UNIVERSITY OF EDUCATION, WINNEBA

COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

EXPLORING THE EXPERIENCES OF APPRENTICESHIP TRAINING IN THE GARMENT INDUSTRY: A CASE OF APPRENTICES AT HOHOE IN THE VOLTA REGION

GYAMWODIE GAY

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GYAMWODIE GAY

190013430

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DECEMBER 2020

DECLARATION

STUDENT'S DECLARATION

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

SIGNATURE …………………………….

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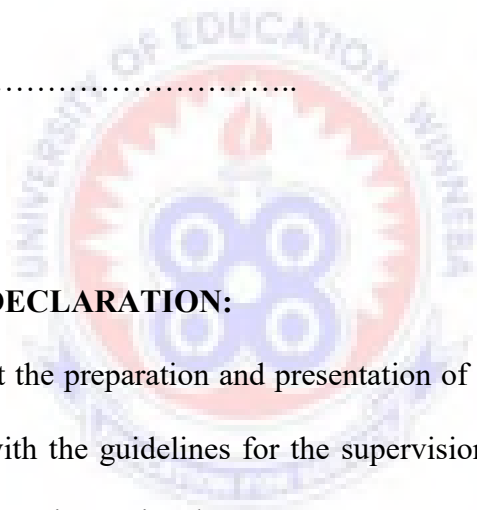
SUPERVISOR'S DECLARATION:

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

SUPERVISOR: DR. JOSEPHINE NTIRI

SIGNATURE …………………………….

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ACKNOWLEDGEMENT

DEDICATION

To my husband Oscar Adddae, my Children Tennyson, Osborn and Aurora and my

parent Uman Faruq Gyamwodie and Ruth Effia Gyamwodie.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF PLATES

PLATE   **PAGE**

ABSTRACT

The purpose of the study was to explore the experiences of apprentices in the garment industry using Hohoe in the Volta Region as a case study. The study adopted the mixed-method approach in the conduct of the study. The purposive sampling technique was used to sample from a population of all fashion trainers and apprentices in the garment industry in the Hohoe Metropolis in the Volta Region of Ghana. A total of 198 participants comprising both trainers and apprentices participated in the study. Using the quantitative approach to research questionnaires were adopted as the main instrument of data collection; which was duly supported by an observation of the apprenticeship training process. The study found that apprenticeship training undertaken in the garment industry takes the form of both direct one-on-one interaction with an apprentice as well as groups and that apprenticeship training is given every day to apprentices. The study additionally discovered that most of the apprentices are trained on the jobs by taking part in the garment production activities. Junior apprentices perform simple tasks whereas senior apprentices are delegated to perform complex tasks. and also, that apprentices go through marketing training as a way of learning the business aspect of apprentices are sent on errands to learn how to market and also purchase items. The study, therefore, recommended that the National Tailors and Dressmakers Association in consultation with the National Vocational Training Institute (Apprentice Training Board) must develop a standard curriculum for its members to regularize the apprenticeship training in the garment industry.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Apprenticeship as an institution dates back to medieval times which has evolved over the centuries adapting to social, economic as well as political forces, maintaining its core features as a model of training in employment through the transmission of work skills from one generation to the next (Anderson & Nieves, 2020; Prak & Wallis, 2019; Sides & Mrvica, 2017). Apprenticeship is still practiced throughout the world, but in a more modern way. Many countries want to investigate the possibility of implementing or developing apprenticeship schemes as a way to better resolve global youth job crises, huge cohorts of unemployed youth, and skill mismatches (Datta et al. 2018).

In Ghana, apprenticeships are experiencing a revival and have been placed at the core of the Government"s Technical and Vocational Education and Training (TVET) policies to contribute to the future skill needs in a rapidly evolving economy (King, 2019; Hardy et al. 2019; Lamptey & Debrah, 2018). Thus, apprenticeships have for many years, featured as an essential model of skills training globally (Ayentimi et al. 2018; Teal, 2016).

Again, the apprenticeship system, which is a major component of Ghana's informal sector, serves as a means of skill transfer from master to apprentice in order to build the human capital needed for overall national growth (Anokye & Afrane, 2014).

Learning by doing is one of Pratt"s (1998) five teaching perspectives and learning by doing is predominantly prevalent in teaching practical skills. However, there are diverse approaches within the learning by doing headline, including experiential

1

learning, co-operative learning, adventure learning and apprenticeship. Apprenticeship which is the focus of this study symbolizes a specific approach that permits apprentice to learn by doing (Pratt &58 Johnson, 1998). Apprenticeship is frequently linked with vocational training where a more knowledgeable or skilled tradesman models a specific behaviour the apprentice tries to follow. In other words, an apprenticeship is a form of training where master craftspersons impart their knowledge and skills to a new generation of practitioners through on-the-job training (Ezenwakwelu et al. 2019; Billett, 2016).

The core advantage of the traditional apprenticeship system is that it affords trainees with hands-on experience, placing them in a better position to start their businesses to offer valued products and/or services to the economy and society as a whole (Ainley and Allen, 2014; COTVET 2010). The conventional apprenticeship system further serves as a lifeline to numerous youth who, in most cases, are incapable of making meaningful progress in formal education, affording them the chance to become expedient citizens.

Notwithstanding the critical role informal apprenticeship systems play in the economy through the training of expert labour and the provision of employment as well as valuable goods and/or services. Informal apprenticeship systems according to International Labour Organisation ILO (2012), do not always work well. Some interventions have been made in an attempt to institute a novel and formalised system, disregarding the prevailing traditions and norms (ILO 2012). Several of these systems have failed, or have proven to be too costly to develop and cater to substantial numbers of master craftsmen and apprentices in informal apprenticeship (ILO 2012).

Furthermore, it was and still is mostly neglected and to some extent, the unregulated sector, saddled with numerous challenges.

To begin with, the quality of training afforded apprentices is frequently contingent on the expertise of the master craftsperson, and their readiness to pass on that expertise. Again, change is happening so fast in the world of work these days, and innovation and developments in technology drive these changes. Many master craftsmen have not been able to improve their skills and thus, have found themselves overtaken by the technological revolution, leading to a situation where outmoded techniques are passed on to their apprentices.

Furthermore, due to the unstructured nature of traditional apprenticeship systems where the content of skills passed on to apprentices is determined by the master craftspersons, in most cases, there is no uniformity in the skills acquired. Thus, since there is no specific curriculum, there is a lack of reasonable uniformity in what is passed on to apprentices. Every master craftspersons do whatever he or she deems appropriate which may, in turn, lead to undesirable professional practices and unethical behaviour being passed on from the master craftspersons to apprentice as indicated by COTVET (2010). Having an effective curriculum will help address some of the challenges and weaknesses that impede the effectiveness of the system. It is as a result of these challenges that this study seeks to explore the experience of apprentices in the Garment Industry using Hohoe in the Volta Region as a case study.

Again, globally, apprenticeship programmes are necessary steps in the labour market contributing to alleviate youth unemployment issues (Eichhorst & Rinne, 2018). It is well acknowledged that apprenticeship programmes Underpinned by a legal structure and state funding, it has remained relatively successful in Germany and other

3

countries such as Austria and Switzerland, where it spans a broad variety of professions and a significant proportion of the age demographic (Di Maio et al. 2019). Modern apprenticeship is a big effort in Ghana to resurrect the labor market path to vocational education and preparation for intermediate skills (Deissinger, 2019).

The objective of apprenticeship training programmes is to improve the attractiveness of the apprentice to potential employers or to enable them to establish their own business (Mulkeen et al., 2019). These programmes serve to enhance the human capital of the apprentice which is expected to have two consequences. One is to increase employers" demand for the apprentice"s labour or the apprentice acquire the necessary skills to establish their own business. Accordingly, the apprentice"s probability of employment will increase. The second consequence is to increase the wage rate the apprentice earn in employment (Cuevas et al. 2020; Deissinger, 2019).

The indigenous apprenticeship system (dressmaking in this case) lost its essential characteristic, which is personal guidance and instruction by the master. This change is due to the increase in demand for mass-produced garments, (Ursache et al. 2017) which could be met by means of large-scale production using machine operators who did not need long periods of apprenticeship to learn how to operate machines. In Ghana, the system of indigenous apprenticeship is to a large extent still governed by the bilateral agreement between the master craftsman and the apprentice"s parent or relation, or even the apprentice herself/himself, depending on the age (Lamptey & Debrah, 2018; Gough et al. 2019). Vocational education is the modern version of apprenticeship currently. It caters for varied individuals, thereby satisfying the educational as well as the occupational needs of the individuals.

The informal apprenticeship system in many African countries, according to Ahadzie (2009), is the most relevant process to consider for skill growth. Since the apprenticeship sector has the ability to broaden the economy's skill base at a much lower cost, it is becoming increasingly popular. Infrastructure is not needed in this industry (Munkaila, 2016).

In most cases, demographics such as ethnicity, religion, or proof of literacy do not prevent an apprentice from entering the system. The most common apprentice entry requirement is to pay a training fee or provide something in kind to demonstrate the apprentice's commitment; this is also known as the commitment fee. They work between 50 and 60 hours per week during their training period, which typically lasts one to four years. According to the International Labor Organization, most apprenticeships are for a longer period of time.

Munkaila (2016) also claims that the lengthening of time is due to the leadership style of masters in the apprenticeship trade. Munkaila (2016) discovered that masters of apprenticeship trade in Ghana's Northern region favoured a time-based approach to delivery over a competency-based approach to delivery. According to Fortwengel (2019), the time-based delivery method holds new apprentices in the trade for a long time before engaging in practical learning.

As per the International Labour Organization (ILO), Ghana has approximately 65 different forms of apprenticeships in over 12 industries. Food preparation and related trades, conventional health care and related trades, industrial trades, agriculture trades, electrical trades, textiles, clothing and furnishing trades, construction trades, mechanical trades, and other production-related trades are only a few of the industries (ILO, 2012). Hairdressing, beauty culture, floral decoration, interior design and

decoration, metal moulders, welders, mechanics, and soap making are only some of the apprenticeship trades available in these industries. This study will explore the experience of apprentices in the Garment Industry using Hohoe in the Volta Region as a case study.

1.2 Problem Statement

As Ghana's unemployment rate rises, the informal apprenticeship system grows in importance as a means of reducing unemployment.

Several reforms have been implemented by Ghana's government to strengthen apprenticeship. The National Vocational Training Institute (NVTI), the National Coordinating Committee on Technical and Vocational Education and Training (NACVET), and, more recently, the Council for Technical and Vocational Education and Training (COTVET) were among the first reforms aimed at making the informal apprenticeship trade a more appealing sector and acting as an effective tool for the broader economy (Hardy et al. 2019). Palmer (2009) claims that these organisations, which were created to expand the apprenticeship sector and enhance its effectiveness, have failed to meet their objectives.

The Hohoe Metropolis alone is dotted with hundreds of sewing centres which are still growing by the day. This study aims to investigate the experience of apprentices in the garment industry using Hohoe in the Volta Region as a case study, in order to add to the body of research on how informal apprenticeships can be enhanced to expand the stock of human capital in this country. In this study, therefore, the experience of apprentices in the Garment Industry will be examined by exploring their experiences

to recommend strategies and actions to promote the development of fashion apprenticeship training.

1.3 Purpose of the study

This study seeks to explore the experiences of apprentices in the garment industry using Hohoe in the Volta Region as a case study.

1.4 Research Objectives

1. To identify the specific process/approach/technique of instruction adopted in the training of apprentices in the garment industry.
2. To assess the types of skills apprentices in the garment industry are taught.
3. To examine the specific competencies gained after completion of the apprenticeship in the garment industry.

1.5 Research Questions

1. What specific process/approach/technique of instruction is adopted in the training of apprentices in the garment industry?
2. What types of skills are apprentices in the garment industry taught?
3. What are the specific competencies gained after completion of the apprenticeship in the garment industry?

1.6 Significance of the Study

The study will focus on master craftsmen's and craftswomen's techniques and activities that foster apprentice production in the garment industry. In addition, this study aims to draw policymakers' attention to the informal sector, specifically the

apprenticeship model, as a possible solution to unemployment. It will also recommend methods for improving the experiences of apprentices in the garment industry. This will make a significant contribution to the economy's human capital growth. More apprenticeship trades are likely to spring up to serve Ghana's unemployed as apprentices are encouraged to be free to be the best versions of themselves. Smith and Kemmis (2013) believes that if young people are given the tools they need to succeed, they can. Finally, this paper aims to contribute to the body of information on the apprenticeship system by examining apprentices' experiences in the informal sector.

1.7 Limitations of the Study

The current study investigated the experiences of apprentices in the garment industry using Hohoe in the Volta Region as a case study; however, as with most research endeavours, the current research may not be without limitations. Firstly, financing the project was a challenge due to the limited resources available to the researcher to carry out the project. Secondly the sadden outbreak of the corona virus also possessed a challenge. The lockdown period was a nightmare when all shops were closed and movement restricted. The laydown protocols to be observed made it difficult to visit the sewing centres to observe the activities of the apprentices and their masters/madams and get information for the research work.

1.8 Delimitations of the study

Geographically, the study is limited to Hohoe in the Volta Region of Ghana. Contextually, this study is concerned with the experiences of apprentices in the garment industry.

1.9 Organization of Study

The study will be organised into five chapters. Chapter one consisted of the background of the study, statement of the study, the purpose of the study, objectives of the study, among others. Chapter two comprise a review of related literature. Chapter three will describe the research methodology employed. These will include research design, target population, sample size, and sampling procedures, research instruments, data collection procedures, as well as data analysis techniques. Chapter four deals with the analysis and interpretation of the findings of the study, and chapter five consists of the summary, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews related literature relative to the experiences of apprenticeship training in the garment industry. A review of the literature would aid in identifying the existing knowledge gaps relating to the objectives of the study and justify the need to investigate the issues relating to the topic in Ghana. It will include themes on the definition of concepts (apprenticeship training in the garment industry), a brief history of apprenticeship, apprenticeship in Ghana, various types of apprenticeship, skills acquisition and training in developing countries, training objectives and priorities, apprenticeship training evaluation, effects of apprenticeship training on the performance of trainees, conceptual and theoretical framework among others.

2.2 Definition of Concepts

2.2.1 Apprenticeship

Apprenticeship, both formal and informal is an extensively used term. Some view it as a mode of learning through the acquisition of skills at the workplace in a structured manner (Fudenberg & Rayo, 2019; Wolter & Ryan, 2011). Others consider an apprenticeship dually as an amalgamation of school-based and enterprise-based education and training (Young, 2019; Deissinger, 2019). Apprenticeship is often mistaken for training modes or perceptions that seem alike. Some nations have introduced their values for different training systems.

A trainee, the apprentice, and a mentor and the master craftsperson, may agree to work together in an apprenticeship (Fudenberg & Rayo, 2019; Anokye & Afrane,

2014). This arrangement will cover the rights and responsibilities of all parties to the contract, such as the trainer, the trainee, and, in most cases, the trainee's guardian. Apprenticeships usually result in a certain degree of trade competence. According to Woods (2012), the apprentice's experience, skills, and competence are broad and related to the trade, and the graduated apprentice will perform all tasks necessary for mastery of the trade at the end of the apprenticeship. Apprentices must have acquired a degree of skills that allows them to be employable after they complete their apprenticeship (Anderson & Nieves, 2020; Sheridan, 2019; Lancy, 2012). Apprenticeships are often offered by businesses, and training is incorporated into the manufacturing process. The apprentice watches and learns alongside an experienced worker or master teacher as they work (Aakernes, 2020; Zhao, 2018; Jrgensen, 2018) while the company offers services to customers.

Structured or dual apprenticeship combines classroom teaching or courses at vocational training centers with on-the-job learning and training. The enterprise, however, remains at the center of the apprenticeship and training process. (Ahadzie, 2009; Zhao, 2018; ILO-World Bank, 2013). Apprenticeship has traditionally been aimed at young people. This is due to a number of economic as well as social/psychological factors.

For starters, trade training will pay off financially over the course of a career. As a result, it makes financial sense to invest early in one's career (Mackay et al. 2019; Taylor & Freeman, 2011). As a result, apprenticeship is regarded as a type of initial vocational training. Prior expertise or work experience is usually not needed, allowing young learners to participate.

Second, apprentice remuneration is usually low because young people are more willing to accept a low remuneration because they may still be living with their parents and do not have to provide for a family.

Third, young apprentices are ideally suited to learning from a knowledgeable worker because they embrace and revere the knowledgeable worker's experience more easily than adult learners (Mackay et al. 2019; Taylor & Freeman, 2011).

Apprenticeships are usually funded by both the apprentice and the master craftsperson (Mokyr, 2019; Kupec & Christman, 2018; Ahadzie, 2009). Since the apprentice contributes productively to the enterprise, master craftspersons incur training costs and hope to recoup their investment during the apprenticeship period (Prak & Wallis, 2019; Tan et al. 2016). The majority of apprentices who study while working pay for their education with their labor, with fees or in-kind donations added on occasion. As a result of the apprenticeship contract, the financial agreement is balanced, and training becomes fair and profitable for both parties. Governments fund a portion of the cost of structured or dual apprenticeships through tax rebates, scholarships, grants, or school-based learning funding (Smith & Kemmis, 2013; Steedman, 2012; Wolter & Ryan, 2011; Palmer, 2009; Deissinger, 2004).

2.2.2 Concept of Training

Education is the process of acquiring background knowledge on a subject which usually takes place at school and colleges or through private studies. Training, on the other hand, refers to learning to use this knowledge or merely the application of knowledge to work (Fudenberg & Rayo, 2019). Thus, education imparts knowledge while training imparts skills. Both are necessary for the development of workers.

Education, according to Cedefop (2019), is a practical education in any trade, art, or craft. Others define it as a concerted and organized attempt to change or improve information, attitudes, abilities, and skills through learning experiences in order to achieve successful success in one or more activities (Lamptey & Debrah, 2018).

Identifying, assuring, and assisting in the creation of key competencies that allow individuals to perform current or future jobs is what Ying (2007) defines training and development as. Training is often regarded as a procedure. Training and growth, according to Kim (2004), is a method of systematically developing work-related skills and experience in people in order to improve results. While basic instruction is provided, a training and development effort may also be structured to improve an individual's self-awareness, abilities, and motivation to do a good job.

According to Shariff and Muhamad (2010), training is application-driven and seeks to impart skills that are instantly useful in specific circumstances. While universal concepts are implemented in training, they are only briefly discussed since they are used to reinforce particular learning points. Job-related behaviors can include any experience and ability learned by an employee that can be related to organizational objectives. Training and development is commonly thought of as a planned initiative by an organization to promote the learning of job-related behavior on the part of its employees (Fudenberg & Rayo, 2019).

2.2.3 The Garment Industry

One of the basic needs of civilised humankind is clothes. The garment industry thus caters for clothing requirement. The garment industry is a sector that manufactures semi-durable consumer goods to satisfy the basic clothing needs of individuals

13

(Gopura et al. 2019; Yunus & Yamagata, 2012). The garment industry produces all kinds of garments and accessories. Garment consumption according to Zhang (2020) is not merely for satisfying the desires of people, but also for filling their tastes as well as their preferences and offering them the elegance and status they are craving for. The garment industry produces apparels, including outerwear, underwear, work and leather apparels (Lacy et al. 2020; Turapovna & Abduhalilovich, 2020).

With its labor-intensive structure and employment-friendly existence, the garment industry has made a significant contribution to socioeconomic growth. Within the manufacturing industry, and also across all economic fields, the sector tends to be the one that creates the most jobs (Nolintha & Jajri, 2016; Khattak et al. 2015; Koopman et al. 2009). When combined with the textile industry, it becomes almost difficult to replace the resulting job opportunities. In the garment industry, women make up about 75% of the workforce (Schoen, 2019; Mahmud et al. 2017; Anwary, 2017).

As a result, the sector makes a significant contribution both socioeconomically and economically. With the opportunities it provides, the sector that can transform even the most unqualified individual into a qualified person in a short period of time with on-the-job training fulfils functions such as reducing unemployment and poverty (Yunus & Yamagata, 2012). None of the other business divisions performs a socioeconomic and cultural role as extensive as this one. Another important advantage of the garment manufacturing industry is the expertise and know-how gained from years of experience in the industry. From cotton and synthetic fibre processing to apparel retail brands, the sector has all the hallmarks of a well-integrated industry (Anwary, 2017; Sulemana et al. 2014).

The textile industry continues to be the leading source of local value added and net foreign exchange earnings. Starting with cotton and synthetic fibre processing, the sector generates a high local value-added by using local inputs such as yarn, cloth, dye, print, finish, sub-industry, and accessory (Mahmud et al. 2017; Nolintha & Jajri, 2016). With this degree of efficiency, the sector continues to produce annual net foreign exchange earnings of nearly ten billion dollars.

2.3 Brief History of Apprenticeship

Apprenticeship is a long-established social institution that has ensured the transfer of work skills from generation to generation for centuries (Prak & Wallis, 2019; De la Croix et al. 2018). Apprenticeships are still practiced throughout the world, but in a more modern way. Faced with global youth job challenges, large cohorts of unemployed youth, and skills mismatches, many countries are considering implementing or refining apprenticeship schemes as a means of addressing these issues (Cuevas et al. 2020; Bakhshi et al. 2017; Billett, 2016).

Other countries are attempting to modernize and formalize both informal and conventional apprenticeships in order to increase the availability of high-quality Technical and Vocational Education and Training (TVET) in their countries. Apprenticeship is the basic method of providing structured vocational training in countries such as Germany, Denmark, Austria, and Switzerland (Young, 2019; Di Maio et al. 2019 Lerman, 2017). In some cases, an apprenticeship is a viable alternative to technical and vocational education and training (TVET) provided by a school (Wu et al. 2019; Haolader et al. 2017). Many West African countries (Ogwo,

2019) have „traditional' and „informal' apprenticeships, which are also the primary means for the majority of the younger population to learn job skills (Ogwo, 2019).

Work-based learning in its various forms, including apprenticeships, should be promoted, according to Cedefop (2019) and the United Nations Educational Scientific and Cultural Organization (UNESCO). According to UNESCO, public policies should encourage and promote quality apprenticeships, as well as assist young people in developing their expertise, skills, and competencies and gaining work experience (Mejia, 2016). A working concept of a modern apprenticeship has been established by the International Labour Organization (ILO). It is defined as a one-of-a-kind type of vocational education that combines on-the-job learning and school-based preparation for specific competencies and work processes (Steedman, 2012). It is governed by legislation and is based on a written employment contract that includes a remuneration package and a regular social security scheme. After a set amount of time has passed, a standardized examination and a recognised credential will be given. However, the system of apprenticeship first developed in the later middle ages and came to be supervised by tailoring guilds and town governments (Prak & Wallis, 2019; Lis & Soly 2017; Epstein, 1991).

In return for offering formal instruction, a master craftsman was allowed to employ young people as a cheap source of labor. Female apprentices were found in many dressmakers affiliated with embroidery, silk weaving, and sewing, despite the fact that the majority of apprentices were males. Apprenticeship has undergone a massive transition over the years. The majority of apprentices no longer live with their master dressmaker and instead travel from their homes (Gough et al. 2019; Lamptey & Debrah, 2018). Since the number of apprenticeships has risen to the point that many

young people work in the private sector, policymakers in both developed and developing countries, as well as international donors, have become more interested in the informal sector (Greig, 2019; Ryan & Lrinc, 2018).

The formal sector is shrinking in some African countries, owing to the impact of structural adjustment programs, debt and burden constraints on economic development, profound awareness of science and technology, and dependence on agro-based exports. Apprenticeships, on the other hand, are still not a popular route for young people in Ghana (Gough et al. 2019). The government's recent emphasis on apprenticeships must be seen in the light of decreasing support for vocational education. In the one hand, there has been a decrease in the standard of vocational education, and on the other, there has been an expansion in degree-level tertiary education, which has become very costly for both taxpayers and students due to high university fees, and a large number of university degrees that do not have a worthwhile return in earnings and jobs (Yamada, 2020; Hardy et al. 2019; Teal, 2016).

2.4 Quality apprenticeships

Apprenticeships are all forms of workplace learning; however, apprenticeships are not all forms of workplace learning. To resolve these issues and to assist countries in establishing or expanding apprenticeship programs, the ILO is advocating for modern "Quality Apprenticeships," (Molz 2015), which provide good work and training conditions for apprentices while also benefiting the training business (ILO, 2017). It's also important to note the distinction between apprenticeships and other types of workplace learning, such as internships, traineeships, and industry attachments.

Generally, modern "Quality Apprenticeships" will comply with all of the following characteristics (ILO, 2017; Molz 2015):

- A contract between the apprentice and the master craftsman that spells out each party's rights and obligations. The apprenticeship has a set length of time that is determined by statute or the training contract.

- The majority of the teaching takes place in the workplace. In most cases, the apprentice is treated as a "employee" with the right to daily training. The apprentice is entitled to regular supplementary work-based training as part of an overall training package arranged with the training companies.

- The national labor law, especially the youth labor code, is respected in terms of training and working conditions in the businesses. The apprentice, like his or her coworkers, is entitled to social protections such as occupational safety and health standards.

- Apprentices earn a federally valid and officially approved certificate upon satisfactory completion.

- Work-based training follows a standardized training curriculum to learn a complete trade or profession in accordance with pre-determined requirements.

2.5 Key Elements of Modern Quality Apprenticeship Systems

Apprenticeships take place in diverse environments shaped by customs, socioeconomic systems, and labour regulations. Apprenticeships "exported" from one country to another have proved to be difficult and ineffective (Molz 2015). All apprenticeship schemes, however, have certain characteristics that can be used as guiding principles and tailored to various national contexts (Gessler, 2019). The

International Labour Organization (ILO) recently established fundamental basic concepts of good modern apprenticeships in a recent survey.:

➢ *Social dialogue***:** All types of labor-related bargaining and consultation between governments, employers' associations, and workers' organizations (trade unions) are referred to as social dialogue. Social dialogue is typically robust in high-performing apprenticeship schemes, and social partners play an important role in apprenticeship governance, financial monitoring, identifying skills requirements, standard-setting, monitoring working conditions, and inspections.

➢ *Roles and responsibilities:* Apprenticeship is based on a clear set of roles and obligations shared by social stakeholders and government agencies at the macro level, as well as companies, training schools, and apprentices at the micro level. At the macro level, institutional support and facilitation between stakeholders are required for the functional operation of an apprenticeship scheme.

➢ *Financing:* A solid financial foundation, including co-funding arrangements between the government and companies, is critical to the success of apprenticeship. Financing must include appropriate benefits for all stakeholders while holding costs to a minimum. Businesses, in particular, must be certain that their investment in apprentices will be repaid.

➢ *Legislation:* Modern and formal apprenticeship is usually regulated by:

○ A law that defines the roles and responsibilities of all stakeholders and the procedures for skills standards, curriculum and examinations;

- An apprenticeship contract that sets out the rights and duties of company and apprentice;

- The national labour law with provisions on youth employment protection regulate the work conditions of apprentices.

Legislation should be consistent, straightforward, and meaningful, and it should conform to current national institutional structures. Overregulation should be avoided, and laws should not be copied from other countries.

2.6 Apprenticeship in Ghana

Apprenticeship programmes in Ghana are programmes of training in a preferred trade under which apprentices experience appropriate teaching and on the job training (COTVET 2009). Apprenticeship in Ghana is closely related to the informal segment of the economy and is responsible for equipping over 85% of the labour force with relevant skills (Adeniran et al. 2020; Adjei, 2018; Lall et al. 2016). Garment making, hairdressing, carpentry, masonry, auto mechanics, welding, cosmetology, plumbing, electronics and leatherworks are some of the domains in which apprenticeship is heavily utilized.

Shaw et al. (2019) describe apprenticeship as a job that requires extensive and continuous training, leading to the achievement of an apprenticeship standard as well as the development of transferable expertise. This description underpins four (4) basic principles: an apprenticeship is a job, in a skilled occupation; apprenticeship entails substantial and continued training; apprenticeship leads to adequate competency in a profession, and apprenticeship advances transferable skills to improve careers (Adotey et al. 2016).

Informal apprenticeship training in Ghana, is accountable for about 80-90% of all basic skills training, as compared to about 5-10% from formal training institutions and about 10-15% from not-for-profit providers (Adotey et al. 2016). Presently, youth trained through informal apprenticeship have three (3) basic options in terms of certification. These are not mutually exclusive; thus, some apprentices may attain all three. The most common form of certification originates in the form of a written testimonial from the apprentice"s master-craftsperson or trainer. This certificate is usually not acknowledged beyond the immediate area where the apprentice learned.

Second, some of the more influential Informal Sector Associations (ISA) (for example, the Ghana National Association of Tailors and Dressmakers and the Ghana Hairdressers and Beauticians Association) conduct their own informal skills testing, resulting in certificates issued by the association that are widely recognized by their members nationally (Adotey et al. 2016). Third, informal apprentices can take the NVTI proficiency test. This proficiency assessment is a non-written competency-based ability test that includes both a practical and an oral examination. This enables illiterate trainees, including informal apprentices, to obtain a nationally recognized qualification.

As per Ghana Statistical Service (2015), the informal apprenticeship scheme, which is a subset of the economy's informal sector, recruits approximately 59,986 Ghanaians each year and employs approximately 20% of the workforce in the informal sector. According to Palmer (2009), the informal apprenticeship scheme is the most relevant process to consider for skill creation in many African countries. This is because the apprenticeship sector has the ability to significantly increase the economy's skill base

at a much lower rate. This industry does not need a lot of infrastructure. While learning, the apprentice also contributes to production.

In Ghana, the informal apprenticeship system has established itself in the majority of urban areas (Anokye & Afrane, 2014). Until recently, informal apprenticeships served as a platform for socialization in which parents or masters transferred new skills, when commercialization of informal apprenticeships took over, reducing the influence of apprenticeships as a medium of socialization (Lamptey & Debrah, 2018; Palmer, 2009). Informal apprenticeships in Ghana are established through training between the master craftsperson and the apprentice. In the apprenticeship scheme, skill transfer is typically accomplished by observing and imitating the master's on-the-job experience (Hardy et al. 2019; Sonnenberg, 2012).

The master may sometimes instruct the apprentice to repair or produce, but the apprentice's efforts almost always result in a mistake (Anokye & Afrane, 2014). The apprenticeship begins with the master advising the apprentice on menial tasks such as running errands and cleaning the workshop. The apprentice is then taught about the tools of the trade, how to fix or produce one object at a time, and eventually general business management skills such as sourcing, contracting, and proving (Lamptey & Debrah, 2018; Fuller & Unwin, 2014). Entry into the system as an apprentice is typically not limited by demographics such as race, faith, or literacy evidence (Anokye & Afranie, 2014; Ahadzie, 2009).

2.7 Advantages and Disadvantages of Apprenticeship Training

Youth unemployment rates are generally lower in countries with well-established apprenticeship programs (Molz, 2015). Some of them are known as having high levels of skilled labor, resulting in high productivity and innovation potential. According to Molz (2015), well-designed apprenticeships will help to smooth school-to-work transitions by providing relevant work experience in a real labor market environment. While learning a trade; providing youth with the skills required by businesses; being an effective training methodology for transferring sophisticated skillsets, even for high-tech occupations; combining work and training opportunities, linked to a salary or allowance; allowing companies to better cater for immediate and future staff needs; and making TVET systems more responsive to skill demand.

However, issues with apprenticeship training can arise in the case of low-quality work and learning conditions, for instance when young people are exploited as "cheap labour" and or when the work environment is unsafe and inadequate for a young person with little work experience (Gessler, 2019; Mohrenweiser, 2016; Göggel and Zwick, 2012). Another issue presents itself when apprentices are not adequately trained or when apprenticeships provide only a few skills that are relevant for one particular company, but do not provide the apprentice with the skills to find employment after the training is completed (Mohrenweiser, 2016; Göggel and Zwick, 2012).

2.8 Types of Apprenticeship

There are two types of apprenticeship training; Formal and Informal Apprenticeship.

2.8.1 Formal Apprenticeship

Prak and Wallis (2019) and Wolter and Ryan, (2011) describe Formal apprenticeship as scheme offered by businesses such as manufacturing and service industries and public corporation which have adequate resources in machines and materials to train people to perform specific skills in their organizations. Gessler (2019), defined formal apprenticeship as a learning process which transits from the classroom to real practical situation in the workplace in the industry. Learning experiences acquired in the classroom are transferred to the real work situation.

Programmes, where formal apprenticeship is practised, include an internship, students industrial work experience scheme and on-the-job training scheme (Gessler, 2019). Internship training is a technique for training professionals and sub-professional in the field of work, such as teachers, physicians, pharmacists, lawyers, counsellors and social workers (Crépon & Premand, 2018). The training is undertaken typically as a culminating experience before the student‟s graduation, after preliminary classwork and usually a full-time resident experience to provide a complete experience. The student is placed in a firm or agency selected by the college for its progressive method of operation and supervised by a professional person selected on professional abilities and competency.

The student industrial work experience scheme is a skill-training programme designed to expose and prepare students of higher institutions for work situations, as they exist in the world of work. This covers programmes like engineering, technology, applied science and applied arts (Gessler, 2019; Crépon & Premand, 2018). This scheme helps to bridge the gap between theory learnt in school and practice as they exist in the industries. The scheme provides students with opportunities to familiarise

themselves with and expose them to tools, equipment and machines that are not available in their various institutions but will be used after graduation. The scheme also prepares the students to work methods and prepares them in safeguarding the work area and other workers in the industry.

Regarding on-the-job training, the instructor uses observation and practice strategies for training. This training provides individuals with the necessary learning approaches in a specific task in occupation and training, which enables individuals to learn while working (Gessler, 2019). Characteristics of on-the-job training include the performance of an activity by the master trainer, watching of what the master trainer does by the apprentices, doing of master trainer activity by trial and error, and repetition of an activity to achieve mastery.

2.8.2 Informal Apprenticeship

Apprenticeships that are "traditional" or "informal" can be found in the informal economy and in rural areas. Traditional apprenticeship involves the transmission of skills from a father or mother to their offspring, near family members, or clan members (Molz, 2015). Traditional apprenticeship programs have developed in many regions into informal apprenticeship systems that are open to apprentices who are not members of the family or kin community. Informal apprenticeship is based on an unofficial work and training arrangement in a practitioner's sector (Molz 2015).

Informal apprenticeship is rooted and regulated by local culture and customs, while formal apprenticeship is based on policies and legislation. Informal apprenticeship is the only way for many young people in developing countries to gain professional experience (Ezenwakwelu et al. 2019; Teal, 2016) Long working hours, hazardous

working conditions, little or no allowances or wages, little or no social security, and significant gender imbalances are only a few of the more serious problems that may arise from informal apprenticeship (Regel & Pilz, 2019).

In an informal apprenticeship, the apprentice learns trade skills by watching his master do the work (Crépon & Premand, 2018; Wonder & Tenson, 2017). There is no theory taught, and most of the training facilities are ill-equipped, and no training syllabus is used. Informal apprenticeship, as described by Eraut (2004), is a situation in which a learner sits near the master to learn his craft, as practiced by roadside shops. As part of living experience, a self-directed person acquires attitudes, beliefs, skills, and information for learning and doing work. In traditional culture, learning a craft always starts with personal services to the master; young people will become house servants to a close relative and eventually be exposed to the crafts (Wonder & Tenson, 2017 ILO 2012; Palmer, 2009).

Informal apprenticeship occurs when an individual chooses a crafts master and contracts to learn a trade or craft for a living (Ahadzie, 2009). After mastering the trade or crafts satisfactorily to the master, the apprentice continues as a journeyman. According to Ahadzie (2009), people who want to learn a trade in Ghana normally look for a dressmaker to apprentice with. Craftwork, carpentry, auto mechanic work, cabinet building, blacksmithing, goldsmithing, shoemaking, electronics repairs, and electrical appliance repairs are all examples of informal apprenticeships (Zhang & Cerdin, 2020). Informal apprenticeship training is designed around what the apprentice needs to know and do in order to work safely and satisfactorily on the job. This entails active involvement in on-the-job learning experiences as well as workshop study.

2.9 Certification in Apprenticeship Training

In apprenticeship preparation, certification is a crucial component. This is typically achieved at the conclusion of an apprentice training program, and it would show the training's level of competency. Certification is the process of verifying an object's, person's, or organization's unique characteristics (Prak & Wallis, 2019; Lassnigg, 2017). Professional certification is one of the most common forms of certification in modern society, where an individual is certified as capable of performing a job or task competently, normally by passing an examination.

All apprenticeship training programs provided by private and public training agencies must be accredited by a commission. Accredited apprenticeship programs assure the learner, industry, employers, and the general public that the program meets or exceeds the national apprentice policy's educational and industrial standards (Mokyr, 2019; Loveder, 2017; Fuller, 2016; Billett, 2016). The aim of this policy is to ensure that those with the ability and skills to become qualified tradespeople are able to achieve their goals by enrolling in high-quality training programs.

Independent of the school system, the accreditation policy offers an auditing framework for apprenticeship training programs. It also addresses the challenges of technological change by encouraging continuous curriculum development through a continuous review process (Karmel & Roberts, 2012; Taylor & Freeman, 2011). To be recognized as meaningful and useful, certification must be based on certain standards. Quality and currency are two of these ideals. The certificate must be based on an accurate, reliable, and reasonable evaluation (Forster et al., 2006). This could be based on a variety of tests, one of which could be a cognitive ability test, which assesses a person's reasoning, memory, and verbal abilities.

27

The physical skill test, for example, assesses a person's stamina, endurance, and muscle movement. The psychomotor test is often used in the assessment of a person's dexterity, hand-eye coordination, arm-hand coordination, and arm-hand steadiness in a skill-based test (Young, 2019; Deissinger, 2019). Individuals can benefit from certification in a variety of ways. The credential offers trainees a clear target if it is a competency-based result of a career-technical program, many of which provide the opportunity to earn one. It provides flexibility in certifying competence if it is not connected to a curriculum (Gessler, 2019).

Apprentices gain trust and a sense of achievement after receiving a certificate. The credential may also be transferable to other programs for credit. The certificate is a technical certification of high value in business and industry that can help people find work. Typically, this means that those with qualifications will be paying more at the outset (Helper et al. 2016). Both trainers should make certification in the apprenticeship program a top priority. Since it will raise industry and trainee morale both during and after the training. Employers would be aware of the caliber of trainees they would be hiring as well as their training requirements.

2.10 Effects of Apprenticeship Training on the Performance of Apprentices

Countries eager to foster development and ease the transition from full-time schooling to employment for the youth have long recognized the value of apprenticeship in terms of jobs and skills (Prak & Wallis, 2019; Poulsen & Eberhardt, 2016). Although there is a long-term connection between apprenticeship and low youth unemployment, it would be naive to think of apprenticeship as a „cure' for high youth unemployment (Mokyr, 2019; Kupec & Christman, 2018).

Apprenticeship is primarily about skill creation for the benefit of businesses, their workers, and the economy as a whole (Fuller, 2016). Since it accurately represents the equally wide range of skills needed in a modern economy, an apprenticeship will accommodate a wide range of abilities and aptitudes (Bosch & Charest, 2012). However, it is not an adequate solution for enhancing the transition to the labor market of young people with low academic achievement or other disadvantages. As previously stated, apprenticeship refers to any scheme in which an employer agrees to hire a young person and train or have them trained systematically for a trade for a set period of time, during which the apprentice is obligated to work in the employer's service (Prak & Wallis, 2019).

The majority of the artisan has developed as a result of this training phase. Systematic long-term training for a recognized occupation that occurs primarily within an enterprise or under the supervision of an individual artisan should be regulated by a written apprenticeship contract and subject to specified standards (Steedman, 2012). Apprenticeship in the informal economy is a common occurrence in many countries, including Africa. Poor communities have established purely workplace-based informal apprenticeship programs to pass on skills from one generation to the next. A young apprentice learns from an accomplished master craftsperson through observation and imitation, gaining trade skills and being inducted into the company's community and networks (Steedman, 2010).

Many people have questioned the success of many artisans in general. Despite the system's strength in providing relevant skills for artisans, informal apprenticeship has a number of flaws (Steedman, 2012). Long working hours, hazardous working conditions, little to no allowances or salaries, little to no social security in the event of

29

sickness or injury, and severe gender imbalances are only a few of the decent work deficits commonly found in an apprenticeship that are thought to have a major impact on the artisans' efficiency (Gessler, 2019). On the one hand, improving informal apprenticeship is thought to be necessary in order to fix these flaws. However, since training is incorporated into the manufacturing process, it is a more cost-effective way to invest in a country's skills base and improve the employability of youth than expanding traditional technical education and training (Steedman, 2012).

2.11 The Garment Industry in Ghana

Over the past few years, the growth rate of Ghana‟s fashion and garments industry appears to be decreasing in size. However, many strategic measures are being taken to ensure a substantial growth rate in the sector (Howard et al. 2019: Sulemana 2014; Madichie & Saeed, 2010). To boost opportunities in the sector, the African Fashion Fund (AFF) – an organization that empowers Fashion Designers in Africa and the diaspora, recently announced a new official partnership with Parsons School of Design in the USA to establish their first long-term, presence in Africa which Ghana is expected to benefit.

With the coming into effect the African Continental Free Trade Area (AfCFTA) agreement together with a substantial boost in the fashion and garment industry, Ghana has the opportunity to boost the sector and reverse the negative growth rates it has recorded in the sector recently. Ghana‟s fashion and garment industry recorded a growth rate of 15.1% in 2008; it has, however, dropped to 0.8 and 0.3% in 2014 and 2015 respectively. Subsequently, the sector recorded a negative figure of -1.4% in

2016 (Essel, 2019; Adotey et al. 2017). What this implies is that the sector has been declining in what is proving to be a sustained recession.

McKinsey and Company predicts strong growth in the global fashion industry in 2019. It predicts growth of 3.5 percent to 4.5 percent in 2017, which is slightly lower than the 4 percent to 5 percent predicted for the $2.5 trillion global fashion industry in 2017. The global fashion industry is currently valued at about US$2.6 trillion, with an annual growth rate of 5.5 percent. Africa accounts for less than 5% of this total, while Asia and the United States account for 80% of the industry (Czekala et al. 2019). As the population grows, new and emerging needs arise and young individuals are finding creative ways to make use of Ghanaian fabrics as a way of creating employment.

Granting, the Ghanaian garment industry has evolved in the past years; the youth are lately discovering creative means of creating employment for themselves in a competitive environment through apprenticeships. Due to the relative surge of opportunities in the fashion industry, a group of Ghanaian fashion designers in the country are gradually positioning themselves to take advantages of the opportunities in the sector with the implementation of the African Continental Free Trade Area agreement (Gathii, 2019; Davis, 2017; McNamee et al. 2015). Competition in the global fashion industry is so rife that the survival of modern fashion now depends on the culture that is continually exerting more considerable influence in the sector. The garment industry is capable of fetching a substantial revenue; however, the support in the attempt to surging production appears to be minimal (Amankwah-Amoah, 2015).

2.12 Theoretical Framework

Apprenticeship is about learning and learning is a complex phenomenon that psychologists over the centuries have and continue to explore. To learn is to have a change in behaviour (Kolb et al. 2001). Learning is a continuous process where people discover new things, ideas and ways of life. Learning takes place through interaction with the environment, discover new ways through observation and doing (Narendra et al. 2016). Behavioural change is the manifestation of learning in which an organism exhibits certain traits or changes in behaviour. Learning refers to change in an individual due to experience (Kucuk, 2018).

Narendra et al. (2016) also describe learning as any permanent change in behaviour resulting from experience. Learning, therefore, is a process of change in an individual due to experience and reasoning from the environment. A behavioural change could be due to maturation or average growth, e.g., a child learning to sit up, crawl and walk. Learning theories are constructs, propositions explaining a systematic behaviour change. People learn in different ways and at different rates and that explain individual differences in people. There are four schools of thought concerning how people include apprentices learn, giving rise to four theories of learning. These are Behaviorism, cognitivism, social learning and humanist theories.

2.12.1 Behavioural Learning Theory

Behaviourists attempt to explain learning in terms of how events in the environment affect behaviour. According to O'Donohue and Kitchener, (1998) empiricists believe and argued that knowledge is based on experience and that a person can acquire knowledge only about things that can be experienced utilizing the senses of sight, touch, hearing, smell and taste; then the individual verifies knowledge through

observation and experiment. To the empiricist, a person acquires knowledge by forming various associations among different aspects of the environment that one can experience through one‟s senses. Behavioural theory is strongly based on the concepts of conditioning (Haleblian & Finkelstei 1999). Conditioning is the process by which an organism behaviour becomes associated with some stimulus on the environment so that when the stimulus is presented, the behaviour occurs.

2.12.2 The Cognitive Learning Theory

The cognitive learning theory has been developed within the philosophical frameworks of rationalism. Cognitive attempt to explain learning in terms of how people think (Prestine & LeGrand, 1991; Tennyson & Rasch, 1988). Rationalist‟s philosophers argued that knowledge is based on reasoning. Harinie et al., (2017), infer that a rationalist believes that people learn because of the ability to interpret wants to occur in the environment. Also, those human beings are born with an innate desire to find meaning in the world and what people perceived is determined as to how much by how the mind interprets the stimuli.

Many of our mental processes, such as vision, memory, and judgment, are referred to as cognition. Thinking is the most critical mental process, and cognitive focus most of their attention on studying how people think (Nabi & Prestin, 2017; Tennyson & Rasch, 1988). The cognitive-developmental model and the information processing model: the cognitive-developmental model focuses on change that occurs in how people think, and they progress from infancy through childhood and adolescence and ultimately into adulthood (Girgis et al. 2019; Gopnik et al. 2017). The information processing model uses the way a computer works as a way of understanding how the

human mind takes in information (a sensory experience), process it (thinks) and produce output (behaviour) (Newman and Newman, 2017).

2.12.3 The Social Learning Theory

Social Learning Theory, which is also termed observation learning, focuses on how people learn by observing the behaviour of others (Akers & Jennings, 2016). It provides a link between behavioural and cognitive theory. Learning by observation occurs in four sequential phases: attention, retention, reproduction and motivation. The principle is explained that the learner must first pay attention to the model''s behaviour, remember the behaviour, practice it and be motivated to perform.

Sellers and Akers (2018), infer that much of children''s learning occurs by observing parents, teachers, other children and even character on television. Nicholson and Higgins (2017) also infer that through observations, children acquire the necessary know-how and need some practice to reef their skills. Observational learning amount to most human learning. It occurs when learners watch a teacher solve a problem and hear him speak. It occurs when children or learners observe how parent cook, clean or repair a broken appliance.

2.12.4 The Humanistic Learning Theory

Humanistic Learning, unlike other learning perspectives, places the learner as the source of authority, rather than the world, sociopolitical circumstance, doctrine, or personal situation. This implies that the apprentice chooses the process and materials for his or her education (Purswell, 2019; Johnson, 2014). Humanistic Learning Theory, also known as Humanism, focuses on basic human qualities such as

imagination, personal development, and decision-making. People, according to humanists, are good and noble. Maslow's research into hierarchical needs is a major concept in this learning theory, particularly Self-Actualization, because only at this level can the student fully experience development.

Learners should be able to set their own expectations and should have some options or choices about what they learn at school, apprentices can set their own standards and assess their work, and the training experience can help apprentices build good relationships with their peers, according to the Humanistic Learning Theory (DeCarvalho, 1991). As a result, the Humanistic approach is learner-centric, focusing on the individual's potential rather than technical learning resources, resulting in a positive and applicable learning experience for the apprentice (Johnson, 2014).

Learning should ideally be an active process in which the apprentice participates in learning exercises in order to gain information relevant to their situation. Since one of the main themes is that an apprentice is a source of authority, the learner chooses the learning materials and the method by which they will learn the content. They might read, listen to speeches, watch movies, or put what they've learned into practice through social interactions or through completing a specific task (Purswell, 2019; Johnson, 2017). The amount of learning is also determined by the learner. However, it is the apprentice, not the teacher, who must make the right or incorrect decision in their learning decisions. This strengthens the apprentice's role as a source of authority (Pramesti & Salafudin, 2018).

The teacher acts as a mentor or facilitator to help the apprentice develop and implement a learning plan that will help them achieve their goal. To be successful in assisting the apprentice in gaining the desired knowledge, the teacher must be mindful

of the apprentice's specific needs (Purswell, 2019; Johnson, 2017). The mentor will assist in developing a plan to support the apprentice's academic and emotional growth by first identifying the apprentice's specific needs. This development requires the creation of a non-threatening and encouraging climate.

Thus, the humanist theorist focuses on the affective or emotional component of learning. Pramesti & Salafudin, (2018) infer that the goals of the humanist theorists are to enable the apprentice to express themselves creatively, to understand and cope with their feelings and to become independent learners. From a humanist perspective, trainers ought to be less communed with what apprentice learn as they learn and develop a positive attitude towards learning and self-esteem (Hartono et al. 2018). In apprenticeship training, the apprentice identifies or locates a master trainer, which is the most practised or the master trainer identifies the apprentice to be trained in the trade or crafts. The apprentice ought to be ready to benefit from the training, and the training environment should be a replica of the working environment. Practical apprenticeship training is based on the training environment being the working environment.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

Research methodology, according to Kumar (2019), is a systematic process of collecting, presenting, analyzing and interpreting data to arrive at reliable resolutions to human problems. This chapter provides the methodological considerations of this study. It outlines and describes the processes used in data collection and analysis and addresses ethical concerns relative to data collection in Ghana. The chapter also defines the approach adopted and the conditions under which the various phases of investigations will be conducted.

3.2 Research Design

A research design, according to Leavy (2017), is a conceptual framework within which research is conducted. It also establishes the blueprint for the collection, measurement, and analysis of data (Schoonenboom & Johnson, 2017). Lawrence (2020), underscored that the selection of any research design is based on numerous constituents with the ultimate being the attributes of the variables or population being used or investigated. In this study, the descriptive research design was espoused due to the nature of the study.

This study adopted a mixed-methods approach. The mixed method of research is a type of research in which a researcher combines elements of qualitative and quantitative approaches for breadth and depth of understanding and substantiation (Plano Clark & Ivankova 2016; Greene 2015; Creswell, 2014; Hesse-Biber 2010).

The aim of mixed-method research is to harness the synergy and intensity that exists between quantitative and qualitative research methods in order to better understand a phenomenon than is possible with either method alone (Flick, 2011).

The study employed both qualitative and quantitative approaches in data collection and analysis that are appropriate in a sequential design (Saris & Gallhofer 2014). In a mixed-methods technique, the nature of research questions initiates the choice of the approaches to be used. Plano Clark and Badiee (2010) described mixed methods research as a category of research where the researcher blend or combined quantitative and qualitative research approaches, methods, theories into a single study (Johnson, & Gray 2010). Mixed methods research is further an effort to legitimate the application of various procedures in clarifying research questions, rather than limiting or restraining researchers" choices.

3.3 Population of the study

A population can be described as the complete set of subjects that can be studied (Saunders et al. 2012). The target population for this study comprised all trainers and apprentices in the garment industry in the Hohoe Metropolis in the Volta Region of Ghana. There is no extant specific data on the exact number of apprentices and trainers in the fashion industry in the Hohoe Metropolis. However, for this study, it was estimated that there were about 2000 apprentices and trainers in the Hohoe metropolis.

3.4 Sampling Technique and Sample Size

Sharma (2017) asserts that sampling cannot be avoided in research as it is impracticable to survey the entire targeted population due to budget and time

constraints; thus, samples are drawn to represent a population adequately. A population, as indicated, can be described as the complete set of subjects that can be studied. According to Rahi (2017), a sample is a relatively small number of units used to make generalizations about the whole. Its primary objective is to provide accurate estimates of an unknown parameter.

For this study, the purposive sampling technique was adopted. In purposive sampling, sampling is done with a purpose in mind. The rationale for choosing this strategy is to enable the researcher to use judgment in determining cases that will best facilitate the answering of research questions and meet the objectives of the study (Etikan & Babatope, 2019). Furthermore, purposive sampling is appropriate when the study aims to glean knowledge from targeted respondents deemed to have specific knowledge in the field of study. Purposively selecting a case is a deliberate decision by the researcher; thus, the researcher decides what needs to be acknowledged and sets out to determine participants that can and are willing to provide the information by virtue of their knowledge or experience (Mujere, 2016). This method of sampling is often employed when working with case study research and when one wishes to select samples that are particularly useful (Sharma, 2017).

This sampling technique was implemented using Saunders et al. (2012) suggestion that at least 10% of the population is considered adequate as a sample for a study, hence; in this study, the purposive sampling technique was applied with the motive of drawing a sample size of 220 from the estimated population. This comprised of 200 apprentices and 20 masters or trainers in the Hohoe metropolis.

Therefore, the researcher set out to purposively sample two hundred and twenty (220) trainers and apprentices in the garment industry in the Hohoe Metropolis in the Volta Region of Ghana.

3.5 Data Collection Instruments

This study adopted the mixed methods approach of data collection; thus; self-administered questionnaires and interviews were used as the main data collection instruments.

3.5.1 Questionnaires

The questionnaire is used as a general term to include all techniques of data gathering in which each person is required to respond to the same set of questions in a predetermined order (Dalati & Gómez, 2018). Questionnaires usually are one of the particular forms of primary data collection on which it relies for precision in the data. It is a standard technique used for gathering primary data in most research studies. A valid questionnaire allowed the researcher to collect data, and one that is reliable meant that these data are collected consistently (Young, 2016).

Again, the use of the questionnaire ensures consistency, uniformity and stability in response. Its usage makes the respondents complete answering the questionnaire at their convenience and also ensure the respondents greater anonymity. Both closed-ended and open-ended questions were asked. The open-ended questions allowed participants to express their views freely on issues raised. The questionnaires were distributed to the apprentices in the Hohoe metropolis for their responses. Instances where participants could not read the researcher offered to read and explain the questions to the participants.

3.5.2 Interview

The term "interview" refers to structured or unstructured verbal communication between the researcher and the participants in which the interviewer receives information. Interviews are particularly useful for learning the story behind a participant's experience because the interviewer can dig deeper into the subject (McNamara, 1999).

By interviewing study participants, valid and reliable data relevant to answering the research questions was gathered in this study. These were accomplished through one-on-one interviews with fashion houses. According to Creswell (2012), a one-on-one interview is useful for asking sensitive questions and allowing interviewees to ask questions and make comments that go beyond the initial questions. Interviews are thought to have a high response rate because they are scheduled ahead of time, making participants feel obligated to complete the interview.

Based on the research questions, a structured interview guide was created and distributed to the apprentices' trainers or masters. The interviews were conducted using the interview guide as a guide (refer to Appendix B). While the exact sequence and choice of interview questions varied depending on the responses of individual respondents, the interviews generally followed the guide's structure. In the Hohoe metropolis, the interview guide was given to twenty-two trainers. Twenty (20) trainers were used because among the many fashion shops visited these were the trainers who had the time and were ready to interact with the researcher.

3.6 Ethical Considerations

Ethics in science is concerned with what is ethical and what is not ethical while conducting research (Pietilä et al. 2020) and is an essential component of any research project. When human beings are the research subjects, as is the case in this study (Swain, 2016), the topic of ethics in research becomes much more relevant. According to Pietilä et al. (2020), research ethics encompasses the entire research process, including the nature of the problem being investigated, the reporting of the theoretical framework, the context in which the research is conducted, the data collection instruments used, the data collection methods used, the research subjects, the data analysis procedures used, and how the data is analyzed.

According to Swain (2016), research must be carried out in an ethical manner; thus, the research question must be framed objectively within the theoretical framework to ensure trust in the research process. In addition, research participants' rights and privacy must be respected and safeguarded. Again, the researcher must be sensitive to the research subjects' cultural and social differences, and all research findings must be accurately reported, including full disclosure of the research methodology and the research process' limitations (Fotrousi et al., 2017). In this study, the researcher aims to contribute to exploring the experiences of apprentices in the garment industry in Hohoe in the Volta Region. This provides legitimization for this research; thus, it is vital to treat respondents with respect and acquire informed consent.

The participants had the right to voluntarily decide whether to accept the invitation to participate in the research. To make an informed decision on whether to participate in the study, participants were informed of the objective and purpose of the study; what participation in the survey involved; how the research results would be disseminated

and used; what their rights as participants were; and where they could obtain more information on their research rights. The researcher thus obtained informed consent from the participants. Participation was strictly voluntary.

3.7 Data Analysis

In methodology literature, there is no single rational approach or the most suitable process of analyzing quantitative data. Analysis refers to and requires an ultimate choice. Consequently, the quantitative data gathered was analyzed, employing quantitative approaches to allow for the provision of a reasonable meaning to the study. However, the responses were compiled, edited, coded and tallied. The scores for individual respondents were aggregated across the items to reach the ultimate raw score. Manageable percentages, including frequency tables, were adopted to examine the issues.

The qualitative data collected through the interview sessions were coded and placed into categories. For example, if the respondents gave comments about the approaches of instruction adopted in the apprenticeship training, they were placed under a coded "method of instruction" category. A basic approach of organizing words and phrases from interviews under coding themes and categories were successfully adopted in this data analysis. This approach allowed the researcher to sort the interview data so that words bearing on a given topic could be separated from other words for interpretation.

CHAPTER FOUR

DATA ANALYSIS

4.1 Introduction

The purpose of the study was to explore the experiences of apprentices in the garment industry. The fourth chapter of this research report introduces the analysis of the results. A total of 200 questionnaires were distributed to apprentices and out of the 200 questionnaires, 178 representing 89% were considered valid for further analysis. For the 22 questionnaires, some could not be retrieved and others were partially completed hence were taken out of the final dataset.

Gender distribution of respondents
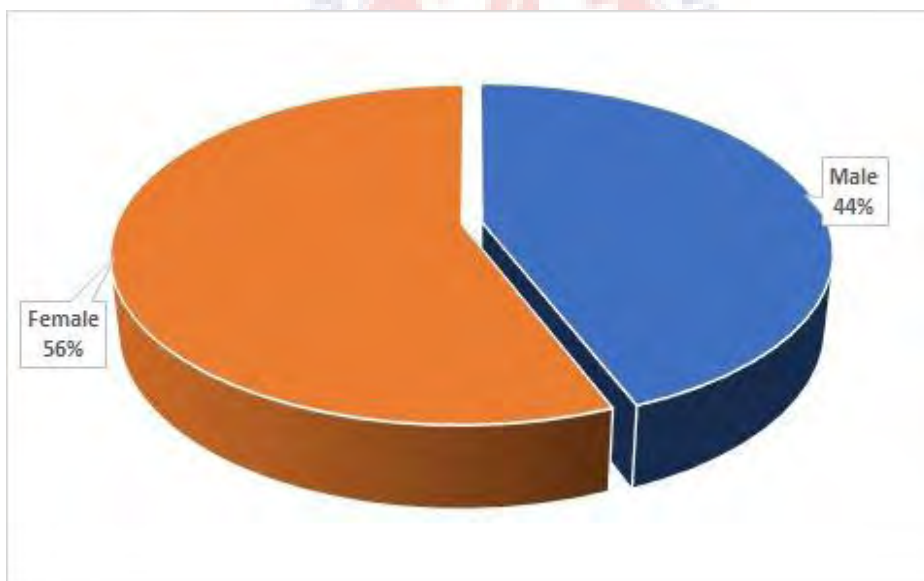
Figure 4.1 Gender Distribution of Respondents

Figure 4.1 shows the gender of respondents used for the study. As shown above, majority of the respondents, 56% were female with 44% being Male. This shows that most of the apprentice was female.

Table 4.1 Age of Respondents

Age range (years)	Frequency (*n*)	Percentage (%)
< 20	96	53.9
21 – 30	23	12.9
31 – 40	19	10.7
41 – 50	26	14.6
51 & above	14	7.9
Total	178	100.0

Source: Fieldwork (2020)

Table 4.1 shows the age distribution of respondents. From the table more than half of the respondents, 53.9% (n=96) were below 20 years, 26 representing 14.6% were between the ages of 41-50, 23 representing 12.9% were between 21-30 years, 19 representing 10.7% were between 31-40 years whiles 14 representing 7.9% were either 51 years or above. The age distribution indicates that most of the apprentices were below 40 years.

Table 4.2 Educational Qualification of Respondents

Qualification	Frequency (*n*)	Percent (%)
No formal education	17	9.6
Primary education	52	29.2
JHS	79	44.4
SHS/Vocational	30	16.9
Total	178	100.0

Source: Fieldwork (2020)

As shown in table 4.2 out of 178 respondents, 79 representing 44.4% had JHS education, 52 representing 29.2% had Primary education, 29 representing 16.3% had SHS/Vocational education with 17 representing 9.6% possessing non-formal education. This gives a clear indication that majority of the respondents had had some of the education up to JHS level.

Table 4.3 Years of Apprenticeship

Years	Frequency (*n*)	Percent (%)
< 1	20	11.2
1 – 2	71	39.9
3 – 4	79	44.4
Other	8	4.5
Total	178	100.0

Source: Fieldwork (2020)

Table 4.3 shows the years of apprenticeship of respondents. From the table 20 respondents% had been in apprenticeship for less than a year, 71 representing 39.9% had been in apprenticeship for 1-2 years, 20 representing 11.2% had been in apprenticeship for 3-4 years with 79 representing 44.4% being in apprenticeship for other years. This shows that most of the respondents had been in apprenticeship for at most three years.

Table 4.4 Position in the Workshop

Position	Frequency (*n*)	Percent (%)
Senior Apprentice	78	43.8
Junior Apprentice	100	56.2
Total	178	100.0

Source: Fieldwork (2020)

The respondents were asked to indicate their position in their respective workshops. The results as being shown in Table 4.4 as shown in the table more than half of the respondents, 56.2% (n=100) were junior apprentices with 78 representing 43.8% being senior apprentices.

Table 4.5 Approach to Training in the Workshops

Approach	Frequency (*n*)	Percent (%)
Individually	48	27.0
In groups	59	33.1
A combination of the two	71	39.9
Total	178	100.0

Source: Fieldwork (2020)

Table 4.5 shows respondents" views on how training is done in various workshops. Out of 178 respondents, 71 representing 39.9% asserted that training was done in a combination of twos, 59 representing 33.1% asserted groups with 48 representing 27% asserting that training was done individually. It is revealing from the responses

that training was in combination of both the direct one-on-one interaction with an apprentice as well as groups.

Table 4.6 Frequency of Teaching at the Shop

Daily teaching	Frequency (*n*)	Percent (%)
Yes	106	59.6
No	72	40.4
Total	178	100.0

Source: Fieldwork (2020)

Table 4.6 provides the results on how often apprentices are taught. It is apparent from the table that more than half of the respondents 59.6% said Yes to the assertion that they are taught every day with 72 representing 40.4% indicating No. This means that apprenticeship training was given every day to apprentices.

Table 4.7 Hours Madam Spends Teaching Apprentices

Hours	Frequency (*n*)	Percent (%)
1 – 2 hours	3	1.7
3 – 4 hours	14	7.8
5 – 6 hours	66	37.1
> 7 hours	95	53.4
Total	178	100.0

Source: Fieldwork (2020)

Table 4.7 shows respondents'' views on the number of hours they are taught by their madam or master each day. From the table only 3 respondents representing 1.7% asserted their madam teaches them for 1-2 hours each day, 14 representing 7.8% asserted 3-4 hours, 66 representing 37.1% asserted 59-6 hours with 95 representing

53.4% asserting more than 7 hours. From the responses, it can be deduced that the

apprentices undergo more than 7 hours of training each day.

4.2 Instructional Techniques adopted in the teaching of apprentices

Table 4.8 Specific Process/Approach/Technique of Instruction Adopted in the Training of Apprentices in the Garment Industry

Statement	N	Min	Max	Mean	±SD
Teaching and learning involve interaction between the madam and apprentices through the use of teaching aids and the organization and presentation of content to apprentices	178	1	5	2.91	1.346
Madam talks less and allowed apprentices to discuss issues among ourselves	178	1	5	3.07	1.458
Madam provides opportunity for self-initiated training to enable apprentices experiment and find solution to the sewing problems	178	1	5	2.96	1.443
Apprentices are trained on-the-job by taking part in the garment production activities at the workshop	178	1	5	4.02	1.676
Madam delegates the most senior apprentices to perform more complicated tasks like cutting out of garments	178	1	5	4.56	.705
Junior apprentices performed simpler tasks like ironing, tacking and hemming under the supervision of the senior apprentice	178	1	5	4.14	1.279
Apart from learning the practical skills of sewing, apprentices are also sent on errands to purchase materials for sewing and so we can learn about purchasing and marketing trends during the process	178	1	5	4.28	1.035

Source: Fieldwork (2020)

Table 4.8 presents the descriptive statistics of respondent"s views on the Specific

process/approach/technique of instruction adopted in the training of apprentices in the

garment industry. The respondents were gathered on the scale of 1-not at all, 2-small

extent, 3-moderate extent, 4-large extent, 5-very large extent.

This table is quite revealing in several ways in that the majority of the respondents

agreed to a large extent that apprentices are trained on-the-job by taking part in the

garment production activities at the workshop (M=4.02, ±SD=1.676), their madam delegates the most senior apprentices to perform more complicated tasks like cutting out of garments (M=4.56, ±SD=.705), junior apprentices performed simpler tasks like ironing, tacking and hemming under the supervision of the senior apprentice (M=4.14, ±SD=1.279), and apprentices are also sent on errands to purchase materials for sewing in order to learning purchasing and marketing (M=4.28, ±SD=1.035).

However, most of the respondents agreed to a moderate extent that their madam talk and allowed apprentices to discuss issues among themselves (M=3.07, SD=1.458), their madam provides opportunity for self-initiated training to enable apprentices experiment and find a solution to the sewing problems (M=2.96, SD=1.443) and that teaching and learning involve interaction between the madam and apprentices through the use of teaching aids and the organization and presentation of content to apprentices (M=2.91, ±SD=1.346).

It is widely known that apprenticeship is a particular way of enabling students to learn by doing. From the discussions above, it can be realised that most of the apprentice is trained on the jobs by taking part in the garment production activities. Junior apprentices perform simple tasks with seniors delegated to perform complicated tasks. Apprentice however as a way of learning the business aspect of the apprentice is sent on errands to learn how to market and as well purchase items.

4.3 Apprenticeship competencies

Table 4.9 Types of Skills Apprentices are Taught in the Dressmaking Shops

Statement	N	Min	Max	Mean	±SD
The skills and knowledge of dressmaking along with minor maintenance of the machine	178	1	5	4.46	.789
Quality production of various garments	178	1	5	3.80	1.198
Use of tools and equipment in the dressmaking trade	178	1	5	4.07	1.012
Sewing terminologies	178	1	5	3.96	1.016
Apprentices were taught how to take and record body measurements	178	1	5	4.21	.978
Making of basic hand and machine stitches	178	1	5	4.12	.995
Designing, drafting, pattern making and fabric estimation	178	1	5	4.16	.998
Cutting, tailoring and finishing of garments	178	1	5	4.16	.952
Defects and alteration to fitting problems	178	1	5	4.13	.947
Processes of quality control, packaging, labelling	178	1	5	4.06	1.009
Workshop organization	178	1	5	3.81	1.018
Purchasing of materials	178	1	5	3.71	.958
Negotiating with customers	178	1	5	4.09	.910
Marketing and advertising	178	2	5	3.76	.902
Safe handling of tools and equipment in the workshop	178	1	5	3.89	.962
Literacy/numeracy	178	2	5	4.63	.687

Source: Fieldwork (2020)

Table 4.9 shows respondents assertions on the types of skills apprentices in the dressmaking shops are taught. The responses were recorded on the five-point Likert scale of 1-strongly disagree, 2-disagree, 3-not sure, 4-agree, 5-strongly agree.

From the table majority of the respondents agreed to quality production of various garments (M=3.80, SD=1.198), use of tools and equipment in the dressmaking trade (M=4.07, SD=1.012), sewing technologies (M=3.96, SD=1.016), recording of body measurements (M=4.21, SD=.978) and the skills and knowledge of dressmaking along with minor maintenance of the machine (M=4.46, SD=.789).

That notwithstanding, most of the respondents also agreed to the making of basic hand and machine stitches (M=4.12, SD=.995), designing, drafting, pattern making and fabric estimation (M4.16, SD=.998), cutting, tailoring and finishing of garments (M=4.16, SD=.952), defects and alteration of fitting problems (M=4.13, SD=.947) and process of quality control, packaging and labelling (M=4.06, SD=1.009).

Moreover, the majority of the respondents agreed to workshop organisation (M=3.81, SD=1.018), purchasing of materials (M=3.71, SD=.958), negotiating with customers (M=4.09, SD=.910), marketing and advertising (M=3.76, SD=.902), safe handling of tools and equipment in the workshop (M=3.89, SD=.962) and literacy/numeracy (M=4.63, SD=.687).

It is recognisable from the above discussions that apprentices are given basic literacy/numeracy, marketing and advertising and as well negotiating skills during their training programs. These skills are integral to building successful careers in dressmaking. The basic sewing skills; setting up the sewing machine, sewing technologies, workshop organisation, purchasing of materials, handling of tools/machinery, quality production and the skills and knowledge of dressmaking along with minor maintenance of the machine were also provided to apprentices.

4.4 General Competencies gained after apprenticeship training

Table 4.10 Specific Competencies gained after Completion of the Apprenticeship in the Garment Industry

Statement	N	Min	Max	Mean	±SD
Identify and take care of the different tools and equipment used for drafting, cutting & sewing	178	1	2	1.4	.906
Identify and practice basic (permanent and temporary) and decorative stitches.	178	2	2	1.2	.859
Take accurate body measurements systematically.	178	2	2	1.3	.745
Master the use of sewing machine and taking care of the machine.	178	1	2	1.3	.980
Make different varieties of seams by applying bias, piping, facing and plackets	178	1	2	1.1	.842
Perform hand stitching, attach hook & eye, buttons, buttonhole etc.	178	1	2	1.2	.893
Design, drafting, cutting, sewing and finishing of a garment.	178	1	2	1.4	1.054
Do final pressing, fold, pack and cost estimation of finished garment.	178	1	2	1.4	1.140

Source: Fieldwork (2020)

Table 4.10 presents the descriptive statistics of respondent‟s views on the specific competencies gained after completion of the apprenticeship in the garment industry. The assertions were collected using the scale of 1-Yes, and 2-No.

From the table majority of the respondents said yes to identifying and taking care of the different tools and equipment (M=1.4, ±SD=.906), identification and practice of basic (permanent and temporary) and decorative stitches (M=1.2, ±SD=.859), taking accurate body measurements systematically (M=1.3, ±SD=.745) and mastering the use of sewing machine and taking care of the machine (M=1.3, ±SD=.980).

That notwithstanding, most of the respondents said yes to making different varieties of seams by applying bias, piping, facing and plackets (M=1.1, ±SD=.882),

performing hand stitching, attachment of hook & eye, buttons, buttonhole etc. (M=1.2, ±SD=.893), design drafting, cutting, sewing and finishing of a garment (M=1.4, ±SD=1.054) and doing final pressing, fold, pack and cost estimation of the finished garment (M=1.4, ±SD=1.140).

It is revealing from the above discussions that the training given to apprentices were not disconnected from the wider skills/competencies need for the job market. Apprentices asserted gaining relevant knowledge in identifying and taking care of tools and equipment, taking accurate body measurements, making different varieties of seams, performing hand stitching, designing, drafting, cutting, sewing and finishing and as well doing final pressing, folding, packing and cost-estimation.

4.5 Specific Competencies apprentices gain after the completion of training

Table 4.11 Specific Competencies gained after Completion of the Dressmaking Apprenticeship (sequentially)

Statement	N	Min	Max	Mean	±SD
Take design specifications from the client.	178	1	5	3.47	1.180
Take measurements of the client according to the garment design	178	1	5	3.61	1.180
Estimate cost of labour charges and material	178	1	5	3.46	1.298
Prepare work area for sewing	178	1	5	4.19	1.049
Clean the sewing machine	178	1	5	3.66	1.216
Test sewing machine	178	1	5	3.84	1.124
Set machine according to garment design	178	1	5	3.86	1.192
Make pattern according to design variations and requirement	178	1	5	3.67	1.220
Finalise the pattern by giving seam allowances	178	1	5	3.66	1.134
Identify tools for cutting the fabric	178	2	5	4.63	.687
Examine the grainline of fabric	178	1	5	3.36	1.338
Set pattern on fabric and pinning pattern on the fabric	178	1	5	3.78	1.022
Cutting out garment pieces	178	1	5	3.89	1.083
Applying fusing (vilene) on cut out pieces according to design.	178	1	5	4.00	1.074
Assembling all the pieces of garment for stitching	178	1	5	4.22	.976
Compare the stitched garment with design specifications, measure stitched garment for differences and perform alterations if required	178	1	5	3.90	1.063
Remove unwanted threads from the stitched garment, diagnose stitch faults, remove stitch faults and perform finishing	177	1	5	3.79	1.015
Ironing of the finished garment	178	1	5	3.90	1.037

Source: Fieldwork (2020)

Table 4.11 shows respondents" views on the competencies gained after completion of the dressmaking apprenticeship (sequentially). This was also gathered using the five-point Likert scale.

55

From the table majority of the respondents agreed to possess competencies such as taking design specifications from clients (M=3.47), taking measurements of clients according to garment design (M=3.61), estimating the cost of labour charges and material (M=3.46), preparing work area for sewing (M=4.19), cleaning the sewing machine (M=3.66), and testing of sewing machines (M=3.84).

Moreover, the majority of the respondents agreed to the acquisition of competencies in taking measurement according to garment design (M=3.86), making pattern according to design variations and requirement (M=3.67, SD=1.220), finalizing the pattern by giving seam allowances (M=3.66), identifying tools for cutting fabric (M=4.63), examining the grainline of fabric (M=3.36) and setting pattern on the fabric and pinning pattern on the fabric (M=3.78).

Finally, respondents agreed to gain competencies in cutting out garment pieces (M=3.89), applying fusing on cut out pieces according to design (M=4.00), assembling all the pieces of garment for stitching (M=4.22), comparing the stitched garment with design specifications (M=3.90), removing unwanted threads from the stitched garment, diagnosing stitch faults, removing stitch faults and performing finishing (M=3.79) and ironing of finished garment (M=3.90).

The underlying factor in sewing is the ability to effectively perform tasks in an ordered manner to ensure effective utilization of materials for sewing. It can be deduced from the above that apprentices gained knowledge in performing sewing tasks sequentially. The skills gained in sequence ranged from identifying and taking care of tools/equipment through the taking of body measurement to folding, ironing, packing and cost evaluation among others.

Table 4.12 Are you able to sew Confidently now without Supervision by your Madam/Master

Responses	Frequency (*n*)	Percent (%)
Yes	103	57.8
No	75	42.2
Total	178	100.0

Source: Fieldwork (2020)

This question required respondents to give their assessment of their confidence in their ability to sew without any supervision from their madam or master. The responses have been presents in Table 4.12. The results are compelling to note that more than half of the respondents 57.8% (n=103) said Yes to being able to sew confidently without supervision by their madam whereas 73 representing 42.2% said No. The result is revealing which suggests that most of the respondents were able to confidently sew after successfully going through the period of apprenticeship.

Table 4.13 Respondents being allowed to sit for any Examination during the Course of Training

Responses	Frequency (n)	Percent (%)
Yes	33	18.5%
No	145	81.5%
Total	178	100.0

Source: Fieldwork (2020)

From table 4.13 majority of the respondents, 81.5% (n=145) asserted no to sitting for any form of examination during the course of the training with only 33 representing

18.5% asserting yes. This means the majority of the apprentices do not sit for any examination during their training program.

Table 4.14 Kendall's Coefficient on the Specific Competencies gained

Statements	Mean Rank	Rank
Identify basic tools used in the garment industry	13.39	1st
Assembling all the pieces of garment for stitching	11.62	2nd
Prepare work area for sewing	11.33	3rd
Applying fusing (vilene) on cut out pieces according to design.	10.36	4th
Cutting out garment pieces	9.88	5th
Compare the stitched garment with design specifications, measure stitched garment for differences and perform alterations if required	9.86	6th
Ironing of the finished garment	9.74	7th
Set machine according to garment design	9.62	8th
Test sewing machine	9.52	9th
Remove unwanted threads from the stitched garment, diagnose stitch faults, remove stitch faults and perform finishing	9.13	10th
Set pattern on fabric and pinning pattern on the fabric	9.07	11th
Clean the sewing machine	8.98	12th
Make pattern according to design variations and requirement	8.89	13th
Finalise the pattern by giving seam allowances	8.45	14th
Take measurements of the client according to the garment design	8.32	15th
Examine the grainline of the fabric	7.82	16th
Estimate cost of labour charges and material	7.56	17th
Take design specifications from the client.	7.44	18th

Kendall''sW^a=.114 (17), $\chi2$= 341.934, p=.000
Source: Fieldwork (2020)

Table 4.14 presents Kendall''s coefficient of concordance on the specific competencies gained after completion of the dressmaking apprenticeship (sequentially). The Kendall''s realized was W^a=0.114 indicating that apprentices agree

with each other to gain some specific competencies after the completion of their training program.

The mean ranks showed that respondents categorised identification of basic tools used in the garment industry (M=13.39), assembling of the pieces of the garment for stitching (M=11.62) and preparation of the work area (11.33) as the most important competencies gained as shown in the table above. From the results, it can be concluded that specific competencies gained by the apprentices after the completion of their training include their ability to identify tools for cutting the fabric, assembling all the pieces of garment for stitching, prepare work area for sewing, applying fusing (vilene) on cut out pieces according to design and cutting out garment pieces.

4.6 Interview Results

4.6.1 Operational Background of Trainers

The respondents were inquired to provide background information about their operations. The responses show that the majority of the trainers have been operating on average for 7 years in the fashion industry in the Hohoe metropolis. Furthermore, the responses revealed that fashion houses in the metropolis have at least 4 apprentices with the highest shop training 13 apprentices and the least with just 2 apprentices in their respective fashion shops at the time of the study. Furthermore, the interview results revealed that the trainers were graduating on average about 2 apprentices in a year. Selected comments have been given below;

> *"I've been doing this business for the past 10 years. Currently, I have 13 apprentices working under me. Last year 4 apprentices passed out actually 3 passed out and the other the parents got transferred from the area so she had to leave with them…"* [Trainer 6]

59

"I have been operating this shop for the past 5 years and currently have 8 apprentices in my shop and I think last year like this 4 people graduated which has been the highest that have left…" [Trainer 13]

"oh, I've been sewing for 3 years now. At the moment I have 6 apprentices and last year I like this I passed out 2 so I had 8 as of last year. They were the first apprentices I had when I began this shop…"
[Trainer 2]

4.6.2 Approaches to Apprenticeship Training

The respondents were asked to indicate the approaches or methods of instruction adopted in training the apprentices. The responses revealed fashion trainers adopted various forms of techniques in training the apprentices. Excerpts of their remarks have been provided below;

"for me, there are two approaches it is task-based. When am teaching them how to cut I put all of them together and then when I am teaching them how to sew I train them on an individual basis. When they're sewing I go round and check and then also they'd come to me when they're experiencing any difficulties…" [Trainer 8]

"First of all, I demonstrate the skill or the activity to them before asking them to do it for me to see if indeed they got what I demonstrated. I will do this till they all master the skill before moving on to another thing …"
[Trainer 11]

"I teach them the sewing itself and also other things too. Like how to talk to customers when they come to the shop, how to cost the things that will be needed for a particular sewing and many other things. Usually, when it comes to sewing, I teach all of them at a go and then focus individually because along the line I realised they have unique ways of learning so you need to give each one attention based on their unique ways of learning..."
[Trainer 5]

From the results it could be resolved that the trainers provided a mixture of on-the-job training, coaching and mentoring for the apprentices in the area of study. While learners are taught the rudiments of sewing where they are taken through the basic to

advanced principles guiding the art and science of sewing. Generally, apprentices are usually required to learn how to use a sewing machine, from design to cutting the pattern to finishing the garment.

Plate 4.1 Trainer demonstrating to apprentices (Source: Fieldwork 2020)

Plate 4.2 Researcher demonstrating to apprentices' freehand cutting (Source: Fieldwork 2020)

4.6.3 Reasons for choice of instructional method

The respondents were asked to indicate why they chose the instructional methods they use in their respective businesses. The respondents gave varying reasons for their choice of instructional method. Selected remarks have been provided below;

61

"oh you know this is a practical thing we"redoing so when you are learning or teaching someone you need to demonstrate it for them to see what you want them to do especially when it"s thefirst time. That is why I use that approach else they would not understand…" [Trainer 3]

"I use the method because I think that is the best of approaches. You know most of the apprentices are dropouts or people have academic problems. This should tell you something so you need to be patient and attend to their peculiar strengths and abilities...that is why I train them in the group but attend to them individually…" [Trainer 1]

From the responses, it can be concluded that the trainers adopt their respective methods of training because of their belief that is what will help them achieve effective outcomes which are for the apprentices to replicate what they have been taught. More so, the trainers" decisions are also informed by the level of academics of the apprentices.

4.6.4 Types of Skills Acquired by the Apprentices in the Garment Industry

The researcher sought to assess the types of skills acquired by the apprentices in the industry. Excerpts of the responses have been provided below;

"I teach them the sewing itself and it ranges from activities such as hand stitching, designing, drafting, cutting, sewing, ironing, stitching necklines, buttonholes, fixing of sleeves, collars etc. apart from the sewing I teach them a lot of things from customer relationship to how to negotiate when buying items. Courtesy and politeness and I must say that I actually train my apprentices to be better persons for themselves and their families as well. I treat them like my own children…" [Trainer 12]

"when they come first, I take them to go through the process of sewing simple hand stitches. They do needlework, how to take measurements, tack, hem, fix buttons and cut. Fixing of buttons and buttonholes by hand on completed garments, straight stitching the seams of „slit" using hand sewing machines. Their trainers will coach them through this practice for not less than three months. [Trainer 18]

"For me they are made to also observe the senior apprentices learn more complex skills such as the taking of body measurement, designing and cutting Kaba as well as pressing of garments. At the advanced level, they

are made to undertake pattern making, yokes and neckline on paper, designing of the skirt (slit) and Kaba using cement papers. The apprentices advance to cutting and sewing complete garments while others design blouses and sleeves using cement papers…" [Trainer 9]

From the responses, it can be concluded that the apprentices are introduced to a variety of skills. From basic sewing skills to advanced and complex sewing skills. More so, the apprentices learn how to manage their businesses; most importantly the very managerial skills they need to succeed.

Plate 4.3 Apprentices cutting fabric at the shop (Source: Fieldwork 2020)

Plate 4.4 Apprentices sewing fabric at the shop (Source: Fieldwork 2020)

4.6.5 Specific Competencies Gained after Completion of the Apprenticeship

The researcher asked the respondents to indicate the specific competencies the apprentices gain from their tutelage. The respondents outlined quite several competencies that apprentices acquire through their training. Selected comments have been outlined below;

> *"as part of the sewing, I also equip them with problem-solving skills. You see this business sometimes all about solving problems. You see that somebody will go and sew their dress somewhere and they won"t behappy with it and they will bring it here. It is up to you to find a way to correct it for the person. Others too will bring things that they"ve not used for a long time; a time that they were very slim and now they have put on weight so you need to find a way to make it fit them…"* [Trainer 13]

> *"I believe I teach them communication and teamwork skills. They will sew all right but they need additional competencies to be able to be successful in whatever they choose to do. So, I sometimes let them take charge of things at the shop. They learn organizational skills and how to manage their time and all that…"* [Trainer 1]

The apprentices learn various competencies through the apprenticeship period as it emerged that when apprentices arrive at the shop in the morning, the new apprentices take up cleaning chores at the workshop. They pull out the sewing machines and prepare them in readiness for the day"s work. The apprentices are also made to work together (teamwork), and sometimes they are given problem tasks to solve (problem-solving skills) on their own. They also naturally show that some of the apprentices take up leadership roles in their respective groupings. From the observations it was obvious that the apprentices not only get introduced to sewing but also, learn the virtues of teamwork, problem-solving as well as leadership skills.

4.6.6 Challenges in managing Apprentices

The respondents were asked to share their opinions on the challenges they encounter in managing apprentices. The respondents indicated several challenges which have been provided below;

> *"some of the apprentices are too slow learners and sometimes it gets frustrating. They keep making same mistakes all the time you have to talk talk talk…"*[Trainer 10]

> *"Some of the apprentices have basic problems. How do I say it mpo? Some have personal time management problems others too do one thing you correct them and they do another thing else. Others to don't respect at all; some form of insolent behaviour that they put up makes the training difficult…"* [Trainer 15]

> *"Some of the apprentices comes from poor homes and so when they come it"s likeindirectly, you"reresponsible for their upkeep. I have a place I offer some of them especially those who stay very far away from here to sleep. Sometimes when they come like that, I am the one who has to provide for everything their food, toiletries and so many other things…"*
> [Trainer 4]

From the responses, it can be said that the apprentices in the metropolis are slow to grasping concepts which makes it difficult for trainers. They also have personal problems such as time management, insolence and other attitudes that all together makes the training process a difficult exercise.

CHAPTER FIVE

SUMMARY OF FINDINGS; CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of the study was to explore the experiences of apprentices in the garment industry using Hohoe in the Volta Region as a case study. This chapter, therefore, presents the summary of findings, conclusions of the results as well as recommendations.

5.2 Summary of Findings

This study has shown that apprenticeship training undertaken in the garment industry takes the form of both direct one-on-one interaction with an apprentice as well as groups and that apprenticeship training is given every day to apprentices. Also, the findings suggest that most of the apprentices currently undergoing training have spent less than one (1) year on their respective training regimes. That notwithstanding, another significant finding is that the apprentices on average are given more than 7 hours of training each day and this as indicated earlier could be in the form of one-on-one training or group forms.

Another obvious finding emerging suggests that specific processes and approaches or techniques of instruction adopted in the training of apprentices in the garment industry. The study observed that most of the apprentices are trained on the jobs by taking part in the garment production activities and also, junior apprentices perform simple tasks with seniors delegated to perform complicated tasks. Furthermore, the study found that apprentices go through marketing training as well whereas the way of learning the business aspect of apprentices are sent on errands to learn how to market and as well purchase items.

Moreover, evidences from this study further suggest that apprentices are given basic literacy/numeracy, marketing and advertising and as well negotiating skills during their training which includes basic sewing skills; setting up the sewing machine, sewing equipment, workshop organisation, purchasing of materials, handling of tools/machinery, quality production and the skills and knowledge of dressmaking along with minor maintenance of the machine were also provided to apprentices.

Again, concerning the general competencies gained after completion of the apprenticeship in the garment industry the study discovered that the training given to apprentices in the garment industry were not disconnected from the wider skills/competencies needed for the job market. Besides, apprentices gained relevant knowledge in identifying and taking care of tools and equipment, taking accurate body measurements, making different varieties of seams, performing hand stitching, designing, drafting, cutting, sewing and finishing and as well doing final pressing, folding, packing and cost-estimation were the general competencies they have acquired after completion of the apprenticeship in the garment industry.

On the other hand, the study found that the apprentices in garment industries gain specific competencies such as the ability to effectively perform tasks in an ordered manner to ensure effective usage of materials for sewing and the ability to perform sewing tasks sequentially. The sequential skills gained ranged from identifying and taking care of tools/equipment through the taking of body measurement to folding, ironing, packing and cost evaluation among others. specific competencies gained by the apprentices after the completion of their training includes the identification of tools for cutting fabric, assembling all the pieces of garment for stitching, prepare

work area for sewing, applying fusing (vilene) on cut out pieces according to design and cutting out garment pieces.

The study also found that most of the apprentices declared they can confidently sew after successfully going through the period of apprenticeship.

5.2 Conclusions

The study concludes that apprenticeship training undertaken in the garment industry takes the form of both direct one-on-one and group interactions between the trainers and the apprentices. Apprentices are trained on the jobs by taking part in garment production activities. Junior apprentices perform simple tasks whereas senior apprentices are delegated to perform complicated tasks.

Moreover, the study concludes that apprentices are given basic literacy/numeracy, marketing and advertising and as well negotiating skills during their training programms which includes basic sewing skills; setting up the sewing machine, sewing technologies, workshop organisation, purchasing of materials, handling of tools/machinery, quality production and the skills and knowledge of dressmaking along with minor maintenance of the machine were also provided to apprentices.

Relative to general competencies apprentices acquire; the study concludes that apprentices in the garment industry after completion of the apprenticeship training can fit into the job market and are also able to identify and take care of tools and equipment, taking accurate body measurements, making different varieties of seams, performing hand stitching, designing, drafting, cutting, sewing and finishing and as well doing final pressing, folding, packing and cost-estimation were the general

competencies they have acquired after completion of the apprenticeship in the garment industry.

It can also be concluded that apprentices in garment industries gain specific competencies such as the ability to effectively perform tasks in an ordered manner to ensure effective utilisation of materials for sewing and the ability to perform sewing tasks sequentially. The sequential skills gained ranged from identifying and taking care of tools/equipment through taking of body measurement to folding, ironing, packing and cost evaluation among others. Other specific competencies gained after completion of their training includes apprentice''s ability to identify tools for cutting fabric, assemble all the pieces of garment for stitching, prepare work area for sewing, applying fusing (vilene) on cut out pieces according to design and cutting out garment pieces.

5.3 Recommendations

1. The National Tailors and Dressmakers Association in consultation with the National Vocational Training Institute (Apprentice Training Board) must develop a standard curriculum for its members to regularise the apprenticeship training in the garment industry

2. Some amount of theory should be taught to explain the significance of fabric grain, fabric properties and elements and principles of design as applied to garment design.

3. The general purpose of apprenticeship training in the garment industry is to construct garments, bringing the design to life, following specifications and

quality standards, apprentices training in the garment industry thus apprentices must be trained to acquire those needed skills specifically.

4. Apprentices in the garment industry must be taught to understand the end-to-end garment making process, be experienced sewers, operate all sewing machines effectively and apply stitching techniques by hand.

5. Although apprenticeship is an informal training system, it is regarded by the tailors and seamstresses and their apprentices as a professional training for which certificates are awarded representing skill and competency. Adequate preparation before examinations would give the apprentices confidence. Thus, all apprentices must be made to write periodic examinations in the cause of the training to boost their confidence before the final examination.

5.4 Suggestions for Further Research

- It is suggested that the unit of analysis for this study has been the apprentices who were undergoing their training at the time of the study. Their responses might not be a fair reflection of actual happenings in the industry hence it is therefore suggested that up and coming researchers increase the scope to include the perspectives of the trainers.

- The study analysis did not capture strategies for improvement in the apprenticeship training in the garment industry. Hence it is imperative that up-and-coming researchers after considering the trainer's perspectives should consider the strategies for improving the training particularly the contents.

REFERENCES

Aakernes, N. (2020). Both novice and expert? How apprentices develop vocational competence in workplaces where technology is continuously changing: Examples from the Norwegian media graphics programme. *Nordic Journal of Vocational Education and Training*, *10*(1), 18-42.

Adeniran, A., Ishaku, J., & Yusuf, A. (2020). Youth Employment and Labor Market Vulnerability in Ghana: Aggregate Trends and Determinants. In *West African Youth Challenges and Opportunity Pathways* (pp. 187-211). Palgrave Macmillan, Cham.

Adjei, P. (2018). *Labour Skills Mismatch in Urban Ghana* (Doctoral dissertation, University of Ghana).

Adotey, J. A., Pongo, N. A & Obinnim, E. (2017). Exploring the Antecedents of Mobile Garment Alteration Business in Ghana: Benefits, Potentials and Quandaries. *International Journal of Social Science and Humanities Research, 5*(2), 14-22.

Adotey, J., Obinnim, E. & Pongo N. A. (2016). Health and Safety Practices of Dressmaking Apprenticeship Training Programmes: A Case of the Tamale Metropolis in the Northern Region. *Arts and Design Studies, International Institute for Science, Technology & Education (IISTE)*, *48*, 54 – 63.

Ahadzie, W. (2009). The traditional informal apprenticeship system of West Africa as preparation for work. In *International handbook of education for the changing world of work* (pp. 261-275). Springer, Dordrecht.

Ainley, P., & Allen, M. (2014). Another Great Training Robbery or a Real Alternative for Young People? Apprenticeships at the start of the 21st Century. London: Radicaled.

Akers, R. L., & Jennings, W. G. (2016). Social learning theory. *Wiley Handbooks in Criminology and Criminal Justice*, 230-240.

Amankwah-Amoah, J. (2015). Explaining declining industries in developing countries: The case of textiles and apparel in Ghana. *Competition & Change*, *19*(1), 19-35.

Anderson, N. S., & Nieves, L. (2020). *The Apprenticeship: A Bipartisan Model of Opportunity. In Working to Learn* (pp. 23-65). Palgrave Macmillan, Cham.

Anokye, P. A., & Afrane, S. K. (2014). Apprenticeship Training System in Ghana: Processes, Institutional Dynamics and Challenges. *Journal of Education and Practice, 5(7*) 23-30.

Anwary, A. (2017). Feminised workforce in transnational production: Bangladesh ready-made garment industry. *History and Sociology of South Asia*, *11*(2), 174-191.

Archibald, M. M. (2015). Investigator triangulation: a collaborative strategy with potential for mixed methods research? *Journal of Mixed-Methods Research*. *10*(3), 228–250 (2015).

Ayentimi, D. T., Burgess, J., & Dayaram, K. (2018). Skilled labour shortage: a qualitative study of Ghana‟s training and apprenticeship system. *Human Resource Development International*, *21*(5), 406-424.

Bakhshi, H., Downing, J. M., Osborne, M. A., & Schneider, P. (2017). *The future of skills: Employment in 2030*. USA: Pearson.

Berg, B. L. (2012). *Qualitative Research Methods for the Social Science* (8th ed.). Long Beach: Allyn and Bacon.

Billett, S. (2016). Apprenticeship as a mode of learning and model of education. *Education and Training, 58*(6), 613-628.

Council for Technical and Vocational Education and Training (COTVET) (2010). *National Apprenticeship Strategy 2010–2014*. COTVET, Accra.

Crépon, B., & Premand, P. (2018). *Creating new positions? direct and indirect effects of a subsidized apprenticeship program*. Paris: The World Bank.

Creswell, J. W. (2015). *A concise introduction to mixed methods research.* Sage, Thousand Oaks.

Cuevas, F., Coll, C., & Gimenez, A. (2020). Beneficiaries of the Apprenticeship Process. *The Success of Apprenticeships: Views of Stakeholders on Training and Learning*, *3*, 87-97.

Czekala, M., Bukietynska, A., Gurak, M., Jagodzinski, J., & Klosowski, J. (2019). Condition analysis and forecasting in the fashion industry. *International Journal of Economics, Finance and Management Sciences, 7*(2), 74.

Dalati, S., & Gómez, J. M. (2018). Surveys and Questionnaires. In *Modernizing the Academic Teaching and Research Environment* (pp. 175-186). Springer, Cham.

Datta, N., Assy, A. E., Buba, J., Johansson De Silva, S., & Watson, S. (2018). *Integrated Youth Employment Programs: A Stocktake of Evidence on What Works in Youth Employment Programs*. World Bank.

Davis, W. (2017). The African growth and opportunity act and the African continental free trade area. *AJIL Unbound*, *111*, 377-383.

De la Croix, D., Doepke, M., & Mokyr, J. (2018). Clans, guilds, and markets: Apprenticeship institutions and growth in the preindustrial economy. *The Quarterly Journal of Economics*, *133*(1), 1-70.

DeCarvalho, R. J. (1991). The humanistic paradigm in education. *The Humanistic Psychologist*, *19*(1), 88-104.

Deissinger, T. (2004). Apprenticeship systems in England and Germany: decline and survival. In *Towards a history of vocational education and training (VET) in Europe in a comparative perspective: First international conference 2002* (pp. 28-45).

Deissinger, T. (2019). The Sustainability of the Dual System Approach to VET. *The Wiley Handbook of Vocational Education and Training*, 293.

Denzin, N. K., & Lincoln, Y. S. (Eds.) (2011). *The SAGE Handbook of Qualitative Research* (5th ed.). Thousand Oaks, CA: SAGE Publications.

Di Maio, G., Graf, L., & Wilson, A. (2019). Torn between economic efficiency and social equality? Short-track apprenticeships in Denmark, Germany and Switzerland. *European Educational Research Journal*, *18*(6), 699-723.

Drobot, L. (2012). Qualitative research in social sciences and education–basic paradigms and research methods. *Research in Pedagogy*, *2*(2), 11–20.

Eichhorst, W., & Rinne, U. (2018). Promoting youth employment in Europe: Evidence-based policy lessons. In *European Youth Labour Markets* (pp. 189-204). Springer, Cham.

Epstein, S. A. (1991). *Wage labour and guilds in medieval Europe*. UNC Press Books.

Eraut, M. (2004). Informal learning in the workplace. *Studies in Continuing Education, 26*(2), 247-273.

Essel, O. Q. (2019). Challenges Hampering the Growth of Dress Fashion Design in the Ghana Fashion Industry. *Journal of Small Business and Entrepreneurship*, *7*(2), 1-6.

Etikan, I., & Babatope, O. (2019). A Basic Approach in Sampling Methodology and Sample Size Calculation. *Med Life Clin*, *1*(1), 1006.

Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, *5*(6), 00149.

European Centre for the Development of Vocational Training (Cedefop). (2019). Apprenticeship review: Cyprus: adding value: rethinking apprenticeships.

Ezenwakwelu, C. A., Egbosionu, N. A., & Okwo, H. U. (2019). Apprenticeship Training Effects on Entrepreneurship Development in Developing Economies. *Academy of Entrepreneurship Journal*, *25*(1), 1-21.

Flick, U. (2014). *An introduction to qualitative research* (5th ed.). London: SAGE.

Fortwengel, J. (2019). Collaborating on Implementing Apprenticeships: Promises, Challenges, and Solutions for Managing Networks. *Foreword v 1. Introduction 1 2. Economy and Business 2*, 62.

Fotrousi, F., Seyff, N., & Börstler, J. (2017, September). Ethical considerations in research on user feedback. In *2017 IEEE 25th International Requirements Engineering Conference Workshops (REW)* (pp. 194-198). IEEE.

Fudenberg, D., & Rayo, L. (2019). Training and effort dynamics in apprenticeship. *American Economic Review*, *109*(11), 3780-3812.

Fuller, A. (2016). The growth of apprenticeship in England: doubts beneath the numbers. *Challenge*, *59*(5), 422-433.

Fuller, A., & Unwin, L. (Eds.). (2014). *Contemporary apprenticeship: International perspectives on an evolving model of learning*. Routledge.

Gathii, J. T. (2019). Agreement Establishing the African Continental Free Trade Area. *International Legal Materials*, *58*(5), 1028-1083.

Gessler, M. (2019). Concepts of Apprenticeship: Strengths, Weaknesses, and Pitfalls. *Handbook of Vocational Education and Training: Developments in the Changing World of Work*, 677-709.

Ghana Statistical Service. (2015). *Countrystat Ghana*. Ghana: Ghana Statistical Service.

Girgis, F., Lee, D. J., Goodarzi, A., & Ditterich, J. (2018). Toward a neuroscience of adult cognitive-developmental theory. *Frontiers in neuroscience*, *12*, 4.

Göggel, K., & Zwick, T. (2012). Heterogeneous wage effects of apprenticeship training. *The Scandinavian Journal of Economics*, *114*(3), 756-779.

Gopnik, A., O‟Grady, S., Lucas, C. G., Griffiths, T. L., Wente, A., Bridgers, S., & Dahl, R. E. (2017). Changes in cognitive flexibility and hypothesis search across human life history from childhood to adolescence to adulthood. *Proceedings of the National Academy of Sciences*, *114*(30), 7892-7899.

Gough, K. V., Langevang, T., Yankson, P. W., & Owusu, G. (2019). Shaping geographies of informal education: a global South perspective. *Annals of the American Association of Geographers*, *109*(6), 1885-1902.

Gray, D. E. (2019). *Doing research in the business world*. Sage Publications Limited.

75

Greene, J. C. (2015). Preserving distinctions within the multimethod and mixed methods research merger. In: Hesse-Biber, S.N., Johnson, R.B. (eds.), The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry, pp. 606–615. Oxford University Press, Oxford.

Greig, M. (2019). Factors affecting modern apprenticeship completion in Scotland. *International Journal of Training and Development*, *23*(1), 27-50.

Haleblian, J., & Finkelstein, S. (1999). The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective. *Administrative Science Quarterly*, *44*(1), 29-56.

Haolader, F. A., Foysol, K. M., & Clement, C. K. (2017). Technical and Vocational Education and Training (TVET) in Bangladesh–Systems, curricula, and transition pathways. In Vocational education and training in times of economic crisis (pp. 201-227). Springer, Cham.

Hardy, M. L., Mbiti, I. M., Mccasland, J. L., & Salcher, I. (2019). *The Apprenticeship-to-Work Transition: Experimental Evidence from Ghana*. The World Bank.

Harinie, L. T., Sudiro, A., Rahayu, M., & Fatchan, A. (2017). Study of Bandura''s Social Cognitive Learning Theory for the entrepreneurship learning process. *Social Sciences*, *6*(1), 1.

Hartono, Y., Haryanto, S., & Asrowi, A. (2018). Character education in the perspective of humanistic theory: A case study in Indonesia. *EDUCARE*, *10*(2), 34-45.

Helper, S., Noonan, R., Nicholson, J. R., & Langdon, D. (2016). The Benefits and Costs of Apprenticeships: A Business Perspective. *US Department of Commerce*.

Hesse-Biber, S.N. (2010). *Mixed methods research: Merging theory with practice.* New York: Guilford Press.

ILO-World Bank (2013). *Towards a Model Apprenticeship Framework: A Comparative Analysis of National Apprenticeship Systems, International*

Labour   Organization,   International   Bank   for   Reconstruction   and Development/The World Bank, Geneva, Switzerland.

International Labour Organization (ILO) (2011). *Upgrading Informal Apprenticeship Systems.* Skills for Employment. Geneva.

International Labour Organization (ILO) (2012). Upgrading informal apprenticeship: a resource guide for Africa. International Labour Office, Skills and Employability Department. Geneva: ILO

International Labour Organization (ILO). (2017). *ILO Toolkit for Quality Apprenticeships, Volume 1*: Guide for Policy Makers.

Johnson, A. P. (2014). Humanistic learning theory. *Education psychology: Theories of learning and human development*, 1-10.

Johnson, A. P. (2017). Humanistic and holistic learning theory.

Johnson, R. B., & Gray, R. (2010). A history of philosophical and theoretical issues for mixed methods research. In A. Tashakkori & C. Teddlie (Eds.), Sage handbook of mixed

Jørgensen, C. H. (2018). The modernisation of the apprenticeship system in Denmark 1945–2015. In *Vocational Education in the Nordic Countries* (pp. 171-190). Routledge.

Karmel, T., & Roberts, D. (2012). *The role of culture' in apprenticeship completions*. National Centre for Vocational Education Research.

Khattak, A., Stringer, C., Benson-Rea, M., & Haworth, N. (2015). Environmental upgrading of apparel firms in global value chains: Evidence from Sri Lanka. *Competition & Change*, *19*(4), 317-335.

Kim, H. (2004). Transfer of training as a sociopolitical process. *Human Resource Development Quarterly, 15*(4), 497.

King, K. (2019). *Education, skills and international cooperation: Comparative and historical perspectives* (Vol. 36). Springer.

Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2001). Experiential learning theory: Previous research and new directions. *Perspectives on thinking, learning, and Cognitive Styles*, *1*(8), 227-247.

Koopman, R., Wang, Z., & Wei, S. J. (2009). *A world factory in global production chains: estimating imported value added in Chinese exports*. Centre for Economic Policy Research.

Kucuk, S. (2018). How Pre-service Teachers Learn Educational Technology with the Situated Learning Approach. *Journal of Technology and Teacher Education*, *26*(2), 249-274.

Kumar, R. (2019). *Research methodology: A step-by-step guide for beginners*. Sage Publications Limited.

Kupec, C., & Christman, S. (2018). Apprenticeship: A Pathway for the Cost Estimating Profession and the Greater STEM Workforce. *Journal for Excellence in Business & Education*, *5*(2), 23-45.

Lacy, P., Long, J., & Spindler, W. (2020). Fashion Industry Profile. In *The Circular Economy Handbook* (pp. 185-195). Palgrave Macmillan, London.

Lall, S., Navaretti, G. B., Teitel, S., & Wignaraja, G. (2016). *Technology and enterprise development: Ghana under structural adjustment*. London: Springer.

Lamptey, Y. A., & Debrah, Y. A. (2018). Skills Training in the Informal Sector: Perspectives from Ghana. *African Journal of Employee Relations*, *42*(1), 1-16.

Lancy, D. F. (2012). "First you must master pain": the nature and purpose of apprenticeship. *Anthropology of Work Review, 33*(2), 113-126.

Lassnigg, L. (2017). Apprenticeship Policies coping with the crisis: A comparison of Austria with Germany and Switzerland. In *Vocational Education and Training in Times of Economic Crisis* (pp. 127-148). Springer, Cham.

Lawrence, B. (2020). *Research design*. In *The County Diagnostic* (pp. 43-94). Springer Spektrum, Wiesbaden.

Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. Guilford Publications.

Lerman, R. I. (2017). Skill Development in Middle-Level Occupations. *The Oxford Handbook of Skills and Training*, 180.

Lis, C., & Soly, H. (2017). *Craft guilds in comparative perspective: the Northern and Southern Netherlands, a survey.* In Craft Guilds in the Early Modern Low Countries (pp. 13-43). London: Routledge.

Loveder, P. (2017). Australian Apprenticeships: Trends, Challenges and Future Opportunities for Dealing with Industry 4.0. Conference Paper. *National Centre for Vocational Education Research (NCVER)*.

Mackay, D., Pham, A., & Bayley, T. (2019). Youth Ready for Youth Futures: A Case Study of Project-Based Learning. *Transformations in Tertiary Education: The Scholarship of Engagement at RMIT University*, 71.

Madichie, N. O., & Saeed, A. T. (2010). The innovation dilemma of the Ghanaian textile industry. *International Journal of Entrepreneurship and Innovation Management*, *11*(2), 228-238.

Mahmud, M. S., Rajath, V. D., Mahmud, R., Jahan, M. N., Hasan, M. R., & Rahman, K. M. A. (2017). Prevalence of health hazards: A study on the female workers of the garment industry in Gazipur District, Bangladesh. *Journal of Applied and Advanced Research*, *2*(3), 184-188.

McNamee, T., Pearson, M., & Boer, W. (Eds.). (2015). *Africans Investing in Africa: Understanding business and trade, sector by sector*. Springer.

Mejia, A. (2016). UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training UN Campus Platz der Vereinten Nationen 1 53113 Bonn.

Mohrenweiser, J. (2016). Recruitment and apprenticeship training. *Industrielle Beziehungen/The German Journal of Industrial Relations*, 6-24.

Mokyr, J. (2019). *The Economics of Apprenticeship. Apprenticeships through the Ages*. Cambridge University Press.

Molz, A. (2015). *Delivering TVET through Quality Apprenticeships: online conference organized by UNESCOUNEVOC*. Background note. UNESOC. Available online at https://unevoc.unesco.org/eforum/BackgroundNote-VC-ApprenticeshipMolz.pdf

Mujere, N. (2016). Sampling in research. In *Mixed methods research for improved scientific study* (pp. 107-121). IGI Global.

Mulkeen, J., Abdou, H. A., Leigh, J., & Ward, P. (2019). Degree and Higher-Level Apprenticeships: an empirical investigation of stakeholder perceptions of challenges and opportunities. *Studies in Higher Education*, *44*(2), 333-346.

Munkaila, A. (2016). The Major Constraints Militating Against Apprenticeship Training Schemes in the Informal Sector of Ghana: The Case of Tamale Metropolis. *International Journal of Economics, Commerce and Management, IV*(1).

Nabi, R. L., & Prestin, A. (2017). Social learning theory and social cognitive theory. *The International Encyclopedia of Media Effects*, 1-13.

Narendra, K. S., Wang, Y., & Mukhopadhay, S. (2016, December). Fast Reinforcement Learning using multiple models. In *2016 IEEE 55th Conference on Decision and Control (CDC)* (pp. 7183-7188). IEEE.

Newman, B. M., & Newman, P. R. (2017). *Development through life: A psychosocial approach*. Cengage Learning.

Nicholson, J., & Higgins, G. E. (2017). Social structure social learning theory: Preventing crime and violence. *In Preventing crime and violence* (pp. 11-20). Springer, Cham.

Nolintha, V., & Jajri, I. (2016). The garment industry in Laos: technological capabilities, global production chains and competitiveness. *Asia Pacific Business Review*, *22*(1), 110-130.

O'Donohue, W., & Kitchener, R. (Eds.). (1998). *Handbook of behaviourism*. Elsevier.

Ogwo, B. A. (2019). Work-based Learning of Technical and Vocational Education and Training Programmes in Sub-Saharan Africa. *Work-based Learning as a Pathway to Competence-based Education*, 147.

Palmer, R. (2009). Formalising the informal: Ghana's national apprenticeship programme. *Journal of Vocational Education and Training*, *61*(1), 67-83.

Pietilä, A. M., Nurmi, S. M., Halkoaho, A., & Kyngäs, H. (2020). Qualitative Research: Ethical Considerations. In *The Application of Content Analysis in Nursing Science Research* (pp. 49-69). Springer, Cham.

Plano Clark, V. L., Ivankova, N. V. (2016). *Mixed methods research: A practical guide to the field*. Thousand Oaks: Sage.

Poulsen, S. B., & Eberhardt, C. (2016). *Approaching apprenticeship systems from a European perspective*. Bundesinstitut für Berufsbildung.

Prak, M., & Wallis, P. (2019). *Apprenticeship in early modern Europe*. Cambridge University Press.

Pramesti, S. L. D., & Salafudin, S. (2018). Development of humanistic statistics learning devices based on inquiry and mind mapping models. *Al-Jabar: Jurnal Pendidikan Matematika*, *9*(1), 85-93.

Pratt, D., & Johnson, J. (1998). The apprenticeship perspective: Modelling ways of being" in Pratt, D. (ed.) *Five Perspectives on Teaching in Adult and Higher Education* Malabar FL: Krieger Publishing Company.

Pratt, D. (1998). *Five perspectives on teaching in adult and higher education.* Malabar FL: Krieger Publishing Company.

Prestine, N. A., & LeGrand, B. F. (1991). Cognitive learning theory and the preparation of educational administrators: Implications for practice and policy. *Educational administration quarterly*, *27*(1), 61-89.

Purswell, K. E. (2019). Humanistic learning theory in counselor education. *Professional Counselor*, *9*(4), 45-56.

Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, *6*(2), 1-5.

Regel, I. J., & Pilz, M. (2019). Informal learning and skill formation within the Indian informal tailoring sector. *International Journal of Training Research*, *17*(2), 140-156.

Ryan, L., & Lőrinc, M. (2018). Perceptions, prejudices and possibilities: young people narrating apprenticeship experiences. *British Journal of sociology of Education*, *39*(6), 762-777.

Saris, W. E., & Gallhofer, I. N., (2014). *Design, evaluation, and analysis of questionnaires for survey research.* Hoboken: John Wiley & Sons.

Schoen, R. F. (2019, July). Women and rural industrialization: Garment production reaches old land and new labour in Bangladesh. In *Women's Studies International Forum* (Vol. 75, p. 102248). Pergamon.

Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, *69*(2), 107-131.

Sellers, C. S., & Akers, R. L. (2018). Social learning theory: Correcting misconceptions. In *the Essential Criminology Reader* (pp. 89-99). London: Routledge.

Shariff, S. M., & Muhamad, M. (2010). Learning in an industrial practicum training program: a case study in a public university in Malaysia. *World Applied Sciences Journal*, *11*(11), 1361-1368.

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research*, *3*(7), 749-752.

Shaw, S., Gordon, H. R., Xing, X., & Carroll, M. C. (2019). Why Apprenticeship Programs Matter to 21st Century Postsecondary Education. *CTE Journal*, *7*(2), 34-56

Sheridan, I. (2019). *Work-Based Learning in Ireland. In Global Perspectives on Work-Based Learning Initiatives* (pp. 218-243). IGI Global.

Sides, C., & Mrvica, A. (2017). *Internships: Theory and practice*. London: Routledge.

Slavich, B., & Castellucci, F. (2016). Wishing upon a star: How apprentice-master similarity, status and career stage affect critics'' evaluations of former apprentices in the haute cuisine industry. *Organization Studies*, *37*(6), 823-843.

Smith, E., & Kemmis, R. B. (2013). Good practice principles in apprenticeship systems: An international study. *The Online Journal for Technical and Vocational Education and Training in Asia*, *1*, 1-12.

Sonnenberg, K. (2012). Traditional apprenticeship in Ghana and Senegal: Skills development for youth for the informal sector. *Journal of International Cooperation in Education*, *15*(2), 93-105.

Sreejesh, S., Mohapatra, S., & Anusree, M. R., (2014). *Business research methods - An applied orientation*. Cham: Springer International Publishing.

Steedman, H. (2010). *The state of apprenticeship in 2010: international comparisons-* Australia, Austria, England, France, Germany, Ireland, Sweden, Switzerland: a report for the Apprenticeship Ambassadors Network.

Steedman, H. (2012). Overview of apprenticeship systems and issues ILO contribution to the G20 task force on employment. *International Labour Organization*, 23-45.

Sulemana, I. (2014). *Factors influencing the performance of small scale entrepreneurs in the garment industry of the Tamale Metropolis of Ghana* (Doctoral dissertation, University of Ghana).

Gopura, S., Payne, A. R., Buys, L., & Bandara, D. C. (2019). Fashion exposure. *Journal of Fashion Marketing and Management: An International Journal*, *34*, 45-67.

Swain, J. (2016). *Ethical considerations in research and education.* London: SAGE Publications.

Tan, J. P., Lee, K. H., Flynn, R., Roseth, V. V., & Nam, Y. J. J. (2016). *Workforce Development in emerging economies: Comparative perspectives on institutions, praxis, and policies*. Paris: The World Bank.

Taylor, A., & Freeman, S. (2011). „Made in the trade‟: youth attitudes toward apprenticeship certification. *Journal of Vocational Education & Training*, *63*(3), 345-362.

Teal, F. (2016). Are apprenticeships beneficial in sub-Saharan Africa? *IZA World of Labor*.

Tennyson, R. D., & Rasch, M. (1988). Linking cognitive learning theory to instructional prescriptions. *Instructional Science*, *17*(4), 369-385.

Tillé, Y., & Wilhelm, M. (2017). Probability sampling designs: principles for the choice of design and balancing. *Statistical Science*, *32*(2), 176-189.

Turapovna, A. M., & Abduhalilovich, R. B. (2020). Clothes market in Uzbekistan: competitive environment, development. *Proceeding of The ICECRS*, *5*.

Ursache, M., Avădanei, M. L., Ionesi, D. S., & Loghin, E. (2017, October). Education-employment partnership for VET in the fashion sector. In *IOP Conference Series: Materials Science and Engineering* (Vol. 254, No. 22, p. 222007). IOP Publishing.

Wilson, V. (2016). Research methods: sampling. *Evidence Based Library and Information Practice*, *11*(1 (S)), 69-71.

Wolter, S. C., & Ryan, P. (2011). Apprenticeship. In *Handbook of the Economics of Education* (Vol. 3, pp. 521-576). Elsevier.

Wonder, M., & Tenson, M. (2017). The informal apprenticeship miracle: A Case for Mbare-Magaba Informal Industry, Zimbabwe. *Eastern Africa Social Science Research Review*, *33*(2), 43-56.

Woods, J. G. (2012). An analysis of apprentices in the US construction trades. Education+ Training.

Wu, Q., Bai, B., & Zhu, X. (2019). *Technical and Vocational Education and Training in the Philippines: Development and Status Quo.* In Vocational Education and Training in ASEAN Member States (pp. 155-171). Springer, Singapore.

Yamada, S. (2020). Traditional Apprenticeship as an Educational and Life Experience: Life Stories of Young Auto Repair Apprentices in Kumasi, Ghana. *The Challenge of African Potentials: Conviviality, Informality and Futurity*, 181.

Young, I. (2019). *Apprenticeship: Lessons from the German dual studies model of vocational education and training* (Doctoral dissertation, Education: Faculty of Education).

Young, T. J. (2016). 11 Questionnaires and Surveys. *Research methods in intercultural communication: A practical guide*, 165.

Yunus, M., & Yamagata, T. (2012). The garment industry in Bangladesh. *Dynamics of the Garment Industry in Low-Income Countries: Experience of Asia and Africa (Interim Report). Chousakenkyu Houkokusho, IDE-JETRO*.

Zhang, K. Y., & Cerdin, J. L. (2020). The Chinese Apprenticeship Model: The Spirit of Craftsmanship. *The Success of Apprenticeships: Views of Stakeholders on Training and Learning*, *3*, 187-192.

Zhang, W. (2020). Consumption, taste, and the economic transition in modern China. *Consumption Markets & Culture*, *23*(1), 1-20.

Zhao, Z. (2018). Modern apprenticeship as an effective transition to working life: Improvement of the Vocational Education System in China. In *Transitions to Post-School Life* (pp. 51-66). Springer, Singapore.

Lawless, K. A., & Pellegrino, J. W. (2007). Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. *Review of Educational Research*, *77*(4), 575-614.

APPENDIX A

QUESTIONNAIRES FOR DRESSMAKING APPRENTICES

This questionnaire is designed to collect information on your experiences of dressmaking apprenticeship training. This study is for academic purposes only; hence, the results of this research are earmarked to contribute to dressmaking apprenticeship training. Your responses will remain confidential, and the results will be used for academic purposes only. You can use a [√] mark to indicate your responses for items with alternative responses.

THANK YOU

SECTION A: DEMOGRAPHICS

1. Name of dressmaking shop_____

2. Gender: Female   [ ]   Male   [ ]

3. Age: below 20 [ ]   21-30 [ ]   31-40 [ ]   41-50 [ ]   50   & above[ ]

4. Educational qualification: No formal education [   ] Primary education [   ] JSS [   ] SSS\Vocational [   ]

5. How long have you been an apprentice? less than a year [   ] 1 -2years [   ] 3-4 Others please specify_____

6. Your position in this workshop. Senior Apprentice [   ] Junior Apprentice [   ]

7. How much did you pay for your training?

   _____

8. How does your master teach you? Individually [   ] in groups [   ]

9. Does your master teach you every day? Yes [   ] No [   ]

10. How many hours does your madam spends teaching you each day 1-2 hours [   ] 3-4 hours [   ] 5-6 hours [   ] More than 7 hours [   ]

11. What other work do you do at the workshop in addition to learning how to sew?_____

    _____

SECTION B: SPECIFIC PROCESS/APPROACH/TECHNIQUE OF INSTRUCTION ADOPTED IN THE TRAINING OF APPRENTICES IN THE GARMENT INDUSTRY

Process/approach/technique of training adopted	*5*	*4*	*3*	*2*	*1*
Teaching and learning involve interaction between the madam and apprentices through the use of teaching aids and the organization and presentation of content to apprentices					
Madam/master talks less and allowed apprentices to discuss issues among ourselves					
Madam/master provides opportunity for self initiated training to enable apprentices experiment and find solution to the sewing problems					
Apprentices are trained on-the-job by taking part in the garment production activities at the workshop					
Madam/master delegates the most senior apprentices to perform more complicated tasks like cutting out of garments					
Junior apprentices performed simpler tasks like ironing, tacking and hemming under the supervision of the senior apprentice					
Apart from learning the practical skills of sewing, apprentices are also sent on errands to purchase materials for sewing and so we are able to learn about purchasing and marketing trends during the process					

Key: 5 = A very large extent, 4 = large extent 3 = moderate extent, 2 = Small extent 1 = Not at all

SECTION C: TYPES OF SKILLS APPRENTICES IN THE DRESSMAKING SHOPS ARE TAUGHT

Skills apprentices are taught	5	4	3	2	1
The skills and knowledge of dressmaking along with minor maintenance of the machine					
Quality production of various garments					
Use of tools and equipment in the dressmaking trade					
Sewing terminologies					
Apprentices were taught how to take and record body measurements					
Making of basic hand and machine stitches					
Designing, drafting, pattern making and fabric estimation					
Cutting, tailoring and finishing of garments					
Defects and alteration to fitting problems					
Processes of quality control, packaging, labelling					
Workshop organization					
Purchasing of materials					
Negotiating with customers					
Marketing and advertising					
Safe handling of tools and equipment in the workshop					
Literacy/numeracy					

Key: 1=Strongly Disagree; 2= Disagree; 3=Not sure; 4=Agree; 5=Strongly Agree

SECTION D: GENERAL COMPETENCIES GAINED AFTER COMPLETION OF THE APPRENTICESHIP IN THE GARMENT INDUSTRY

General competencies gained after completion of the dressmaking apprenticeship	5	4	3	2	1
Identify and take care of the different tools and equipment used for drafting, cutting & sewing					
Identify and practice basic (permanent and temporary) and decorative stitches.					

Take accurate body measurements systematically.					
Master the use of sewing machine and taking care of the machine.					
Make different varieties of seams by applying bias, piping, facing and plackets					
Perform hand stitching, attach hook & eye, buttons, buttonhole etc.					
Design, drafting, cutting, sewing and finishing of a garment.					
Do final pressing, fold, pack and cost estimation of finished garment.					

Key: 5 = A very large extent, 4 = large extent 3 = moderate extent, 2 = Small extent 1 = Not at all

SECTION E: SPECIFIC COMPETENCIES GAINED AFTER COMPLETION OF THE DRESSMAKING APPRENTICESHIP (SEQUENTIALLY)

Specific competencies gained after completion of the dressmaking apprenticeship	5	4	3	2	1
Take design specifications from the client.					
Take measurements of the client according to the garment design					
Estimate cost of labour charges and material					
Prepare work area for sewing					
Clean the sewing machine					
Test sewing machine					
Set machine according to garment design					
Make pattern according to design variations and requirement					
Finalise the pattern by giving seam allowances					
Identify tools for cutting the fabric					
Examine the grainline of fabric					
Set pattern on fabric and pinning pattern on the fabric					
Cutting out garment pieces					
Applying fusing (Vilene) on cut out pieces according to design.					
Assembling all the pieces of garment for stitching					
Compare the stitched garment with design specifications, measure stitched garment for					

differences and perform alterations if required					
Remove unwanted threads from the stitched garment, diagnose stitch faults, remove stitch faults and perform finishing					
Ironing of the finished garment					

Key: 5 = A very large extent, 4 = large extent 3 = moderate extent, 2 = Small extent 1 = Not at all

Are you able to sew confidently now without supervision by your madam?

     Yes [ ]   No [ ]

Do you sit for any examination during the course of training? Yes [   ] No [   ]

What would you do after your training?

_____

_____

_____

_____

_____

THANK YOU

APPENDIX B

INTERVIEW GUIDE FOR SHOP OWNERS/MANAGERS

Section A Demography

Interview No.: _____

Date/Time: _____

Interviewee: _____

Name of Fashion House: _____

Female [   ]   Male [   ]

SECTION B: Operational Background

1. How long have you been sewing?

2. For how long have you been operating the shop?

3. How many apprentices do you have at the moment?

4. How many apprentices do you pass out on yearly basis since you began operating this shop?

SECTION C: Processes/approaches/techniques of instruction

5. What mode of instruction do you adopt in teaching your apprentices?

6. Why do you think that method of instruction is appropriate?

SECTION D: Effects of the methods of instruction

7. What skills and competencies do you teach your apprentices in your shop?

8. What challenges do you encounter in managing your apprentices?

9. Any comments?

THANK YOU