

**AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND  
ENTREPRENEURIAL DEVELOPMENT**

**SELECTION, USE AND CARE OF UNDERGARMENTS AMONG GHANAIAN  
WOMEN**

**ADDAI-NIMO VIDA**

**AUGUST, 2023**

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ENTREPRENEURIAL DEVELOPMENT**

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**(7201210002)**

**A Dissertation submitted to the Department of FASHION AND TEXTILES  
DESIGN, Faculty of VOCATIONAL EDUCATION, School of Research and  
Graduate Studies, Akenten Appiah-Menka University of Skills Training and  
Entrepreneurial Development, in partial fulfilment of the requirements for the  
award of Master of Technology (Fashion Design and Textiles) degree.**

**AUGUST, 2023**

## **DECLARATION**

### **Student's Declaration**

I, ADDAI-NIMO VIDA, declare that, apart from references made from other people's work which has been duly acknowledged, this dissertation was prepared by myself produced from research undertaken under supervision and that none of the sections has been presented for any degree or certificate in the university or any university elsewhere.

SIGNATURE: .....

DATE: .....

### **Supervisor's Declaration**

I hereby declare that; the preparation and presentation of this work was supervised in accordance with the guidelines on supervision of dissertation laid down by the Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development.

DR. JOSEPHINE ABOAGYEWAA-NTIRI

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DATE: .....

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## **DEDICATION**

This piece of work is dedicated to my children; Agnes Ayinbisah Nhyiraba Bawumya, Nana Oduro Katakylie Boateng and Maame Afia Nkunim Durowaa Gyabaah who have been my backbone and encouragement.

May the good Lord bless us all.

## TABLE OF CONTENTS

DECLARATION .....	ii
ACKNOWLEDGEMENT .....	iii
DEDICATION.....	iv
TABLE OF CONTENTS .....	v
LIST OF TABLES.....	ix
LIST OF FIGURES.....	x
ABSTRACT .....	xii
<b>CHAPTER ONE.....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study.....	1
1.2 The Problem Statement .....	1
1.3 Research Objectives .....	3
1.4 Research Objectives .....	3
1.5 Research Questions .....	3
1.6 Significance Of The Study .....	3
1.7 Limitations of the Study.....	4
1.8 Delimitation.....	4
1.9 Research organization .....	5
<b>CHAPTER TWO.....</b>	<b>7</b>
<b>LITERATURE REVIEW .....</b>	<b>7</b>
2.1 Introduction .....	7
2.2 The History of Female Undergarment.....	7
2.3 Types of Female Undergarment .....	10

2.3.1 Corset .....	11
2.3.2 Chemise.....	12
2.3.3 Panties .....	13
2.3.4 Coal Furnace (Brazier).....	17
2.4 Selection of Undergarments .....	30
2.4.1 Fabric selection .....	31
2.4.2 Undergarment styles.....	32
2.4.3 Choosing the best women's underwear .....	33
2.5 Care for the female underwear .....	34
2.6 The Conceptual Framework .....	35
2.7 Summary .....	37
<b>CHAPTER THREE .....</b>	<b>39</b>
<b>METHODOLOGY.....</b>	<b>39</b>
3.1 Introduction .....	39
3.2 Study design .....	39
3.4 Study population .....	40
3.5 Sample size.....	40
3.6 Sampling method .....	40
3.7 Data collection .....	42
3.8 Pre-test.....	42
3.9 Data collection process .....	43
3.10 Data Analysis .....	44
3.11 Ethical issues .....	44

<b>CHAPTER FOUR</b> .....	46
<b>RESULTS AND DISCUSSION</b> .....	46
4.1 Introduction .....	46
4.2 Presentation of results .....	46
4.2.1 Demographics of respondents .....	47
4.3 Marital Status Respondents.....	48
4.3.1 Types of undergarments commonly used by Ghanaian women.....	50
4.3.2 Determine the factors to consider when selecting the right type and size of undergarment (Panties and Brasier) for any dress .....	52
4.3.3 Identify the right usage of the various types of undergarments (panties and..... Brasier).....	56
4.3.4 Demonstrate how to Care for the Female Undergarment (Panties and Brasier).....	59
4.4 Discussion .....	62
4.4.1 Demographics .....	62
4.4.2 What are the Types of Undergarments (Panties and Brasier) Preferred by Ghanaian Women?.....	63
4.4.3 How to select the right type of Panties and Brasier as a Ghanaian woman? .....	64
4.4.4 What are the uses of the various types of female undergarment (Panties and Brasier? .....	65
4.4.5 How to care for the female undergarment (panties and Brasier) .....	67
<b>CHAPTER FIVE</b> .....	70
<b>SUMMARY, CONCLUSION AND RECOMMENDATION</b> .....	70
5.1 Introduction .....	70
5.2 Summary of key findings .....	70
5.3 Conclusion.....	71

5.4 Recommendation.....	72
<b>REFERENCES</b> .....	73
<b>APPENDIX</b> .....	76

## LIST OF TABLES

Table 4.1: Age Distribution of Respondents Source: Field Survey (2023).....	47
Table 4.2: Occupation Distribution of Respondents .....	48
Table 4.3: Female Body Type.....	49
Table 4.4: Types of Undergarments.....	50
Table 4.5: Style of Brasiers owned by Ghanaian women .....	51
Table 4.6: Style of Panty owned by Ghanaian Woman .....	52
Table 4.7: Factors for selecting the right type of panties .....	53
Table 4.8: Factors for selecting Brasier.....	54
Table 4.9: Factors to consider in choosing undergarment.....	55
Table 4.10: Frequency of Panty usage among Ghanaian women .....	56
Table 4.11: Frequency usage of Brasiersier .....	57
Table 4.12: Crosstab of appropriate usage of Brasier for a dress style .....	58
Table 4.13: Crosstab of Appropriate panty for a dress .....	59
Table 4.14: Factors to Demonstrate how to wash undergarment .....	60
Table 4.15: Storage of Undergarments frequency distribution .....	61
Table 4.16: Proper Disposal of Undergarments .....	62

## LIST OF FIGURES

Figure 2.1: Corset in the late 1760s .....	9
Figure 2.2: 1878 Hourglass Corsets .....	11
Figure 2.3: Presentation of Modernized Corset .....	12
Figure 2.4: Chemise Collection.....	13
Figure 2.5: Various styles of Underpanties .....	14
Figure 2.6:1 . Adhesive underwear screen .....	16
Figure 2.7: Sticky Panties .....	16
Figure 2.8: Brasiers with Pudding.....	17
Figure 2.9 Brasier with push up .....	18
Figure 2.10: T-shirt Brasiers.....	19
Figure 2.11: Sports Brasiers .....	19
Figure 2.12 Strapless Brasier .....	20
Figure 2.13: Brasierlette Brasier .....	20
Figure 2.14: Balconett Brasier .....	21
Figure 2.15: Minimizer Brasier.....	21
Figure 2.16: Plunge Brasier .....	21
Figure 2.17: Maternity Brasier .....	22
Figure 2.18: Longline Brasier .....	22
Figure 2.19: Caged Brasier .....	23
Figure 2.20: Bridal Brasier .....	23
Figure 2.21: Belly Dance Brasier.....	24
Figure 2.22: Built-in Brasier .....	24
Figure 2.23: Cup-less Brasier .....	25
Figure 2.24: Racerback Brasier .....	25
Figure 2.25: Front closure Brasier .....	26

Figure 2.26: Sheer Brasier .....	26
Figure 2.27: Peephole Brasier .....	27
Figure 2.28: Backless Brasier .....	27
Figure 2.29: Halter Brasier .....	28
Figure 2.30: Triangular Brasier .....	28
Figure 2.31: Vintage Brasier .....	29
Figure 2.32: Seamless Brasier .....	29
Figure 2.33: Stick-on Brasier .....	30

## **ABSTRACT**

Indecent dressing amongst Ghanaian women is seen as social problem that needs attention. Undergarment is supposed to cover-up the body rather than exposing various body parts. This study analyzed undergarment selection, use, and care among Ghanaian women, intending to promote comfort and modesty when choosing and wearing different forms of apparel. The study was inspired by the tendency of exposing garments among the youth, particularly in picking and utilizing undergarments that fail to suit clothing selections. The study aims to identify common undergarments (panties and Brassier) used by Ghanaian women, offer guidance on selecting suitable undergarments for various dress styles, explore the multifaceted uses of different undergarment types, and propose effective methods for caring for these essential pieces of clothing. A descriptive case study was undertaken, using a structured questionnaire administered to a cross section of Ghanaian women, with a population size of 27,492 and a sample size of 100. The survey indicated that Ghanaian women commonly pick for certain undergarment designs, such as G-strings, Boy shorts, and Hipsters, for distinct outfit kinds. Strapless and convertible Brassier choices are popular for various ensembles. Proper care and storage of undergarments were highlighted, including handwashing with mild detergents, preventing colour saturation, and utilizing separate compartments for storage. Women should pay attention to the fit and comfort of their undergarments since this can affect their over-all confidence and comfort throughout the day. The findings underscore the importance of conscious undergarment selection and care in fostering comfort and modesty for Ghanaian women, allowing them to make informed selections and advocating for ethical garment care practices.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Today, dressing or the use of garments can be traced to the cultural background of the person wearing it. However, trends in fashion are seeing the hybrid of both local and global designs of garment to meet the international demands. The shape and form of a person cannot be overlooked when selecting a garment.

Undergarment is the closest clothes to a human's skin, an intimate and often hidden indicator of their sexuality feeling about oneself (, 2009).

The African women for that matter, the Ghanaian female is well-endowed in shape and form. However, not all dress style or garment may look appropriate for their shape and form. Certain choice of garments may look indecent and provocative on the Ghanaian female. The recent trends of fashion in relation to the choice of a garment have raised concern about the right type of undergarment to select and use. Currently, most Ghanaian ladies dress provocatively in either their undergarments on display or almost half-naked, such dressing amount to indecent dressing most customs Ghana. In a Ghanaian context, any dress or garment that may expose the sensitive parts of any person is rated indecent. In dressing the undergarment, which is worn beneath a garment must be concealed and not revealing, such may be considered indecent as well.

#### **1.2 The Problem Statement**

According to Avaala and Akons (2017), there is no justifiable reason why a person would like to dress indecently. Most of the garment worn today by the youth especially is rather revealing instead of concealing sensitive parts of the body. This may be attributed to the

selection and use of underwear and clothing. Underwear must be hidden under clothing to expose. Nowadays, most underwear is more revealing and revealing even when it's underneath the shirt. There are different types of women's underwear, but this study focused on underwear and bras as underwear. According to Datta and Agrawal (2018), women chose underwear for three main reasons during the first half of the 20th century. Getting in perfect shape and staying in shape are goals as well as health considerations.

Each type of clothing has its own suitable underwear, as there is no single piece of underwear that can fit all clothes. Certain styles of clothing may require a specific type of underwear. However, Ghanaian clothing and underwear choices must be scrutinized. This is due to the body shape of Ghanaian women. For example, when choosing a piece of clothing that fits a certain occasion, a woman should be mindful of the type of underwear she will wear, otherwise it may be offensive in terms of color or pattern of seams on the body.

Castillo and Cubillos (2012) identified the following concepts in their research that led to the collection of information from workers who have experience in using workwear to establish use and consumption. Improvements or design suggestions: comfort, functionality and user-friendliness.

Furthermore, this study will contribute to reducing the way Ghanaian women wear and handle inappropriate underwear.

### **1.3 Research Objectives**

This study aimed to assess the need for selection, use and storage of underwear when choosing clothes to wear among Ghanaian women. Choosing your underwear carefully to decide what to wear has become essential.

### **1.4 Research Objectives**

This study aimed to achieve the following objectives to serve as a guide in the implementation process:

- I. Identify the types of underwear (underpants and bras) commonly used by Ghanaian women
- II. Choose the right underwear (panties and bras) for every outfit
- III. Identify the use and care of women's underwear (underpants and bras).

### **1.5 Research Questions**

- I. What are the types of women's underwear (panties and bras)?
- II. What should be kept in mind to choose the right underwear for each outfit?
- III. What are the uses and care of different types of underwear?

### **1.6 Significance Of The Study**

This research will help Ghanaian woman(s) to make the right decision in choosing what underwear and bra to wear at any given time, as well as determine what type of undergarment is best suited for a particular person specific dress. In other words, the research will help fashion designers choose the style of their clothes more carefully. It will also help young girls enhance their appearance and ability to hide their underwear. However, it will protect the country from the indecent dress that is becoming mainstream.

### **1.7 Limitations of the Study**

Research on the selection, use and storage of Ghanaian women's underwear in Ejisu City is limited by sample size and scope, which may not adequately represent the diverse perspectives and practices of all including Ghanaian women in different regions cultural backgrounds, and socioeconomic statuses. The research was done solely in the Ejisu Municipality in the Ashanti Region, which may restrict its relevance to other regions.

Additionally, self-report bias and lack of cultural subtleties may impair the accuracy of the obtained data. The study's quantitative data analysis, depending on standardized questionnaires and Likert scale replies, may not capture the rich qualitative insights that in-depth interviews or open-ended survey questions may give. Temporal considerations and gender views may potentially impact the applicability of the findings in the future.

Overall, the study offers valuable insights into undergarment selection, use, and care among Ghanaian women within the specified context, but researchers and practitioners should consider these limitations when interpreting and applying the findings to broader contexts or designing future studies on similar topics.

### **1.8 Delimitation**

Delimitations are purposeful choices made by researchers to confine the scope of a study, concentrating on some characteristics while ignoring others.

This study on undergarment selection, usage, and care among Ghanaian women is confined to Ejisu Municipality in the Ashanti Region of Ghana, which may not be applicable to women from other regions with differing cultural norms, fashion trends, and undergarment habits.

The study could have covered the whole of Ghana taking care cultural and religious differences but for the inadequate time frame for this academic exercise, the case of Ejisu township of Ashanti region was used to represent the Ghanaian women. The study could have covered both male and female but literature has revealed that mostly women have problem with the choice of undergarment. The staff of the school hails from different parts of the country with at least two major religious grouping in Ghana.

The study did not distinguish between underwear-related behaviors based on age groups or generations, and cultural subtleties were not widely addressed. The limited sample size may not fully reflect the methods of lingerie selection, use and maintenance typical of Ghanaian women. Quantitative research methods can reduce the depth of qualitative knowledge that can be gained through further qualitative research methods.

### **1.9 Research organization**

The study is divided into five main chapters. The first chapter is an introduction that provides the context of the study. Chapter two discusses the theoretical framework as well as the research related to this study. The literature is divided into empirical reviews and conceptual frameworks. The empirical review discusses an overview of underwear, types of underwear, underwear selection process, lingerie use, and underwear care by women in Ghana.

Chapter three presents the methods used in the study. Specifically, it introduces study design, population, sample and sampling procedures, research instruments, instrument pilot tests, and data collection procedures. It also presents the statistical procedures applied to the data analysis.

Chapter four highlights the findings and discusses the conclusions of the study. It examines respondents' background information and descriptive and inferential analyses of the data.

Chapter five presents a summary of the research results, draws conclusions, and makes recommendations.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

From 17<sup>th</sup> to 20<sup>th</sup> century varieties of under wears have evolved from materials, shape and styles to their selection. Today quality, comfort and style play a huge role in selection of undergarment. (Patra, R. 2017). Thus, selection of undergarment has become part of deciding what to wear. This chapter therefore explores the history of undergarment and type of female undergarment. It also examines literature on chemise, brassiere, and selection of undergarments, best women undergarment and care for female underwear. The chapter concludes with the conceptual framework that guides the study and summary of lessons that guides the study

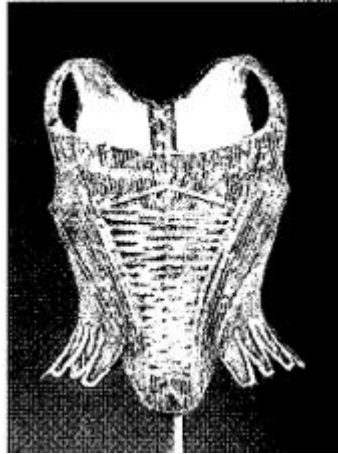
#### **2.2 The History of Female Undergarment**

Undergarments, as foundation wear, are the beginning point for a woman to mould her physique and establish a female identity. The usage of underwear as outerwear was extensively adapted in the late twentieth century, therefore undergarments as garments is the newest trend nowadays.

Underwear's history began in Ancient Rome, when men and women began wearing an undergarment known as subiculum. It came in the form of either a pair of shorts or a loincloth wrapped over the lower torso. Only gladiators and labourers wore it alone. A strophium was also wrapped around the breast (Patra, 2017). According to Patra (2017), the breast was covered under straight bodices and high necklines during the Middle Ages. It was the first-time chemises or shifts emerged, and men began to wear Brasier and hoses, which resembled breeches and were quite fashionable in following decades.

According to Willet and Cunnington (1992), underwear includes all forms of articles of clothing that are primarily worn by women and are completely or mostly hidden from the viewer by the outer garment (clothing). This makes it easier to describe underwear (underwear, underwear, undergarments) as any piece of fabric worn under a garment, dress, or garment. A garment that can faithfully imitate traditional underwear. In ancient times, the first known underwear dates back to Egypt and Greece, when their use seemed purely practical. According to Seon Sang & Ja Paik (2009), it is possible to imagine the origin of underwear from ancient clothing. However, until wearing multiple layers of clothing there is no difference between underwear and outerwear.

Clothing, especially underwear, evolved significantly in the Middle Ages. One notable difference between men's and women's clothing is that women's underwear has been highly evolved to include items such as corsets and petticoats, but men's underwear is less important. For millennia, the female body has been shaped in various forms to adapt to current fashions (Dhainaut Jildaz et al., 2013). In addition, the cotte, a linen tunic that was hemmed and stiffened to fit snugly against the body, contributed to the slim, zigzag shape of medieval Europe. In the Middle Ages, petticoats were just as important as corsets for the upper half of a woman's body as well as the lower part of a woman. Figure 1 below shows the image of women's bras at that time.



**Figure 2.1: Corset in the late 1760s**

**Source: Metro Museum of Arts in New York (1760s)**

In one argument, Ewing (2010) shows that the exposed petticoat and glimpses of other petticoats revealed by the softer outer layer also have an erotic appeal. Underwear provided the appropriate form for the outerwear to be displayed on, and it was occasionally disclosed as outerwear, when it was often embellished with exquisite needlework. During this period, it was also utilized to increase female sexual attraction.

The number and type of undergarments worn by ladies reached extremes throughout the nineteenth century. The female body had grown so unapproachable behind the layers of underwear that pulling it off caused its own type of sexual titillation (Perrot, n.d.).

There were significant events in the early twentieth century that had a significant impact on female life and dress. Women faced huge challenges coping with new sorts of employment outside the house during the First World War, therefore they sought undergarments that allowed for greater physical mobility. The Great Depression and World War II had a significant impact on underwear, and as a result, solely practical underwear evolved (Summers, n.d.).

Improvements in synthetic fibers such as nylon in 1939 and Lycra in 1959, and their application to corsets, transformed both underwear and outerwear. Its superior economic, technological, and trendy skills had a significant influence on the fashion business. The social and political atmosphere, in particular, produced tremendous changes in female underwear fashion throughout the twentieth century. Female sexual views and conduct became far more liberated than at any previous time in history (Wilson, 2003).

### **2.3 Types of Female Undergarment**

The enhanced women's undergarment of the present invention has a front panel that is ideally usually triangular in form and is made of a soft and malleable fabric material such as cotton, silk, or another comfortable but durable material. When the improved women's undergarment of the present invention is worn, the front panel may also include an inner panel mounted on the inside of the front panel, the inner panel being constructed of soft cotton or other such fabric material, and the inner panel being positioned generally adjacent the female genitalia, specifically the vagina. The front panel would include a lower corner, upper left corner, and upper right corner, and would preferably have changeable size governed by the sizes and preferences of the people wearing the undergarment, depending on comfort and aesthetics (Franko, 2007).

Until the seventeenth century, when ribbons and buttons were introduced, the customary voluminous chemise was worn beneath the tight and extended bodice. A chemise is a stiffened linen undergarment. This became an undergarment for ladies at the period, and the illustration below depicts the appearance of a chemise. This was previously referred to as cotte, an early French term for any close-fitting clothing. The cotte is related to the term cote, which means ribs. The 'cotte' was the first version of what was known as a

corset. One of the most significant advancements in the history of undergarment is the corset.

### 2.3.1 Corset

A corset is a type of supportive garment that is widely used to hold and train the body in the desired shape, usually a smaller waist or larger butt, for cosmetic or medical purposes or to support the breasts. (Swanson, 2019). While they have been a women's mainstay for many years, corsets are now worn by both men and women. According to Mcknight (2018), corsets were called in the 19th century and had a sturdy silhouette with thick hems that molded a woman's upper body into a V shape, while flattening and lifting the breasts in the centuries the first century of corsets.



**Figure 2.2: 1878 Hourglass Corsets**

**Source: Patras (2017)**

The corset in Figure 2 above is mainly used to slim the body and adjust to accentuate the curves of a woman's body. This corset reduces the waistline and accentuates the bust and

hips. The corset shell was originally worn underneath the corset to provide coverage between the shirt and the body. Bras were not worn close to the skin due to hygiene issues in the 19th century, as they had steel braces and rusted metal eyelets (Mcknight, 2018). A lightweight linen or cotton shirt (also known as a shirt) is worn under a corset to absorb perspiration and protect the corset and wearer from each other, as well as for bras and protection. Other clothing of the wearer and perspiration.



**Figure 2.3: Presentation of Modernized Corset 1**

**Source: Walmart Corset Bustier (2020)**

Unlike early corsets, today's production corsets, as shown in Figure 3, can be worn without a Chemise.

### **2.3.2 Chemise**

A chemise is a type of garment that is mainly worn close to the skin to protect clothing from sweat and bodily fluids, and it is the forerunner of the modern shirts commonly worn in Western countries. Burnham, 1997). Johnson (2014) concludes that until the

invention of panties in the 20th century, shirts were the only type of underwear available to women at the time. The shirt is simply made of linen or cotton. In modern terms, it looks like a tunic or a mini-dress. Figure 4 below is a collection of chemise from old to new:



**Figure 2.4: Chemise Collection 1**

**Source: Ewing (2018)**

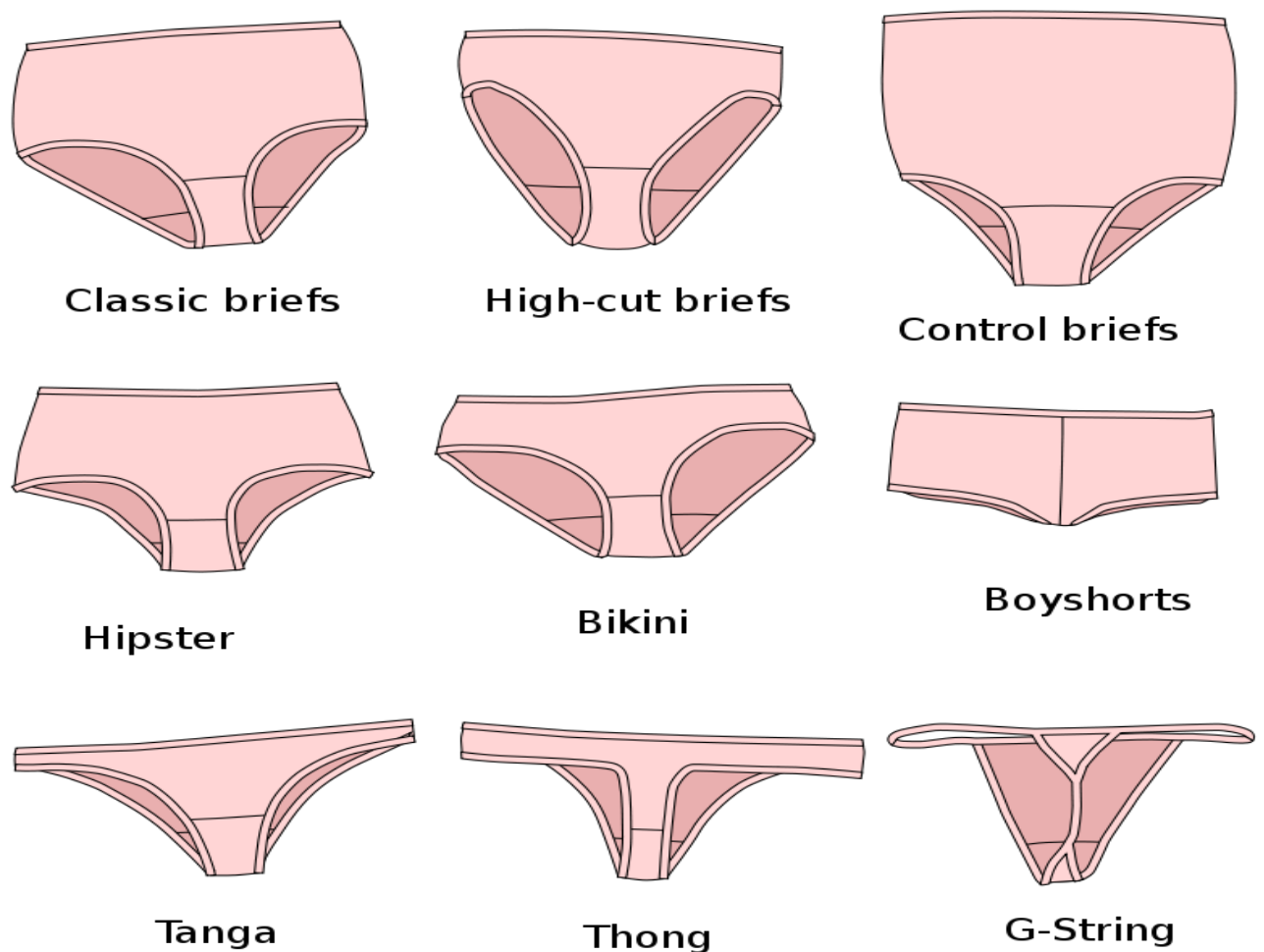
### **2.3.3 Panties**

According to the Oxford dictionary, panties are short underwear worn by women and girls, sometimes called pants. Cotton, lace, latex, leather, lycra, mesh, polyester and silk are some of the materials used to make underwear.

Underpants are underwear commonly worn by women. Elasticated belts, crotch pads for genital protection, and leg holes, like belts, are mostly made of elastic bands (Carroll & Schultz, 2009). The breeches are loose panties, usually white cotton, that are purely functional and only developed for aesthetic appeal in the late 20th century. The breeches have become an integral part of clothing. , diverse in materials and colors, with new cuts

that are continuously reduced in size. “Pants” can refer to both men’s and women’s underwear, but “underpants” only refer to women’s underwear (Burgdorf, 2013).

Carroll and Schultz (2009) reveal that breeches are divided into several categories based on factors such as the amount of back cover, the width of the sides, and the height at which they are worn. These categories are not always well-defined and usage may vary slightly between braiziers, as shown in Figure 5.



**Figure 2.5: Various styles of Underpanties**

**Source: Ewing (2018)**

Panties that cover the entire back and extend to the waist or just below the navel.

Vintage panties are also known as "grandma's panties" because they were the signature underwear of the previous decades and associated with older women. Waist

circumference is high at the hips and small leg openings to cover as much of the waist and butt as possible.

Control panties are intended for support while creating the illusion that you are slimmer. This style is usually made of stretchy material such as spandex and can reach above the waist. Some have stiffer shields to help flatten the belly. Some shaping panties also compress the buttocks, but others are intended to prevent buttock compression. Others just lift the buttocks and cut holes to create maximum fullness for the buttocks.

High-Waisted panties have wider leg openings and slimmer sides to show more legs and allow for more movement. Shorts have moderate to low coverage, less back coverage than bikinis, and have small bands on the sides.

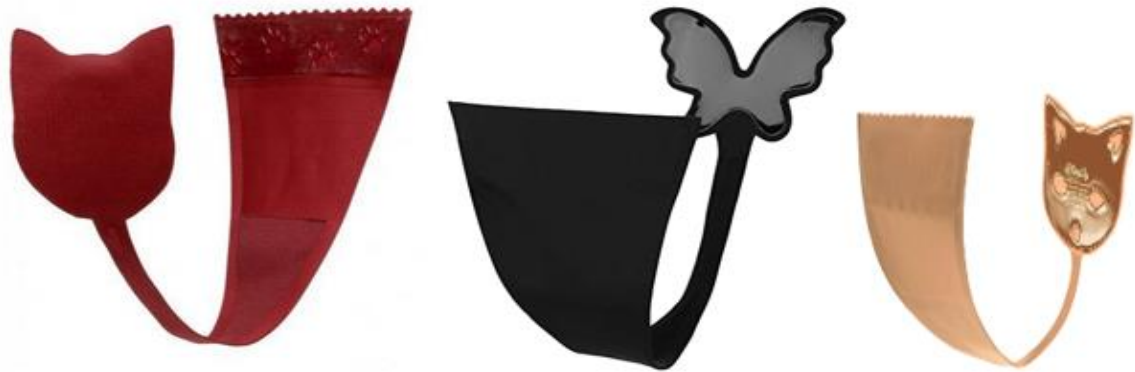
Underpants have a longitudinal string at the back that connects the crotch to the waistband, sometimes with a fabric triangle commonly known as a whale's tail when it protrudes above the low-rise waistband. The T-front is a type of panty in which the panties extend to the front. It provides almost minimal coverage while maintaining the essential hygienic functions of underwear and simply protecting the genitals. Usually, it's made entirely of cord, with extra fabric or lace around the waist.

Slit pants have the same waist as shorts, but the back is largely cut. The crotch is triangular, tapering to a thin band at the back and between the buttocks before widening at the top and joining at the waistband.

Boy's shorts are shorts that cover the hips and are so named because they resemble boxer shorts, a type of boxer shorts. Some are designed to look like men's briefs, with raised

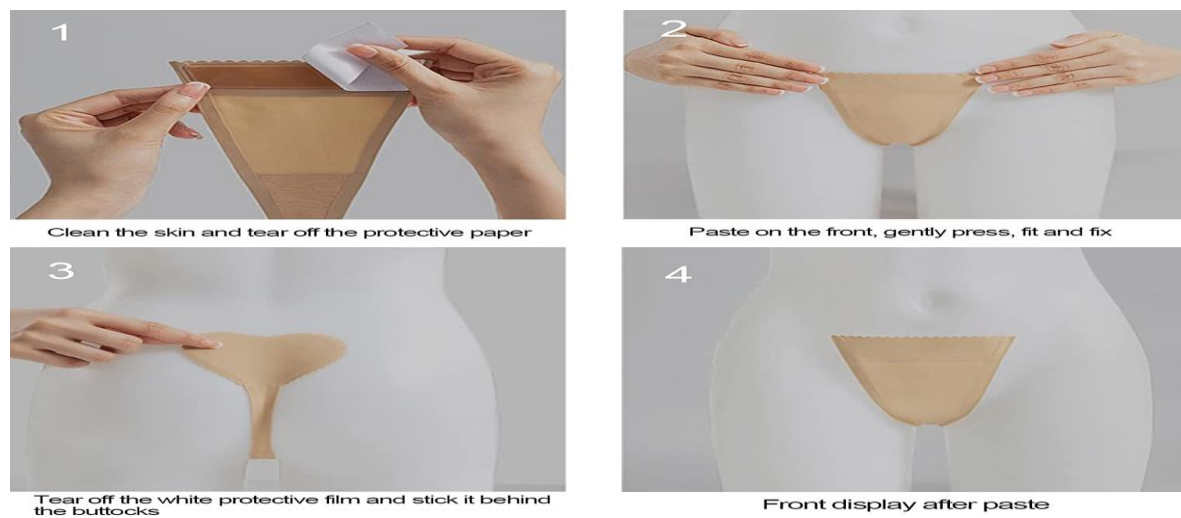
and contrasting hems. Unlike men's underwear, this model is usually lower. Boy's shorts usually cover most of the bottom.

Sticky panties are sometimes called strapless/sticky panties. It's a kind of micro pantyhose that only covers the front and back of the body. They are very useful when women do not want to show their panties. Refer to Figure 2.6 for a copy.



**Figure 2.6:1 . Adhesive underwear screen**

**Source: Ewing (2018)**



**Figure 2.7: Sticky Panties**

**Source: Ewing (2018)**

The cheeks have the shape of the front like hipster shorts, bikinis or boys shorts, but at the back they're made to support the butt and have a seam so the fabric rests halfway

down the cheeks to accentuate the shape. They reveal the outer third or half of each cheek and are often lace or scalloped.

Hipsters are worn with a belt that is straight across the hips and lower on the body.

### **2.3.4 Coal Furnace (Brazier)**

A bra is a type of fitted underwear worn by women to support their breasts. Wearing bras to support the breasts dates back to ancient Greece, where women wore a strip of wool or linen wrapped around their breasts and tied or pinned at the back. This is called the chest band. Chest bands, like those seen on Victor's Coronation stela, were worn by Roman women while playing sports. Shin (2009) argues that since the 16th century, corsets have dominated the underwear of wealthy women in the Western world. Clothing designers began experimenting with solutions in the late 19th century, dividing the corset into several parts: a belt-like restraint device for the lower body and devices that suspend the chest from the shoulders to the upper body.

### **Buffered Coal Furnace (Buffered Coal Furnace)**

Padded bras give size to your breasts while hiding nipples under loose fitting clothing. A soft pad is placed in the Brassier cup to enhance the appearance of bust size.



**Figure 2.8: Brasiers with Pudding**

Source: Shin (2009)

Breast Augmentation Bra (Brasier with pump)

Women with large breasts prefer to wear a push-up bra, which balances the breasts by pressing from below.



**Figure 2.9 Brasier with push up**

**Source: Shin (2009)**

### **Hell T-shirt**

Brasier t-shirts, commonly known as seamless Brasier t-shirts, are made in such a way that no seams are visible beyond the t-shirt. It will make you more comfortable and look better when wearing a T-Shirt, and bras are preferred by teenagers.

A T-Shirt Brasier, often known as a seamless t-shirt Brasier, is made such that no seams show through the t-shirt. This will provide you with comfort and a better look with your t-shirt, and Brasiers are preferred by teens.



**Figure 2.10: T-shirt Brasiers**

**Source: Shin (2009)**

### **Sports Brasier (Brasier for Sports)**

This sort of Brasier is ideal for any lady who visits a gym or participates in any health activity, especially those who participate in sports and must run for an extended amount of time. This sort of Brasier guarantees a snug fit and reduces boob bounce.



**Figure 2.11: Sports Brasiers**

**Source: Shin (2009)**

### **Strapless Brasier**

Strapless Brasier is used to support your fashionable cleavage in an off-shoulder or netted garment.



**Figure 2.12 Strapless Brasier**

**Source: Shin (2009)**

***Brasierlette Brasier***

For your casual look Brasierlette style is the ideal match it is very fancy and can be slipped easily you can wear it under chiffon or georgette top.



**Figure 2.13: Brasierlette Brasier**

**Source: Shin (2009)**

***Balconette Brasier***

This delicate style gives a rounded appearance with wide straps and cups that forms a horizontal neckline and hence it is recommended for girls with wide neck.



**Figure 2.14: Balconett Brasier**

**Source: Shin (2009)**

***Minimizer Brasier***

Minimizer Brasiers are preferable for the woman who has a large breast to minimize the exposable size of Brasiers and ensure better fitting of cloth.



**Figure 2.15: Minimizer Brasier**

**Source: Shin (2009)**

***Plunge Brasier***

The cup of plunge Brasier is designed especially for the heavy breast which supports properly to ensure the better look of large figures.



**Figure 2.16: Plunge Brasier**

**Source: Shin (2009)**

### *Maternity Brasier*

These Brasiers are specifically developed for breastfeeding parents, with molded soft and supportive cups. You may simply access the front portion to nurse your infant.



**Figure 2.17: Maternity Brasier**

**Source: Shin (2009)**

### *Longline Brasier*

A Brasier is known as longline Brasier because it is long enough to reach up to waist or hips.



**Figure 2.18: Longline Brasier**

**Source: Shin (2009)**

### *Caged Brasier*

The crisscross strap style is now trendy and this style can be picked for any low-cut party wear outfit.



**Figure 2.19: Caged Brasier**

**Source: Shin (2009)**

***Bridal Brasier***

It is above the style and the coverage that will look best on the bride wearing a Western outfit for the day.



**Figure 2.20: Bridal Brasier**

**Source: Shin (2009)**

***Belly Dance Brasier***

This is a stone-studded Brasier with other glittery objects you can also try this if you go for any fancy dress competition.



**Figure 2.21: Belly Dance Brasier**

Source: Shin (2009)

### ***Built-in Brasier***

This is ideal to team up a tube tops tank tops and swimsuits. The dress itself has a Brasier attached inside which will give you a gorgeous look at your figure.



**Figure 2.22: Built-in Brasier**

Source: Shin (2009)

### ***Cup-less Brasier***

This is stylish lingerie ideal for those ladies with minimal breasts it is mostly worn under night suit.



**Figure 2.23: Cup-less Brasier**

**Source: Shin (2009)**

### Racerback Brasier

In these types of Brasiers, the shoulder straps form a V-shape and close to your neck. The V-shaped design of the cups and the positioning of the straps create a center-front gathering effect, pushing the breasts together to create enhanced cleavage.



**Figure 2.24: Racerback Brasier**

**Source: Shin (2009)**

### *Front Closure Brasier*

The hooks are on the front side rather than the backside of the Brasier. Front closure bras can be an excellent option for special occasions when wearing outfits with unique or intricate back designs, as they eliminate the risk of visible bra lines or closures.



**Figure 2.25: Front closure Brasier**

**Source: Shin (2009)**

### *Sheer Brasier*

This is usually made up of lace knit or satin this is a good choice for the regular use as it has a classy appealing feature.



**Figure 2.26: Sheer Brasier**

**Source: Shin (2009)**

### *Peephole Brasier*

The Brasier has a hole in both the cups from where the breast is partially visible you should try this one if you are going for the honeymoon.



**Figure 2.27: Peephole Brasier**

**Source: Shin (2009)**

***Backless Brasier***

Backless Brasiers are preferable for those who want to wear a dress which is low cut in the backside.



**Figure 2.28: Backless Brasier**

**Source: Shin (2009)**

***Halter Brasier***

Instead of buying strapless or transparent strap you can consider the halter Brasier to wear under your halter neck dresses.



**Figure 2.29: Halter Brasier**

**Source: Shin (2009)**

### *Triangle Brasier*

Triangle Brasier is preferable by the teenager who used to visit the beach and take a sun-bath for swimming into the sea.



**Figure 2.30: Triangular Brasier**

**Source: Shin (2009)**

### *Vintage Brasier*

Vintage is a traditional dress preferable for any age woman. Teenagers choose these Brasiers when they go to a party. This Brasier ensures an amazing fitting which is suitable for a party dress.



**Figure 2.31: Vintage Brasier**

**Source: Shin (2009)**

***Seamless Brasier***

If you want to hide the seam of any traditional Brasiers then this type of Brasier is made for you. This Brasier does not have any seam which can be visible through your tops.



**Figure 2.32: Seamless Brasier**

**Source: Shin (2009)**

***Stick-on Brasier***

Stick-on Brasier is specially designed for the teenagers who want to wear a Strapless Brasier just to give a good shape to their tiny breasts. Many girls wear this type of Brasier while goes for a party.



**Figure 2.33: Stick-on Brasier 1**

**Source: Shin (2009)**

## **2.4 Selection of Undergarments**

The form and shape of all women vary and depend on what factors to consider when choosing an undergarment. The average European cannot choose to wear exactly what an average African lady needs to wear and vice versa. This is a result of the variation in body type, shape, and form. The selection of undergarments is as important as the selection of outer garments. Not all undergarments best fit any garment choice. As stipulated by Tsaousi (2014), the selection of garments can be the premise on the fabric type, the garment style, physique, colour matching, and the styles of the underwear. No one likes the feeling of their underwear being squeezed, bulged, or lifted throughout the day, as that's a sign that you're tying them up. Finding comfortable underwear is easy if you understand how to fit properly and choose good fabrics. To get a comfortable fit, it's important to know your body type. In a survey by Risius et al (2014), participants were found to emphasize the following infinity variables:

comfort, bra's ability to hold in place, ideal fit, shape under clothing, support, discretion, strap design, shape, shape of breasts, material fabric and breast augmentation. These traits are considered to have an impact on the desirability of the bra and its social function in adult women; it is these over variables that will be the focus of future research on bra optimization for women aged 45-65. More than half of the participants said they would no longer wear the bra they wore in their twenties, suggesting that bra preferences change with age (Risius et al., 2014).

### **2.4.1 Fabric selection**

Although most underwear includes panties, this does not preclude other fabrics used to make underwear. Cotton is a breathable fabric that's ideal for underwear because it's hygroscopic so moisture won't get trapped in your underwear so your underwear won't sweat as much and you won't have to worry about bacteria as many. and yeast infections. Cotton underwear is a particularly suitable choice for women due to the risk of yeast infection according to Joubert (2012). While cotton underwear's breathability makes them more comfortable, they don't necessarily feel as soft when worn under clothing. Choose underwear made of flexible synthetic materials, such as nylon, Lycra, or spandex for a slimmer feel. However, for your comfort, make sure the crotch is lined with cotton. Again, when choosing clothes that fit better, consider "seamless" or "lineless" underwear. They have no stretch in the hips or leg openings, making them great for tailoring. Another reason why cotton crotch lining is important is because it's breathable. If the crotch lining is synthetic, you run the risk of moisture retention, which can lead to illness. Silk underwear is sleek and sexy, but it's not as breathable as cotton. This increases the risk of moisture getting trapped in your underwear, which can lead to illness. For optimal comfort, wear only silk lingerie on sale. Occasionally, this also applies to lace and other forms of elegant underwear. While lace underwear frequently has cotton inside, it is neither pleasant nor long-lasting. No matter how much you adore stunning designs, sensual lace, or that creatively cut underwear, it's not healthy for your vagina if it's not made of 100 percent cotton. While it's great to wear seductive lingerie on rare occasions, avoid wearing synthetic fabrics like nylon or polyester regularly as they might cause chafing and redness(Gupta, 2020).

### **2.4.2 Undergarment styles**

If you ask several individuals to recommend their favourite underwear, you'll receive a lot of varied responses. Everyone has an opinion about the best women's underwear, and it typically relies on body shape and personal choice (TheCut, 2021). That is why the easiest method to shop for undergarments online is to start with your preferred shapes and then read the reviews. The Cut (2021) gathered 23 pairs of underwear with excellent ratings and categorized them below.

When it comes to boy shorts, it's important to make sure the leg holes don't roll or bunch up. Fans claim the cotton/elastane combination is unbelievably soft. The high-waisted seamless briefs provide enough coverage. "Just enough snugness without being too tight!" writes one reviewer. "They don't expose any underwear lines," one enthusiast comments. A seamless panty is ideal for wearing with tight skirts, shorts, dresses, and work trousers. Because the seam lines are nearly imperceptible, the region appears and feels smooth on the outside, avoiding the unsightly panty lines. The high-waisted shape offers covering without seeming overly grandma-like. Ideal for severe sofa sitting, runs, and exercises. These moisture-wicking hipsters are ideal for anybody on the go, but they're still stylish enough to wear around the house. The comfy high-rise thong gives you the best of both worlds: front support and rear flexibility. Thongs are quite seductive. Although many women find them unsettling. Thongs made of light fabrics, such as lace, provide that comfort and make you feel amazing when contrasted to those made of spandex/synthetic. Discover the correct pair, and wear them beneath tight dresses and leggings for a no-show effect (Manral, 2020)

A t-shirt bra with underwiring is a daily item for the modern lady to wear with all of her tops, dresses, shirts, and blouses. You may have a handful in basic colour like black, grey,

and nude, as well as one or two in your favourite colours for fun. If you have any transparent t-shirts, acquire a matching bra.

According to Manral (2020), every lady needs one of the convertible bras. They are ideal for low-lined necklines, and the straps can be altered into halters, criss-crosses, and even strapless looks. Make sure to try them on in all of their many applications before deciding on the best one for you.

### **2.4.3 Choosing the best women's underwear**

Choose bikini panties every day. Bikini shorts are a traditional choice for women's underwear due to their low waistline and modest coverage. They will be a comfortable alternative to most body shapes, making them a great choice for everyday underwear.

Women with large bellies should use high-waisted underwear because most of the weight is on the abdomen, underwear with a lower waistline can be wrinkled and rolled. Choose high-waisted panties that cover your belly so you don't have to pull your pants up all day. However, for girls with a curvy or hourglass figure, high-waisted panties can be a comfortable alternative.

If you want your clothes to fit better, wear underwear. There's nothing more embarrassing than tugging at your panties to keep it from bunching up under skinny jeans and other tights. A pair of panties may be the most comfortable alternative as it provides little feeling in the back and won't create extra puffiness under your clothes.

Flip-flops can be uncomfortable for some people, so try them on at home before wearing them for the day. Women with larger buttocks should wear short boys' underwear. Boys shorts provide just enough coverage for a big butt for a pear-shaped body, where most of your weight is on your lower body. To avoid stress and discomfort caused by visible seams on outerwear, it's best to choose seamless panties.

Boys' shorts are suitable for most body types, but they are especially flattering on people with big butts.

## **2.5 Care for the female underwear**

According to Gupta (2020), Underwear keeps our vagina clean and dry while also providing comfort. Underwear has several advantages, keeping underwear clean is even more important to prevent microbes and germs from gathering and forming pus in and around the vagina. Clean underwear's also aid in the prevention of odour and itching.

### **Ironing**

While you may believe that your underwear is clean after washing it, it may actually be carrying some health risks with it, especially if they are dried indoors such as the bathroom where the sun does not shine on it. The heat of the sun is able to kill some bacterias and germs in the underwear. However, because most women are uncomfortable hanging their underwear in full sunlight to dry properly, the ideal approach is to iron the central section after they are dry to help remove moisture and destroy any bacteria in the fabric. Mendelson (2009) concluded that Ironing will help remove wrinkles from your underwear, and when ironing your undergarments, the temperature should be set low. You may adjust the temperature to fit the cloth you're ironing, such as cotton, silk, rayon, or polyester. All of these textiles react differently to temperature.

To prevent stains from settling in, place a light piece of fabric over the underwear while ironing it, especially if it is not cotton underwear.

Determine if you will be ironing cotton, silk, rayon, or polyester, because different fabrics react differently to different temperatures. There may be a care label attached to

the underwear and these instructions must be followed in order to get the best value for product bought. Outer garments are ironed to remove creases and straighten the pleats and other garment features but this is not the case with brassier, lingerie or a pair of panties.

### **Storage**

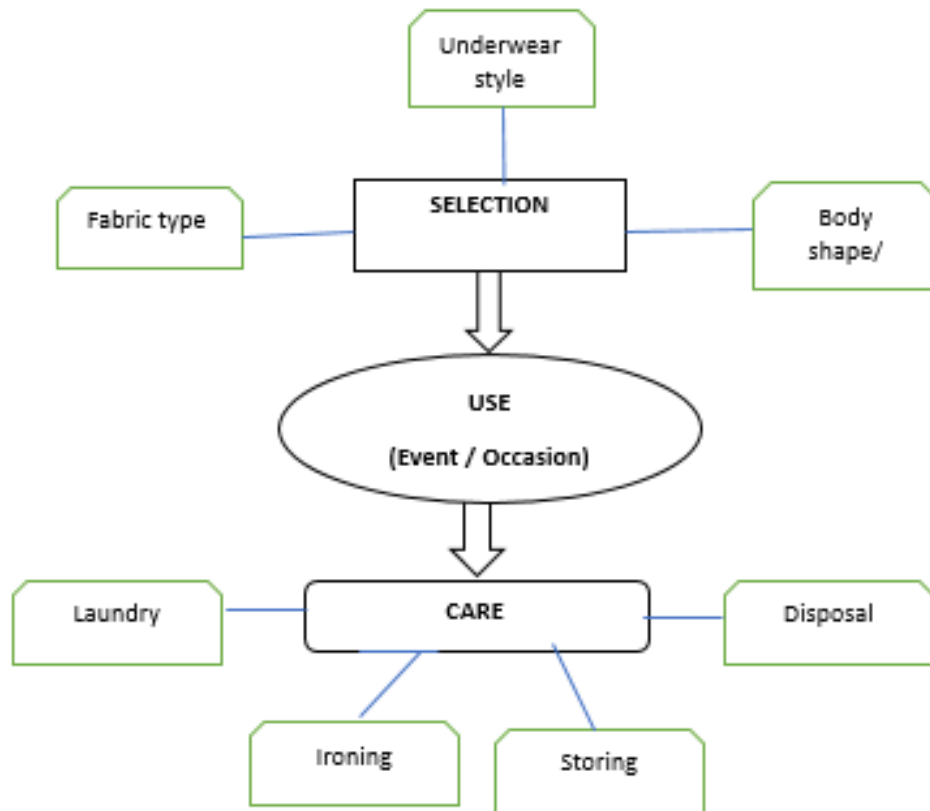
After ironing, gently fold underwear and store them in your underwear bag or closet. Put your daily undergarments in one section. Then, separate apart more formal or designer underwear, such as lace or silk. You might also include a distinct area for underwear used when exercising, such as jock straps. Instead of using dividers, arrange your underwear within your drawer. Fold and stack one pair of underpants on top of the other after sorting them by colour or style and put the stacks in the drawer.

### **Disposal**

Consumer decisions about the disposal of clothing are important from an environmental perspective as they affect the life of the clothing as well as its ability to be reused and recycled (Laitala, 2014).

## **2.6 The Conceptual Framework**

The conceptual framework of this study is the adaptation of factors to be considered when choosing, using and storing women's underwear as proposed (Tsaousi, 2011 & Tsyewu, 2013). Figure 2.35 is an illustrative diagram of the model used to meet all of the objectives set out to guide this study.



**Figure 2.35: Conceptual Framework 1**

During the study, the factors that led to the choice of women's underwear will be categorized under the fabric type, undergarment style, and body shape and form. As argued by Risius et al (2014), women are psychologically and physiologically affected by the aging process, and tactical decisions on aesthetic procedures are frequently undertaken to disguise the external indicators of rising age. The relationship between the use and events or occasion was analysed to find out whether or not the event or occasion at hand has some correlation to the use of undergarments. More so, caring for the undergarment will be assessed through laundry, ironing, storing, and disposal. Undergarment disposal

research focuses on disposal methods, behavioural motives, disposal causes, and consumer demographics who behave in certain ways.

## **2.7 Summary**

The focus of this chapter was to assess the work done by other authors in line with the female undergarment. Obviously, from most literature reviewed; it is evident that the use of female undergarments emerged during the era of the ancient Roman Empire. Artifacts like corsets, chemise, breast bands, brasiers, and panties were identified as female undergarments. These artifacts have gone through various stages of modernization as a result of fashion evolutions. However, the selection of the female undergarment cannot be done anyhow. The fabric used for the style of the undergarment must be considered. The female body shape and form is also a critical issue. Certain undergarment style may not be suitable and comfortable for the array of body shape and form women exhibit. The various styles of undergarments have specific usage for an event. In caring for the female undergarment, laundry, ironing, storing, and disposal were deduced by most researchers as the most common practices. Just like any other thing that has a lifespan, underwear to get worn out after sometime and must be disposed off. A lot of factors such as wear and tear due to frequency of use, poor fit, and changes in fashion, boredom and lack of storage space cause undergarments to be disposed off after sometime.

### **Laundry**

It is recommended to wash your underwear by hand rather than in a machine, as this shreds the fabric and can badly affect the fit. Hand-wash your underwear to extend its life. Clean them with a moderate detergent, rinse well, and hang to dry. If you want to wash bras and briefs in the washing machine, set the temperature to 40 degrees Fahrenheit and use a light detergent.

Coloured underwear should always be cleaned with a colour-safe detergent. To restore the whiteness of white clothing, use a detergent containing optical brighteners. Never use bleach-containing detergent, especially on white clothes. Always adhere to the washing directions. Also avoid softener since some fabrics, such as those used in sports bras, might be affected by it (thin and soft, breathable fibres). The softener has the potential to block the pores in the fibres, resulting in the loss of breathability characteristics (Swegmark, 2022).

It is preferable to hang underpants to dry. In case a tumble dryer is used, set it on low heat. Otherwise, you risk ruining the elastics of the garment. Always check the washing instructions first to determine if a dryer is permitted. However, in Africa where sunlight is abundant, it is best when hanged in the sun for a while. Tights should not be worn with white synthetic underwear. All tights contain colour, and part of it will be released while washing, which white underwear may readily absorb. Always wash your underwear separately. Do not wash your underwear with garments that have been contaminated with body fluids. And, to extend the lifespan of the underwear, hand wash them rather than using a washing machine, which could be a breeding ground for bacteria.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

The selection of scientific analyzes is profitable when the most competent techniques and organizations recognize them in the planning and execution of field activities, such as data analysis (Kumekpor, 2002). . Crosswell (2013) further explains that the chosen research method does not affect the study design but allows the researcher to consider how each approach can enhance or limit their research. In general, there are three reasons why social studies should be encouraged. One of them is giving explanations. For example, a census is a representation of the demographics of the population. The next reason is to clear things up, and a study done this way is a prime example of this.

#### **3.2 Study design**

Research design is a research method within a study that extends from the choice of a general hypothesis to a critical data collection and analysis method (Creswell, 2009). The study used descriptive case study method by survey method to collect data. Leedy and Ormrod (2005) indicate that to answer questions about the relationship between measurable variables and the desire to explain, predict and control a phenomenon, quantitative research is used. This method is considered appropriate because it best describes the characteristics, perceptions, and thinking of the studied group to ensure the achievement of the objective of this study. 3.3 Research area

The commune is located in the center of the Ashanti region and borders six other districts: Sekyere East, Kwabre East, Bosomtwe, Asante Akim South, Asante Akim North and Kumasi Metropolitan. The municipality has an area of 222.8 square kilometers and a

population density of 811 people per square kilometer. The main economic activities of the municipality are agriculture, mining and tourism (Ghana Bureau of Statistics, 2021).

### **3.4 Study population**

The female population of Ejisu Town is 27,492 according to the 2021 Census and Housing. This is an increase of 6.3% from the 2010 census, where the female population was 25,685. The ratio of women to men in the town is 102.1, which means that for every 100 men there are 102.1 women. The majority of the female population (73.2%) lives in rural areas. Here are the top 5 cities in Ejisu town with the highest female population:

Ejisu (27,492), Kwamo (7,935), Fumesua (6,336), Bonwire (5,211) and Juaben (4,909).

These cities account for 38.4% of the total female population of the municipality.

### **3.5 Sample size**

Purposeful sampling is a non-random sampling technique in which specific participants are intentionally selected based on certain criteria corresponding to the research objective. To collect a representative sample of women with significant work experience, 100 female participants were intentionally identified for this survey. These include health workers, teachers, students, traders and farmers.

Therefore, a purposeful sample size of 100 participants was sufficient. The choice of female was in line with the topic under study, female undergarment, to achieve the desired objectives.

### **3.6 Sampling method**

Sampling is the process of selecting certain individuals or objects from a population such that the selected group contains elements that are representative of the characteristics

found in the entire group (Kombo & Tromp, 2006). However, the strategies used to select people or objects from a larger population for the purpose of conducting research or collecting data are known as sampling methods.

It is important to emphasize that random sampling is only one of many possible sampling strategies in research. The sampling technique used will be determined by a number of criteria, including research topic, available resources, and demographic characteristics.

However, a targeted sampling strategy was used to collect data from the sampled population. A statistical approach to a non-random sampling technique in which specific participants are intentionally selected based on certain criteria corresponding to the research objective.

If the sample size is proportional to the size of each group in the population, then the chance of selecting a health worker, teacher, shopkeeper, or farmer is equal to the ratio of the size of each group to the overall size of the population in the sample.

Simple random sample for example, if the female population of Ejisu commune is 800 people, including 100 health workers, 100 teachers, 150 merchants, 150 farmers and 300 others, then the probability of selecting a health worker is  $100/1,000 = 0.1$  or 10% probability of choosing a teacher is  $100/1000 = 0.1$  or 10%, probability of choosing a trader is  $150/1000 = 0.15$  or 15% and probability of choosing a farmer is  $150/1000 = 0.15$  or 15%.

### **3.7 Data collection**

The study includes primary and secondary data. To review the literature, secondary information was collected from books, articles, documents, reports from organizations and internet sources. These have been reviewed in Chapter 2 to show that the selection, use and maintenance of underwear for Ghanaian women is a challenge.

In addition to secondary data, the study also collected primary data through a survey of 100 Ghanaian women selected using convenience sampling method. Information was collected using a structured questionnaire designed to collect information about the types of underwear worn by Ghanaian women and their suitability with different types of clothing. The survey results are then examined using descriptive statistics such as frequency and percentage to determine the best underwear for different types of outfits.

To ensure the reliability of the results, the study used a combination of primary and secondary data sources as well as rigorous research methodology. Despite using this approach, the overall results of the results have limitations, as do many other studies. The structured questionnaire is used as the primary data collection tool because it is relatively cheaper than conducting an interview because it reduces travel and telephone costs, and allows to reach a wide audience within short time. It is easier to use questionnaires than to conduct interviews with researchers with full-time jobs. In contrast, to limit other responses to specific choices while reducing the risk of misunderstandings, closed-ended questions were used in the questionnaire.

### **3.8 Pre-test**

A pre-test was conducted with twenty (20) staff members of Dadease D/A High School in Sekyere Kumawu District. They also received an assessment form that included guidelines for clarity, readability, form, relevance, layout, anonymity, and confidentiality.

Pre-testing revealed challenges related to respondents' understanding of the questions. It was also thanks to previous tests that the questionnaire was revised and it was possible to ensure that it still met the objectives of the study.

### **3.9 Data collection process**

Structured questionnaires are a common approach to collecting data from research participants. It provides a systematic and uniform method of information collection and allows easy comparison of responses. It gives a quantifiable assessment of participants' ideas and views on an issue using a Likert scale, which can be tested statistically. In addition, allowing participants to respond to questions with open-ended responses allows them to express their thoughts and ideas verbally, resulting in richer and more complete data. Overall, the application of structured questionnaires can provide insights into participants' perspectives and experiences, which in turn yield useful insights from the collected data.

The Likert scale in structured questionnaires is a popular and effective way to assess respondents' attitudes and impressions. It allows data to be quantified, which can then be tested statistically. The scale used in this study, ranging from 1 to 5, is a frequently used scale with many different answers, in which 5 is greater than 1 ( $5 > 1$ ). The scale goes from 5 = Strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly disagree. In addition, allowing respondents to submit additional comments or feedback about their experiences in addition to Likert-scale questions will generate deeper qualitative data that can be used to further interpret answers and make informed suggestions. The minimum time allowed to complete the questionnaire of 8 minutes is also ideal as it allows respondents to think deeply about their comments without feeling pressured.

### **3.10 Data Analysis**

SPSS is a popular statistical software tool that can perform both simple and complex statistical analysis. Its common frequency and crosstab functions are ideal for evaluating categorical data, such as Likert scale responses in your research. These tools can provide frequency distributions, percentages, and cross-tabulations to help you summarize and visualize the relationships between the variables in your study. In summary, the use of SPSS in the study is acceptable for analysing and interpreting the questionnaire data.

### **3.11 Ethical issues**

According to Kumekpor (2002), the interviewees are the most important part of the research and everything needs to be done to reduce their anxiety and terror. Neuman (2003) goes on to say that "ethics describes what is real or unreal to be achieved, or what good research the researcher should include". He also points out that ethics begins and ends with the integrity and values of the investigator. (Bryman, 2008) further warns that the essential ethical criteria of social research are:

Never force anyone to participate; Participation must always be voluntary. Individuals need to understand what they are facing in order to participate and make informed judgments. Consent alone is not enough.

All participants were informed in advance before the questionnaire was administered, and they were also informed of their right to unsubscribe at any time during the process. To secure information obtained from respondents, codes were used instead of names for identification purposes. The researcher also warrants that participation in this study is completely voluntary, without any compulsive factors. To ensure confidentiality, questionnaires were given to respondents in their various offices, and in the absence of this facility, they were set aside and questionnaires distributed to them secretly. Collected

data was treated confidentially and participants were told that their interaction lasted only 8 minutes.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.1 Introduction**

In this part of the study, the researcher typically presents and analyzes the collected data. Summarize the results and highlight any significant patterns or trends emerging from the data relevant to the research objective.

In this particular study, the results and discussion may include information on the most common types of underwear worn by Ghanaian women as well as the frequency with which underwear is changed or washed. The researchers also looked at factors that influence the choice and use of underwear, such as comfort, style and cultural norms.

The study's discussion will explore the implications of these findings and how they relate to broader issues in Ghanaian society, such as gender roles, body image and hygiene practices. The researcher also reflects on the limitations of the study and suggests areas for future research.

In summary, the results and discussion section of a study is an essential part of helping to interpret and make sense of the data collected and to draw meaningful conclusions that can contribute to our understanding about a particular phenomenon.

#### **4.2 Presentation of results**

The study aimed to investigate the selection, use and storage of underwear by Ghanaian women. The results section includes charts or graphs showing the types of underwear used and how often it is changed or washed.

The presentation of the obtained data helps to provide a detailed analysis of the results. This analysis involves identifying patterns or trends in the data, comparing the results with previous research, and explaining the significance of the results. For example, the analysis could discuss cultural or social factors influencing the choice and use of underwear by Ghanaian women.

#### 4.2.1 Demographics of respondents

Descriptive statistics are used to analyze collected demographic data, with emphasis on their frequency and central trends.

**Table 4.1: Age Distribution of Respondents Source: Field Survey (2023)**

	Age group	Frequency	Percent %
Valid	26-30	24	24.0
	31-35	14	14.0
	36-40	18	18.0
	41-45	19	19.0
	46-50	25	25.0
	Total	100	100.0

Table 4.1 shows the age distribution of respondents in Ejisu City, and 25% of them are between the ages of 46 and 50, indicating that the majority of respondents were involved in this process. However, the number of respondents is at least 14% of the sampled population and is between the ages of 31 and 35. Of the 100 respondents, 25 are between 46 and 50 years old, 19 are between 41 and 45 years old, 18 respondents aged 36 to 40 years old, 14 respondents aged 31 to 35 years old and those aged 26 to 30 years old were

24 years old. All respondents were women. The data sample above clearly shows that the youngest and oldest age groups participate more than other age groups.

**Table 4.2: Occupation Distribution of Respondents**

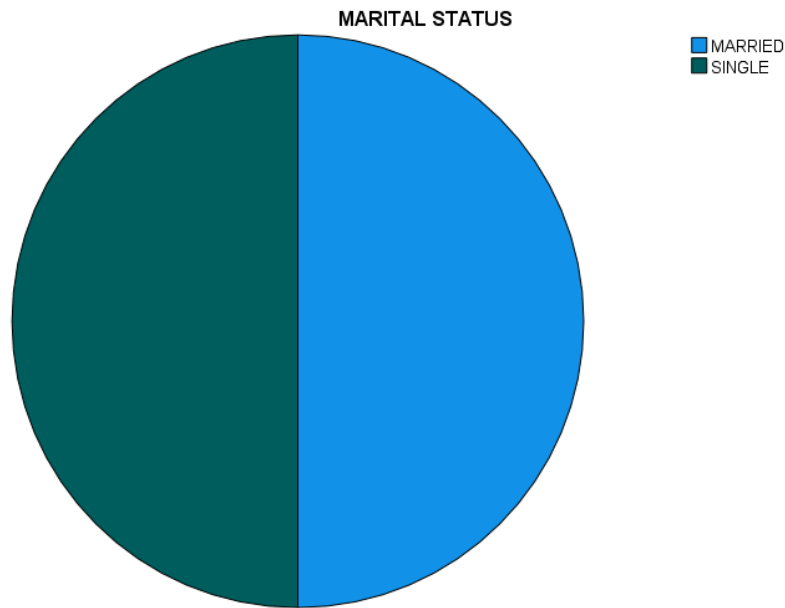
	Occupation	Frequency	Percent
Valid	DOCTOR	6	6.0
	FARMER	12	12.0
	MIDWIFE	14	14.0
	NURSE	12	12.0
	STUDENT	17	17.0
	TEACHER	21	21.0
	TRADER	18	18.0
	Total	100	100.0

Source: Field Survey (2023)

In this survey, eight classes of occupation were identified in the Ejisu municipality. These were Doctors, Midwives, Nurses, students, teachers, traders and farmers. Six of the respondents were identified as Doctors, 21 Teachers, 14 Midwives, 12 Nurses, 17 Students, 18 Traders and 12 Farmers. The majority of the respondents were Teachers who constitute 21 percent of the population under study. However, the least respondents of the sample population identified as Doctors were 6 percent as shown in table 4.2.

### **4.3 Marital Status Respondents**

The figure below shown the marital status of the study population, indicating those that were single and married as at the time of the survey. The data collected clearly indicate that 50 percent of the population was married and single as well. This indicates that the distribution for marital status was fairly represented.



**Figure 4.1: Marital Status Distribution**

**Table 4.3: Female Body Type**

	Body Type	Frequency(n)	Percent (%)
Valid	ATHLETIC	34	34.0
	INVENTED TRIANGLE	4	4.0
	PEAR SHAPE	47	47.0
	OTHERS	15	15.0
	Total	100	100.0

Source: Field Survey (2023)

The female body types that were identified in this survey include the Athletic, Invented Triangle, Pear -shape and others that were not sure of their body type. The Athletic female body type can be described as Women with broader shoulders, a muscular back, and a flatter stomach, usually with a smaller bust and hips in proportion to their overall body size. This type of women was 34 in the survey.

The inverted triangle shaped women feature a larger upper body, broad shoulders, and fuller bust, with narrower hips and thighs, and only 4 of such participated in the study.

The Pear-shape women feature a smaller upper body (shoulder and bust), narrow waist, wider or well-defined hips and thighs, 47 respondents were found in this category. As shown in table 4.3, pear-shaped women were in majority of the participants, whereas, the inverted triangular women were in minority with just 4 participants.

### 4.3.1 Types of undergarments commonly used by Ghanaian women

The data presented seek to address the research question one of the studies concerning the types of undergarments commonly used by Ghanaian women. The data is analyze using descriptive statistics with emphasis on central tendency. Obviously, the interpretation of the data determines whether the objective one was successfully achieved.

**Table 4.4: Types of Undergarments**

Type	of	Frequency(n)	Percent(%)	Valid	Cumulative
Undergarment				Percent	Percent
Valid PANTY		57	57.0	57.0	57.0
BRASIER		29	29.0	29.0	86.0
CHEMISE		10	10.0	10.0	96.0
CORSET		4	4.0	4.0	100.0
Total		100	100.0	100.0	

Source: Field Survey (2023)

Table 4.4 clearly shows that the majority of Ghanaian women use panties and bras, and a significant number of them use corsets and shirts as underwear. Of the approximately 100 women interviewed in the survey, 57 of them said they liked panties, 29 liked bras and

the rest preferred shirts and corsets, 10 and 4 respectively. % population. However, the data in Table 4.4 above shows the types of underwear used by Ghanaian women.

Finally, Ghanaian women in this study were asked what kind of underwear and bra they owned to determine their preference for underwear and bras and the following results were obtained after analyzing the data.

**Table 4.5: Style of Brasiers owned by Ghanaian women**

Style of Brasier		Frequency(n)	Percent (%)	Valid Percent
Valid	CONVERTIBLE	1	1.0	1.0
	PUSH UP	3	3.0	3.0
	T-SHIRT	22	22.0	22.0
	SPORTS	21	21.0	21.0
	BRASIER			
	STRAPLESS	53	53.0	53.0
	Total	100	100.0	100.0

Source: Field Survey (2023)

Table 4.5 above shows the different styles of Brasier owned by Ghanaian women. This includes Convertible, Push-up, T-shirt, Sports, and Strapless Brasier. Majority of the respondents owned strapless Brasier which has the highest percentage score of 53. This indicate that more than half of the Ghanaian women own strapless Brasier. This can be translated as the most popular Brasier own by Ghanaian women. Convertible Brasier is seen as the most least Brasier own by a Ghanaian woman.

**Table 4.6: Style of Panty owned by Ghanaian Woman**

		<b>Frequency(n)</b>	<b>Percent (%)</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Valid	BIKINI	38	38.0	38.0	38.0
	BOY SHORT	35	35.0	35.0	73.0
	G-STRING	15	15.0	15.0	88.0
	HIPSTER	12	12.0	12.0	100.0
	Total	100	100.0	100.0	

Source: Field Survey (2023)

It can be observed that the style of panties owned by Ghanaian women is bikini, boys shorts, G-String, and Hipster. Out of the displayed style of panties, the most popular among them is the Bikini with about 38 percent of the population disclosing their ownership. This is closely followed by Boy short with 35 percent of the population. The least own panty is the Hipster style with just 12 percent of the population.

Suddenly, to explore the type of undergarment preferred by Ghanaian women, there is also the need to find out the usage of panties and Brasier.

#### **4.3.2 Determine the factors to consider when selecting the right type and size of undergarment (Panties and Brasier) for any dress**

Choosing the right type and size of undergarment (panties and Brasier) for any type of dress is important to ensure that you feel comfortable and confident in your outfit. However, the following finds affirms which undergarment is right for a dress after the data collected was analyzed using mean as the central tendency.

Panties: Factors for selecting the right type of panty to use for a dress or outfit

**Table 4.7: Factors for selecting the right type of panties**

Factors	N	Minimum	Maximum	Mean
Choose nude colour panty for any lighter coloured garment	100	2	4	3.23
High-rise panties are good for mummy tummy women	100	1	5	3.48
Go for panties made of cotton and very breathable because it is idea for all women	100	1	5	4.51
Panties that are very tight on the waistline or stomach are good for all occasion due to comfort	100	1	3	1.82
Valid N (listwise)	100			

Source: Field Survey (2023)

In terms of selecting the right type of panties, the variable analyzed in survey presents an outcome in table 4.7, which indicate their central tendencies using the mean. The variable “Panties that are very tight on the waistline or stomach are good for all occasion” had a mean score of 1.82, which clearly show a rejection of this factor to consider. This is because the mean score for acceptance should be above 3.0. Hence, all the remaining factors scored a mean between 3.23 and 4.51.

**Table 4.8: Factors for selecting Brasier**

	N	Minimum	Maximum	Mean
Choose Brasier with nude or skin tone colour for lighter colour garments	100	1	5	4.01
Brasier with foam liner cups is best for all kinds of women	100	1	4	1.97
Brasier made with breathable fabric is best for all women	100	2	5	3.54
The under wire of well-fitting Brasier must sit on the chest in the cleavage	100	1	5	3.92
Valid N (listwise)	100			

Source: Field Survey (2023)

Table 4.8 clearly shows the mean distributions of the factors considered for selecting Brasier by the Ghanaian woman. As per the data available the average mean score should be 3.0. This means that mean score below 3.0 is a weak factor to consider but mean score above 3.0 is a strong factor to consider. However, all the factors must be considered in selecting Brasier for the Ghanaian woman except the “Brasier with foam liner cups is best for all kinds of women” with a mean score of 1.97 which is far below average.

**Table 4.9: Factors to consider in choosing undergarment**

	N	Minimum	Maximum	Mean
Older Ghanaian women choose underwear based on comfort than trends	100	4	5	4.72
Average Ghanaian women will choose trending style of undergarment over it been supportive	100	2	5	3.88
Women pay attention to breathability of undergarment when choosing the fabric used	100	2	5	4.95
Must consider the colour of undergarment when choosing a dress or outfit garment	100	1	5	4.46
Always consider your body shape in selecting an undergarment (panties and Brasier)	100	1	4	2.21
Valid N (listwise)	100			

Source: Field Survey (2023)

Table 4.9 above shows the factors to consider when selecting undergarment by the Ghanaian woman. This reveals that most Ghanaian women pay attention to the breathability of the undergarment in relation to the fabric used when selecting a panty or Brasier. table 4.9 recorded a mean of 4.95, depicting the majority of the respondent strongly agreeing to that fact that most Ghanaian women pay attention to the breathability of the undergarment in relation to the fabric used when selecting a panty or Brasier. Evidently, the mean score below 3.0 express weak or weaker factor to consider. Hence, body shape was least considered as a factor in selecting female undergarment. Aside that all the other factors were considered because they had mean score above 3.0.

### 4.3.3 Identify the right usage of the various types of undergarments (panties and Brasier)

#### Usage of Panties

The author uses descriptive statistics to analyze the data to test the rate, or frequency at which a particular type of panty is used by the Ghanaian woman.

**Table 4.10: Frequency of Panty usage among Ghanaian women**

	Never	Rarely	Occasionally	Frequently	Daily	Valid N (listwise)
Bikini	1	6	25	35	33	100
Boy short	0	9	26	30	35	100
Hipster	10	2	28	30	30	100
G-String	7	13	29	29	22	100

Source: Field Survey (2023)

The frequency of usage of panty among Ghanaian women was examine using the sample population of 100 Ghanaian women and the variable are the various types of panties identified among them. The table 4.10 shows that the panty mostly used daily by Ghanaian women is Boy short with modal score of 35, closely followed by bikini and hipster. However, the most frequently used panty is bikini with a frequency score of 35 and closely followed by Boy short and Hipster. The type of panty that is used mostly during event is G-string, which is keenly contested by Hipster, Boy short and Bikini respectively. Panty that was never used by some Ghanaian women is Hipster and rarely used is G-string, scoring 10 and 13 respectively.

## Brasier Usage

Frequency usage of Brasier among Ghanaian women,

**Table 4.11: Frequency usage of Brasiersier**

	Never	Rarely	Eventually	Frequently	Daily	Valid N (listwise)
Strapless Brasier	3	6	26	34	31	100
Push up Brasier	5	14	31	30	20	100
T-Shirt Brasier	9	16	28	29	18	100
Convertible Brasier	7	13	18	29	33	100

Source: Field Survey (2023)

Out of the identified style of Brasier owned by Ghanaian women, table 4.11 above indicates the frequency distribution of that style of Brasier. The distribution shows clearly the most never used Brasier style is T-Shirt Brasier with a score of 9. The most rarely used Brasier is the T-shirt Brasier with a frequency score of 16. However, the most popular Brasier used eventually is Push-up Brasier. Among the four style of Brasier, the most frequently used one is the strapless, closely followed by the Push-up with 34 and 30 score respectively. The most popular Brasier used on a daily basis is the convertible Brasier as displayed in table 4.11.

### Using appropriate underwear for a garment

In order to identify the appropriate panty and Brasier for a type of dress or garment or outfit, the samples from the survey as indicate in table 4.12 and 4.13 were analyzed.

**Table 4.12: Crosstab of appropriate usage of Brasier for a dress style**

	Sports Brasier	Push-up Brasier	Convertible Brasier	Strapless Brasier	N valid (Likewise)
Kaba & slit	9	18	35	38	100
Kaftan	0	26	37	37	100
Off-the shoulder	11	19	30	39	100
Maxi dress	10	21	38	31	100
Wrap dress	17	37	20	26	100
Mini dress	18	24	26	32	100
Midi dress	27	22	25	26	100
Sports wear	39	16	27	18	100
Jumpsuit	23	14	30	33	100
Blazer dress	20	22	28	30	100

Source: Field Survey (2023)

The identified Brasier among the Ghanaian women were matched against ten styles/ types of dresses. The appropriate matched Brasier for Kaba and slit is strapless Brasier with highest score of 38 out of 100. It also seems strapless Brasier and convertible Brasier are ideal for Kaftan dresses as they score 37 each in the survey as the highest. Strapless Brasier again score 39 frequencies as the appropriate for off-the shoulder dresses. 38 out of the 100 respondents agreed that convertible Brasier is ideal for maxi dresses. Push-up Brasier was noted as appropriate for wrap dress with a score of 37. Convincedly, strapless Brasier was clearly seen as appropriate for mini, jumpsuit and blazer dresses with the modal score of 32, 33 and 30 respectively. Sports Brasier was an ideal for Sport wear and midi dresses as it score 27 and 39 respectively.

**Table 4.13: Crosstab of Appropriate panty for a dress**

	Bikini	Boy shorts	Hipster	G-String	N	valid (Likewise)
Kaba & slit	10	17	38	35	100	
Kaftan	8	26	30	36	100	
Off-the shoulder	30	15	17	38	100	
Maxi dress	10	20	35	35	100	
Wrap dress	22	22	20	36	100	
Mini dress	20	30	21	29	100	
Midi dress	22	27	25	26	100	
Sports wear	12	38	32	18	100	
Jumpsuit	18	32	18	32	100	
Trouser / shorts	20	27	25	28	100	

Source: Field Survey (2023)

The appropriate panty for Kaftan, off-the shoulder, wrap dresses and trousers/ shorts is G-string with a score 36,38,36 and 28 respectively according this survey as displayed in table 4.13. the most appropriate panty for Kaba and slit is Hipster with 38 score. Boy shorts is also ideal for mini dress, midi dress and sportswear with the highest score of 30,27 and 38 respectively. However, jumpsuit dresses can match well with both Boy short and G-string, scoring 32 apiece. Again, Hipster and G-string were both ideal for maxi dress with 35 score apiece.

#### **4.3.4 Demonstrate how to Care for the Female Undergarment (Panties and Brasier)**

##### **Laundry**

Ensure that panties and Brasier are properly washed and cared for, this is to enhanced their longevity and hygiene.

**Table 4.14: Factors to Demonstrate how to wash undergarment**

	N	Minimum	Maximum	Sum	Mean	Variance
Wash white undies separate from coloured ones	100	2	5	468	4.68	.321
Use strong detergent to wash to wash panties and Brasiers	100	1	4	218	2.18	.634
Use mild detergent to wash panties and Brasiers	100	2	5	372	3.72	.749
Dry panties and Brasier under the direct sun	100	1	4	250	2.50	.717
Dry panties and Brasier under room temperature	100	1	3	231	2.31	.479
Valid N (listwise)	100					

Source: Field Survey (2023)

The table, show how to demonstrate the laundry of female undergarment after the central tendency was analyzed. The mean distribution gave a clue to which factor needs consideration washing the panties and Brasier. The highest mean is 4.68 and the lowest is 2.18. all mean distribution below 3.0 express weak point to consider and above it suggests that it needs attention. However, separating white underwear from coloured one is highly recommended with a mean score of 4.68, and use mild detergent to wash them is also welcomed as it scores 3.72 mean during the survey. This also means drying underwear under the direct sunshine and even in the room temperature was not so much recommended as well as using strong detergent in washing them since all of them score less than 3.0 mean.

## Storage

Proper storage of panties and Brasiers is essential to ensure they stay in good condition for a longer period of time. To determine the proper storage procedure for the female undergarments, four variables were tested and analyzed using frequency distribution of the respondents.

**Table 4.15: Storage of Undergarments frequency distribution**

	N	Minimum	Maximum	Sum	Mean
Fold panties and Brasier neatly into separate drawer	100	1	5	351	3.51
Keep panties and Brasier in separate bag	100	1	5	354	3.54
Mix panties and Brasier with other garments	100	1	5	195	1.95
Keep dirty and new undergarment together	100	1	5	180	1.80
Valid N (listwise)	100				

Source: Field Survey (2023)

Table 4.15 displays the frequency of distribution of the storage of undergarment (panties and Brasier). There were four variables that was used to determine the proper storage procedure and all the variables had proven useful in the study. A mean of 3.51 of the respondents agreed that undergarments must be stored by folding panties and Brasier neatly into separate drawers. The variable keeps panties and Brasier in separate bags was also affirmed with a mean score of 3.54. However, mix panties and Brasier with other garments were disagreed by the respondents with a mean score of 1.95. Again, keep dirty and new undergarment together was strongly disagreed with a mean score of 1.80.

## Disposal

**Table 4.16: Proper Disposal of Undergarments**

	N	Minimum	Maximum	Sum	Mean
Dispose Brasier and panties after six months to a year of usage	100	1	5	250	2.50
Keep old used panties for the monthly menstruation	100	1	5	287	2.87
Discard old used panties and Brasier in the dust bin	100	1	4	228	2.28
Burn old used panties and Brasier	100	1	5	401	4.01
Give out old used panties and Brasier to charity	100	1	3	229	2.29
Keep dirty and new undergarment together	100	1	3	116	1.16
Valid N (listwise)	100				

Source: Field Survey (2023)

The mean score for the variables tested as shown in table 4.16 are: Keep dirty and new undergarment together (1.16); Give out old / used panties and Brasier to charity (2.29); Burn old/used panties and Brasier (4.01); discard old/used panties and Brasier in the dustbin (2.28); Keep old/used panties for monthly menstruation (2.87); and Dispose Brasier and panties after six months to a year of usage (2.25).

## 4.4 Discussion

### 4.4.1 Demographics

The demographics of the study in relation to age, occupation, and body shape of Ghanaian women provide important insights into their preferences and needs for undergarments. The study can help the fashion industry better cater to the needs of this group of women and improve their overall satisfaction with undergarments.

In terms of age, the study reveal that younger Ghanaian women prefer more fashionable and trendy undergarments, while older women usually prioritize comfort and support. This information can help manufacturers design undergarments that cater to the preferences of different age groups.

Occupation is another important demographic variable to consider, as different occupations may require different types of undergarments. For example, women in physically demanding jobs like traders and farmers require undergarments that provide more support, while women in office or corporate jobs like Teachers, Doctors and Nurses prefer undergarments that are more comfortable and seamless.

Finally, body shape is an important demographic variable to consider, as different body shapes require different types of undergarments. For example, women with larger busts mostly require undergarments with more support, while women with smaller busts may prefer undergarments that add more shape and definition.

In conclusion, demographics such as age, occupation, and body shape play a crucial role in understanding the preferences and needs of Ghanaian women when it comes to undergarments. This information can help manufacturers design undergarments that cater to the specific needs and preferences of this group of women, resulting in greater satisfaction and customer loyalty.

#### **4.4.2 What are the Types of Undergarments (Panties and Brasier) Preferred by Ghanaian Women?**

The types of undergarments (panties and Brasier) preferred by Ghanaian women may vary depending on personal preferences, body shape, and the occasion. However, based

on the study, some common types of undergarments preferred by Ghanaian women include: Panties (Bikini, Hipster, Boy shorts, and G-strings), and for Brasier (T-shirt Brasier, Sports Brasier, Push-up Brasier, and Demi-cup Brasier) as indicated in table 4.5 and 4.6.

#### **4.4.3 How to select the right type of Panties and Brasier as a Ghanaian woman?**

The study reveals that the average Ghanaian women consider the fabric type (breathable), comfortability and supportiveness in terms of size and style as per table 4.7 and 4.8.

According to Loh et al. (2019), in selecting the female undergarment (panties and Brasier) before considering the style (design and fabric), factors like breathability, absorbency and skin pressure reduction should be taking into consideration. This affirms the choice of the Ghanaian woman in terms of the type of undergarment they own and prefer to possess as part of their clothing asset.

The colour of every garment has great effect on the undergarment especially panties and Brasier. White coloured panty especially tend to show too easily beneath most light coloured or texture outfit. Therefore, nude or skin tone coloured undergarment is mostly considered for all light-colored outfits.

This survey also reveals that fabrics that breathable and allow a lot of aeration beneath is an ideal consideration for an undergarment selection. Hence, providing the Ghanaian woman comfort to go about her daily tasks without restrictions that are avoidable.

Surprisingly, body shape was not seen as a strong factor in selecting female undergarment as the statistics in table 4.9 depicts.

The style of the undergarment should be able to support both the breast and the buttocks as well as the vagina.

It's worth noting that the study revealed that comfort and supportiveness are the two most important factors considered by Ghanaian women when selecting undergarments. As a result, many Ghanaian women may prioritize undergarments that offer good support, are breathable, and do not cause any discomfort or irritation.

#### **4.4.4 What are the uses of the various types of female undergarment (Panties and Brasier?)**

Frequency of usage

Panties: The usage of the female undergarment was assessed based on the frequency of use and the appropriate undergarment for a type or style of garment/ outfit or dress.

The survey presented in table 4.10, revealed that most Ghanaian women as of the time of the survey prefer Boy short type of panty or Bikini, and Hipster and G-string as an alternative. However, the type of panty mostly used during events is G-string and Hipsters. Some believe the Hipster will keep their tummy in check to allow them look gorgeous in their outfit for the occasion as agreed by (Loh et al., 2019). But for daily wear of the average Ghanaian woman is Boy short or Bikini.

Brasier: Ghanaian women prefer daily usage of convertible Brasier as shown in table 4.11, due to its versatility. Agreeably, this style of Brasier can be adjusted to suit most style of design of outfit. But on the contrary, the most never used Brasier style is T-shirt Brasier, since of the preferred outfit or dress don't really suit it style. Notwithstanding, AAEAFRIC (2020), finding confirmed with this survey that majority of the Ghanaian women prefer Push-up Brasier for events and most frequently used is the strapless Brasier, since that can blend with most trending outfits.

Personal preferences, of course, differ, and some women may opt to wear various types of underwear for reasons other than their original use. The most crucial component in utilizing underwear, in my opinion, is that they fit properly and give the appropriate comfort and support for the wearer's demands.

#### The Right Undergarment for a Dress

Boy shorts are panty-style shorts with longer legs and a low-rise waistband. Since they are comfortable and provide moderate coverage, bikini panties are a popular choice for everyday wear. Hipster panties, which are comfy and give modest coverage, are a favorite choice for Ghanaian older women for everyday usage. Hipster panties are ideal for wearing beneath tight-fitting apparel since they have no visible panty lines. Hipster panties are also suitable as sleepwear. G-strings are a style of underwear that is commonly used as part of lingerie, intimate wear, swimwear, costumes, and dancewear to erase visible panty lines and increase sensuality as claimed (AAEAFRIC, 2020b; Ewing, 2018.).

Generally, the study findings indicate that the most acceptable panty types for various types of dresses and trousers/shorts vary, with G-string being the most appropriate for Kaftans, off-the-shoulder, wrap dresses, and trousers/shorts. G-string and Boy shorts were the most popular panty styles for different sorts of dresses. Boy shorts and G-strings are both appropriate for jumpsuit dresses. Boy shorts are best for small dresses, midi dresses, and sportswear. Hipster panty is being the most popular for Mini, slit, and maxi dresses as well as best for Kaba and slit dresses. Again, both the hipster and the G-string are ideal for maxi dresses. The study's results can help Ghanaian women choose proper panty styles for different types of clothes.

According to the poll findings, the right Brasier to wear with a specific type of dress varies on the dress style. Strapless Brasier are preferred for Kaba and slit, off-the-shoulder, and maxi dresses, and push-up Brasier are preferred for wrap dresses. Convertible Brasier are a popular choice for Kaftans and maxi dresses. Strapless Brasier are the best option for short, jumpsuit, and blazer dresses. Sports Brasier are perfect for athletic wear and midi dresses.

According to the findings of the study, Ghanaian women should consider the style of their clothing while selecting a Brasier to wear. While choosing a Brasier, it is essential to consider things like as comfort, support, and personal choice.

#### **4.4.5 How to care for the female undergarment (panties and Brasier)**

To ensure that Ghanaian women's panties and Brasier last long and remain in good condition, here are some tips on how to care for them as per the displays of table 4.14, 4.15 and 4.16:

**Laundry:** In order to achieve the best washing results, it is best to use lukewarm water with a gentle soap to handwash panties. Bleaches and fabric softeners must be avoided as they can damage the fabrics and elastic used in making these panties and brasiers. After washing, gently squeeze out the excess water and hang the panties and Brasiers to dry. Avoid using a dryer, as the heat can damage the fabric and elastic.

**Storing:** Store panties and Brasiers in a dry place with good ventilation to prevent mold and mildew. Avoid storing them in a damp or humid environment. It is important to separate light-colored panties and Brasiers from dark-colored ones to avoid color bleeding. Direct sunlight can cause the color of the fabric to fade, so it is best to dry panties and Brasiers in the shade.

Storage: It became substantive that folding panties and Brasier neatly into separate drawer, and it confirmed the claim by (Hurst, 2022.), of such been a good practice. It was also discovered from the survey that keeping dirty underwear with new one, and mixing Brasier and panties not a good practice as well. However, as indicated in table 4.15, separate bags should be used to keep both Brasier and panties and indicated by (Clovia, 2023), as the best practices for female undergarment. The reason was that the accessories of Brasier can cause damage to the panties, hence shorten the durability of the panties. Again, keeping dirty undergarments with washed or neat one strongly not to be encourage at all. This will make both the used and new appear dirty and infested.

Evidently, undergarments must be clean and dry before storing them in designated containers or bags. Separate undergarment by type such as panties and Brasier in different compartments and the storage place must be cool and dry. All these practices are engaged to ensure that the female undergarment stays in good conditions and last longer.

Disposal: Undergarments, such as panties and Brasiers, have a lifetime and will ultimately wear out, losing elasticity and form. They may also become soiled or irreparably ruined. When this occurs, it is essential to properly dispose of them to avoid bacteria development and preserve hygiene. Nevertheless, some people may opt to get rid of their underwear for personal reasons, such as replacing them with new ones or altering their style choice.

The presentation of results from table 4.16, gives a clue as to how panties and Brasier could be disposed off in the Ghanaian setting. Majority of the respondents in the survey indicate that they would prefer burning their undergarments as number one priority.

Sustainablejungle (2023.), claimed that donating used undergarment was a good option but considering the superstitious beliefs of the average Ghanaian, that cannot be an option to dispose a panty or Brasier, this was reflective in the results obtained from the survey.

However, keeping old panties for monthly menstrual routine was greatly embraced by most women. This was preferable because they wouldn't want to soil their new or favourite panties during that time of the month. Only a section of the Ghanaian women prefers disposing their panties and Brasier in the dustbin because of superstitious beliefs though it was an option considered by most fashion experts like Sustainable jungle and Clovia fashion experts (Clovia, 2023; Sustainablejungle, 2023). The disposal of Brasier and panties after six months to a year of usage was not emphatically accepted by all the respondents, and many attribute it to personal issues and financial status in the country as of the time of the survey.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATION**

#### **5.1 Introduction**

Chapter five presents an overview of the main research findings, conclusions and some recommendations. The presentations were made in accordance with the objectives of the study. The study respondents were Ghanaian women living in Ejisu city, Ashanti region, Ghana.

#### **5.2 Summary of key findings**

The validity and reliability of the collected data were tested using the research objectives and the following key findings were discovered.

It was discovered that Ghanaian women prefer certain styles of panties and Brasier. This implies that for any lady you meet in Ghana, may be wearing one of these styles of panties (G-string, Boy short, Hipster, and Bikini), and Brasier (Convertible, strapless, push-up and).

More so, when it comes to the selection of panty and Brasier, the Ghanaian woman prefer to choose Boy short or Bikini panty, and strapless or convertible Brasier.

Eventually, the most frequently used panty and Brasier by Ghanaian women are Boy short and Bikini (panties), and strapless and convertible (Brasier).

Furthermore, the G-string panty and strapless Brasier are mostly worn with off-the shoulder and wrap dresses, whereas most of the respondents indicate that Hipster panty and strapless Brasier greatly match Kaba and slit dress, especially when it comes to the various styles of the kaba, and the Hipster panty also keep the tummy in check. The Boy short is massively used for small dress, midi dress, and sports wears, whereas, G-string

and Hipster panties with strapless Brasier are both suitable for maxi dresses. Convertible Brasier, and either G-string, Hipster or Bikini suits Kaftan dresses as well.

Suddenly, it was revealed that Brasier and panties should not be washed with strong detergents, and handwash must be encourage to maintain durability of the undergarment. Also, never mixed coloured undergarments when washing or drying them. This is to avoid colour saturation. Undergarments should be neatly folder in separate compartments or bags. Old or used up undergarments can be burnt, and recycled as means of disposal and not burying. It is also believed that giving out undergarment for charity was not encouraged because the Ghanaian customs and traditions prohibit that practice.

### **5.3 Conclusion**

The appropriate selection of undergarments is essential for enhancing the comfort and confidence of women when wearing different types of dresses. This study has revealed that there is no one-size-fits-all solution for selecting undergarments, as the appropriate type of Brasier and panty can vary depending on the specific dress style. For instance, strapless Brasier and G-strings were found to be ideal for off-the-shoulder and wrap dresses, while hipsters and boy shorts were more appropriate for Kaba and slit and mini dresses.

According to the study of Ghanaian women, the best panty style for particular clothing types were classified as G-string, Boy short, and Hipster. Strapless Brasier, convertible Brasier, and push-up Brasier were discovered to be suited for many dress kinds, such as off-the-shoulder, Kaftan, and wrap dresses. Personal choice and body type should also be addressed while selecting undergarments to achieve the optimum fit and comfort.

It is also necessary to note that women's preferences for undergarments can vary depending on their individual body types, personal preferences, and comfort levels.

Proper care and storage of undergarments are also essential to maintain their quality and hygiene. Undergarments must also be properly cared for and stored in order to retain their quality and lifespan.

#### **5.4 Recommendation**

According to the study results, Ghanaian women should consider purchasing G-strings, Hipsters, and Boy shorts as acceptable panty alternatives based on the style of garment they are wearing. Strapless and convertible Brasier were highlighted as good choices for most types of dresses, while push-up Brasier were suggested for wrap dresses. Sports Brasier were discovered to be suitable for both sportswear and midi dresses.

Women should also pay attention to the fit and comfort of their undergarments, since this can affect their overall confidence and comfort throughout the day. Furthermore, correct undergarment maintenance and storage may increase their lifespan and assure their continuing usage.

According to the survey results, Ghanaian women should select G-string and Hipster panty styles for the various clothing types specified in the study. Strapless Brasier were advised for Kaba and slit, off-the-shoulder, and maxi dresses, while convertible Brasier were suggested for Kaftan dresses. Sports Brasier was advised for sports clothing and midi dresses, while push-up Brasier was good for wrap dresses. To guarantee the durability and hygiene of their underwear, ladies should follow correct laundry and storage habits.

Therefore, it is recommended that women experiment with different styles and types of undergarments to find what works best for them.

## REFERENCES

- AAEAFRIC (2020a). Fashion Industry in Ghana - African Association of Entrepreneurs.  
<https://aaeafrica.org/ghana/fashion-industry-in-ghana/>
- AAEAFRIC (2020b). Fashion Industry in Ghana - African Association of Entrepreneurs.  
<https://aaeafrica.org/ghana/fashion-industry-in-ghana/>
- Avaala P. and Akons S. (2017) indecent dressing in Ghana.  
<https://www.modernghana.com/amp/news/816258/indecent-dressing-in-ghana.html>
- Burgdorf, K. (2013). Say “NO” to dodgy knickers. The Hoopla.
- Burnham, D. K. (1997). Cut my cote. 34.
- Carroll, J. Manuel., & Schultz, K. (2009). Underneath It All. Harlequin.
- Castillo J. and Cubillos (2012). Ergonomics principles to design work for electrical workers in Colombia.  
<https://pubmed.ncbi.nlm.nih.gov/22316792/>
- Citypopulation (2022). Ejisu Municipal (Municipal District, Ghana) - Population Statistics, Charts, Map and Location.  
[https://www.citypopulation.de/en/ghana/admin/ashanti/0611\\_\\_ejisu\\_municipal/](https://www.citypopulation.de/en/ghana/admin/ashanti/0611__ejisu_municipal/)
- Clovia (2023). 5 Best Ways To Store And Organize Your Brasier - Clovia Blog.  
<https://www.clovia.com/blog/5-best-ways-store-organize-Brasier/>
- Datta D. and Agrawal B. (2018). Quantitative analysis and testing of undergarments.  
<https://www.semanticscholar.org/paper/Quality-Analysis-and-Testing-of-Undergarments-Datta-Agrawal>
- Dhainaut, J., Dlubala, A., Guevel, R., Medard, A., Oddon, G., Raymond, N. & Turconi, J. (2013). (12) United States Patent (30) Foreign Application Priority Data.

- Ewing, E. (2022). Fashion in Underwear: From Babylon to Bikini Briefs - Elizabeth Ewing - Google Books. Retrieved May 30, 2022, from [https://books.google.com.gh/books?hl=en&lr=&id=pX5r8p1dPjUC&oi=fnd&pg=PP1&dq=visible+outer+petticoat+and+glimpses+of+other+petticoats+revealed+by+softer+outer+clothes+had+%22sex+appeal%22+too&ots=izbtuiCWyp&sig=SUq2ujpuNjJQazlQGSgzu6hkVs&redir\\_esc=y#v=on](https://books.google.com.gh/books?hl=en&lr=&id=pX5r8p1dPjUC&oi=fnd&pg=PP1&dq=visible+outer+petticoat+and+glimpses+of+other+petticoats+revealed+by+softer+outer+clothes+had+%22sex+appeal%22+too&ots=izbtuiCWyp&sig=SUq2ujpuNjJQazlQGSgzu6hkVs&redir_esc=y#v=on)
- Franko, D. J. (2007). Undergarment for women.
- Hurst, M. (2023). How to organize an underwear drawer: 10 genius ways |. Retrieved from <https://www.homesandgardens.com/interior-design/bedrooms/how-to-organize-an-underwear-drawer>.
- Loh, T. Y., Hendricks, A. J., Hsiao, J. L., & Shi, V. Y. (2019). Undergarment and Fabric Selection in the Management of Hidradenitis Suppurativa. <https://doi.org/10.1159/000501611>.
- Mcknight, A. M. M. (2018). Shaping Toronto female Economy and Agency in the Corset Industry, 1871 - 1914. Ryerson University.
- Patra, R. (2017). Underwear: From Ancient Rome to modern essentials. <https://blog.patra.com/2017/02/06/the-changing-shape-of-underwear-from-ancient-rome-to-modern-essentials/>
- Perrot, P. (2022). Fashioning the Bourgeoisie: A History of Clothing in the Nineteenth Century. Retrieved May 30, 2022, from [https://books.google.com.gh/books?hl=en&lr=&id=D-FCM2ImWpkC&oi=fnd&pg=PR7&dq=during+the+nineteenth+century+the+quantity+and+style+of+undergarment+worn+by+women&ots=5lanwSMRdf&sig=nPB3ptI\\_blyVekHzTW8NiZCVMsk&redir\\_esc=y#v=onepage&q=during+the+nineteenth+ce](https://books.google.com.gh/books?hl=en&lr=&id=D-FCM2ImWpkC&oi=fnd&pg=PR7&dq=during+the+nineteenth+century+the+quantity+and+style+of+undergarment+worn+by+women&ots=5lanwSMRdf&sig=nPB3ptI_blyVekHzTW8NiZCVMsk&redir_esc=y#v=onepage&q=during+the+nineteenth+ce)

Seon Sang, J., & Ja Paik, M. (2009). A Study on the Use of Underwear as Outerwear. *Ijcc*, 12(1), 1–12.

Summers, J. (2022). Fashion on the Ration: Style in the Second World War - Julie Summers - Google Books. Retrieved May 30, 2022, from <https://books.google.com.gh/books?hl=en&lr=&id=RdmiBQAAQBAJ&oi=fnd&pg=PP8&dq=the+great+depression+and+the+second+world+war+had+a+profound+effect+on+underwear+so+purely+functional+underwear+emerged+as+a+result&ots=ncQK4qFb1T&sig=6VS1jxYtKo0HLgrBwhoeoSDAXxg>.

Sustainablejungle (2023). What To Do With Old Underwear & Brasiers: 7 Ways to Protect Privates And Our Planet. Retrieved April 11, 2023, from <https://www.sustainablejungle.com/sustainable-fashion/what-to-do-with-old-underwear-and-Brasiers/>

Swanson, K. (2019). The Corset. A History of Intellectual Property in 50 Objects, Claudy Op Den Camp and Dan Hunter eds., Cambridge University Press (2019). Northeastern University School of Law Research Paper No. 307-2017.

Wilson, E. (2003). Adorned in Dreams: Fashion and Modernity. <https://books.google.com.gh/books?hl=en&lr=&id=Je49xdoIajwC&oi=fnd&pg=PR6&dq=the+social+and+political+atmosphere+in+particular+produced+tremendous+changes+in+female+underwear+fashion+throughout+the+twentieth+century&ots=XZAfoUxVO2&sig=55Zctmc51VrPvGOQbqNe>.

## APPENDIX

### AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND ENTREPRENEURIAL DEVELOPMENT (AAMUSTED)



#### QUESTIONNAIRE ON FEMALE UNDERGARMENT

Dear respondents,

The purpose of this study is to examine the Selection, use and care of undergarment among Ghana women: A case of Ejisu township

Please read carefully and tick (√) to rate the extent to which your selection, use and care of your panties and brasseries. All information gathered shall be used solely for this research purpose and shall be treated with confidentiality.

#### SECTION A: Demographic Characteristics

1. Age group:

26-30 years ( )                      31-35 years ( )                      36- 40 years ( )  
41- 46 years ( )    46- 50 years ( )

2. Marital status

married ( )              Single ( )

3. What is your brasseries cap size?    28/75 ( )                      30/80 ( )                      32/85 ( )  
34/90 ( )                      36/95 ( )                      38/100 ( )                      40/100 ( )

4. What is your body size?

- Hourglass shape                       Athletic                       Triangle shape
- Diamond shape                       Pear shape
- Inverted triangle shape                       Round

SECTION B: identifying types of female undergarment

5. Which of the following type of undergarments do you use all the time?

Panty  Brassier  Chemise  Corset

6. What style of brassier do use often?

- Balconette                       Sports brassier
- Bralette                       Strapless
- Convertible                       T-Shirt
- Push up

7. Which of the following style of brassier do you have in your closet or wardrobe?

- Balconette                       Sports brassier
- Bralette                       Strapless
- Convertible                       T-Shirt
- Push up

8. What style of panty do use often?

- Bikini                       G-String
- Boy short                       Hipster
- Classical brief



d	Women with heavy buttocks can wear certain sizes of panties					
e	There is the right brassier for different shape of women					
f	Busty female can wear all style of brassier					
g	Padded brassier makes smaller bust female comfortable					
h	Apple shaped women cannot certain style of panties and brassieres					
13	Style of brassier and panties (undergarment)					
a	Boys brief is idea for all kinds of outer garment					
b	Seamless panties must be worn when tight garment is used					
c	Any kind of panty can be worn beneath loose garments					
d	Thongs and G-string panties are idea for corporate wear					
e	Hipster panties are highly recommended for trouser outfit (including jeans)					
f	Convertible brassier is ideal for all kinds of outer garments					

SECTION D: uses of female undergarment

Please indicate your level of agreement or disagreement with the following parameters, Key: Disagree (D), Strongly Disagree (SD), Neutral (N), Agree (A), and Strongly Agree (SA).

	Parameter / variable	D	SD	N	A	SA
14	Uses of panties					
a	G-string and Thong are complete seamless (zero coverage of bottom)					

b	Briefs are ideal for work, and sleep					
c	High cut briefs and Hipster provide full coverage					
d	Bikini offers plenty coverage on the bottom					
e	Boy short is good for sports and gym					
15	Uses of Brassier (Brassieres)					
a	Any brassier can be used for kinds of event					
b	Sports activities has a brassier ideal for it					
c	Dinner dresses have idea brassier to compliment it					
d	Formal garments require certain style of brassier					

#### SECTION E: Care of female undergarment

Please indicate your level of agreement or disagreement with the following parameters, Disagree (D), Strongly Disagree (SD), Neutral (N), Agree (A), and Strongly Agree (SA).

	Parameter / variable	D	SD	N	A	SA
16	Laundry of undergarment					
a	Wash white undies separate from coloured ones					
b	Use strong detergent to wash panties & brassier					
c	Use mild detergent to wash panties & brassier					
d	Dry panties and brassier in the sun					
e	Dry panties and brassier under room temperature					
17	Storage of undergarment					
a	Fold panties and brassier neatly into separate					

	drawer					
b	Keep panties and brassier in separate bag					
c	Mix panties and brassier with other garments					
d	Keep dirty and new undergarments together					
18	Disposal of undergarment					
a	Dispose brassier and panties after six months to a year of usage					
b	Keep old used panties for the monthly menstruation					
c	Discard old used panties and brassier in the dust bin					
d	Burn old used panties and brassier					
e	Give out old used panties and brassier to charity					
f	Sell old used panties and brassier for income					
g	Gift old used panties and brassier to younger sister					

God bless you for taking time off your busy schedules to respond to this questionnaire.

THAK YOU.