UNIVERSITY OF EDUCATION, WINNEBA

TRADE, CONSUMPTION AND SAFETY OF SECOND-HAND

CLOTHING IN THE CAPE COAST METROPOLIS

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TRADE, CONSUMPTION AND SAFETY OF SECOND-HAND CLOTHING

IN THE CAPE COAST METROPOLIS

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degree

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DECLARATION

STUDENT'S DECLARATION

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

SIGNATURE……………..……………….

DATE …………………………………...

SUPERVISORS' DECLARATION

We, hereby certify that the preparation and presentation of the thesis was supervised in accordance with guidelines and supervision of thesis laid down by the University of Education, Winneba.

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ACKNOWLEDGEMENTS

DEDICATION

To my late mother, Mrs. Martha Philomena Ogoe.

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ABSTRACT

This survey explored the second-hand clothing trade, consumption and safety in the Cape Coast Metropolis in the Central Region of Ghana. The objectives of the study were to identify the kinds of second-hand clothing sold on the markets; identify the most patronized second-hand clothing by consumers in Cape Coast, explain why second-hand clothing trade and consumption were booming, and assess the effectiveness of safety treatments given to second-hand clothing before sale and usage in the Cape Coast Metropolis. Views were sampled from 110 respondents (100 consumers and 10 traders) selected by purposive and convenience sampling techniques. Data were collected through the use of questionnaire and observation checklist. The quantitative data generated frequencies and percentages using Statistical Package for Social Sciences (SPSS) version 20 and presented in charts and tables. The qualitative data gathered from interview and observation checklist were analyzed in themes that reflected the objectives of the study. In-text quotations and direct quotes from the respondents were used to present the qualitative data. The study revealed that 90% each of brassieres, boxer shorts, dresses, blouses and towels were the most commonly sold followed by 80% each for shirts, T-shirts, footwear and bags, bedsheets (70%) and jackets (60%). Shirts (89%), dresses (81%), towels (77%), T-shirts (76%) and footwear (71%) were the most patronized second-hand clothing. Durability (100%) and price (100%) were main factors that guided consumer purchases while traders were mainly motivated by profitability (100%); ease of entry in the business (100%); affordability of taxes (90%); and lack of government regulatory restrictions (90%). Washing (89%), pressing/ironing (76%) and removal of stain (73%) were the main treatment practices performed by consumers before use, while traders sorted out the second-hand clothing items into categories before sale (90%) and repaired/altered second-hand clothing (50%) often than washing (20%) and ironing (10%). Use of gloves and nose and mouth masks were not observed. Both consumers and traders expressed that washing, removal of stains, sun drying and ironing were enough to ensure safety in handling and use of second-hand clothing. The trade was lucrative and the consumers found the products satisfactory, hence the need to focus more attention on issues of second-hand clothing trade regulations and monitoring while encouraging both traders and consumers to observe safety measures in the handling and usage of second-hand clothing.

CHAPTER ONE

INTRODUCTION

1.1   Overview

This chapter gives a brief discussion of the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations of the study, delimitations of the study, operational definition of terms and organization of the study.

1.2   Background to the Study

Clothes are often discarded when much of their potential life time is left. Such clothes are often of less interest to the user and therefore are subjected to recycling (Farrant, 2008). Clothes recycle options may include re-using, re-selling and disposal. The process of recycling results in donation of such used clothes to individuals who are in need as against disposal. The public generally considers donating used clothing to non-profit organizations as a better alternative to throwing them away. People donate clothing for a variety of reasons, ranging from changing fashion, the outgrowing of favourite dresses, to help those who are less fortunate.

Second-hand clothing otherwise referred to as used-clothing is derived from the fact that, these clothing items that have previously been worn or used by someone is transferred to another person either as a gift or by making purchases of such items. Imo and Maiyo (2012) traced the origin of second-hand clothing from wealthy westerners who contribute their obsolete clothing as donations to charitable organizations. Until the

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commercial dealings in second-hand clothing trade, second-hand clothes remained the main form of clothing to individuals who were in need of them. Slotterback (2007) reported that about 80% of the donated clothing is usually sold to second-hand clothing merchants. The merchants sort the second-hand clothing by condition and then categorize them into groups, which they bundle in bales, whose prices vary according to quality of the contents.

Established charitable organizations are the single largest source of the twenty-first century global trade in second-hand clothing, supplying both domestic and foreign second-hand-clothing markets through their collection efforts (Heike, 2005). The major charitable organizations in the twenty-first century include the Salvation Army, Goodwill Industries, St. Vincent de Paul, and Amvets all from the United States and in Europe, Humana, Oxfam, Terre, and Abbey Pierre. Charities and private agents collect large volumes of used clothing from donor countries to consumers in developed countries. Some of the largest donors of clothing include: United States of America (USA), Germany, Canada, Belgium, and the Netherlands. Biggest importers of second-hand clothing identified on the continents by Brooks and Simon (2012) included Sub-Saharan Africa, Central and South America, Asia, and Eastern Europe.

Baden and Barber (2005) found that the United States, the Netherlands and Japan participate in second-hand clothing trade as major exporters while the developing countries are the major importers and consumers of second-hand clothing, with 30% out of the total export going to Sub-Saharan African countries. This proportion could be even higher if the numbers were given for the volume rather than for the monetary value. Other findings by Farrant (2008) have also indicated that up to 90% of the

Ghanaian population consumes second-hand clothes, as highlighted by a study conducted in 1997 by the Swiss Academy for Development. Although the extent of second-hand clothes imports in Ghana is yet to be quantified, there are indications that there has been a substantial increase: the increase in the number of traders selling these goods as well as the number of consumers being a case in point.

Second-hand clothing trade appears undeniably beneficial to receivers in developing countries since it provides a cheap way of purchasing clothes. The trade in second-hand clothing does not only provide cheap clothes for consumers, but also yields revenue for the government through tariffs paid on the second-hand clothes. This sector also provides employment opportunities such as washing, ironing and mending of the used garments. Upon a closer look at the Ghanaian market, massive influx of second-hand clothing seems to find their way in almost every corner where marketing activities can go on. A lot of concerns have been raised by government of states through it trade union and other media to minimize the commercial dealings of second-hand clothing yet, these clothing items seem to make up a substantial proportion of all clothing purchased at retail.

Medical and environmental experts have also raised possible health risks associated with the use of second-hand clothing which may include: infestations from scabies, mites, lice, bacteria and fungi. These second-hand clothing are stored for days and pass through a lot of hands before reaching proposed consumers, therefore the introduction of infectious organisms into the clothing could be high. For instance, the Ghana Standard Authority (GSA) in the year 2011 testified and reported that there were health hazards associated with the usage of second-hand underwear, hence the decision to

implement a ban on the importation of second-hand undergarment in 1994 was considered (Ghana News Agency, 2012). Yet it appears not much is done to enforce the law.

From personal observation second-hand clothing is making waves and becoming the first clothing line for majority of residents in and around Cape Coast irrespective of social status, ethnicity or religion. Students and young consumers, especially from tertiary institutions, are in sharp contest with the working class for what is referred to as first selection of second-hand clothing on the Cape Coast markets, which they patronize very well. The growth in the number of traders, particularly women traders, selling these goods indicates that there are many people depending on second-hand clothing for their survival. The existing trend of consumer preferences for imported items is clearly reflected in the noticeable increase in traders of second-hand clothing.

1.3   Statement of the Problem

Second-hand clothing has been absorbed into the fashion system and is undeniably providing clothes for many individuals across the country. In an effort to maintain public health standards and cultural dignity, the government of Ghana passed a legislation instrument (LI) 1586 in 1994 that outlaws the importation and sale of second-hand clothes, especially undergarments. However, a closer look at markets in Cape Coast indicated that the demand for second-hand clothing and the number of people who sold such goods seemed to be on the increase. Much concerns on possible health hazards associated with handling of second-hand clothes before usage to prevent or control the spread of infestations had been suggested by medical experts. However, one could not be sure whether these safety practices were observed by traders and consumers in the Cape

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Coast Metropolis. Since these second-hand clothing were stored for days, openly displayed on the market and passed through several hands, through sorting and selection before they reached consumers, the likelihood of introducing infectious organisms such as scabies, mites, lice, bacteria and fungi into the clothing could be high. Though it has been observed that second-hand clothing was widely consumed by people in Cape Coast, very little was known about its shopping preferences, reasons for wide spread consumption and safety measures taken by traders and patrons to prevent or control health risks associated with the usage and handling of such goods. It was against this background that the researcher sought to undertake this study.

1.4 Purpose of the study

The purpose of the study was to investigate the reasons why second-hand clothing trade and consumption appeared to be on the increase; and also treatment practices observed by both traders and consumers of second-hand clothing to ensure safety before sale and usage in the Cape Coast Metropolis.

1.5 Objectives of the Study

The study sought to:

1. identify the kinds of second-hand clothing sold on markets in the Cape Coast Metropolis.

2. identify the most patronized second-hand clothing by consumers in Cape Coast.

3. find out why second-hand clothing trade and consumption were booming in Cape Coast.

4. explore the kinds of safety treatment given to second-hand clothing before sale and usage by traders and consumers in the Cape Coast Metropolis.

1.6   Research Questions

1.   What kinds of second-hand clothing were sold on markets in the Cape Coast Metropolis?

2.   What items of the second-hand clothing do consumers patronized most on the Cape Coast markets?

3.   What is bringing about the booming of second-hand clothing trade and consumption in the Cape Coast Metropolis?

4.   How did traders and consumers treat second-hand clothing to make them safe before sale and usage in the Cape Coast Metropolis?

1.7 Significance of the Study

1.   The study was intended to offer an insight on the factors leading to increase in second-hand clothing trade and consumption among Ghanaians. Findings from this study primarily would inform researchers about the kinds of second-hand clothing available on the Ghanaian markets, the specific types of second-hand clothing that are mostly patronized and reasons for increases in the number of traders and consumers of second-hand clothing, despite the health concerns raised on possible health hazards associated with the handling and usage of second-hand clothing. The findings from this study might also add to the existing knowledge base on factors that influence people's clothing decisions.

2.   Furthermore, the findings of this study might offer a fresh, rigorous and in-depth understanding of the rationale for the patronage of clothing that has been observed to pose danger to health.

3.   Again, findings of this study will fill the gap in existing literature regarding what second-hand clothing trade and its consumption mean to patrons.

4.   Finally, it is hoped that this research work would provide a foundation for further studies on second-hand clothing business and usage.

1.8   Limitations of the Study

The study was limited only to second-hand clothing traders and consumers in the Cape Coast Metropolis. Therefore, the results cannot be generalized for the whole country. Again, the researcher would have wished to cover a large area and again use a sizeable number of respondents however, looking at the nature of the target group (second-hand clothing traders and consumers), this was not possible. In order to overcome this, the researcher adopted non- probability sampling methods, that is purposive and convenience sampling techniques to sample one hundred and ten (110) respondents. This aided in achieving the intent of this study which was more of exploratory and interpretation of the phenomena as it existed. Therefore, the number of individuals participating in the study does not affect the integrity of the findings.

Also, interviews conducted through the use of the questionnaire during data collection were mostly done by the use of the local language (Fante), and this delayed the process of analyzing the data as the researcher had to translate items on the questionnaire to gather data and also translate responses to suit the study.

1.9   Delimitations of the Study

Firstly, second-hand clothing trade is a wide concept with several directions to study deeper. But to narrow this research to the reasons why SHC trade and consumption were

booming in Cape Coast despite health concerns raised about the commodity, delimits the research. Secondly, the study was confined to only Cape Coast Metropolis.

1.10 Operational Definition of Terms

Accessories:	Clothing items used to compliment an outfit. Examples: scarves, shoes, bags, handkerchief, etc.
Household linen:	Fabric/textiles products intended for daily use at home such as bed sheets, pillow cases, tablecloths, rags, blankets, curtains and towels.
Innergarments:	These are garments worn over the undergarments. Examples: dresses, skirts, trousers, suit, etc.
Outergarment:	Garments that are used to give additional warmth and are Usually worn over the innergarments. Examples: coats, jackets and sweaters.
Safety:	Conditions that promote good health with the use and handling of second-hand clothing.
Second-hand Clothing:	Imported clothing items that have been previously owned, worn or used by someone and sold to another new person. It is also referred to as used clothing.
Second-hand Clothing Consumer:	Someone who patronizes and/or uses second-hand clothing items.

Second-hand Clothing

Trader:	Someone who sells second-hand clothing items.
Treatment:	A process or method of handling second-hand clothing with the intention of making the clothes hygienic or safe for use or improving upon their appearances by observing practices such as washing, disinfecting, boiling, ironing, repairing, dry cleaning, etc.
Undergarments:	Garments worn next/closer to the skin such as brassiere, pants, singlet/vest, etc.

1.11   Organization of the study

The research report has been presented in five chapters. The first chapter dealt with the background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations and delimitations of the study, operational definitions of terms as well as the organization of the study. The review of the relevant literature constituted the chapter two, and covered theoretical framework, conceptual framework and empirical review. Chapter three covered methodology and comprised the research design, population of the study, sample and sampling techniques, instruments for data collection, pilot study, data collection procedures and data analysis, validity and reliability. Chapter four dealt with the presentation of results and discussion. The last chapter (chapter five) dealt with the summary, conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1   Overview

This chapter provides an overview of the literature relating to second-hand clothing trade, consumption and safety. Literature pertaining to Theoretical Framework, Conceptual Framework and Empirical Studies (Clothing Production and Consumption, Types of Second-hand Clothing, Second-hand Clothing Trade and Consumption, Health Problems Associated with Second-hand Clothing Trade and Usage Safety Measures Taken by Sellers and Users of Second-hand Clothing are reviewed.

2.2   Theoretical Framework

The demand and supply theory was adopted in this study to help explain how people are motivated to enter into a trade with an increasing demand from consumers who have varying needs yet might be ignorance about its implications of their patronage of products.

2.2.1   The Demand and Supply Theory

Demand and supply is an economic model of price determination in a market. The theory had its roots in the early 20th century and was originally developed by Antoine Augustin Cournot (1838) but later broadly publicized by Alfred Marshall (1890). The demand for a good or service is the quantity that people are ready to buy at various prices within a given time period (Keat, 2006). Supply of a good or service on the other hand is the quantity that suppliers will be willing to bring to the market at given prices

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(Worthington, Britton & Rees, 2001). The demand and supply model describes how consumers and suppliers interact to determine the quantity of a good or service sold in a market and the price at which it is sold. It explains how a perfect competitive market operates as there are many buyers and sellers of a product whose decision can influence market price (Mankiw, 2012).

The demand and supply theory is of interest in the present study because, it can be used to explain the driving forces behind active trade and consumption of second-hand clothing in Cape Coast irrespective of the health risk associated with them. When the trade and consumption of second-hand clothing is viewed holistically, one can conclude that both the traders and the consumers are connected; depend on each other and provide feedback which eventually create markets. The availability of second-hand clothing on the African markets presupposes that there is increased demand of the commodity by the people (Hansen, 2005a). Awumah (2012) affirmed that the second-hand clothing business continues to flourish with patrons developing unmeasured affinity to the commodity. As more patrons get involved more suppliers are attracted to enter into such businesses. Schiller (1991) stated that a consumer's willingness and ability to buy a product at various prices depends on a variety of forces. Potential consumers decide how much of second-hand clothing product to buy on the basis of its price and other factors such as tastes, information, income, prices of other goods and government regulations.

Economists have generally ascertained that when the price of a good falls and everything else remains the same, the quantity of the good demanded will rise and vice versa (Worthington *et al.,* 2001). Demand is affected by taste and ability to buy, which depend on the market price. This explains why when the market price for a product such

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as second-hand clothing is low, the demand will be high. At very low prices, many consumers will be able to purchase second-hand clothing. Traders also cease such opportunities to make the product available to consumers so as to maximize profit.

It is an undeniable fact that second-hand clothing business has offered a lot of benefits to patrons. It offers employment opportunity for people who engage in the trade as well as repairers and launderers. Revenue paid by dealers and retailers goes a long way to support the economy. Consumers have also attached various reasons for patronizing second-hand clothing. The product is affordable to many, durable and unique in styles. Consumers are able to improve their wardrobe with the little amount of money they have. Awumah (2012) reported that the majority of the Ghanaian populace for instance, would commute naked if used clothing was entirely banned.

In spite of these benefits identified, issues relating to revenue loss and health that surround the trade and consumption need to be considered. Second-hand clothing traders are usually unorganized as there are many that move from house to house and the streets to deliver these clothing items to buyers escaping from being taxed, hence making revenue collection difficult. Keat (2006) stated that sellers are motivated to do more of anything that increases profits and less of anything that decreases profits, hence other issues that need to be considered are often ignored. Beside this, whereas the second-hand clothing industry is offering employment to people, the same industry is rendering people jobless in the textile production industries of the country and collapsing some of these industries.

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Abdallah (2010) gave an account that Ghana's Textile Industry is gradually joining the league of other nations in the sub-region with collapsed textile and garment manufacturing sub-sector. From over forty (40) textile firms that employed more than 25,000 people in the last two decades, the country now has only four (4) textile factories employing less than 4,000 Ghanaians. The country, according to Ghana's Revenue Agencies Governing Board (RAGB) (2010), is losing about 300 million cedis in potential revenue annually through smuggling of textile materials and other clothing items (Ministry of Trade and Industry, 2010). Like the situation in other countries, Ghana's once thriving textile and garment market is now flooded with sub-standard textile and clothing products thereby surging up the country's unemployment index.

Although consumers seem to pay less for acquiring second-hand clothing product they often spend more either to repair or treat these clothes before usage, thus increase cost as against purchasing of new clothes. In other instances items bought by consumers may look neat yet not durable resulting in cost rather than benefits. More importantly, these used clothing are unsafe if not treated properly by the new users, exposing them to infections and other health problems like respiratory, skin and sexually transmitted diseases. The onset of infestations to patrons of second-hand clothing may not be sudden but may be gradual, deteriorating the health of the people. The end result for the infected person will be to spend more to cure diseases acquired through the purchase of second-hand clothing or even suffer from long-term treatments of other infections. However, the public health and environmental implications of these goods outweigh all other arguments being adduced by patrons. Eventually, the effects of having a lot of people

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treating ailments as a result of infections from used clothing affect the production in general.

In summary, the world's demand for used clothing keeps increasing and businesses in this sector seem to offer benefits to patrons, the frequent importation of second-hand clothes has had negative effects on the health of the populace, rendered people in the textile industries jobless. The model explains reasons for high patronage of second-hand clothing ranging from affordability, accessibility, durability with traders finding the business as profit gaining, flexible restrictions on the part of government and affordable taxes. However, issues relating to health risks, loss of revenue and employment in the textile industries cannot be underestimated.

2.3   Conceptual Framework

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                    ┌──────────────────────────┐
                    │   Second-Hand Clothing   │
                    │     (SHC) Market         │
                    └──────────────────────────┘
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SHC CONSUMERS
Motivating factors

i. Price

ii Uniqueness

iii Availability

iv Durability, etc.

HEALTH PROBLEMS ASSOCIATED WITH SHC

 i. Respiratory diseases

ii Skin diseases

iii Genital infection

iv Neurological effects

v. Gastrointestinal

   infection, etc

SHC TRADERS
Motivating factors

 i. High demand rate

ii Flexble restrictions

iii Profitable, etc.

SHC TREATMENT PRACTICES

 i. Washing

ii. Ironing/pressing

iii stain removal

iv. Sun drying

v. Disinfecting etc.

Source: Researcher's Construct (2014)

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The conceptual framework considered for this study was adopted by the researcher and discussed for better understanding of the motivating factors influencing the trade and consumption of second-hand clothing. Issues concerning possible health risk associated with its usage and handling and treatment packages that can be adopted to minimize these health risk were also considered. This framework describes the relationship between consumer clothing needs and what drives people to consume second-hand clothing.

The second-hand clothing market is viewed holistically where assorted used undergarments, innergarments, outergarments, accessories and household linen are on display for purchases. The participants involved are mainly second-hand clothing consumers and traders who are connected to each other and provide feedback which eventually create market. Both traders and consumers of second-hand clothing hold their motives for entering into the market. Consumers are often motivated by factors such as price, durability, unique designs, fit, beauty, style of item and the like while traders are often motivated by factors like high demand rate profitability, flexibility relating to payment of taxes and government restrictions. However, both consumers and traders stand the risk of being exposed to some health hazards.

At the second-hand clothing market it is observed that traders sort through the items bringing out the best for clients while consumers try on what they select. Contamination begins to occur right from sorting by the trader. Traders are exposed to long-term effects of vapour from fumigants and other chemicals used to prevent or control insects infestation on clothing. Department of Justice and Attorney June 2012, Report (cited in Muthiani *et al.*, 2012), emphasized the most systematic effects of vapour

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from fumigants to be neurological: headache, dizziness, vertigo, slurred speech, nausea and vomiting, confusion, blurred vision, twitching and possibly convulsions and coma. The mode of display of used clothing items in most Ghanaian markets especially on the floor also introduce dirt onto the clothing items making them unhygienic.

Body fluids may be transferred from persons to others as consumers sort through and try on these clothing items before making choices. Awumah (2012) agreed to this fact that body fluids which soiled used clothing are injurious to the skin and hair causing ringworm through fungal infection and also may introduce genital candidiasis or "white" caused by yeast and blood discharges into the body of the new user. The used clothes absorb body fluids in the form of sweats, discharges, which contain millions of microbes, yeasts, pathogens, parasites, molds, fungi, bacteria and virus-possible reservoir for organ and skin infections, when conditions become favourable. Medical experts have expressed greater health risks associated with second-hand clothing posing health problems to patrons hence affecting the general health of the populace.

Many studies have also demonstrated that clothing could easily become contaminated with high levels of microorganisms that survive in clothes for long periods and *Sporulate* when conditions became suitable. Patrons of second-hand clothing seem ignorant about the health risks associated with second-hand clothing. Bloomfield *et al*, (2011) stated that the critical control points or component causes of infection transmission in the home are the hands together with hand and food contact surfaces and cleaning cloths. The hands alone may be sufficient cause for transmission of an infection in our daily performance of task. Since second-hand clothing are stored for days and pass through a lot of hands before it reaches the final consumer, they form important route of

transmission of microbial infections. When this happens, majority of the populace may not be fit and healthy enough to carry out tasks that can bring income to the nation thus affecting productivity. In addition, government has to spend more on ensuring the citizens are healthy thus increasing expenditure on National Health Insurance Scheme (NHIS) and the national budget as well.

Ideally, patrons of second-hand clothing should have observed safety measures before engaging in this business. Safety practices such as washing, ironing/pressing, sun drying, disinfecting, boiling, etc before sale and usage should have been the concern. Other protective measures such as use of gloves, wearing of aprons and overall, use of nose/mouth masks and sanitizers should have also been considered. However, patrons of second-hand clothing often concentrate on their motives of either making profit, searching for fair prices or the aesthetic aspects of what they consume or engage in and often ignore these safety treatments packages.

These health risk assessment raised justify why the patronage of used clothing and especially undergarments should be of public health concern to all because of the likelihood of spreading infections and diseases among patrons. Public ignorance and unconvinced health risk is a greater obstacle in discussing issues of this nature. Awareness creation will have to be intensified by the Ministry of Health and Ministry of Education through the various Metropolitan, Municipal or District assemblies. Unfortunately, the reality is that second-hand clothing market is the saving grace for some traders and consumers who despite the health concerns being raised wants to make living or dress their children like their peers with affluence.

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In addition, second-hand clothing activities seem to be poorly regulated in Ghana. Dealers seem taking advantage of the porous check points at the various ports to introduced even unrecommended used clothes like undergarments into the country as there are no clear indications of which agencies to enforce the law passed in 1994 on the importation of second-hand clothing. Importers seem to enjoy affordable taxes charged for discharging such goods into the country. Since the trade is poorly regulated, retailers (traders) are also attracted into this business motivated by factors relating to high demand rate, profitability, low taxes charged or escape from paying taxes. Ironically, individuals who are into the production and sale of textile products other than used clothing seem to pay high taxes. As many are attracted into the business and are not organized a lot of these traders are even escaping from being taxed hence affecting revenue gain.

2.4   Clothing Production and Consumption

The clothing industry plays a vital role in delivering sustainable development. Not only has it created jobs and contributed to the economy, it has also had a huge influence over society and the economy through its production, marketing, customer transactions and supply chains globally (Forum for the Future, 2010). Wadje (2009) stated that the textile industry is one of the few basic industries, characterized as a necessary component of human life which provides man with the basic requirement called clothes. Clothing is used to cover the body, to make people look more attractive, and to communicate with others.

In Mangieri's (2006) opinion, cloth and clothing were among the primary historical commodities linking Africa with an increasingly globalizing economy and gradually altering the subjectivities of Africans. The textile and clothing industry is a

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diverse and heterogeneous industry which covers important number of activities from the transformation of fibres to yarns and fabrics to the production of a wide variety of products such as industrial and technical textiles, clothing, interior and household goods (Green Public Procurement, 2011). Green Public Procurement added that the clothing industry is intensive and offers basic level jobs for unskilled labour in developed as well as developing countries.

The world's export in clothing and textiles keep increasing. The year 2012 recorded an increase of 1 percent in total textile and apparel/clothing exports at $22.7 billion, as against $22.4 in 2011. This figure rose close to $708 billion World exports of textiles and clothing (World Trade Organization International Trade Statistics, 2013). Statistics from the United Nations Industrial Development Organization (UNIDO) Industrial Statistics Database (INDSTAT) has also indicated that around 26.5 million people work within the clothing and textiles sector worldwide (ILO, 2006). Out of these workers, 13 million were employed in the clothing sector and 13.5 million in the textiles sector. These figures represented only people employed in manufacturing and not retail or other sectors relating to clothing and textiles (Allwood, Laursen, De Rodriguez & Bocken, 2006).

Estimating the number of people working in these sectors is extremely difficult because of the number of small firms and sub-contractors active in these sectors, and the difficulty of drawing boundaries between sectors (Allwood *et al.,* 2006). Job creation in the textile and clothing sector has been particularly strong for women in poor countries, who previously had no income opportunities other than the household or the informal sector. This confirms Hernandez (2006) finding that around 70% of clothing workers

were women who typically sew, finish and pack clothes. Supervisors, machine operators and technicians tend to be men who earn more than the women. In the past five to ten years, employment in the sector has increasingly been concentrated in China, Pakistan, Bangladesh, India, Mexico, Romania, Cambodia and Turkey. All of these countries, apart from India, have shown increases in clothing and textile employment from 1997 to 2002 (Allwood *et al.*, 2006). However, for many smaller developing countries, which are small exporters on a global scale, clothing and textiles exports are their dominant form of external earnings.

Mangieri (2006) reported that post-independence governments throughout sub-Saharan Africa invested heavily in domestic textile and clothing manufacture, with a particular focus on African prints. These local print-cloth industries, once the core of post-independence manufacturing sectors and celebrated as thriving, tangible symbols of African independence, are today in steep decline throughout sub-Saharan Africa. Adhikari and Yamamoto (2007) found that lack of capital, lack of skilled and/or trained human resources, poor quality of infrastructure, high cost of inputs, were but a few challenges facing the clothing and textiles industries globally. They further expressed that the textiles and clothing, particularly clothing, is a classic example of a buyer driven commodity chain, which is characterized by decentralized, globally dispersed production networks, coordinated by lead firms who control design, marketing, and branding at the retail level. Among the world's most powerful retailers include Gap, Nike, Wal-Mart and Liz Claiborne, who own no factories and do not necessarily produce in order to sell.

2.4.1   Global Clothing Consumption

Ha-Brookshire and Hodges (2008) revealed that the various reasons and needs for clothing lead to a significant amount of clothing acquisition throughout a person's life. The clothing consumption process is made up of acquisition, inventory and discard (Baker, 2011). Acquiring clothing results in the necessity to dispose of clothing later. As the world's population keeps increasing, production of goods keep rising because consumer demand is also increasing. The urgent need to reduce waste and conserve finite natural resources in order to develop a sustainable future, has enlightened both producers and consumers on the need to recycle and exhibit sustainable behaviors.

It is widely known that moving up to waste management hierarchy means that extensive re-use and consequently repair of used items must be implemented and considerable changes to supply-chain dynamics will be resulted. This means that ideally, waste should be prevented and what cannot be prevented should be re-used, re-cycled and recovered to the extent feasible, with landfill being used as little as possible (Green Public Procurement, 2011). Pears (2006) attributed the increasing rate and volume of fashion garment consumption to increased speed of production and access to cheaper labour. These factors, Pears believed have enabled garment prices to drop and consequently, consumers can afford to buy more garments for their money.

Consumers are increasingly concerned about environmental, social and economic issues, and increasingly willing to act on those concerns. However, consumer awareness of these concerns often does not translate into sustainable consumer behavior because of a variety of factors such as availability, affordability, convenience, product performance, conflicting priorities and skepticism. Consumers now seek for high-quality, longer-

lasting fashion and wash clothes less frequently (Forum for the Future, 2010). Fashion garments are made in standard sizes. These garments can become fashion waste when the owner changes in size or shape and it no longer fits, or flatters the body (Pears, 2006). The owner may hoard the garment with the intention of wearing the garment again, upon returning to their original size. However, when a new garment takes over the role of the original version, the old item is unlikely to have an active role in the wardrobe. The wearer may still have a fondness for the original garment, and may not necessarily be conscious of the fact that it has become inactive, as their focus is on the superior version. Pears (2006) stated that if a fashion garment no longer suits the desired image or ideology of the wearer then it will surely be cast aside.

Birtwistle and Moore (2007) expressed that at the end of product lifestyle, re-cycling is deemed as one of the most common and efficient solutions for consumers to increase their efforts to reduce the amount of waste products channeled to landfills, and more consumers are encouraged to re-use products and other re-cyclable waste. Schor (2002) earlier found used clothing market as another vantage point from which to consider clothing consumption. In Mangieri's (2006) opinion, the recent international agreements on export manufacture and trade have promoted used clothing consumption.

2.5   Types of Second-Hand Clothing

Textile and apparel have strong re-use and re-cycling potential. Birtwistle and Moore (2007) reported that the rapid growth in garment purchasing has resulted in a new phenomenon that some clothes will be just worn for several times. Re-using and re-cycling could extend the value and provide additional lifespan for products. Second-hand clothing also referred to as used clothing is any clothing capable of being re-used which

is often in good condition or require some form of repair (Roux & Guiot, 2008). More recently, wearing second-hand clothing has become a more acceptable practice, even among those who can afford to purchase new clothing (Baker, 2011). In response to consumer demand and changes in consumer lifestyle, manufacturers and retailers have developed various categories for styling and clothing types.

Clothing is now available for all occasions and life styles. Different categorizations of clothing are presented by researchers based on types, sex, and purpose for which such clothing are made. Frings (1999) found that manufacturers have specialized in clothing type they produce while retailers have separate departments for each category of clothing. Clothes can generally be categorized according to type of wearers (women, men or children), mode of usage (undergarment, innergarment, outergarment, household linen or accessories). Frings (1999) categorized women clothing to include: dresses, social apparel, suits, outerwear, sport wear, active wear, swim wear, lingerie and accessories. The male categories included: tailored, furnishings, sportswear, work wear and accessories.

Second-hand clothing are donated to charities and collection centres (as a way of disposing them) by ordinary people in North America, Europe and Asia (Smallstarter, 2013). These clothing are usually outgrown dresses and shirts, out-of-weather clothes and stuff that people in developed countries do not need anymore. Many of these clothing (some of which are designer labels) are still in good condition although some of them are often damaged, stained or torn. Among the clothes found at second-hand retail markets in Ghana published in Chronicle on August, 2008 consisted of shirts, dresses, panties, 'T'-shirts, jeans, trousers, towels, underwear (Okoampa-Ahoofe, 2008). The report stressed

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all other types of clothing were found as second-hand at the retail market in Kantamanto, a suburb of Accra. Awumah's (2012) findings at the Ghanaian ports also identified several confiscated bales of used undergarments. This was carried out through a random sampling process. Again, items sampled by Muthiani *et al.* (2012) for testing of pathogenic microbial levels in second-hand clothing included: underskirts, socks, brassieres, panties and towels. Pictures posted by Okoye (2013) on second-hand clothing trade at Katamanto in Accra showed used children's toys, football shoes, children's dresses all at retail. Kantamanto is noted to helping about 3,000 traders who are mostly into the sale of second-hand clothing.

A recent research conducted by the British Broadcasting Corporation (BBC) (2014) on second-hand clothing activities in Ghana recorded similar used clothing items such as panties, underskirt, shirts and dresses sold at retail. It was also obvious from the findings that the growing consumption of second-hand clothing has ripple the effects on the Ghanaian textile industries. It came to light that the textile factory is somewhat alive because of clothes demanded for attending funerals and not much was expected for other purposes such as clothes for work (Febiri, 2014).

2.6   Second-Hand Clothing Trade and Consumption

The trade, purchase and consumption of second-hand clothing has existed throughout time. Before the industrial revolution, apparel was mostly made in the home and the ability to purchase and wear new clothing that was not homemade was restricted to the wealthy and upper class (Tortora & Eubank, 2009). With technological advances in textile and apparel production as well as the outsourcing of labour, the prevalence of

second-hand clothing became less common as more people were able to afford other forms of clothing (Fitzwater, 2005).

Hansen (2008) found that the commercial trade in second-hand clothing was limited to exports, especially to colonial Africa by the end of the nineteenth century. Charities also collected used clothing for re-distribution to the poor. By the late nineteenth century, the effects of industrial plenty enabled increasing numbers of middle-class consumers to increasingly shun used-clothing markets, a trend which has continued down the social scale today (Hansen, 2008). Cheaper clothing and growing consumer purchasing power after the Second World War led to an increase in donations to charity. Hansen (2008) again identified a fundamental shift in used clothing distribution from charity to commerce post-Second World War, whereby philanthropic groups in the USA stopped giving away clothing to the poor and started selling them in shops instead, to raise money for their diverse causes. Hence, the first Oxfam second-hand shop opened in London in 1948, sold donated used clothing to support donor projects. Norris (2012) believed that colonial trade routes expanded the second-hand clothing market.

By the 1980s, the falling costs of garments and the growth in supply coincided with the liberalization of African markets in particular, resulting in a spectacular increase in the amount of worn clothing being sold to commercial textile recyclers for expanding re-use markets. From the 1980s, Hansen (2008) found both an increase in commercial used clothing traffic and humanitarian aid flow to African countries at the same time. The public generally considers donating used clothing to local non-profit organizations as a better alternative to throwing them away, which increases landfill waste (Meginnis,

2012). People donate clothing for a variety of reasons, ranging from changing fashions to helping others less fortunate than themselves.

Megginis (2012) stated that the clothing literally travels the world and has an economic ripple effects that far exceeds consumers' expectations or intent. These authors: Field (2007), Baden and Barber (2005) and Hansen (2004) found that the trade itself creates a wide range of jobs in local economies, from large-scale dealers, market traders to itinerant peddlers, augmented by tailors and people mending, washing, and ironing sacks of clothing. Meginnis (2012) affirmed that there are several markets where donated clothing can end up. One example is Africa where clothing is imported and sold in local markets. There are many different non-profits that collect used clothing for re-distribution. Meginnis identified them to include: Goodwill Industries, World Vision, Help the Aged, Salvation Army and Oxfam.

2.6.1 Goodwill Industries

It is a United State (U.S.) non-profit organization that collects gently used clothing with the primary purpose of re-sale through thrift shops. Clothing that is not sold in the thrift stores is sent to Goodwill industries outlets where it is sold by the pound. Clothing that remains unsold are sent to a salvage warehouse. There, it is compiled into bales; this is where an international used clothing dealer would purchase their good from non-profit organization. In 2011, Goodwill industries generated 2.59 billion dollars of revenue from retail sales alone; this money is used to support their mission, which includes job training, job placement, and family support (Goodwill Industries Global, as cited in Meginnis, 2012).

Goodwill Industries also provides centres in many of the world's impoverished nations, where they create an environment for people with disabilities and low income to receive job training and placement. One of their missions in the international platform is to create a sense of environmental awareness and therefore, create sustainable recycle behaviour within countries they work with. For example Goodwill Industries Brazil has a collection bank for used clothing which is then resold in local thrift stores in Brazil. Again, the revenue from these activities is used to create jobs and training for local Brazilians (Goodwill Industries Global, as cited in Meginnis, 2012).

2.6.2   World Vision

The World Vision is a Christian non-profit organization that works to help the poor and oppressed to promote human transformation. One way they realize this goal is by collecting used textiles, which are sold, sent abroad and distributed to local populations in underdeveloped countries. Almost all of these non-profits use the same supply chain system. First, individual households donate clothing to a non-profit agency. The agency then sells the used clothing to rag dealers. The revenue from these sales is then used to support the non-profit's mission, be it job training or carrying out other international developmental programs (World Vision, as cited in Meginnis, 2012).

2.6.3   Help the Aged

Help the Aged sells donated clothing to Pre-cycle, an intermediary import-export firm, which is a common practice in the used clothing trade (British Heart Foundation, 2011). Wooldridge (2006) documented some of the routes clothing donated to Help the Aged doorstep collections take to final markets. Donated clothes are transported to the Pre-cycle depot and sold for a set price per tonne. Pre-cycle combines collections from

different sources and exports them to a sorting firm in Poland. Used clothes are processed and categorised: 'A' Grade items are sold in Polish shops, 'B' Grade are exported to Africa, 'C' Grade are exported to Iran, Iraq, Syria, Jordan and Pakistan and 'G' Grade are recycled for industrial use. Brooks (2012) also identified Oxfam and the Salvation Army, the two largest used clothing collectors in the UK, who have their own industrial processing export facilities to be performing similar activities.

2.6.4   The Salvation Army

The Salvation Army Trading Company Limited (SATCoL) is a trading arm of The Salvation Army. Profits that SATCoL receives from the sale of donated clothing is given back to The Salvation Army to aid their non-profit activities (SATCoL, 2011). Donated clothing is processed at the SATCoL facility and exported to a limited number of large buyers in Eastern Europe, including Bulgaria and Estonia (Brooks, 2012).

2.6.5   Oxfam

Brooks (2012) reported that Oxfam primarily exports clothing to Benin, Gabon, Ghana, Senegal and Togo. Fifty percent (50%) of total volume is exported to West Africa, 25% to Eastern Europe and 25% to the Middle East. However, by value three times as much goes to West Africa, including a greater proportion of low-weight and high-value garments like t-shirts, whereas bulky cold weather items like coats are exported to Eastern Europe. Oxfam sells clothing to small companies (Baden & Barber, 2005). Oxfam has established some small-scale local processing activities in Senegal to provide local employment and generate value enhancement activities. It has also commissioned a report on the impacts of the trade (Baden & Barber, 2005).

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As a large international development NGO, Oxfam occupies a broader geographical space than many other UK domestic charities, such as Help the Aged or YMCA, and so is responsive to a different scale of accountability. Norris (2012) added that non-profit organizations such as Oxfam are duty bound to make sure that used clothing is exported legally and textile waste is not dumped in countries that cannot process it properly. Members of the Charity Retail Association sign up to a Code of Charity Retailing that encourages them to consider whether their commercial activities could compromise the objective to maximize income for the charity through selling donated goods.

Trade in second-hand clothes is a well-established activity with internet website advertisements where members of the public are requested to donate their used clothes (Mkhize, 2003). There appears to be consensus that private charity organizations in the USA, Canada and Europe are the main suppliers of second hand clothes. Charities like the Salvation Army, Goodwill, St. Vincent de Paul, and Armvets in the United States and Oxfam, Humania, Abbe Pierre, Development Aid from People to People in Europe receive far more donated clothing than they can sell in their thrift stores (Mkhize, 2003). Mkhize added that surplus is sold to commercial dealers.

Rivoli (2009) identified multiple factors that influence the export destinations for used clothing to include: transport costs, local socio-political contexts, trade liberalization and the removal of import bans on used clothing, which are all externalities that can lead to rapid shifts in markets. The supply of second-hand merchandise is clearly influenced by the donation of clothing. Thus, these organizations have a vested interest in understanding why people donate clothing so that they can better manage inventory

(Bendapundi *et al.,* 1996). In addition, cost of transport and access to markets with consumers who can afford only low-value used clothing and not higher-value new clothing dictate the overall pattern of the used-clothing trade (Brooks, 2012). However, other factors are also at work beyond the macroeconomic geography, including the transnational diasporic networks which link supplies and markets. There are different types of used-clothing trading relationships, differentiated by the degree of coordination between the production and consumption activities.

Rivoli (2009) stated that the United States is the largest exporter and dispatches over 500,000 tonnes of used clothes per annum, to more than one hundred different countries. The second largest is the UK, which shipped 319,998 tonnes, worth over $425 million in 2010 (UNCOMTRADE, 2011). Second-hand clothes are retailed in low and middle-income countries and the trade is habitual and widespread, although little understood by most people across both the Global North and South (Palmer, 2005). Identifying factors that increase helping behaviour, such as clothing donation, can lead to the development of more appropriate promotional strategies (Bendapudi, Singh & Bendapudi, 1996).

To ensure an optimum value of the clothes, sorting the collected clothes is a key step which involves much more than simply identifying the type of clothes like skirts, men's pants, jeans and the like. The workers categorize the clothes by amount of wear, ranging from new to un-wearable (Rivoli, 2005). Sorting is performed manually by skilled and experienced workers who are able to recognize the large variety of fibre types: natural, synthetic or blended fibres (Waste online, 2008). A study by Ogawa

(2005) in Mwanza identified the merchants who entered the trade of second-hand clothes and categorized them into three as wholesalers, middlemen and retailers.

2.6.6. Wholesalers

These are traders who import the bales from international recycle agencies and sell them to middlemen. The second-hand clothes are gathered from general households by charity organizations and volunteer associations and then transferred to recycle agencies (Ogawa, 2005). Recycle agencies classify the second-hand clothes by the kinds of item and wrap these items in vinyl sheeting and iron bands. Imo and Maiyo (2012) observed that these traders are involved in purchasing and shipping merchandise from Europe and USA. They buy merchandise in tonnes then store in warehouses mostly at the point of entry. This is followed by an example from Fields' findings in 2011 that there are between 60-80 second-hand clothing importers in Kenya, majority of them concentrated around Mombasa port and Nairobi's industrial area and the periphery of the Central Business District (CBD) close to Gikomba market which is the largest informal market in Kenya and the biggest second-hand clothing exchange in East Africa. Baker (2011) observed that sorting is done before and this allows the exporters to target markets during appropriate times of the year by season and thus assessing the forces of demand and supply. The blocks of clothes wrapped with vinyl sheeting are called bales and wholesalers import these bales and sell them to middlemen in their shops (Ogawa, 2005).

2.6.7 Middlemen

Middlemen purchase bales from wholesalers and sell them item by item to retailers. Imo and Maiyo (2012) described these as medium/ordinary retailers who buy merchandise in bales from the wholesalers to sell to customers in designated business

premises. They may specialize in selling specific merchandise such as lingerie or nightwear, women's wear, children's wear and accessories.

2.6.8 Retailers

These are those who purchase the second-hand clothes from middlemen and sell them to consumers (Ogawa, 2005). Retailers can be sub-classified into stall-keepers, small-street traders, vendors and rural market traders. These traders cannot afford to buy merchandise in bales thus select a few pieces from the medium retailers to sell. They rarely have permanent business premises but prefer walking or stationing themselves along town streets in an attempt to attract the attention of customers (Imo & Maiyo 2012). Among the garments usable as second-hand clothes, an important fraction is bound for Eastern Europe (winter clothes). However, the largest part of clothes is sold baled (usually one bale contains about 500 kg of clothes) to large-scale importers in the South, mainly in Sub-Saharan Africa, which is the world's largest second-hand clothing destination (Hansen, 2004).

These importers then sell the bales to wholesalers who in turn sell the bales to other wholesalers or directly to small retailers selling the clothes on local markets. The clothing literally travels the world and has an economic ripple effect that far exceeds consumers' expectations or their intent. There are several markets where donated clothing can end up. One example is Africa, where clothing is imported and sold in local markets (Meginnis, 2012).

2.7   The Global Context of Second-Hand Clothing Trade

In recent decades the international trade in used-clothing has been fuelled by the rapid circulation, consumption and disposal of garments in the Global North (Norris,

2010). Brooks (2012) presented that the recycling, reproduction and retail of used objects are important sectors of transnational commercial activity that depends upon connections between different types of economic actors, who have more or less powerfully embedded roles in international networks. Used-clothing networks have long histories and great geographical reaches that have attracted only limited popular and academic attention (Jester, 2002). However, inter-related developmental, ethical and environmental discourses are stimulating increasing interest in this sector (Andrews, 2011).

Trade in second-hand clothes is a well-established activity with internet website advertisements where members of the public are requested to donate their used clothes (Mkhize, 2003). There appears to be consensus that charity organizations in the United State of America (USA), Canada and Europe are the main suppliers of second-hand clothes. Mkhize (2003) identified authors like Hansen who pointed out charities like the Salvation Army; Goodwill; St. Vincent de Paul and Armvets in the United States and Oxfam; Humania; Abbe Pierre; Development Aid from People to People in Europe who receive far more donated clothing then they can sell in their thrift stores.

Mhango and Niehm (2005) observed that the sale of second-hand clothing plays a fundamental role in delivering clothing and related goods from economically advanced countries to consumers in developing nations. Slotterback (2007) reported that about 80% of the donated clothing is usually sold to second-hand clothing merchants. Clothing merchants from the importing countries visit the offices of exporters to ascertain the quality, negotiate the price, pay for the bales and then ship the clothing to the country of origin (Olumide, 2011). The merchants sort the second-hand clothing by condition and then categorize in groups which they bundle in bales whose prices vary according to

quality of the contents. Second-hand clothes are retailed in low and middle-income countries and the trade is habitual and widespread, although little understood by most people across both the Global North and South (Hansen, 2000; Milgram, 2005; Norris, 2005, Palmer, 2005).

Fields (2008) declared that global trade in second-hand clothing has grown dramatically in the past 20 years, from an estimated $ 0.4 billion in 1980 to $1.4 billion in 2000. Norris (2012) later found that the value of the global trade in second-hand garments has risen to US$ 2.97 billion in 2010, an increase of 13 percent from 2009 alone (COMTRADE, 2011). Although this may appear relatively small in relation to value, it is large in terms of volume, given that the garments retail for 10-20% of their original selling price (Fields, 2008). Norris (2010) cited authors like Brooks and Simon forthcoming and Norris (2005) who agreed to the fact that available figures are underestimated in this under-regulated trade: the value of sealed bales of worn clothing are notoriously hard to judge.

Second-hand clothing is a multimillion-dollar global trade, with diverse supporting business activities. Support functions range from buying, to merchandising, packing and delivery, employment, inventory control and logistics, and financial management (US Department of Commerce, 2000; Peterson & Balasubramanian, 2002). Norris (2012) expressed that the complexity of the trade and the volume of imports entering African markets has grown enormously since the second-half of the 1980's.

Consequently, some reports estimated that at least one-third of Sub-Saharan Africans (SSA) are wearing cast-off European and American clothing (Hansen, 2000).

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Such estimates in cities and towns across much of SSA illustrate the scale and importance of the rapidly expanding trade in, and consumption of second-hand clothing imported from the West. Yet, these figures mask considerable intraregional variation. For example, while some countries, including Gambia and Sierra Leone, import relatively small quantities of second-hand clothing (200 tonnes per year), Kenya's share of used clothing imports is far higher (4500 tonnes per year). Similarly, a study conducted in 1997 by the Swiss Academy for Development (SAD) indicated that up to 90% of the Ghanaian population consumes second-hand clothes (Farrant, 2008). Norris (2012) concluded with an expression that the global second-hand clothing economy has a number of heterogeneous, idiosyncratic characteristics; fundamentally it is grounded in its very materiality and temporal relationship to consumption trends, fashion cycles, redundancy, and material decay, creating a variable supply of unknown quality and quantity.

2.7.1   The Socio-economic Impacts of Second-Hand Clothing Trade

Recent international agreements on export manufacture and trade have prompted considerable research on African production (Brooks, 2012). Mangieri (2006) probed further how the second-hand clothing trade in parts of sub-Saharan Africa has achieved such prominence, in a relatively short period of explosive growth since the 1980. She believed that, cloth and clothing were among the primary historical commodities linking Africa with an increasingly globalizing economy and gradually altering the subjectivities of the population, creating consumers.

Studies have indicated significant employment generated by this sector in terms of handling, cleaning, repairing, re-styling and distributing second-hand clothes. Several developing countries have industries based on the sorting, processing and re-exporting

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second-hand clothing, with many Eastern European countries entering the market recently. Employment within the second-hand trade is diverse. Baden and Barber (2005) cited SAD's report in 1997 that approximately 150 000 Ghanaians work in the second-hand clothing sector.

Hansen (2000) stated that in Zambia, traders are both young and old women and men with different educational histories and from many different ethnic groups. Hansen again noted that the number of women in the second-hand clothing business outnumber that of the male counterpart, a fact that seem to agree with Field's findings in Zimbabwe. Field (2000) found that the majority of second-hand clothing traders appeared to earn relatively, high income. Second-hand clothes are sold on African markets at a price which is lower than that of the local production. Baden and Barber (2005) also noted that employment in the informal second-hand clothing sector, unlike the formal sector, is not accompanied by social or legal protection.

The trade in second-hand clothing worldwide is currently worth around $1 billion per year, which is ten times more than in 1990. In comparison, the total global trade in textiles and clothing is about $200 billion per year. Second-hand clothing therefore represents less than 0.5% of the total textile trade (Baden & Barber, 2005). However, as second-hand clothes are usually sold at 10-20% of the price of new clothes (Field, 2004) it could be fairer to compare the volumes involved. Second-hand clothing then represents about 5% of the total global trade with the Sub-Saharan Africa recording more than 25% of the value of all clothing imports (Baden & Barber, 2005). This proportion would be even higher if the numbers were given for the volume rather than for the monetary value.

Moreover, it is essential to note that the role played by second-hand clothing varies considerably from one country to another as published by Oxfam (Baden & Barber, 2005). They came out that the importance of second-hand clothing in this area has decreased over the past five years due to the rise in imports of cheap clothes from Asia. The importance of the used clothing trade for Africans becomes apparent when one looks beyond these global figures. In volume terms used clothing is frequently the main imported consumer item and accounts for over 50 percent of the clothing market in many sub-Saharan African countries (Frazer, 2008).

Mangieri (2006) also found that the significant changes in the global regulatory environment including preferential trade arrangements with the European Union (the Cotonou Convention of 2000) and the United States (the African Growth and Opportunity Act (AGOA), passed by the US Congress in 2000), have had effects on the African markets including Kenya and this has resulted in tremendous growth in nascent export apparel production. Studies by Mangieri (2006) and Brooks (2012) have identified areas (markets) around the African continents where second-hand clothing activities are prominent to include: Kenya, South Africa, Ghana, Zambia, Zimbabwe and Mozambque. Recent findings by Wallop (2014) indicated that Ghana is ranked among the biggest buyers of cast-off clothes in the world. Figures supporting this showed that 30,000 tonnes of used clothing arrive in the docks of Accra which is the capital city of Ghana every year. Similarly, Meginnis (2012) presented that in one Zambian market alone, there can be up to five hundred (500) second-hand clothing traders at once, thus showing how much this activity is integrated into some developing countries' markets. This form of trade was the easiest form of starting business in Zambia.

In analyzing the effects of these markets on the various economies Mangieri (2006) declared that the collapse of the domestic African print manufacturing sector is linked to market liberalization in the 1990s affecting both local cotton production and the importation of second-hand clothing. Rivoli (2009) identified multiple factors influencing the export destinations for used clothing to include: transport costs, local socio-political contexts, trade liberalization and the removal of import bans on used clothing, which are all externalities that can lead to rapid shifts in markets.

2.8   Health Problems Associated with Second-Hand Clothing Trade and Usage

Clothes have the potential, just as any other hand contact site, to be a component in the chain of infection transmission during normal daily activities. Clothing and household linens such as sheets, pillows and towels have the potential to act as vehicles for spread of infection in home and everyday life settings (Bloomfield, Exner, Signorelli, Nath & Scott, 2011). Many studies have demonstrated that fabric could easily become contaminated with high levels of micro-organisms that survive in them for long periods and sporulate when conditions became suitable (Awumah, 2012).

Infectious agents that have the potential for spread via clothing include enteric bacteria such as *Salmonella, Shigella, Campylobacter, E. coli* (including *E. Coli* O157) and *C. Difficile* and respiratory and enteric viral strains such as norovirus, rotavirus, adenovirus and astrovirus. It also includes respiratory (cold and flu) viruses such as rhinovirus, influenza virus, respiratory syncytial virus (International Scientific Forum on Home Hygiene, 2011). Investigation in hospitals, as reviewed by Tammaerlin, Domicel, Hambraeus and Stahle, (2000) showed that clothing acts as a barrier to dispersal and

recorded that these organisms are retained on the inner surfaces of clothing specifically underclothing.

Fumigated goods are often kept in sealed containers for several weeks and exposed to changes in the temperature and climate which may lead to vapours being released (Muthiani, Matiru, & Bii, 2012). They further stressed that the residual vapours inside the container on opening can be of significance both as occupational hazard to workers handling the containers and to the consumer handling the goods. According to the South Australia Public Health Fact Sheet (2009), some of the risks associated with second-hand clothing include tinea, impetigo, scabies, body lice, and bed bugs. In many studies, clothes have been found to be contaminated with chemicals and biotic factors.

A microbiology faculty study of the University of Arizona encapsulated vividly one such investigation, which shows that of the 100-500 grams of faeces excreted per day by the average American, an estimated 0.1 gram of residual faecal matter remained on their undergarment. Again, bacteria was found on toilet seat, lid, and gaps between the top and porcelain rim and the toilet seat suggesting that droplets of faecal matter after flushing the toilet was an infection hazard, especially during acute diarrhoea illnesses. Other existing studies on pathogenic microbes on clothes include microbial flora on ties (Dixon, 2000), Laboratory coats (Srinivasan *et al*., 2008) worn by doctors and students, lanyards (Kotsanas *et al*., 2008), nurse's scrubs and gowns (Pilonetto *et al*., 2004) used in hospitals and nursing homes. Micro-organisms in clothes are transmissible through sharing.

Fomites have been shown to aid in the transmission of pathogens from one individual to another. Survival of microbes on fomites is influenced by intrinsic factors which include fomite properties or microbe characteristics and extrinsic factors, including environmental temperature, humidity, etc. If these microbes remain viable on surfaces long enough to come in contact with a host, they may only need to be present in small numbers to infect the next host (Boone & Gerba, 2010).

A common fomite is bedding, where commonly employed materials, such as cotton, act as wicks to carry pathogens far from the initial contact point with human skin, particularly when moisture is present from sweat, semen, saliva, vaginal secretions, secretions from wounds and open pimples and spilled drinks. Thus, when sheets and pillow cases are changed, the deeper lying material (mattress, mattress cover and pillow) still harbour potential pathogens of the previous user(s) (Muthiani *et al*., 2012). Furthermore, the next user particularly when moisture is introduced onto the scene can become infected by reverse wicking, i.e. moisture can draw deep lying pathogens back toward the surface of the bedding that is in contact with the user. In a study by Neely and Maley (2000), the data indicated that *Staphylococci* and *Enterococci* can survive for extended periods of time.

Awumah (2012) cautioned that the belief that normal laundering produces clean clothes, does not necessarily translate to bacteriologically clean, due to detergents having a wide range of efficacy in reducing bacteria contamination on clothing. Similarly, washing machines have been identified as sources to spread bacteria, such as *Staphylococcus Aureus*- a common cause of skin infections, from previous loads to future loads of laundry. In one study, the transfer of viruses to sterile cloth swatches in the

laundry was very efficient for all viruses tested, ie. Adenovirus causing pink eye and diarrhoea, hepatitis A virus causing hepatitis and rotavirus causing diarrhoea. A sufficient number of rotavirus and hepatitis-A virus survived in laundry washed only with detergents (Awumah, 2012).

Bloomfield *et al.* (2011) identified two points where clothing can spread infection. The first is where contaminated items are handled before and during laundering. Secondly, if the laundry process fails to eliminate contamination, this can then be spread to other items in the laundry load. If laundry is left damp, this encourages microbial survival and there is the chance for growth of residual micro-organisms, such that clothes can then become a source of microbes. Assessing the impact of hygiene practices, such as laundry hygiene, either in combination with or separate from hand hygiene or surface hygiene, is difficult because of multiplicity and close interdependence of the various routes of infection transmission, and the extreme difficulties in controlling variables (Bloomfield *et al.*, 2011). They admitted that the impact may also vary from one community or even one household to another, according to a range of factors such as the types of pathogens prevalent within that community, their modes of transmission and the social conditions and habits of the people who make up the study population.

Within the home, the primary sources of contamination on clothing are from the wearers own body flora, from handling of contaminated food and from contact with other people or household pets (Bloomfield *et al.*, 2011). Whereas organisms shed via skin scales or via faeces will mainly contaminate underclothing in contact with the skin, contamination from nasal secretions or from contaminated food or from nursing care of infected family members is more likely on outer clothing. Awumah (2012) again found

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that clothing, bed linens, towels and especially used underwear and other items which are in constant or intermittent contact with the body may form an important route of transmission of microbial infections. Bloomfield *et al.* (2011) indicated that the critical control points or component causes of infection transmission in the home are the hands together with hand and food contact surfaces and cleaning cloths. They added that in some cases, the hands alone may be sufficient cause for transmission of an infection. Since these second-hand clothing are stored for days and pass through a lot of hands before it reaches the final consumer, this assumption seems true. Use of bleach or other targeted disinfectants and sanitizers, such as silver ions, are necessary to reduce contamination of washing machines.

These studies have established a strong relationship between micro-organisms and fabric, a justification that patronage of used clothing and especially undergarments should be of public health concern to all in view of the likelihood of spreading communicable diseases (Awumah, 2012). These observations reinforce the need for more care with clothing. Muthiani *et al.* (2012) found that because of the frequency of intimate contact with the previous owner's skin and the fact that used undergarments come from people from all walks of life, it is reasonable to expect that these clothes are colonized with potentially pathogenic bacteria and fungi as demonstrated by the study. *Staphylococci* resist drying and can survive in dust and soil for years. In their study, used panties and bras had the highest count of molds with an average count of 6.5 and 6.3 respectively followed by towels and socks at 6 C.F.U per cm of the cloth. This can be attributed to the high frequency of usage of undergarments. They are tolerant of high temperatures; this

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capacity and resistance to drying allowing prolonged survival on fomites and clothing (Sattar *et al.*, 2001).

In the year 2012, the South Australia Health Department cautioned consumers to study critically second-hand clothing items thoroughly before purchase since bed bugs, lice and their eggs and/or waste products may be evident in the seams and creases of second-hand goods. The Department stated further that an examination of the second-hand items will give one the indication of its general cleanliness and quality but not necessarily reveal a health risk, since most of the parasites of concern are so tiny that they cannot be seen with the naked eyes.

2.8.1   Fumigation/Volatile Organic Compounds (VOC)

Fumigation of cargo is widely practiced in international shipping. Fumigant is one of a number of techniques that are used to prevent or control insect infestation. Fumigants/VOC include: benzene, chloropicrin, ethylene dibromide, ethylene oxide, formaldehyde, hydrogen cyanide, methyl bromide, phosphine and toluene. The fumigants used for the second-hand clothing before they are shipped or exported are aimed at killing any probable insect that might be hiding in the clothing. The level of contamination of a specific fumigant or VOC is also related to the type of the commodity and the country of export/origin (Muthiani *et al.*, 2012). Among the fumigants listed, formaldehyde is the most common fumigants on clothing.

Long-term ill effects on the health may develop from exposure to the fumigants and the VOCs (New Zealand Custom Service, 2012). For instance, methyl bromide is a very toxic fumigant gas with poor olfactory warning properties. It has local and

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systematic effects. When used on items like clothing, can cause acute poisoning leaving marked irritation of the eyes, skin and mucous membranes of the respiratory tract, with high concentrations causing pulmonary oedema with a late onset chemical pneumonitis. Dermal exposure can cause severe irritation and corrosive injury of the skin with blisters and vesicles resembling a second-degree burn, in particular when the gas or liquid is trapped in gloves, boots and other clothing (Muthiani *et al.*, 2012). The most systematic effects are neurological: headache, dizziness, vertigo, slurred speech, nausea and vomiting, confusion, blurred vision, twitching and possibly convulsions and coma (Department of Justice and Attorney June 2012, Report as cited in Muthiani *et al.*, 2012).

2.9   Safety Measures Taken By Sellers and Users of Second-Hand Clothing

Literature suggests that not all used clothing are in good shape and that almost all clothing items received as second-hand need one form of treatment or the other. Regulations on shipping of goods to other countries present the need to preserve them in good condition before transporting. This is carried out to ensure the goods presented remain in good condition until it reaches the receiver. On the international trade and in the second-hand clothing industry, the most commonly used and standardized treatments given to second-hand clothing before shipment is the use of fumigants. Fumigants are applied to such clothing items to prevent possible infestations from pest and insects.

Another common practice carried out by second-hand clothing traders and users is repair and mending. The need for clothing repair comes from various sources. Baker (2011) identified repair works commonly carried out on second-hand clothing to include: securing and fixing buttons, snaps, hook and eye, reinforcement of split/ripped seams,

replacement of zippers and elastic, lengthening or shorting of garments and patching. Clothing repair or 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. Baker stressed that whether a hem has come loose or the hemline length has changed, repairing a hem is one of the most frequently made repairs. In other instances traders made use of a variety of visual merchandising techniques to attract customers since these techniques were important in turning a customer's search into purchase of an item. The techniques included displaying merchandise by hanging on the walls, on counters, on the doors and windows for those businesses that had some window space.

A survey by Imo and Maiyo (2012) indicated that there existed some kind of networking between the second-hand clothes traders and the dry cleaning industry in Nairobi. This finding seems to exist in all the second-hand clothing retail markets across the globe. The traders have linked with these drycleaners who also do repairs, cleaning and ironing on their behalf at a fee. Rono (1998) noted that these laundry services would improve the quality, price and appearance of the products on offer. In Awumah's (2012) opinion, the belief that normal laundering produces clean clothes, does not necessarily translate to bacteriologically clean, due to detergents having a wide range of efficacy in reducing bacteria contamination on clothing. Similarly, washing machines have been identified as sources to spread bacteria, such as *Staphylococcus Aureus*- a common cause of skin infections, from previous loads to future loads of laundry (Awumah, 2012).

Hygiene measures such as washing with detergents, ironing, sun-drying and proper storage of clothing items must be of concern to the individual. Forster (2014) supported this by indicating some clothing care measures such as washing, ironing and

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ensuring proper storage as means to care for clothing. Bloomfield *et al.* (2011) concluded that, although laundry processes should be able to deliver clean fabrics with minimum use of water, power and chemicals, it is equally important to ensure that laundered clothing does not represent an infection risk. They advised that after wear or use, clothing and household linens most particularly those that which comes into contact with the body surfaces, should be laundered in a manner which will not only render them aesthetically clean, but also hygienically clean i.e. free from pathogens.

To achieve this, there is a need to ensure that laundry products are clearly labelled so that consumers can understand whether, and under what laundering conditions, their laundry products can be expected to produce fabrics which are hygienically as well as visibly clean. It is also important to recognize that the hygienic cleaning (i.e. biocidal/germ removal action) of laundering is achieved by a combination of heat, rinsing, detergent and chemical oxidative action (Bloomfields *et al.,* 2011).

CHAPTER THREE

METHODOLOGY

3.1   Overview

This section deals with the methods used to obtain information for the study. These include research design, population, sample and sampling technique(s), instruments, pre-test, data collection, data analysis, validity and reliability.

3.2   Research Design

In this descriptive survey research, the researcher used a mixed method approach, described by Creswell (2002) as a procedure for collecting, analyzing and mixing both quantitative and qualitative data to study and understand a research problem very well. The mixed method of data collection recognizes that there are weaknesses inherent in each type of data. Creswell (2003) was of the opinion that by combining quantitative and qualitative methods, the researcher can provide a comprehensive analysis of the research problem which would help neutralize the weaknesses involved in each single method of data collection.

The rationale for using the mixed method in this study was that both quantitative and qualitative methods were required to sufficiently describe, interpret and analyze the data collected on the factors that influence second-hand clothing trade and consumption. When quantitative and qualitative methods are used in combination, they complement each other and allow for more complete analysis (Tashakkori & Teddlie, as cited in Ivankova, 2002) was of the view that. Thus, both numerical and text data, collected

sequentially and concurrently, helped to explain the research problem for better understanding.

3.3   The Population of the Study

According to Ary *et al.,* (2002), population refers to the entire group of individuals to whom the findings of a study apply. The population for this study was 169,894 inhabitants within the Cape Coast Metropolis (Ghana Statistical Service, 2012). This comprised traders and consumers of second-hand clothing as well as inhabitants who were neither second-hand clothing traders nor users in the Cape Coast Metropolis. Figures for the specific study population (traders and consumers) were not accessible because they were not organized, hence the use of the population of inhabitants of the Cape Coast Metropolis.

3.4   Sample and Sampling Techniques

One hundred (100) and ten (10) second-hand clothing consumers and traders respectively in Cape Coast Metropolis were used for the study. The researcher engaged only respondents who portrayed readiness and willingness to participate in the study. The purposive sampling technique was employed to sample ten (10) second-hand clothing traders who engaged mainly in the sale of second-hand undergarments, innergarments, outergarments, accessories and household linen and had their shops at five different locations within the metropolis. Two second-hand clothing traders were selected for each category of clothing product, summing up to the ten (10) respondents. This number was considered because the researcher intended to gain an in-depth understanding of the

issues under study through personal interview and observation which are both time involving.

The convenience sampling technique was used to select hundred (100) consumers of the traders purposively sampled. Respondents were mostly reached at the point of purchase at the market. However, through arrangement, a few of the respondents were reached at their homes, offices or campuses to answer the questions as they were too busy at the market to participate in the interview. Only those who were willing to give the information were included in the study. Though convenience sampling as a non-probability sampling technique is considered a weak form of sampling because of the inability to generalize findings to a larger population, it is an easier, less expensive and more time saving technique (Gravetter & Forzano, 2006). Convenience sampling was employed to select the consumers because second-hand clothing consumers were readily available and willing to provide the needed information for the study.

3.5   Instruments for Data Collection

Two instruments were used for the study: semi-structured questionnaire and observation checklist. Employing two or more methods help researchers to offset the limitations associated with one method (Punch, 2005) and to determine the accuracy of information gathered (Bush, 2002). These instruments were adopted to enable the researcher to understand and describe the experiences of second-hand clothing traders and consumers. Separate questionnaires were designed for the second-hand clothing traders and consumers. Since the items on the questionnaires were semi-structured, there were open and close-ended questions. Semi-structured questionnaires/interviews consist of several key questions that help to define the areas to be explored, but also allow the

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interviewer or interviewee to diverge in order to pursue an idea or response in more detail (Gill, 2008). The items on the instruments used for the study were based on the four research questions raised to guide the study.

3.5.1 Questionnaire

The questionnaire was in two parts, the first part consisted of demographic information of respondents and the second part consisted of structured questions for the research data. Sidhu (2002) posited that a questionnaire is that form of inquiry which contains a systematically compiled and organized series of questions that are sent to the population samples. As the researcher desired to collect factual information on second-hand clothing trade and consumption, multiple choice questions and open-ended questions were developed in the questionnaire to collect data on the research questions stated. The questionnaire for the traders was made up of 20 items (Appendix B), whereas that of the consumers had 11 questions (Appendix C). For those participants who could read and write, copies of the questionnaire were given to them to provide the necessary information required within an average time frame of thirty (30) minutes. In the case of those who could not read and answer the questions, the researcher interpreted the questions to them mostly in the local dialect (Fante) and filled their questionnaires for them in the English Language. Thus the same questionnaire was used to interview respondents who could neither read nor write as well as those who were too busy to fill their questionnaires but could verbally respond to the questions.

3.5.2   Observation Checklist

Observation was carried out during and after the administration of the questionnaires. The researcher noted various scenes at the Cape Coast market, observed critically with the help of a checklist (Appendix D) and recorded behaviours of interest to the study that both consumers and traders exhibited. Photographs of scenes and items of interest were also taken to support field notes taken (Appendix E, Page 135) and to assist in validating findings.

3.6   Pre-test

The instruments for data collection were pre-tested on twenty (20) consumers and five (5) traders of second-hand clothing in and around Winneba market in the Effutu Municipality. Pre-testing is useful because it enables the researcher to identify problems with data transference (Kusi, 2012). It also helps the researcher to correct ambiguous questions for data reliability. A preliminary analysis was carried out to see whether the wording and format of the items in the instruments would not present any difficulties when the main data were analyzed.

3.7   Data Collection

The researcher administered the questionnaire and conducted the interview personally. Before the data collection, the respondents were informed about the study details and given assurance about ethical principles, such as their anonymity and confidentiality of the information they would provide. An introductory letter (Appendix A) obtained from the Department of Home Economics Education, at the University of Education, Winneba, stating the purpose of the study was also shown or read and interpreted to participants to assure them of the credibility of the study. These gave the

respondents a fair idea of what to expect from the questionnaire/interviewing and increased the likelihood them providing responses to ensure validity.

To achieve research objectives one, two and three, close-ended questions were used whereas the fourth objective contained both close-ended and open-ended questions to find answers from both the traders and consumers. For the close-ended type of questions, options were given for which either the respondents or the interviewer ticked the options which were applicable. The open-ended type of questions, required respondents to express their own views in the spaces that were provided. In addition to these, the researcher used the checklist designed to observe and note scenes of interest at the market. Photographic imageries were also collected and used to support findings.

3.8   Data Analysis

Maxwell (2005) stated that data analysis involves the breaking up of data into manageable themes, patterns, trends and relationships. Items on the two sets of questionnaire used for data collection as well as the checklist were designed in such a way that they both required quantitative and qualitative analysis. Quantitative data obtained was analyzed separately from the qualitative data. For the quantitative data, the respondents were asked to tick in relation to their levels of agreement, series of statements raised. Research question four which sought to find out the effectiveness of treatments given to second-hand clothing before sale and usage, called for both quantitative and qualitative data. Consequently, items on this theme in the two sets of questionnaire and the observation checklist were designed in such a way that they were analyzed quantitatively and qualitatively.

All statistical analysis of the quantitative data were conducted with the help of the Statistical Package for Social Sciences (SPSS), version 20.00 software. The outcome was analyzed using multiple response analysis with SPSS, where the number of times a particular second-hand clothing item was selected by the respondents were shown in frequencies and percentages. The quantitative data was coded into the SPSS software which then generated frequencies and percentages for responses and these were presented in tables and charts. On the other hand, the qualitative data was based on thematic analysis of a set of data gathered. The data was organized, reviewed and coded based on the themes that were generated from the open-ended questions and observed issues on the field. The development of themes was guided by the research questions and the literature review. The data presentation on the qualitative data was done manually using the question-by-question approach as presented on the questionnaire and the observation checklist. Data obtained from the second-hand clothing traders were analyzed separately from that of the consumers so as to make interpretations easier and understandable, and also draw relations where necessary.

Each transcript was read in its entirety several times and key phrases of possible theoretical import were bracketed. Key phrases that shared some commonalities were grouped together as conceptual categories, and these categories were used to determine the direction of the remaining interview. The coding process begun after the themes were determined. The codes consisted of short phrases expressed by the participants in their responses and others were self-generated based on text passages obtained from the literature review. The codes were assigned to each manuscript (questionnaire) and then related codes were aggregated under each theme.

Concerning the observation, the researcher noted behaviours of interest that were observed on the field on the observation checklist were recorded and pictures were taken to aid in the analysis of the data. Data obtained from the observation was considered under the patterns of experiences identified. The researcher combined related patterns in sub-themes to obtain a comprehensive view of the information and supported it with excerpts from the data collected from the respondents. Since the data was collected from two different categories of respondents (traders and consumers of second-hand clothing), data was analyzed from each of these categories' perspective. During the analysis, the links and relationships between responses were explored and interpreted as presented by the respondents. In sum, the various methods utilized for the study were considered adequate to tackle the research questions. Detail description and interpretations of statistics and findings were carried out. It was envisaged that SPSS would be essential for interpreting the quantitative data in order to answer the research questions that demanded quantitative analysis.

3.9   Validity and Reliability

Validity is concerned with the extent to which an instrument measures what it is intended to measure (Tavakol & Dennick, 2011). For content validity, the research instruments were developed after a review of related literature then copies of the instruments were given to some experts in research and Clothing and Textiles at University of Education, Winneba who read through and made necessary corrections.

Reliability is the ability of a research instrument to consistently yield the same results during several uses. According to Radhakrishna (2007), reliability indicates the

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accuracy and precision of an instrument. To enhance the reliability of the study, the instruments were pre-tested in a random sample of five traders and twenty consumers in Winneba in the Effutu Municipality. In this study, reliability was approached as internal consistency of the items where Cronbach alpha coefficient was computed. The result indicated that the alpha coefficient for the variables exceeded 0.7, which according to McMillan and Schumachaer (2010) is indicative of good reliability. In addition, the researcher used both questionnaires/interview and observation to check consistency of responses obtained from the qualitative data gathered.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1   Overview

This chapter presents the results of the study in two sections. Section 'A' covers demographic data of the respondents while Section 'B' covers data gathered on the objectives set for the study.

4.2   Section A: Demographic Characteristics of the Study Respondents

This section presents the demographic characteristics of the study of the respondents. It covers age, sex and occupations of the respondents, as well as their levels of education and number of years they had been engaged in the second-hand clothing business, or had been patronizing second-hand clothing.

4.2.1   Sex Distribution of Respondents

The gender characteristics of respondents is presented in pie charts for both second-hand clothing traders and consumers. The sex distributions of the respondents are shown in Figures 1 and 2 for second-hand clothing consumers and traders respectively.

Key
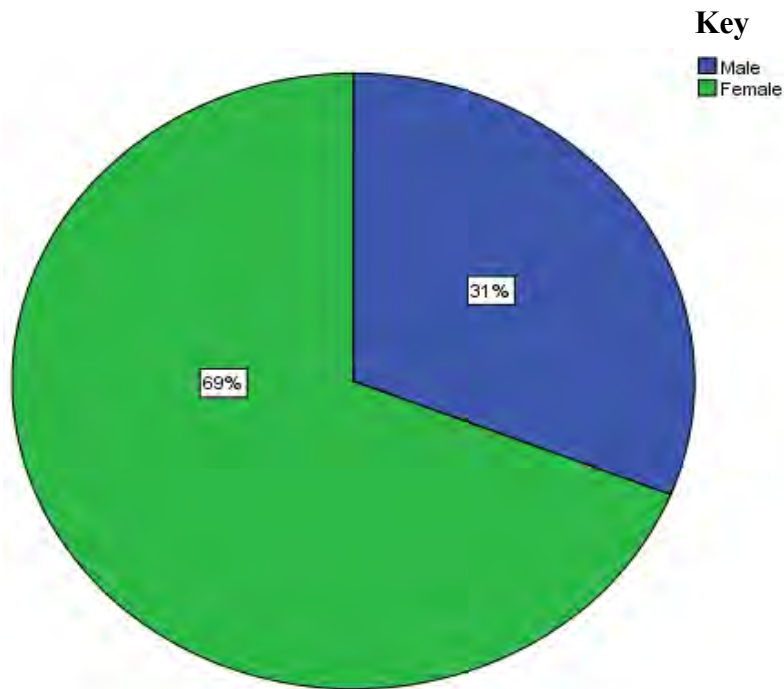
■ Male
■ Female

Figure 1: Sex Distribution of Second-hand Clothing Consumers

The sex distribution of the second-hand clothing consumers presented in Figure 1 shows that 69% were females, while the male were 31%.
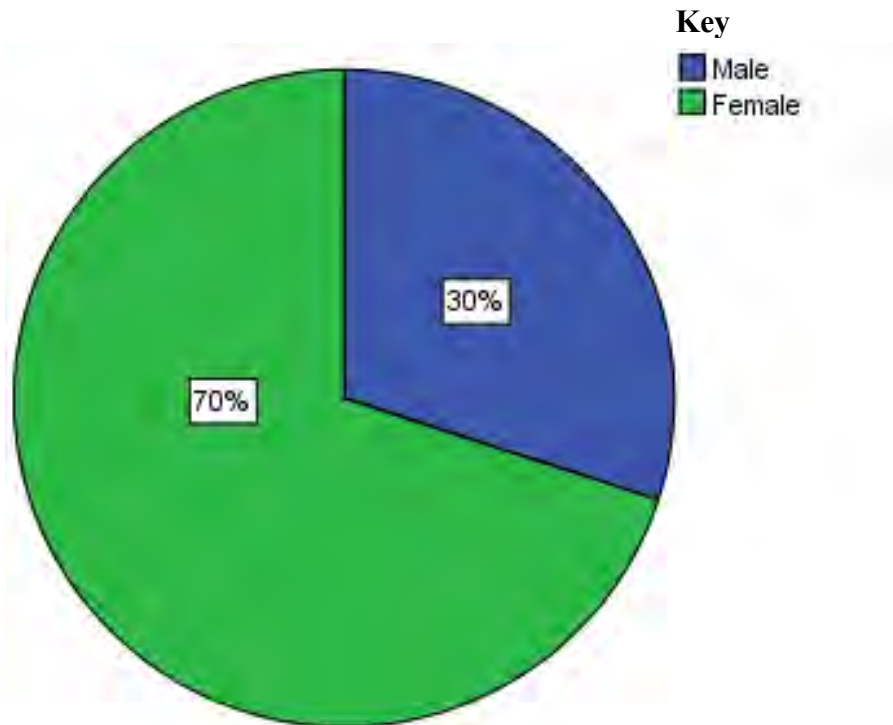
Figure 2: Sex Distribution of Second-hand Clothing Traders

The sex distribution of the second-hand clothing traders who participated in the study as illustrated in Figure 2 indicates that out of the 10 traders, seven (7) were females, representing 70%, while three (3) were males, also representing 30%.

It could be deduced from the findings that both males and females engage in second-hand clothing trade and usage. The result clearly indicated that the percentage of females who engaged in the trade and consumption greatly exceeded that of males. This reflects what Mkhize (2003) found that there were both men and women involved in the trade and consumption of second-hand clothing. This finding agrees with Hansen (1994), who noted that women slightly outnumber men as second-hand clothing traders, a fact on which Fields (2008) agreed in relation to Zimbabwe's street markets. This is not surprising as the service and informal sectors in Africa are dominated by women because they mostly buy clothing for themselves and their household members.

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4.2.2   Age Distribution of the Respondents

The age characteristics of the second-hand clothing consumers were solicited and presented in Table 1.

Table 1: Age Distribution of the Respondents

Age	Consumer	Trader	Frequency	%
Below 21	15	1	16	15
21-25	24	2	26	24
26-30	25	3	28	25
31-35	11	1	12	11
36-40	6	1	7	6
41-45	9	-	9	8
46-50	8	1	9	8
Above 50	2	1	3	3
Total	**100**	**10**	**110**	**100**

The age distribution of the respondents in Table 1 indicates that majority of both the second-hand clothing consumers and traders were aged between 21 and 30 years. This is significant as age is viewed as one of the factors influencing consumer behaviour. Mkhize (2003) described the age grouped between 21 and 30 as working age implying that they consist of different individuals with various income levels; varying needs and actively involved in business transactions. Mesiniemi and Maki-Rahko (2011) perceived this group as the powerful force in the future. Their needs and desires have a big influence on demand. A modern elderly person is seen active, interested in new products and experiences, and an eager consumer with the money and willingness to purchase goods and services, especially personalized services (Solomon, Bamossy, Askegaard &

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Hogg, 2006). A similar finding was noted by Hansen (1994) indicating that in Zambia, second-hand clothing traders are young and old, women and men, with different educational and employment histories and from many ethnic groups. This could be linked with textile handicraft, which has been predominately managed by women (United Nations Industrial Development Organization (UNIDO), 2005) a feature that may account for the marginally higher number of women traders.

4.2.3 Distribution of Respondents by Occupation

Information on the occupational distribution of consumers was gathered. The generated frequencies and percentages have been presented in Table 2.

Table 2: Distribution of Second-hand Clothing Consumers by Occupation

Occupation	Nō.	%
Students	52	52
Artisans	14	14
Traders	13	13
Teachers	12	12
Nurses	8	8
Civil Servants	1	1
Total	**100**	**100**

*Sample size =100

Results from Table 2 indicates that slightly more than half (52%) of the consumer respondents were students, 14%, 13% and 12% were artisans, traders and teachers respectively. The rest, 8% were nurses and an individual was a civil servant.

This finding is not surprising as the study area is noted to have a number of schools and institutions accessible to people and such class of people seem to have knowledge and experiences of what they consume as second-hand clothing. Awumah (2012) reported that students, especially of tertiary institutions, were in sharp contest for second-hand clothing with the working class for what is referred to as first selection, which they patronized highly on the second-hand clothing market. The findings from this study seem to suggest that workers on salaries and wages like the nurses and teachers consume such products even though they may have the means to purchase new clothing but might be holding on to other reasons for consuming second-hand clothing. These findings are in line with Baden and Barber (2005) who mentioned that consumers of such products cut across income groups and social categories which include university students, housewives, and government employees.

4.2.4 Education of Respondents

Data on educational level for both second-hand clothing consumers and traders collected to show the highest level of their education. The responses are presented in Table 3.

Table 3: Level of Education of the Respondents

Education	Consumer	Trader	Nō.	%
No Formal Education	8	-	8	7
Basic/Elementary	8	4	12	11
Secondary/Voc/Tech	44	6	50	46
Tertiary	40	-	40	36
Total	**100**	**10**	**110**	**100**

The characteristics of the respondents in terms of their educational level show that eight (8) people, made up of only consumers had no formal education. However, 12 (11%) of the respondents, consisting of eight (8) consumers and four (4) traders, had Basic/Elementary level of education, while 50 (46%) of them comprising 44 consumers and six (6) traders had secondary/vocational/technical education. Respondents who had tertiary education were 40 (36%). All of them were consumers of second-hand clothing.

These trends were anticipated as the study area is noted to have a large number of schools and tertiary institutions accessible to people. Significantly, with six traders out of the ten having received Secondary/Vocational/Technical education could be attributed to the high levels of unemployment in the country especially with the case of people with low-levels of education. The large number of primary and secondary/vocational/technical educated traders may indicate that they entered the business to earn income since they were not able to further their education. Consequently, lack of higher education would have put them at a disadvantage in seeking employment in the formal sector.

4.2.5 Number of Years Engaged in Second-Hand Clothing Trading and Consumption

The respondents were asked to indicate the number of years they had been engaged in second-hand clothing consumption and trading. The results are presented in table 4.

Table 4: Number of Years Engaged by the Respondents in Second-Hand Clothing Business and Consumption

Years	Consumer	Trader	Nō.	%
Less than 5	18	1	19	17
5-10	25	5	30	27
11-16	36	4	40	37
17-22	13	-	13	12
More than 22	8	-	8	7
Total	**100**	**10**	**110**	**100**

As shown in Table 4, it was found that the highest percentage of the respondents (consumers and traders) (37%), had been engaged in second-hand clothing trade and usage between 11-16 years. Specifically, 19 (17%) of them, made up of 18 consumers and one (1) trader were found to have been in second-hand clothing for less than 5 years; while 30 (27%) made up of 25 consumers and five (5) traders, indicated that they had been engaged in second-hand clothing business between 5-10 years. Significantly, 40 (37%) of the respondents consisting of 36 consumers and four (4) traders, had been involved in second-hand clothing trading and consumption activities between 11-16 years, while 13 (12%) respondents, all of whom were consumers, said they had been dealing in second-hand clothing between 17-22 years. However, eight (8) of the respondents, representing 7% indicated they had been engaged in second-hand clothing business for more than 22 years. Significantly, all the eight (8) respondents were consumers.

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The trade, purchase and consumption of second-hand clothing seem to have existed throughout time. With a significant number of eight second-hand clothing consumers to have been consuming the product for over twenty-two years as this study presents, clearly gives an indication that the trade has existed in Ghana for quite a long time. Findings of Hansen (2008) traced the commercial trade in second-hand clothing to the end of the nineteenth century and this was limited to exports. Hansen further highlighted the effects of industrial plenty which enabled increasing numbers of middle-class consumers to increasingly shun used clothing markets thus, increasing the availability of the product. For a number of years, the trade in used clothing and recycling has been in the public spotlight for research due to different ecological, economic and social reasons. The widespread economic challenges on employment trend in the nation is greatly reflected in this study as people seem to have engaged in this informal business for quite a number of years. The inability of the formal sector to generate jobs in their required quantities has also pushed many into the informal sector (Osei-Boateng & Ampratwum, 2011).

Section B: Results

In this section, the results of data gathered on the research questions for the study from consumers and traders of second-hand clothing are presented. The presentation is done along themes that were derived directly from the research questions.

4.3 Kinds of Second-hand Clothing Sold in the Cape Coast Metropolis

This sub-section of the presentation provides answers to the first research question. It explored the various types and characteristics of second-hand clothing that were available on the market in the study area. The data gathered under this theme for traders was of multiple responses, which means that the respondents could select more than one item where applicable. Therefore, each item of second-hand clothing had an equal opportunity of being selected by all ten traders.

4.3.1 Second-hand Undergarments

In order to find out specific types of second-hand undergarments commonly sold in the Cape Coast Metropolis, the traders were asked to indicate the specific kinds of second-hand undergarments they found commonly sold in the metropolis. Their responses were subjected to multiple responses analysis. Table 5 shows the second-hand undergarments sold by traders in Cape Coast.

Table 5: Second-hand Undergarments Commonly Sold in Cape Coast

Undergarments Sold	Nō.	%
Brassieres	9	90.0
Boxer shorts	9	90.0
Chemise	4	40.0
Panties	3	30.0
Singlets/Vest	2	20.0
Waist slips (Underskirts)	2	20.0
Total	**28***	**280.0***

N>10 Due to Multiple Responses

It can be observed from Table 5 that on the part of the second-hand clothing traders, the common second-hand undergarment sold in Cape Coast, brassieres and boxer shorts, were each selected by nine traders (90%), while chemise was chosen by four (40%) traders. Panties were selected by three (30%), whereas waist slips/underskirt and singlet/vest were each selected by two (20%). The study revealed that brassieres and boxer shorts were selected mostly under the undergarment category. This result confirmed what Awumah (2012) found that there is a boom in this business with importers continuing to make undergarments such as brassieres, panties, boxer shorts and singlet, available to members of the public.

Significantly, used undergarments such as brassieres, panties and boxer shorts were found to be on sale on the Cape Coast market. Literature has established a strong relationship between micro-organisms and used clothing. Muthiani *et al.* (2012) found that because of the frequency of intimate contact with the previous owner's skin and the fact that the undergarments come from people from all walks of life, it is reasonable to expect that these clothes were colonized with potentially pathogenic bacteria and fungi as

demonstrated by their study. In their study, panties and bras had the highest count of molds with an average count of 6.5 and 6.3 respectively followed by towels and socks at 6 colony forming unit (C.F.U) per cm of the cloth. These clothing items are tolerant of high temperatures and resistance to drying allowing prolonged survival of fomites on clothing items (Sattar *et al*., 2001). If these microbes remain viable on surfaces long enough to come in contact with a host, they may only need to be present in small numbers to infect the next host (Boone & Gerba, 2010). This justifies why patronage of used clothing and especially undergarments should be of public health concern to all in view of the likelihood of spreading communicable diseases.

Though a Legislative Instrument (LI) 1586 passed in 1994 banned the importation, clearance and sale of used undergarments of any type, form or description, whether purchased, donated or procured in Ghana, records from this study reporting of the sale of these items in the study area, raise questions about the effectiveness of government policies. This greatly undermines the effectiveness of measures put in place by the state to check the importation and sale of such used clothing.

4.3.2   Second-hand Innergarments

In terms of which second-hand innergarments were common on the Cape Coast market, traders were again asked to select their choice(s) by ticking as many as were applicable to them. Specifically, the traders were asked to select the various second-hand innergarments that they sold on the market in Cape Coast. The results were subjected to multiple response analysis and presented in Table 6.

Table 6: Second-Hand Innergarments Commonly Sold in Cape Coast

Undergarments Sold	Nō.	%
Dresses	9	90.0
Blouses	9	90.0
Shirts	8	80.0
T-shirts	8	80.0
Skirts	6	60.0
Shorts/Knickers	6	60.0
Trousers	4	40.0
Suit	3	30.0
Petticoat	1	10.0
Total	**52***	**520.0***

N>10 Due to Multiple Responses

The results of the multiple responses presented in Table 6 shows that according to the traders, the common second-hand innergarments on the Cape Coast market were dresses and blouses, each of which was selected by nine (9) traders, representing 90% of cases. Shirts and 'T'-shirts were chosen by eight (8) traders, and this represents 80%. However, six of the traders selected skirts and shorts/knickers representing 60% each, while trousers was chosen by four (4) traders, also representing 40%. Suit was selected by three (3) traders, representing 30% whereas petticoat was selected by only one (1) representing 10%.

The result indicates that dresses, blouses, shirts and 'T'-shirts dominated innergarment items commonly sold on the markets. This is not surprising because these clothes are normally worn as either casual wear or occasional wear. Brooks (2012) stated that used 'T'-shirts, jeans and dresses have been used to satisfy a basic need. Items that were

observed during data collection and presented in this study clearly noted that dresses, blouses and 'T'-shirts were common on the Cape Coast second-hand clothing market. This was supported with photographs taken (Appendix E; Page 135) which spotted some of these used clothing on display as the market.

The results from the demographic characteristics of consumers in this study presented students and individuals aged between 20-30 years to be consuming second-hand clothing most. This class of people are powerful consumers as their needs vary and have the desire to be in the best clothing, hence tend to purchase more to improve their wardrobe. It is ironic that workers now wear what was previously considered as casual wear for work clothes and leisure wear. This notion has greatly influenced the youth of today as there are numerous options to acquire clothes at affordable prices. The youth culture is generally influenced by what is in vogue, leisure, having good time and therefore spend money on what will make them stand out and feel good (Frings, 1999). Students, especially of tertiary institutions are in sharp contest with the working class for what is referred to as first selection at the second-hand clothing market and perhaps are ignorant about possible transfer of infestations of the clothes they acquire as well as during laundry (Awumah, 2012).

It is significant to note that these innergarments also have the potential of receiving and spreading infestations among users. As these clothes are fumigated before shipment to needed countries, the dermal exposure of fumigants can cause severe irritation and corrosive injury to human skin. These fumigated clothing items are sealed in containers for several weeks and exposed to changes in temperature and climate. Muthiani *et al*. (2012) indicated that residual vapours inside the containers on opening

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can be of significance both as occupational hazard to workers handling the containers and to the consumers who sort through to make their choices.

4.3.3 Second-hand Outergarments

The traders also indicated which second-hand outergarments are sold on the Cape Coast Market. The data were also of multiple responses in nature, and were thus presented in Table 7.

Table 7: Second-hand Outergarments Commonly Sold on the Cape Coast Market

Outergarments Sold	Nō.	%
Jackets	6	60.0
Sweaters	4	40.0
Aprons	-	00.0
Total	**10***	**100.0***

N>10 Due to Multiple Responses

The results in Table 7 show that jackets were the most common second-hand outergarments sold by traders on the markets in Cape Coast. Specifically, six traders selected jackets, while sweaters were chosen by four traders. These respectively represented 60% and 40% of all the responses given by the traders to all items under consideration. It is important to add that though the list of items in this section were more than two, SPSS only gives the results for items that are selected, which means that if an item is not chosen by respondents, it does not show in the output displayed.

Sweaters and jackets are often used to provide warmth for the body and therefore it is not surprizing as they featured among the items sold at retail on the Cape Coast market. Reports by Curnow and Kermeliotics (2013) on Cable News Network (CNN)

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identified the second-hand jackets as one of the items sold at retail on the African markets. The role of clothing in the spread of infectious diseases to patrons still remain a concern. Outergarments have been used mainly to provide warmth or to protect users. For jackets and sweaters these are mainly made from woolen fabrics and therefore require special treatments during use and laundry. Because of the nature of the fibre used in the construction of such clothing items, they require special care during laundry. Failure to observe proper care could lead to damage of the clothing item and the spread of infections. Differences in microbial strains and factors relating to temperature, humidity and type of fabric used in the construction of outergarments could aid in survival and spread of pathogens being transferred from one host to another.

4.2.4   Second-hand Accessories

Second-hand clothing accessories that were sold on the market in Cape Coast were also inquired from the traders of second-hand clothing. The result of the data gathered have been analyzed and presented in Table 8, using multiple responses analysis in SPSS.

Table 8: Second-hand Accessories Commonly Sold on the Cape Coast Market

Accessories Sold	Nō.	%
Footwear	8	80.0
Bags	8	80.0
Socks	4	40.0
Tie	4	40.0
Hats/Cap	3	30.0
Total	**27***	**270.0***

N>10 Due to Multiple Responses

Footwear and bags were the most common second-hand clothing accessories that were sold by traders on the Cape Coast market. Specifically, eight traders each selected these two items. This represents 80% of responses given to all items under consideration. Socks and tie were each chosen by four traders, representing 40% responses. Hats or caps were selected by three (3) traders which represent 30% of all cases. This situation is also worrying as such clothing items have been found to aid in the transmission of pathogens from the previous user the new users. Used clothing accessories such as footwear, socks, tie and bags could habour potential pathogens of the previous user(s) to the next user (Muthiani *et al.,* 2012).

4.3.5   Second-hand Household Linens

The study also sought to find out from traders, which second-hand household linens were mostly sold on the market in Cape Coast. The result is illustrated in Table 9.

Table 9: Second-hand Household Linens Commonly Sold on the Cape Coast Market

Household Linens Sold	Nō.	%
Towels	9	90.0
Bedsheet	7	70.0
Pillowcase	4	40.0
Blankets	3	30.0
Total	**23***	**230.0***

 N>10 Due to Multiple Responses

Second-hand household linens commonly sold on the market in Cape Coast include bed sheets, towels, pillowcases and blankets as indicated by the traders.   In specific terms, nine (90%) traders selected towels as the common second-hand household linens on the market. Bed sheets and pillowcase were each selected by seven (70%) and

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four (40%) traders respectively, whereas blanket was chosen by three (3) traders representing 30%.

The result results give an indication that people were still patronizing these household linen for use at home. Items such as towels which were among the list of imported second-hand clothing banned in Ghana in 1994 were still making waves on the market. The Daily Graphic as far back as 2008 reported hundreds of sellers and buyers of clothing that included used bedsheets and towels in addition to other categories of used clothing (Okoye, 2013). Bloomfield *et al.* (2011) found that household linens such as bedsheets, pillows and towels have the potential to act as vehicles for spread of infections in homes and everyday life settings, hence the need to observe safe practices in the handling and usage of such clothing items. Awumah (2012) also cautioned that clothing, bed linens, towels and other items which are in constant or intermittent contact with the body may form an important route of transmission of microbial infections. This is not far different from what Muthiani *et al.* (2012) found indicating deeper lying of bedding materials such as sheets, pillow, mattresses and mattress covers habour pathogens of the previous user(s), particularly when moisture is present in the form of sweat, semen, saliva, vaginal discharge, secretion from wounds and open pimples.

4.3.6   Second-hand Clothing Sold by Traders in the Cape Coast Metropolis

In order to identify the kinds of second-hand clothing that the respondents (traders) sold on the Cape Coast market, each of the traders was asked to indicate the specific kinds of second-hand clothing they sold under the categories they sold (eg. Kind of innergarments sold by the traders) on the market to their consumers. This yielded multiple responses

hence; each trader had the chance to choose as many options as were applicable to them.

The result is presented in Table 10.

Table 10: Second-hand Clothing Sold by the Traders

Item Sold	Nō.	%
Dress	9	90.0
Blouses	7	70.0
T-shirts	7	70.0
Waist slip	6	60.0
Bedsheet	5	50.0
Skirts	5	50.0
Brassiere	4	40.0
Shirts	4	40.0
Jackets	4	40.0
Trousers	4	40.0
Shorts/knickers	4	40.0
Singlet/Vest	4	40.0
Pillow cases	3	30.0
Panties	3	30.0
Sweaters	3	30.0
Footwear	3	30.0
Towel	3	30.0
Socks	3	30.0
Chemise	3	30.0
Boxer shorts	2	20.0
Bags	2	20.0
Blankets	2	20.0
Suit	2	20.0
Tie	2	20.0
Curtains	2	20.0
Table cloth	2	20.0
Hats/Caps	1	10.0
Total	**99***	**990.0***

N>10 Due to Multiple Responses

The result illustrated in Table 10 showed that the kinds of second-hand clothing item that the traders (respondents) sold on the Cape Coast market were dominated by dresses, selected by nine (90%) of traders, while blouses and T-shirts were each selected by seven (70%) traders. Waist slip was chosen by six traders, representing 60% of the responses, whereas skirts and bed sheets were each chosen by five (50%) of the traders. Other items that were given some significant selection by the traders include brassieres, shirts, jackets, trousers, shorts/knickers and singlets/vest each of which was selected by four (4) traders, representing 40% in each case. Other items like pillowcases, pants, sweaters, footwear, towel, socks and chemise where each selected by three (30%) traders. Similarly, quite a number of items including blanket, boxer shorts, bags, shorts/knickers, suit, tie, curtains and table cloth were selected by few traders. These items were found to be the choice of only two (20%) second-hand clothing traders. Hat/cap was the only item selected by only one trader.

The result indicated that dresses, blouses and T-shirts were among the most options sold on the Cape Coast market. This finding agrees with what Baden and Barber (2005) found that second-hand clothing items such as dresses, 'T'-shirts, shirts, blouses, socks, footwear and bags were always available on the market. It was also observed that on market day in Cape Coast which falls on Sundays, second-hand clothes such as dresses, blouses, 'T'-shirts and shirts made up a substantial amount of all items sold at retail on the market. Photographs of scenes at the 'Kotokoraba' market in Cape Coast (Appendix E; Page 135) spotted dresses, 'T'-shirts, skirts as well as brassieres and boxer shorts on displa.y for sale at the market. The traders openly displayed the clothes on matted floors, hanged on wooden shelves, dress stands and forms to attract consumers.

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It is however important to mention that some specific second-hand clothing items like panties, brassiere, towels and boxers shorts that were often categorized as undergarments generated significant figures as traded goods in this study. Despite the possible health risks raised by medical experts, these items were still available on the market for people to patronize meaning these products were patronized by consumers in the metropolis. Traders would not supply them if consumers did not demand them. The overwhelming presence of these used clothing items on the Cape Coast markets brings to question the measures being put in places to restrict the importation of these clothing items onto the Ghanaian market. It raises questions about the effectiveness of government policies on the ban of some second-hand clothing notably, pants, brassieres, boxer shorts.

Awumah (2012) cautioned that second hand underwear contained germs and bacteria from the body fluids of the previous users and have the potentials of being transmitted to the next user therefore those who use second hand underwear such as panties, brassieres, chemise, underskirts, boxer shorts and singlets risk contracting rashes and other skin diseases. From the survey, the findings and observations made reinforce the need for more public education on the handling and usage of these second-hand clothing items and as well bring importers who default into book.

This theme explored the kind of second-hand clothing that were available on the Cape Coast markets. Traders were asked to indicate among the list provided, the kind of second-hand clothing that were available for sale on the market and specifically indicate the types of second-hand clothing they sold under the category of undergarments, innergarments, outergarments, accessories and household linen. From the traders' perspective items such as dresses, blouses and T-shirts were among the options that were

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most commonly sold on the Cape Coast market. In terms of specific items under the various categories of second-hand clothing traders sold on the Cape Coast markets, the study revealed that brassieres and boxer shorts were selected mostly under the undergarment category while dresses, 'T'-shirts and blouses dominated as innergarments. The results for the outergarments sold by the traders showed that sweaters and jackets were the most used clothing traders sold. Household linen on the other hand, were dominated by towels, bed sheet and pillow cases. These findings confirm what the researcher observed during data collection as results from the observation came out with similar findings.

4.4   Most Patronized Second-hand Clothing Items on the Cape Coast Market

The result here relates directly to the second research question and it gives details of second-hand clothing items that were preferred by consumers to buy in the study area.

4.4.1   Second-hand Clothing Items Purchased Most by Consumers

In ascertaining the common second-hand clothing that consumers mostly bought from the market in Cape Coast, the consumers were asked to indicate which second-hand clothing they mostly bought. Their responses were multiple in nature and thus, subjected to multiple responses analysis using SPSS. The result is illustrated in Table 11.

Table 11: Second-hand Clothing Items Purchased most by Consumers

SHC Items Purchased	Nō.	%
Shirts	89	89.0
Dress	81	81.0
Towel	77	77.0
T-shirts	76	76.0
Singlet/Vest	73	73.0
Footwear	71	71.0
Brassieres	69	69.0
Skirts	68	68.0
Boxer shorts	61	61.0
Blouses	59	59.0
Bags	53	53.0
Bedsheet	52	52.0
Trousers	40	40.0
Chemise	38	38.0
Shorts/knickers	30	30.0
Panties	13	13.0
Jackets	8	8.0
Petticoat	7	7.0
Sweaters	7	7.0
Table napkins	6	6.0
Total	**978***	**978.0***

N>100 Due to Multiple Responses

The results presented in Table 11 shows that in terms of the second-hand clothing that consumers mostly bought, shirts, dresses, towels, 'T'-shirts, singlet/vest and footwear were the most dominant as they were each selected by a high number of consumers. In specific terms however, shirts were chosen by 89% of the consumers, while dresses were selected by 81% of them. Second-hand towel was the choice of 77% consumers; 'T'-shirt recorded 76% responses; whereas 71% consumers indicated they mostly bought second-hand footwear from the market. Some other second-hand clothing items which were given significant selection by the consumers include: skirts, which was the choice among 68% of the consumers; while boxer shorts was selected by 61% of

them. In addition, blouses, bags and bedsheets were respectively selected by 59%, 53% and 52% of the consumers. The other second-hand clothing items selected by consumers in descending order were: trousers (40%), chemise (38%), shorts/knickers (30%), panties (13%), jackets (8%), sweaters and petticoat (7%) each and table napkin (6%).

Purchasing second-hand clothing instead of new clothing is an alternative decision-making process in which the economist agree that when the price of second-hand clothing acting as a complement to new clothing falls, the demand for them would increase. However, great concerns being raised by medical experts on the spread of pathogens through the use of second-hand clothing as well as the cost involved in treating possible infestations far outweigh the benefits derived from purchasing such clothing. Hence, public education on the use of second-hand clothing need to be intensified.

This theme focused on identifying the most patronized second-hand clothing by the people in Cape Coast. The results revealed that shirts, dresses, towels, T-shirts, singlet/vest and footwear dominated the list, indicating that consumers patronized these used clothing most. In similar instances, used undergarments like panties, singlets/vest and towels featured among the types of used clothing patronized by the people with significant figures. These findings were not surprising as documentaries and photographs presented in publications by researchers like Hansen (2005b); Baden and Barber (2005) found some of these items being exported into Africa. A recent documentary by BBC on Ghana's used clothing industry further highlighted similar used clothing items as some of the second-hand clothing that Ghanaians patronize.

Mensah (1994) found that second-hand clothing that were imported into the country previously were made up of shirts, trousers, knickers and skirts. But today's

second-hand clothing market has broadened to include towels, bedsheets, shoes, belts, socks, handkerchiefs, brassieres and all types of ladies' and gents' clothing. In addition to this, Manu's (1995) article on "The used clothing Rumpus", captured a statement declared by the executive members of the Second-Hand Clothing Association that their members operate in almost every settlement in Ghana. The presence of used clothing market in the country and regular purchases made by the people give a credible impression that many Ghanaians make use of second-hand clothing. Other findings by the Swiss Academy for Development in 1997 clearly indicated that up to 90% of the Ghanaian population consumes second-hand clothing (Farrant, 2008).

4.5   Reasons why Second-Hand Clothing Trade and Consumption are Booming in Cape Coast

This sub-section deals with the third research question and it examines the reasons why second-hand clothing trade and consumption are booming in Cape Coast.

4.5.1   Reasons why Second-Hand Clothing Consumption is Booming

The reasons why second-hand clothing is booming in the study area were solicited from the consumers using a questionnaire. The results of the consumers' responses have been presented in Table 12.

Table 12: Consumers' Reasons for Patronizing Second-hand Clothing

Reasons	Nō.	%
Second-hand clothing items are durable	100	100.0
Second-hand clothing shopping centres are common	100	100.0
Second-hand clothing items are cheaper to buy	93	93.0
Second-hand clothing items have unique designs	81	81.0
Second-hand clothing items are attractively advertised	75	75.0
Total	**449***	**449.0***

N>100 Due to Multiple Responses

From Table 12, the results suggest that durability (100%) and availability of shopping centres (100%) were the main reasons the consumers held for patronizing second-hand clothing. Reasons relating to cheapness, unique designs and attractive advertisement of the product were selected by 93%, 81% and 75% consumers respectively. This is indicative that the consumers agreed more to the various reasons contained on the list of items as those that influenced their consumption of second-hand clothing.

Second-hand clothing shoppers appeared to be motivated by several factors. It is believed that the strong patronage for these second-hand clothing is due to durability, affordability and accessibility compared to new clothing on the market. The results from the survey suggested that consumers' experiences over the years on second-hand clothing usage probably justified the growing consumption rate of the product. Experiences relating to the items presented on the questionnaire and the findings clearly reflected the continuous consumption of the product. The findings agree with Fields' (2011)

observation that second-hand clothing provides consumers with the opportunity to wear designer clothing cheaply, extend the life of useful clothing through re-use, while developing their own identity. Regardless of affordability, the second-hand clothing offer a wider variety of choice with respect to quality and style of clothing in contrast to the expensive and limited choice available in the new local clothing (Edwinson & Nilson, 2009; Fields, 2011). However, health risks associated with the use of second-hand clothing cannot be undermined as both traders and consumers seem to be ignorant about infestations associated with second-hand clothing.

4.5.2   Motivating Factors for Second-hand Clothing Trade

Factors that motivated the second-hand clothing traders to engage in their trading businesses in the Cape Coast Metropolis were inquired from the trading respondents. The results of the analysis of their responses are shown in Table 13.

Table 13: Traders Reasons for Engaging in Second-hand Clothing Trade

Reasons	Nō.	%
Second-Hand clothing is cheaper and affordable by many, hence sales are good	10	100
There is ease of entry in the second-hand clothing market	10	100
Taxes on the second-hand clothing business are affordable	9	90
There are no restrictions from government on the type of second-hand clothing that are sold on the markets	9	90
Import regulations do not affect the second-hand clothing business	8	80
I entered second-hand clothing business because I was dissatisfied with previous business	7	70
Total	**53***	**530***

N>10 Due to Multiple Responses

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From the output presented on Table 13, the traders through their responses to the questionnaire posted 100% for ease of entry into the business and profitability whereas affordable taxes and lack of government regulatory restrictions were selected by nine (9) traders each. Import regulations was the choice of eight (8) traders while seven (7) traders indicated they entered into second-hand clothing business because they were dissatisfied with previous business. The results generally indicate that the traders agreed more to reasons raised on the item as those that influenced their engagement in second-hand clothing in the Cape Coast Metropolis.

The findings revealed that the second-hand clothing business is not only assisting a lot of people to earn a living, but provided opportunity for them to work without many restrictions. Several studies by Field (2004), Hansen (2004), Baden and Barber (2005) suggested that the second-hand clothing trade clearly had offered economic benefits to recipient countries. Field (2004) explained that in Sub-Saharan Africa, despite the fluctuating demand for clothing, market traders can still get a significant income from this trade, much higher than the usual income of factory workers. Also the findings suggest that there were fewer restrictions on the types of second-hand clothing that were sold on the market. This supports Osei-Boateng and Ampratwum's (2011) views on the informal sector, where they noted that workers escaped the regulations of government and consequently suffered neglect of policy makers. Their escape also culminated in evasion of their civil responsibilities such as tax payment and other responsibilities associated with their work. This reflected the findings of this study on affordable taxes paid by the second-hand clothing traders which was deemed as one of the reasons why the traders were engaged in the second-hand clothing business. In as much as the trade of

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second-hand clothing is supporting many and generating revenue for the country, issues relating to the spread of pathogens with the handling of second-hand clothing need to be considered.

4.5.3 Factors that influenced Consumers' Choice of Second-hand Clothing

In finding out the factors that guided consumers' choice and purchasing of second-hand clothing, consumers were asked to indicate which factors among durability or freshness, uniqueness, style, cleanliness of the item, price, neatness of the environment items were sold and fabric design, guided their choices. The result is presented in Table 14.

Table 14: Factors Guiding Consumers' Choice of Second-hand Clothing

Factors	Nō.	%
Durability/freshness	100	100
Price	100	100
Uniqueness of design	74	74.0
Cleanness of item	66	66.0
Style of item	33	33.0
Fabric design	21	21.0
Neatness of the environment items are sold	15	15.0
Total	409*	409.0*

N>10 Due to Multiple Responses

It can be inferred from Table 14 that among the factors that guided the choice of second-hand clothing, durability or freshness of items and price were the most highly considered factors that guided consumers. These two factors were each selected by all 100 consumer respondents of the study. Significantly, uniqueness of design of the

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second-hand clothing items and cleanliness of items were respectively chosen by 74% and 66% consumers. The other factors were rated in the following order by the consumers: style (33%), fabric design (21%) and neatness of the environment within which items were sold (15%).

Second-hand clothing appeared undeniably beneficial to patrons in Cape Coast since the findings suggested that the product provided cheap way of purchasing clothing. Second-hand clothing items are usually of good-quality and a wide choice is offered to consumers. Consumers have always desired to pay less, search for a fair price and at the same time assess quality goods. Therefore, since second-hand clothing were generally cheaper than newer ones, indirect price discrimination between used and new clothing encouraged consumers to buy second-hand clothing with price advantages. At the same time, related health issues that surround the usage of second-hand clothing need to be looked at so as to control the spread of infections.

4.5.4 Traders Opinions on Factors that were considered by Consumers in Selecting Second-hand Clothing

The views of the traders of second-hand clothing were also sought on what they thought were the key factors that guided their consumers when they were purchasing second-hand clothing from them. The result is presented in Table 15.

Table 15: Factors Considered by Consumers in Selecting Second-hand Clothing

Item	Nō.	%
Durability/freshness	10	100.0
Price/Cost	9	90.0
Unique Designs	7	70.0
Beauty	6	60.0
Neatness of the environment items are sold	6	60.0
Cleanness	3	30.0
Total	**41***	**410.0***

N>10 Due to Multiple Responses

Similar to what was observed for the consumers, it was found that durability or freshness and price of items were what guided consumers when they were purchasing second-hand clothing. The two factors were respectively selected by all the ten (100%) and nine (90%) traders. Uniqueness of the item's design was selected by seven (70%) traders, while beauty of item and neatness of the environment items were sold were each selected by six (60%) of the traders. Cleanness was mentioned by only three (30%) of the traders.

The findings from this item confirmed the opinions of the consumers as factors raised were mostly agreed to be a guide to the purchase of second-hand clothing by consumers. Awumah (2012) expressed that the strong empathy for second-hand clothing could be attributed to durability, affordability, texture, uniqueness and endurance compared to new clothing. Todays' consumers are becoming more enlightened, aware and conscious of their choices. This is greatly reflected in this findings as most consumers were found assessing the products at the market before making any choices. It is equally important to note that despite the strong desire for traders to enter into second-

hand clothing business, issues that relate to health risks need to be highlighted to inform these traders on health dangers associated with the trade, as this is often ignored.

This theme aimed at investigating the reasons why consumption and trade in second-hand clothing was booming among the people of Cape Coast. The result indicated that reasons such as cheapness of second-hand clothing as compared to new clothing; second-hand clothing items having unique designs; second-hand clothing shopping centres being common; second-hand clothing being durable; and second-hand clothing being attractively advertised, were found to be major reasons leading to consumer's motives for consuming second-hand clothing. This finding supports what Slotterback (2007) observed that second-hand clothing trade has increased accessibility and affordability of clothing to consumers.

On the part of the traders, it emerged that lack of regulatory restrictions from government on specific types of second-hand clothes to sell, affordable taxes and favourable import regulations appealed to these traders most. The traders also expressed varied reactions through the values recorded for items like the business being profitable and dissatisfaction with previous business which are basic to every entrepreneur. Using the demand and supply theory to explain this existing trend in the second-hand clothing business, as the price of the commodity remains cheap and affordable to consumers, they would be willing to buy more and since demand for the product keeps increasing, traders would also be motivated to bring in the commodity to meet the demands of the consumers.

Second-hand clothing trade is also seen to be poorly regulated as items such as used pants and other undergarments banned or restricted by law in Ghana still found their way on the market, despite the health concerns raised. This places a great set back as the nation struggles to improve upon the health of the citizenry. The increased availability of this commodity in Ghana seems to support a lot of people who may eventually have to suffer from health problems due to infestations (Awumah, 2012).

4.6   Kinds of Treatment Given to Second-hand Clothing to make them Safe for Sale and Use

The result in this sub-section relates to the fourth research question and explored the various forms of treatment that second-hand clothing consumers and traders practice before they used or sold such items.

4.6.1   Treatment by Consumers before Usage

The consumers were asked to indicate the frequency at which they performed some specific types of aesthetic and safety treatments on the second-hand clothing. These treatments were washing, commercial dry-cleaning/dusting, boiling, disinfecting, repair/alteration, pressing/ironing, removing stains and changing style. The outcome is presented in Table 16.

Table 16: Treatment of Second-hand Clothing before use by Consumers

Treatment Activity	Nō.	%
Washing	89	89.0
Pressing/Ironing	76	76.0
Remove Stain	73	72.0
Repair/Alteration	53	53.0
Commercial Dry-cleaning/Dusting	13	13.0
Boiling	12	12.0
Change of style	9	9.0
Disinfecting	3	3.0
Total	319*	319.0*

N>100 Due to Multiple Responses

The results in respect of the various aesthetic and safety treatment activities practiced by the second-hand clothing consumers presented in Table 16 indicated that 89% of the consumers performed washing often. In respect of pressing/ironing as a treatment activity, 76% of them consumers indicated they performed this always, while 73% consumers said they did remove stains often. Fifty-three percent (53%) of the consumers indicated they repaired/altered the second-hand clothing often. Regarding commercial dry-cleaning/dusting and boiling, 13% and 12% respectively indicated that they performed these treatment activities always, whereas 9% stated they changed style often. Disinfecting on the other hand was done by only 3% consumers before the use of their second-hand clothing. Disinfecting and boiling which were most likely to render second-hand clothing safe for use rather received low responses. Apparently, the respondents were mostly concern with appearance of their used clothing and therefore focused on aesthetic treatments such as commercial dry-cleaning/dusting.

4.6.2   Treatment of Second-hand Clothing Expected to be done by Traders

The views of the second-hand clothing traders were sought on whether they deemed it necessary to treat second-hand clothing before selling them to consumers. The result of the responses from the traders is illustrated in Figure 3.
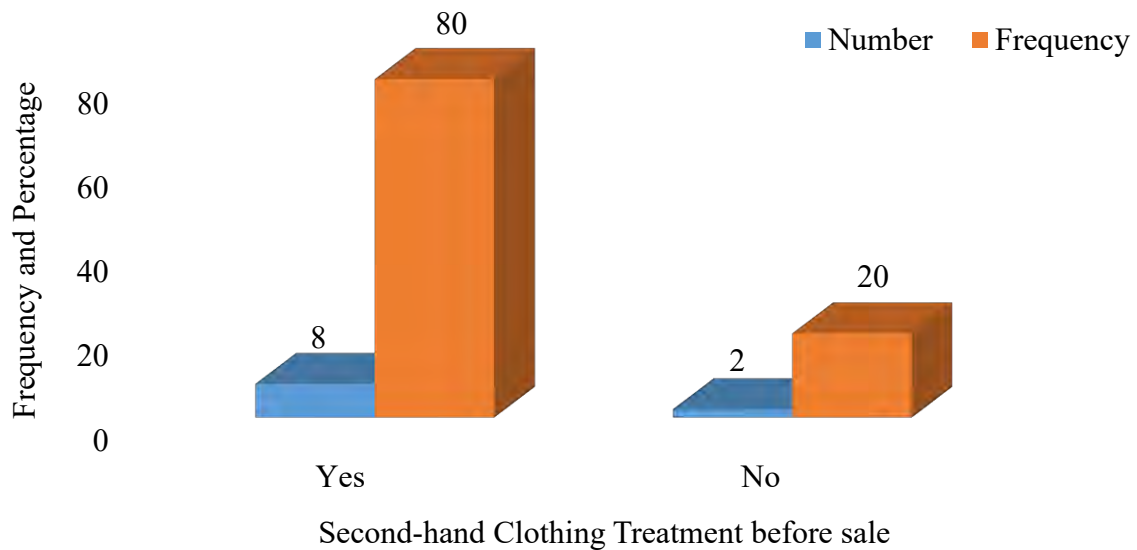
Figure 3: Treatment of Second-hand Clothing by Traders

The illustration in Figure 3 shows that majority of the traders (80%) were of the view that second-hand clothing should be treated before they were sold to prospective consumers. Specifically, it emerged that out of the ten second-hand clothing traders, eight (80%) indicated that second-hand clothing should be given some treatment before they were sold to consumers, while two (20%) responded on the contrary. These were supported with reasons why the commodity should be treated or not before sale on the questionnaire. Some of the comments from respondents in favour of treatment before sale captured included: *"To avoid infestations", "……it makes it presentable and safe for use".*

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When the other two (20%) traders were asked to give reasons for their responses, it came to light that these traders believed that giving second-hand clothing treatment comes with cost; as such they thought it was not necessary. One of the traders asserted that *"When I treat the clothing, it will increase the price of the items"*. Another trader also mentioned *"If I treat these clothing items before I sell them, I have to bear the cost of the detergents and if not well done it will destroy the beauty. Also if the consumers realize that it has been washed before sale, they will not buy because they will think it is old"*. To these traders both aesthetic ad safety treatments of their goods would reduce profit. Obviously, they were not concerned about their own safety.

4.6.3   Kinds of Treatment Given to Second-hand Clothing by Traders

Second-hand clothing traders were asked to indicate which treatment activities they performed before selling their second-hand clothing to consumers. Specifically, the traders were asked to show whether they performed sorting out the clothing items into categories, washing, repair/alteration, pressing/ ironing and commercial dry-cleaning/dusting of their goods before sale. The result of the data is presented in Table 17.

Table 17: Treatment by Traders before Sale

Treatment Activity	Nō.	%
Sorting out into categories	9	90.0
Repair/Alteration	5	50.0
Commercial dry-cleaning/Dusting	3	30.0
Washing	2	20.0
Pressing/Ironing	1	10.0
Total	**20***	**200.0***

N>10 Due to Multiple Responses

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From Table 17, nine (9) traders responded they sorted out the second-hand clothing items into categories before sale. Repair/alteration recorded 50% indicating that five (5) of the traders performed this activity. Regarding commercial dry-cleaning/dusting, it was recorded that three (30%) out of the ten (10) second-hand clothing traders performed this activity. Significantly, washing was performed by two (20%) traders whereas pressing/ironing was found to be performed by only one trader. No serious infection control measures in the forms of boiling and disinfecting treatments were engaged in by the traders.

These findings indicated that second-hand clothing traders performed varied treatments to the second-hand clothes before sale. Significantly, sorting out of the clothes into categories recorded a higher value indicating that the traders performed this activity. To ensure an optimum valorization of the clothing, sorting the collected clothing is a key step which involves much more than simply identifying the type of clothing like skirts, men's shirts and blouses (Rivoli, 2005). A comprehensive and efficient sorting process ensures that appropriate route and market are found for all the textile articles thrown away. Sorting is often carried out by the traders to aid in grading the items from good to worst and as well costing each. Sorting is also needed to enable the traders identify the items that require other forms of treatments like repair and stain removal. In support to this, Forster (2014) identified washing, stain removal, ironing, airing, repair/alteration as key practices in caring for clothing. These practices are believed to aid in preventing or controlling diseases, infections, accidents and embarrassment. These treatment practices such as washing and pressing/ironing are often ignored by these traders since these would rather incur additional cost and thereby reduce profit.

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Poor treatment and untreated practices of second-hand clothing ignored by patrons raise a lot of concerns as even examination records carried out by Muthiani *et al*. (2012), where some second-hand clothes were picked and treated with required laundry soap and temperature, recorded some form of 'left over' microbial infestation. They attributed this to the different levels of exposure to contamination before washing among the clothes samples. Even with this attempt to treat these clothes, some levels of contamination were still recorded. Awumah (2012) cautioned that the belief that normal laundry produces clean clothes does not translate to bacteriologically clean, as detergents have wide range of efficacy in reducing bacterial contamination on clothing. So one can only imagine what is likely to happen to a trader after handling the untreated goods.

4.6.4　Kinds of Treatment Practices Observed

In order to ascertain whether traders observed treatment practices in the handling of second-hand clothing, an observation checklist containing a list of possible treatment activities was followed. The findings were checked and brief description or comments of observable scenes were recorded and presented in Table 18.

Table: 18   Observed Treatment Practices

Treatment Practice	Number of Traders	Description/Comments
Washing	2	One trader was observed washing footwear specifically canvas with detergents (omo and bar soap) just behind where the items were sold at Kotokoraba. White items were separated from coloured ones. The other trader sorted the used clothing and sent them to Wise Way Cleaners in Cape Coast for laundering.
Dusting	4	This treatment was observed to be done by the four traders just in front of where they sold the items before hanging or displaying them. The traders rubbed the surface of the items with dusters to remove dirt from the items.
Repair/alteration	3	The traders sorted out faulty second-hand clothing items that needed repair. Various faults identified on the used clothing for repairs included split seams, loose and spoilt fasteners such as zippers and pockets. Other significant alteration observed included shortening of length of trousers as the consumer demanded. Two of them sent the faulty items to seamstresses nearby for alteration. The other one had a hand sewing machine at the shop, hence the faults on the items were corrected by herself. These repairs/alterations were performed to improve aesthetic appeal in order to attract good sales.
Pressing/Ironing	1	This trader sent the second-hand clothing to Wise Way Cleaners' laundry and there was evidence of items brought in washed and ironed. Also, second-hand clothing that were hanged showed some evidence of ironing. However, because the researcher did not directly observed the items being ironed, the temperature used for ironing could not be established so as to analyze its efficiency in killing agents of infection.
Remove stain	1	Only one trader was observed performing this treatment to three blouses at the shop. This was carried out with the use of a bar soap just to make the items appear neat for sale.
Change style	--	No trader was observed carrying out this treatment practice.
Polishing	2	This was observed among two second-hand footwear sellers whose items were displayed at the early hours of the day on the market.
Disinfecting and boiling	--	No trader was observed carry out these treatment practice.

 N>10   Field survey, 2014

These treatment activities performed by the traders though were significant, their efficiency and effectiveness need to be reconsidered. As part of measures to care for clothing in general, Forster (2014) listed washing, stain removal, ironing and pressing, airing, brushing repairing/alteration as key processes in caring for clothes. These treatment practices were generally found necessary to prevent diseases, infections, accidents and embarrassment. Forster however, did not specify whether these care methods would also make second-hand clothes safe for use. It is important to state that carrying out repairs/alteration were deemed necessary for making the second-hand clothes presentable but this practice increased cost, loss of energy and time, hence the majority of traders ignored these treatment practices.

The various treatment practices identified in this study and performed by the traders offered job opportunities to repairers/alterationists as well as the laundry service sector. This is in line with what literature seemed to suggest that employment generated by the second-hand clothing sector in terms of handling, cleaning, repairing, re-styling and distributing were significant (Baden & Baber, 2005). However, from what was observed these traders would not like to be engaging in these treatment practices but rather perceived that consumers have to do most of these. To them whatever pre-sale activities they carried out was usually meant either to remove stain or repair damages in order to make the product presentable to buyers, but not necessarily to treat any perceived infestations. Obviously, the traders were not aware of the health hazards of skin diseases, respiratory problems, genital infections as well as gastrointestinal infections they are exposed to as a result of handling untreated used clothing.

Table: 19   Protective Measures Observed

Protective Measures	Number of Traders	Description
Wearing of aprons	6	Six traders wore aprons and they were all women. It was also observed that, the intention of wearing the aprons was to keep money and not necessarily to protect themselves.
Use of gloves	--	No trader was observed wearing gloves.
Wearing of overall	--	No trader was observed wearing an overall.
Use of sanitizers	2	Two traders occasionally used sanitizers as protective measures. This was observed after these traders visited the urinal and toilet.
Washing of hands	4	Two traders were observed washing their hands after sorting out SHC, while the others washed their hands after using chemicals in polishing footwear they sell.
Nose and mouth mask	-	None of the traders was observed using nose and mouth mask.

N>10   Field Survey, 2014

Ensuring safety in the handling and acquisition is a key factor to be considered. The study observed that second-hand clothing traders ignored safety practices in the handling of second-hand clothing. This was clearly shown as safety items such as use of glove, overall as well as nose and mouth mask were totally ignored or absent while the wearing of apron was observed though the intention was for keeping money and not necessarily to ensure safety against possible infestations.

As healthy measures are ignored by these traders they put themselves at greater risks of being exposed to gases and vapours from fumigants. For instance, methyl bromide is a very toxic fumigant gas with poor olfactory warning properties which when used on second-hand clothing , can cause acute poisoning leaving marked irritation of the eyes, skin and mucous membranes of the respiratory tract on its victims. Again, dermal

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exposure was found to be a major cause of irritation and corrosive injury of the skin which causes blisters and vessels that resemble a second-degree burn leading to systematic effects of headache, dizziness, vertigo, slurred speech, nausea, blurred vision and possibly convulsions and coma (Muthiani *et al.*, 2012). It is clear that the second-hand clothing traders were seriously exposed to a lot of dangers which they were ignorant of.

4.6.5 Ways of Making Second-hand Clothing Safe for Use

This survey objective was intended to find out from both consumers and traders of second-hand clothing, treatments that could be given to make second-hand clothing items safe to handle and use. Respondents were asked to share their views on the themes given. The respondents shared their views under the theme – methods for treating undergarments, innergarments, outergarments, accessories and household linen. The following sample statements present some of the views of the respondents:

Treatment methods for undergarments

A trader expressed:

> *"I think brassiere and underskirt can be washed before using them while others like the pants shouldn't be brought in at all. After washing, they have to dry them in the sun not in their rooms. In that way they are able to ensure that what they are wearing is in safe condition."*

Another trader said:

> *…… these items have already been treated before. ..... one can smell from the chemicals in it indicating that they have been treated before shipping. They are there for sale so if the customer wants to treat them again then probably he or she can wash them before wearing them.*

A third trader simply stated:

> *I don't think I have to treat these items before selling them. They have been treated already but if the buyer wants to treat them it will be helpful because people come in and sort through the items so if there is any transfer of dirt onto the underwear it will be removed after washing.*

To these traders therefore, washing was enough to make used undergarments safe for re-use by another person. However, findings of Awumah (2012) indicated normal laundry does not produce bacteriologically clean goods and if laundry process fails to eliminate contamination, this can then be spread to other items in the laundry load (Bloomfield *et al.,* 2011).

Treatment methods for innergarments:

On the theme above, a trader shared:

> *For these ones, people normally wash them before they wear them. On my part what I normally do is to repair any fault I find on them then I hang them for sale. I think these types must also be washed and hanged in the sun before usage. After that they can be ironed and worn.*

In the opinion of another trader:

> *They can be washed and if there are stains in them they should be removed before washing. ……. depending on the colour of the dress any detergent that can help remove the stain can be used. But if it white, you can soak it in a powdered soap overnight and wash later. Stains can be removed with the use of parazone.*

It appears this trader saw parazone to be a universal stain remover, regardless of the fibre type and colour of the item. But it must be noted that fibres require different care as they are sourced from different origins and therefore if the right care is not given this might end up destroying the article. Consumer awareness on fibre care needs to be strengthened to enable them provide better care to their textile products as stated by Forster (2014).

A trader also expressed her opinion that:

> *We all know that these items have previous users, but I know they treat them with some chemicals before bringing them here. But since they pass through a lot of hands before the final consumers get them, I would advise that they wash them and dry them in the sun before using them. You can also repair the faults on them before washing and ironing.*

Treatment Methods for Outergarments:

From a trader's perspective:

> *All second-hand clothing can just be washed and dried in the sun to make them safe for use. The leather jackets and heavy pullovers should however be dry-cleaned.*

Another trader simply shared:

> *They can be washed and dried in the sun before usage.*

Treatment Methods for Accessories:

One of the traders responded that:

> *They can be washed and polished. That's what I do to the canvas and shoes that I sell to make them look attractive. The other types like the ladies bags that aren't so dirty, can just be sponged with dusters before use.*

A second trader expressed:

> *The white socks often get dirty so they can be washed with soap before using them. The bags and the shoes can also be washed because they mostly develop mold and smell when not well stored.*

A third trader said:

> *Footwear can be sponged or it can be washed and dried in the sun before wearing them.*

Treatment Methods for Household linen:

A trader had this to share:

> *The bedsheets, curtains and pillows can only be washed to brighten them for use. Other items like used towels, can be cleaned before sale by soaking them in hot water; washing with soap and drying them in the sun.*

In another's opinion:

> *This depends on the type of household linen but washing and ironing will be enough to remove the dirt from them. Towels can be boiled and washed with powdered detergents like 'omo' (a type of powdered detergent).*

It could be deduced from the findings that the traders came out with varied methods that may be adopted to treat second-hand clothing before usage. Specifically the traders mentioned washing, sun-drying and ironing as basic treatment practices for the second-hand clothes. A few others identified boiling some specific used clothes like towels and also the use of powdered detergents instead of the bar soap for washing these second-hand clothing after acquisition. However, the effectiveness of these detergents in preventing infestations remain unknown. Awumah (2012) emphasized on the belief that

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normal laundering produces clean clothing, does not necessarily translate to bacteriologically clean, due to detergents having a wide range of efficacy in reducing bacteria contamination on clothing. Though traders deemed it necessary to treat second-hand clothing before sale however, they expressed that treating second-hand clothes incur additional cost as they spent money for washing and repairs/alterations carried on some second-hand clothing. Meanwhile, these traders stand greater risk of health infestations from fumigated articles as they are the first point of contact when bales are opened.

Though literature suggested that the trade is augmented by tailors and people mending, washing, and ironing sacks of clothing (Field, 2007; Baden & Barber, 2005; Hansen, 2004) the recording of varied views on ways to ensure safety with the handling and use of second-hand clothing was significant. However, traders had to make additional payment for such services thus increasing cost of production.

Consumers' opinions were also solicited on safety measures that both consumers and traders can adopt in the acquisition and handling of second-hand clothing. The following statements were captured from consumers' point of view.

Ensuring Safety

In examining how second-hand clothing consumers ensured safety in the acquisition and use of such goods, a variety of opinions were expressed by the consumers.

A consumer explained that:

> *I feel it is always better to wash these clothes before using them. The reason being that, these items are often displayed on the floor for people who buy them to sort through and make their choices so transfer of dirt and bacterial are possible. Hence, washing them before usage will help remove all the dirt and infestations.*

From the perspective of another consumer:

> *This is one major problem. Most of the time because of the way the traders display the goods, they get dirty, especially the white ones, so I think washing them before usage will help remove any bacteria and infestations from the clothes.*

A consumer expressed:

> *With items like underwear, pants and towels, we can use dettol (a type of disinfectant) to wash them and dry them in the sun. For the white clothes we can soak them with parazone (a type of bleach) overnight and wash them later.*

Another consumer who commented on the use of sanitizers in ensuring safety expressed:

> *They normally sort through the clothes before displaying them and so I think they can use sanitizers to clean their palms. With this if they suspect there are elements of infections, I'm sure the sanitizer will remove that from their bodies.*

In terms of how second-hand clothing traders can ensure safety for themselves and their clients, a consumer had this to share:

> *There isn't much that someone who is buying or selling these clothing items can do to ensure safety. But may be the use of sanitizer will help.*

A consumer also expressed:

> *Most often these clothes are displayed on the matted floor for buyers to sort through so the possibility of transfer of dirt from the ground can occur. So I will advise that the traders hang them either on stands or on hangers for us.*

This was corroborated by another consumer who said that:

> *Traders need to find better ways of displaying the items rather than laying them on mats on the floor. They can be displayed on hangers, tables or on stands in order not to transfer dirt unto the clothes.*

It could be deduced from the findings on the methods that could be adopted to make second-hand clothing safe for use, the respondents generally agreed that second-hand clothing items require treatment before usage. It was realized from the side of the consumers that washing, disinfecting, sun-drying and pressing/ironing are the common treatment activities that can be adopted to make the clothes safe for use. Other safety practices like the use of sanitizers, displaying clothing on hangers and stands were deemed necessary for the avoidance of possible infestation during acquisition of the item.

The treatment of second-hand clothing is considered an important activity to be performed. This is because the idea of it being second-hand signals that it has been used or worn before it reached the current consumer. As a result, different levels of contamination could be recorded from its handling to the usage. In this respect, both consumers and traders indicated the extent to which they associate themselves with statements relating to treatments of second-hand clothing. It was realized in this study that on the side of the consumers, washing, commercial dry-cleaning/dusting and pressing/ironing were the common treatment activities that they often practiced. Other

treatment practices like stain removal, repair/alteration, changing of styles were also occasionally practiced by the consumers before using their second-hand clothing.

From the traders' perspective, apart from sorting out second-hand clothing into categories and dusting, which the traders indicated they perform often, other important treatment practices such as washing, repair and pressing were undertaken only occasionally before they sold the second-hand clothing items. According to literature, the greatest impediment for acquiring recycled second-hand clothing is that it is out of style, needing repair, or deemed worthless by the last owner (Rivoli, 2005). This draws back the concerns raised by government agencies and individuals on the possible infestation associated with these imported second-hand clothing as this finding symbolizes that both consumers and traders of the second-hand clothing would occasionally treat these goods.

Though traders performed treatment activities like washing and ironing occasionally, they did so to make the item presentable for sale and not to observe hygienic practices. In addition to this, what was observed during data collected also confirmed traders' ignorance about health risks associated to used clothing. It was observed that traders who wore protective clothing like aprons, only did so because it made it easier for them to keep money obtained from sales safe, but not to protect themselves from any infestations. This is however worrying as in most cases, consumers sort through and tried on these second-hand clothing items when selecting the best fit, hence increasing the transfer of infestations. Studies have shown that these clothing items pass through a lot of hands before they reach the final consumer and therefore get contaminated along the process (Bloomfield *et al.,* 2011).

CHAPTER FIVE

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

5.1 Overview

This chapter presents the summary of the findings, conclusions, recommendations and suggestions for further studies.

5.2 Summary

The purpose of the study was to unearth the reasons why second-hand clothing trade and consumption appeared to be on the increase, irrespective of the health risk associated with such clothing and find out the kind of treatment practices observed by both traders and consumers, to ensure safety before sale and usage. The design used was a descriptive survey and both quantitative and qualitative data were collected to answer the research questions raised. The sample size was hundred and ten (110) participants of which ten (10) were second-hand clothing traders and hundred (100) consumers in the Cape Coast Metropolis. Purposive and convenience sampling methods were used to select the respondents. Specific objectives for this study were to: identify the kinds of second-hand clothing sold on markets in the Cape Coast Metropolis; identify the most patronized second-hand clothing by consumers in Cape Coast; explain why second-hand clothing trade and consumption were booming in Cape Coast and explore the kinds of safety treatments given to second-hand clothing before sale and usage in the Cape Coast Metropolis.

Main Findings

1. **Demographic Characteristics:** The study realized that females engage in second-hand clothing business than males and that people within the age group of 21 to 30 years patronized the product most. Students and workers of the formal and informal sector like teachers, nurses and artisans were also found to consume the product most whereas both traders and consumers of the product of higher education qualification i.e. secondary/vocational/technical and tertiary levels of education mostly engage in second-hand clothing consumption or trade. Findings also indicated that people have engaged in the trade and consumption of used clothing for ten years and over.

2. **Second-hand Clothing Items Sold on the Cape Coast Markets:** Concerning the kind of second-hand clothing on the Cape Coast market, it was discovered that virtually all clothing items categorized as undergarments, innergarments, outergarments, accessories and household linens were commonly sold on the Cape Coast markets. The study specifically discovered that brassieres, boxer shorts, dresses, blouses and towels were the most commonly sold (90%). Followed by shirts (80%), 'T'-shirts (80%), footwear (80%), bags (80%), bedsheets (70%) and jackets (60%). The kinds of second-hand clothing items sold by the respondents (traders) on the Cape Coast market were dominated by dresses (90%), blouses (70%) and 'T'-shirts (70%).

3. **Second-Hand Clothing Items that were Mostly Patronized by Consumers:** Shirts (89%), dresses (81%), towels (77%), 'T'-shirts (76%) and footwear (71%) were the most patronized. Other types of used clothing patronized by the people

included undergarments such as brassieres (69%), boxer shorts (61%), bags (53%), chemise (38%) and panties (13%).

4. **Reasons why Second-Hand Clothing Trade and Consumption were Booming in the Cape Coast Metropolis:**

   i. The findings suggested that consumer patronage of second-hand clothing was generally high because second-hand clothing items were durable (100%), shopping centres for such products were common (100%), the product were cheaply priced (93%), the designs were unique (81%), advertisements of the product were attractive (75%).

   ii. The study also realized that second-hand clothing business is assisting people to earn a living and generating revenue for the country and as a result reasons relating to goods sales (100%), ease of entry (100%), affordable taxes(90%) and lack of regulatory restrictions from government (90%) were key reasons for traders engagement in the business.

   iii. Factors that guided the consumers' choices of second-hand clothing most were durability (100%) and price (100%) with other significant factors such as neatness of the environment within which items were sold and cleanliness of items also recording 74% and 66% cases respectively.

   iv. To the traders, key factors that guided their consumers' choices when purchasing second-hand clothing were mostly durability (100%) and price of items (90%).

   v. Traders' reasons for engaging in second-hand clothing were good sales (100%), ease of entry (100%), affordable taxes charged (90%), lack of government regulatory restrictions (90%). Flexible import regulations yielded 80% while 70%

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indicated they entered into second-hand clothing business because they were dissatisfied with previous business.

5. **Kinds of Safety Treatments given to Second-hand Clothing before Sale and Usage:**

i.   It was also realized on the part of the consumers that washing (89%), pressing/ironing (76%) and removal of stains (73%) were the most frequently performed treatment practice.

ii. Sorting out the clothes into categories (90%) and repair/alteration (50%) were the most commonly treatment practices performed by the traders. Findings from the observation showed that dusting (four traders) and repair/alteration (three traders) were the common observed treatments performed by the traders.

iii. Key practices observed by the traders for ensuring safety in the handling and acquisition of second-hand clothing were noted to be wearing of aprons (six traders) washing of hands (four traders) and use of sanitizers (two traders). Other protective measures such as the use of gloves, wearing of overall and the use of nose/mouth mask were ignored.

iv. Traders and consumers expressed that washing, removal of stains, sun drying and pressing/ironing were enough to treat any perceived infestations in used clothing.

5.3 Conclusions

The findings revealed that people at all levels of education and occupational types were consuming second-hand clothing as the demographic data presented categories of workers like nurses, teachers, students, artisans, traders and civil servants who patronized the second-hand clothing.

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Second-hand clothing items categorized as undergarments, innergarments, outergarments, accessories and household linens were common on the Cape Coast markets with specific items like brassieres, boxer shorts, dresses, blouses, towels, shirts, T-shirts, footwear and bags on high demand.

Second-hand clothing trade is booming in the Cape Coast Metropolis because consumer patronage was high, the traders found the business quite lucrative, there is ease of entry, payment of affordable taxes and trade regulations were flexible. However, they appeared either not to know or not to be bothered much about health risk associated with the handling and consumption of second-hand clothing. On the part of the consumers, they found the product available on the market and at affordable prices, hence their high patronage.

Treatment of such clothing prior to usage were mainly washing and pressing or ironing. With a section of the public not taking effective measures to treat second-hand clothing before wearing create an atmosphere for fear of greater infestations hence the need for public education.

Though second-hand clothing was providing employment and meeting clothing needs of the people in Cape Coast, associated health risks were found not to be under control. Ironically, whereas the second-hand clothing industry seems to be giving employment to a lot of Ghanaian youth in some instances, the same industry is rendering people jobless in many textile industries across the globe. This calls for proper measures to be taken to bridge the gap between the textile industries and used clothing patronage as in both cases employment is gained but locally produced clothing is safer and has more to contribute to revenue generation than imported second-hand clothing.

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5.4 Recommendations

The following recommendations have been proposed:

1. The findings from this study suggest that second-hand undergarments such as brassieres, panties which were banned after the legistlative instrument was passed in 1994 because these clothing items pose health problems to users, were sill sold on the Cape Coast market. There is therefore the need for the government of Ghana to enforce this law.

2. Government and other organizations that are interested in clothing production should help produce garments such as shirts, dresses, 'T'-shirts and towels that will be attractive in terms of aesthetic, prices and quality since the findings from this study indicated that the above mentioned second-hand clothing were the most patronized in the study area.

3. Patrons of second-hand clothing seem to be ignorant about the health risks they are exposed to and so the Health and Sanitation Department at the Cape Coast Metropolitan Office should expand their activities to educate the people in the Metropolis on the dangers associated with the handling and use of untreated second-hand clothing.

4. Second-hand clothing care and related health risks should be incorporated into the Clothing and Textiles syllabus as well as in others areas such as Home Management to educate and sensitize learners on health risk associated with untreated second-hand clothing.

5. The government of Ghana through the Ministry of Trade and Industry, Ghana Port and Habour and the Ghana Standard Authority should help regularize the

activities within the second-hand clothing business as it has been found to pose health dangers to patrons. In addition, the Consumer Protection Agency (CPA) in Ghana should also help sensitize consumers to be informed about their choice of used clothing and how to care for the clothing they acquire to ensure safety.

5.5   Suggestions for Further Research

Based on the findings of the study, the following suggestions for further research are made:

1. A similar study can be carried out outside the Cape Coast Metropolis. This will establish whether the findings found in the current study on second-hand clothing trade and consumption will bring out similar or different findings.

2. Series of case study can be conducted to assess the possibility of infestations with the handling and consumption of specific second-hand clothing items.

3. The relationship between frequencies of patronage of second-hand clothing needs to be researched into to find out whether patronage of second-hand clothing is on the increase. This will help establish whether safety precautions are being observed by patrons in the acquisition of used clothing.

4. The factors associated with the second-hand clothing business and consumption found in this study can be the basis of a longitudinal study on employment trend in this sector. This would help obtain data for confirmatory analysis on the factors influencing the second-hand clothing business and consumption rate and the magnitude of contribution of each over time.

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APPENDICES

APPENDIX A

UNIVERSITY OF EDUCATION WINNEBA
FACULTY OF SCIENCE EDUCATION

DEPARTMENT OF HOME
ECONOMICS EDUCATION

P. O. Box 25, Winneba, Ghana. Tel. (03323) 21177
E-mail: homeecons@uew.edu.gh

20ᵗʰ January, 2014

To whom it may concern

Dear Sir/Madam,

LETTER OF INTRODUCTION
MS. JACQUELINE OGOE

We write to introduce, **MS. JACQUELINE OGOE**, an M.Phil student of the Department of Home Economics Education, University of Education, Winneba, who is conducting a research title: Factors Influencing Second-Hand Clothing Trade and Consumption in the Cape Coast Metropolis.

We would be very grateful if you could give her the assistance required.

Thank you.

Yours faithfully,

MS. OPHELIA QUARTEY
AG. HEAD OF DEPARTMENT

APPENDIX B

QUESTIONNAIRE SECOND-HAND CLOTHING TRADERS

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF HOME ECONOMICS EDUCATION

This research is carried out as part of the researcher's project. The purpose is to unearth the reasons why second-hand clothing trade and consumption appears to be booming, in the Cape Coast Metropolis. I would be grateful if you could answer the questions on the subject mentioned. The confidentiality of the information you provide as well as your anonymity are all assured.

Instructions

Kindly answer the questions in the as frankly as possible questionnaire. Using the answers assigned to each statement, indicate by ticking (√) the appropriate box that answers the questions or specify any other answer you have.

Demographic information

1. Gender: F [ ]   M [ ]

2. Age: < 11   [ ]   11-15 [ ]
          16-20 [ ]   21-25 [ ]
          26-30 [ ]   31-35 [ ]
          36-40 [ ]   41-45 [ ]
          46-50 [ ]   Above 50 [ ]

3. Level of Education:

   No formal [ ]   Basic/Elementary [ ]   Secondary/Vocational/Technical [ ]
   Tertiary   [ ]   Others:..

4. Number of years in the second-hand clothing business:

   < 5 [ ]   5-10 [ ]   11-16 [ ]   17-22 [ ]   Above 22 [ ]

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KINDS OF SECOND-HAND CLOTHING SOLD ON THE CAPE COAST

MARKETS

5. Which second-hand *undergarments* are sold on the market? (Multiple Responses are allowed)

    Brassiere   [   ]

    Singlet/vest   [   ]

    Chemise   [   ]

    Panties   [   ]

    Boxer shorts   [   ]

    Waist slips (underskirts) [   ]

    Others:..

6. Which second-hand *innergarments* are sold on the market? (Multiple Responses are allowed)

    Dresses   [   ]   Skirts   [   ]

    Blouses   [   ]   Petticoat   [   ]

    Shirts   [   ]   T-Shirts   [   ]

    Trousers   [   ]   Shorts/knickers [   ]

    Suit   [   ]

    Others:..

7. Which second-hand *outergarments* are sold on the market? (Multiple Responses are allowed)

    Sweaters   [   ]   Jackets   [   ]

    Aprons   [   ]   Others:..

8. Which second-hand *accessories* are sold on the market? (Multiple Responses are allowed)

    Socks   [   ]   Tie   [   ]

    Bags   [   ]   Hats/cap   [   ]

    Footwear [   ]   Handkerchief [   ]

    Others:..

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9. Which second-hand *household linen* are sold on the market? (Multiple Responses are allowed)

Blanket   [ ]   Bed sheet [ ]

Pillowcase [ ]   Curtains   [ ]

Table cloth [ ]   Napkins   [ ]

Towel   [ ]   Others:..

10. Which of these second-hand clothing do you sell? (Multiple Responses are allowed)

Brassiere	[ ]	Singlet/vest	[ ]
Chemise	[ ]	Pants	[ ]
Boxer shorts	[ ]	Waist slips (underskirts)	[ ]
Dress	[ ]	Blouses	[ ]
Skirts	[ ]	Shirts	[ ]
T-Shirts	[ ]	Trousers	[ ]
Shorts/knickers	[ ]	Sweaters	[ ]
Jackets	[ ]	Socks	[ ]
Bags	[ ]	Hats/cap	[ ]
Footwear	[ ]	Handkerchief	[ ]
Blanket	[ ]	Bedsheet	[ ]
Pillow case	[ ]	Curtains	[ ]
Table cloth	[ ]	Towel	[ ]

Others: ....

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SECOND-HAND CLOTHING ITEMS MOSTLY BOUGHT BY CLIENTS IN CAPE COAST

11. Which of the following second-hand clothing items do consumers buy most?

(Multiple Responses are allowed)

Brassiere	[ ]	Singlet/vest	[ ]
Chemise	[ ]	Panties	[ ]
Boxer shorts	[ ]	Waist slips (underskirts)	[ ]
Dress	[ ]	Blouses	[ ]
Skirts	[ ]	Shirts	[ ]
T-Shirts	[ ]	Trousers	[ ]
Shorts/knickers	[ ]	Sweaters	[ ]
Jackets	[ ]	Socks	[ ]
Bags	[ ]	Hats/cap	[ ]
Footwear	[ ]	Blanket	[ ]
Bedsheet	[ ]	Pillow case	[ ]
Table cloth	[ ]	Towel	[ ]

Others: ....

REASONS WHY SECOND-HAND CLOTHING TRADE AND CONSUMPTION IS BOOMING IN THE CAPE COAST METROPOLIS

12. Which of these factors motivated you into the second-hand clothing business?

(Multiple responses are allowed)

Reason	Thick (√)
Second-hand clothes are cheaper and affordable by many hence sales are good.	
I entered second-hand clothing business because I was dissatisfied with previous business.	
There is ease of entry in the second-hand clothing market.	
There are no restrictions from government on the type of second-hand clothing that are sold on the markets.	
Taxes on second-hand clothing are affordable.	
Import regulations do not affect the second-hand clothing business.	

13. What qualities or factors do your customers look out for when selecting the

    second-hand clothing? (Multiple Responses are allowed)

    Durability/freshness   [ ]   Price/Cost   [ ]

    Unique designs   [ ]   Beauty   [ ]

    Style   [ ]   Cleanliness   [ ]

    Neatness of the environment

    items are sold.   [ ]

    Others:..

TREATMENT(S) GIVEN TO SECOND-HAND CLOTHING BEFORE SALE

14. Should second-hand clothing be treated before sale?

    Yes   [ ]   No   [ ]

    Please provide reasons for your answer to Question 14……………………………

    …………………………………………………………………………………………

    …………………………………………………………………………………………

15. Which of the under listed activities do you perform before selling the second-hand

    clothing items? (Multiple Responses are allowed)

    Sorting out into categories   [ ]

    Washing   [ ]

    Repair/alteration   [ ]

    Pressing/ironing   [ ]

    Disinfecting   [ ]

    Commercial dry-cleaning/Dusting [ ]

    Others………………………...

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How may the following second-hand clothing items be made safe for use by consumers?

16. Undergarments such as panties, brassieres, chemise and underskirt

....

....

....

17. Innergarments such as dresses, blouses, shirts, T-shirts and trousers

....

....

....

18. Outergarments such as sweaters, jackets and aprons

....

....

19. Accessories such as bags, jewels, socks, footwear and hats/cap

....

....

....

20. Household linen such as bedsheets, blankets, pillow cases and towels

....

....

....

APPENDIX C

QUESTIONNAIRE FOR SECOND-HAND CLOTHING CONSUMERS

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF HOME ECONOMICS EDUCATION

This research is carried out as part of the researcher's project. The purpose is to unearth the reasons why second-hand clothing trade and consumption appears to be on the increase in the Cape Coast Metropolis. I would be grateful if you could answer the questions on the subject mentioned. The confidentiality of the information you provide as well as your anonymity are all assured.

Instructions

Kindly answer the questions in the questionnaire as frankly as possible. Using the options assigned to each statement, indicate by ticking (√) the appropriate box that answers the questions or specify any other you have.

Demographic information

1. Gender: F [ ]   M [ ]

2. Age:

   < 11 [ ]   11-15 [ ]

   16-20 [ ]   21-25 [ ]

   26-30 [ ]   31-35 [ ]

   36-40 [ ]   41-45 [ ]

   46-50 [ ]   Above 50 [ ]

3. Occupation:

Teaching [ ] Nurse [ ] Trading [ ] Artisan [ ]

Student [ ] Others: Specify...

4. Level of Education:

No formal education [ ] Basic/Elementary [ ]

Secondary/Vocational/Technical [ ] Tertiary [ ]

Others: Specify...

5. How long have you been buying second-hand clothing?

< 5yrs [ ] 5-10yrs [ ] 11-16yrs [ ] 17-22yrs [ ] Above 22yrs [ ]

PATRONIZED SECOND-HAND CLOTHING BY THE PEOPLE IN CAPE COAST

6. Which of these second-hand clothing do you mostly buy? (Multiple responses are allowed)

Brassiere	[ ]	Singlet/vest	[ ]
Chemise	[ ]	Panties	[ ]
Boxer shorts	[ ]	Waist slips (underskirts)	[ ]
Dresses	[ ]	Blouses	[ ]
Skirts	[ ]	Shirts	[ ]
T-Shirts	[ ]	Trousers	[ ]
Shorts/knickers	[ ]	Sweaters	[ ]
Jackets	[ ]	Socks	[ ]
Bags	[ ]	Hats/cap	[ ]
Footwear	[ ]	Handkerchief	[ ]
Blanket	[ ]	Bedsheet	[ ]
Pillow case	[ ]	Curtains	[ ]
Table cloth	[ ]	Towel	[ ]

Others: ....

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REASONS WHY CONSUMERS PATRONIZE SECOND-HAND

CLOTHING IN THE CAPE COAST METROPOLIS

7. Which of the following reasons influence your second-hand clothing

purchases?

Second-hand clothes are cheaper to buy.   [ ]

Second-hand clothing items have unique designs.   [ ]

Second-hand clothing shopping centres are common.   [ ]

Second-hand clothing items are durable.   [ ]

Second-hand clothing items are attractively advertized.   [ ]

8. Which factors guide your choice/purchasing of second-hand clothing?

(Multiple responses are allowed)

Durability/freshness   [ ]   Uniqueness of item   [ ]

Price   [ ]   Cleanliness of the item   [ ]

Style of item   [ ]   Fabric design   [ ]

Neatness of the environment items are sold   [ ]

Others:..

TREATMENT(S) GIVEN TO SECOND-HAND CLOTHING BEFORE USAGE

9. Which of the under listed activities do you perform before using the second-

hand clothing items? (Multiple Responses are allowed).

Washing   [ ]   Repair/alteration   [ ]

Pressing/ironing   [ ]   Commercial dry-cleaning/Dusting [ ]

Remove stain   [ ]   Change style   [ ]

Boiling   [ ]   Disinfecting   [ ]

Others:…………………………………………………………………

10. How may second-hand clothing consumers ensure safety in the acquisition
and use of such goods?

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

11. How may second-hand clothing traders ensure safety for themselves and their
clients?

…………………………………………………………………………………

…………………………………………………………………………………

…………………………………………………………………………………

APPENDIX D

OBSERVATION CHECKLIST

Kinds of Treatment Practices Observed

Treatment Practice	Number of Traders	Tally	Description
Washing			
Dusting			
Repair/alteration			
Pressing/ Ironing			
Remove stain			
Change style			
Polishing			
Disinfecting			

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Protective Measures Observed

Protective Measures	Number of Traders	Tally	Description
Wearing of aprons			
Use of gloves			
Wearing of overall			
Use of sanitizers			
Washing of hands			
Nose and mouth mask			

APPENDIX E

Photographs of some Second-hand Clothing

1

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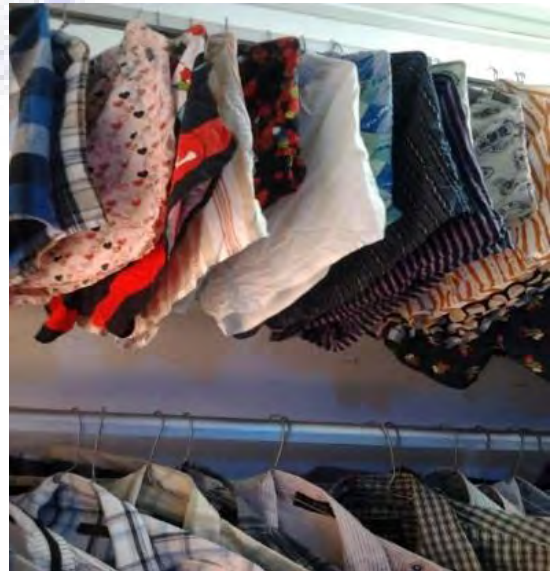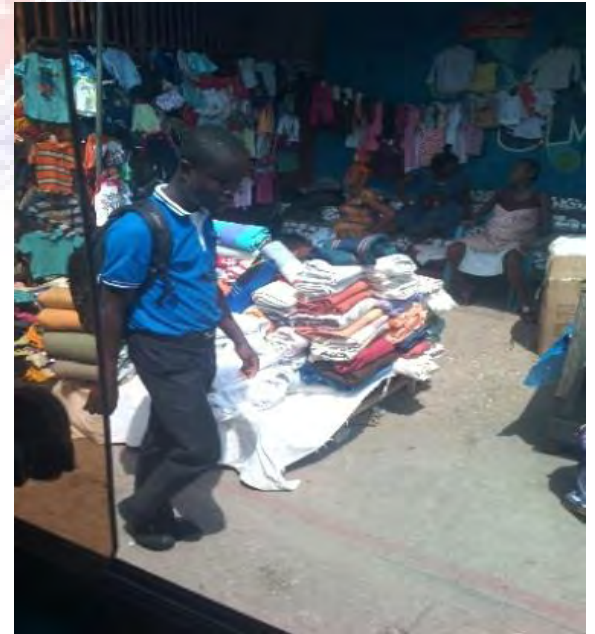**Some Used Clothing on Display in and around Cape Coast Kotokoraba Market.**