DETERMINING SKILLS GAP OF TAILORING AND DRESSMAKING GRADUATES OF VOCATIONAL TRAINING CENTRES IN NAIROBI CITY COUNTY, KENYA.

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DECLARATION

This Thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

I wish to dedicate this thesis to my loving son Mr. Ethan Ateka Barongo who regardless of his age continuously supported me to achieve this milestone.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OFABBREVIATION AND ACRONYMS

BETAs	The Bottom-Up Economic Transformation Agenda
CAD	Computer-Aided Design
GoK	Government of Kenya
KUERB	Kenyatta University Ethical Review Board
NACOSTI	National Commission for Science Technology and Innovation
SMEs	Small and medium enterprises
SPSS	Statistical Packages for Social Sciences
TVET	Technical and Vocational Education and Training
UNDP	United Nations Development Programme
VET	Vocational Education and Training
VTCs	Vocational Training Centres

DEFINITION OF TERMS

Dressmaking: The occupation of making women's clothing.

Hard Skills: Are mastered abilities obtained and improved through practice, repetition and education.

Soft Skills: An attribute that enhances an individual's ability to get a job done. They include interpersonal skills, relationships with other people, attitude, teamwork, creative thinking, communication among others.

Tailoring: The process of designing, cutting, fitting, and sewing clothing, especially custom-made garments, to meet specific measurements or styles for individual clients.

TVET: It is a type of educational program focused on equipping trainees with the practical skills and knowledge needed for specific careers, especially in technical and vocational fields.

VTC: V**ocational Training Centres:** Educational institutions that offer practical, hands-on training in various trades, including tailoring and dressmaking. These centres focus on preparing individuals for specific occupations through skill-based instruction.

Workplace: Refers to a physical place where someone works.

OPERATIONAL DEFINITION OF TERMS

Industry: Is a category of active enterprises and organizations which produce or sell products, services or sources of revenue.

Performance: Refers to completion of a certain task measured against known standards of completeness that have been predetermined by the industry.

Skills gap: Refers to the difference between the skills required for a job and the skills an employee actually has. Because of the skills gap an employee might not be able to perform the job comprehensively.

Tailoring: Process of making, altering, or repairing clothes, particularly focusing on custom-fit garments. It involves the use of specific sewing techniques to create a variety of clothing items.

Dressmaking: A specialized form of tailoring that focuses on the design, creation, and alteration of women's clothing. It includes tasks such as cutting patterns, stitching, fitting, and finishing garments.

Vocational Training Centres (VTCs): Educational institutions that provide specialized training in practical skills and trades, such as tailoring and dressmaking, to prepare trainees for employment in specific industries. These institutions focus on equipping trainees with technical, hands-on skills rather than academic knowledge.

Curriculum: The structured content and materials used in vocational training programs, outlining the skills, knowledge, and competencies that trainees are expected to learn during their studies. In this context, the curriculum of tailoring and dressmaking programs at VTCs.

Employers: Individuals or organizations in the tailoring and dressmaking industry who hire graduates from vocational training centers. Employers provide feedback on the

relevance and adequacy of the skills that graduates bring to the workforce.

ABSTRACT

The Government of Kenya recognizes the critical role of Technical and Vocational Education and Training (TVET) in driving economic growth by equipping individuals with essential skills and competencies. This study aimed to assess the skills gaps among graduates of tailoring and dressmaking programs from Vocational Training Centres (VTCs) in Nairobi City County and propose interventions to address these gaps. The objectives of the study included evaluating the skills acquired by VTC graduates, identifying the skills required by employers, analyzing potential gaps in the tailoring and dressmaking curriculum, and recommending actions to align the training and the industry. A descriptive survey design was employed, with a sample size of 232 participants, including 6 trainers, 205 graduates, and 21 employers from 11 public VTCs and local markets in Nairobi. Quantitative data were collected using structured questionnaires, while qualitative data were gathered through structured interview guides for trainers and employers. Data analysis was conducted using SPSS for statistical analysis, and content analysis was applied to identify key themes from the qualitative responses. The study found that while graduates had strong technical skills in keeping the shop clean (mean=4.22); care and maintenance of sewing machines (mean 3.87); garment assembly and stitching (3.72) and interpretation of garment designs (3.69), significant gaps were identified in advanced skills such as customer care (mean=3.66); studying fashion trends (mean=3.63); record keeping (3.57); buying fabric (mean=3.42) and lastly marketing (mean=3.25). All these being below the average mean of 3.68. The study recommends revising the curriculum to be more industry-responsive by integrating advanced techniques, modern technologies, and soft skills into the training programs. It further suggests that both the National Government and Nairobi City County support VTCs by providing modern training tools and materials to enhance practical skills. Collaboration between training institutions and the industry is crucial to align the curriculum with real-world demands, with active employer involvement in curriculum development and training. These interventions will help close the existing skills gap and improve the employability of VTC graduates.

CHAPTER 1: INTRODUCTION

1.1 Background to the Study

Vocational training plays a crucial role in equipping young people with the skills required to participate in Kenya's workforce. In recent years, the Kenyan government has focused on Technical and Vocational Education and Training (TVET) to combat youth unemployment and build a skilled labor force (Kimemia & Oyucho, 2021). The goal of TVET is to provide skills that meet both individual needs and market demands, supporting economic growth and addressing poverty (Atchoarena & Delluc, 2019). However, the effectiveness of these programs depends on their ability to align with industry requirements, which is often a challenge (Oketch, 2007). In this study the researcher, on determining the skills gap among tailoring and dressmaking graduates from vocational training centers in Nairobi City County, Kenya, explored the alignment between the competencies taught in training institutions and the skills required by the garment industry.

Given Kenya's increasing youth population and high unemployment rates, especially in urban centers, vocational education has been positioned as a potential solution to the employment crisis (Kimemia & Oyucho, 2021). In Nairobi, vocational training centers offer tailoring and dressmaking programs as pathways to employment, with the dual goal of enhancing graduates' job prospects and stimulating growth in the local garment industry (Atchoarena & Delluc, 2019). One of the central challenges for tailoring graduates is their ability to adapt to industry expectations. Many face difficulties securing

employment or successfully starting their own businesses, which impacts both individual livelihoods and the broader economy (Omolo & Egara, 2018). International studies highlight similar issues, where vocational graduates worldwide often experience employment challenges due to insufficient hands-on training, outdated equipment, and a lack of exposure to industry standards (Afeti, 2018; McGrath et al., 2019). This research study explored these local and global perspectives to understand the factors contributing to the skills gap and the specific challenges tailoring graduates face within Nairobi's dynamic garment industry.

The concept of a skills gap in the tailoring sector addresses the discrepancy between the skills that vocational graduates possess and those required by employers. Globally, a growing body of research points to the importance of aligning vocational education curricula with market demands to ensure that trainees acquire practical skills in line with industry needs (Rogerson, 2018). Within the garment industry specifically, required competencies include garment construction, pattern making, fabric handling, and basic entrepreneurship for those entering self-employment (Kamunge, 2019). In Nairobi, studies show that while vocational programs provide basic skills, many graduates struggle with more advanced techniques and industry-specific skills, suggesting that current training does not fully meet the expectations of employers in the garment industry (Mohochi & Magiri, 2020).

Closing the skills gap in tailoring and dressmaking has implications not only for employability but also for local economic growth. By improving the relevance and

quality of vocational training, Kenya can enhance its garment industry, reduce reliance on imported textiles, and support entrepreneurship (Kimemia & Oyucho, 2021). The United Nations has emphasized the importance of aligning vocational education with market demands to ensure sustainable economic development (UNESCO, 2016). Aligning training programs with industry requirements is thus crucial for both individual and national economic progress. This study thus aimed to contribute to policy discussions on enhancing TVET programs to improve employment outcomes for young Kenyans.

1.2 Problem Statement

The tailoring and dressmaking sector in Kenya, particularly in Nairobi, plays a crucial role in employment creation, entrepreneurship, and the overall development of the textile and fashion industries. Vocational training centres in Nairobi are intended to equip trainees with both the technical skills and practical knowledge necessary for careers in tailoring and dressmaking. However, studies suggest that there is a mismatch between the curriculum and the demands of the modern garment industry, particularly in areas such as advanced garment construction techniques, digital design tools, and business management skills.

As a result, many graduates are unprepared to meet the fast-changing needs of the fashion and textile sector, which is increasingly driven by innovation, technology, and entrepreneurship. This skills gap hinders the employability of graduates and limits their ability to either secure jobs in the formal sector or establish successful businesses in the informal economy. The lack of alignment between vocational training and the demands of

the job market not only limits the graduates' career prospects but also affects the growth and competitiveness of the local tailoring and garment industry.

This situation highlighted the need to identify and address the specific skills gaps in tailoring and dressmaking programs in Nairobi's vocational training centres. Understanding the nature and extent of these gaps was essential for developing interventions for enhancing the quality and relevance of vocational training, improving employability outcomes for graduates, and meeting the needs of Kenya’s growing garment industry. This study sought to examine the skills gap in tailoring and dressmaking among graduates of vocational training centres in Nairobi, with the goal of identifying the specific deficiencies in training programs and proposing recommendations to bridge this gap.

1.3 Purpose of the Study

The primary purpose of this study was to determine the skills gap in tailoring and dressmaking among graduates of Vocational Training Centres (VTCs) in Nairobi City. Specifically, the study aimed to identify the mismatch between the skills imparted to trainees during their training and the actual requirements of the labor market within the fashion and textile industry. By assessing both the technical and non-technical skills needed for employability and entrepreneurship, this research sought to provide a comprehensive understanding of the skills deficiencies that may hinder graduates’ success in the tailoring and dressmaking sector. Ultimately, the purpose of this research was to contribute to the enhancement of vocational education in Nairobi City by bridging the identified skills gap, thereby improving graduate employability, promoting

entrepreneurship, and strengthening the overall fashion and textile industry in the region.

1.4 Objectives of the study

The study was guided by the following specific objectives:

1. To assess the tailoring and dressmaking skills acquired by graduates of Vocational Training Centres Nairobi City County
2. To analyze tailoring and dressmaking skills required of tailoring and dressmaking graduates by the employers in Nairobi City County
3. To analyze the training gaps if any in tailoring and dressmaking courses in Vocational Training Centres in Nairobi City County
4. To recommend strategies for bridging the skills gap in tailoring and dressmaking among vocational graduates

1.5 Research Questions

The study was guided by the following research questions

1. Which skills do tailoring and dressmaking graduates from VTCs in Nairobi City County have?
2. Which skills do the employers within Nairobi City County require from tailoring and dressmaking VTC graduates?
3. What are the training gaps in tailoring and dressmaking course offered at VTCs in Nairobi City County?
4. What strategies can be recommended for bridging the skills gap in tailoring and

dressmaking among vocational graduates?

1.6 Significance of the Study

This research on identifying the skills gap in tailoring and dressmaking among graduates of Vocational Training Centres (VTCs) in Nairobi City holds significant value for various stakeholders and for the broader socio-economic landscape. This study is highly significant as it addresses critical gaps in the vocational education system, improve the alignment between training and industry needs, enhance graduate outcomes, and ultimately contribute to the growth and competitiveness of Nairobi's tailoring and dressmaking sector. Understanding the nature and extent of this skills gap is crucial for improving the effectiveness of vocational education programs.

Identifying the specific areas where VTC graduates fall short will provide valuable insights into how the curriculum, teaching methods, and practical training can be enhanced to meet the evolving needs of the industry. Additionally, addressing these gaps will not only benefit the graduates but also boost the competitiveness of Nairobi's tailoring and fashion industry, contributing to broader socio-economic development. The findings of the study may also provoke further research in the area of tailoring and dressmaking as well as enrich literature review in this area of study.

1.7 Delimitation/Scope of the Study

The study was confined to the public Vocational Training Centres in Nairobi City County, Kenya. It focused only on tailoring and dressmaking course graduates including their

trainers as well as their employers.

1.8. Limitation of the Study

The study was limited to graduates of tailoring and dressmaking course in public Vocational Training Centres Nairobi City County, therefore generalizations of the findings to other counties and other courses other than tailoring and dressmaking should be done with caution as there may be variability in the quality of training across different vocational centres. There could have been response bias from graduates who may not want to disclose their skill gaps.

1.9. Assumptions of the Study

The study was based on the assumption that the participants in the study, including VTC graduates, trainers, employers, and industry stakeholders, will provide honest and reliable information regarding their experiences, perceptions, and expectations related to the skills needed in tailoring and dressmaking. The study assumed that there is a noticeable gap between the skills imparted to trainees during their training and the expectations of the fashion and textile industry in Nairobi. This skills gap is assumed to be one of the contributing factors to the employability challenges faced by VTC graduates. These assumptions form the basis of the study's design and methodology, providing a framework for exploring the skills gap in tailoring and dressmaking among VTC graduates in Nairobi City.

1.10. Conceptual Framework

Figure 1.1 conceptualizes the gap between the skills required by the industry for tailoring and dressmaking career; and the skills acquired by tailoring and dressmaking graduates from VTCs. The linkages in this conceptual framework illustrate a complex interplay between various independent variables including the vocational training curriculum quality and relevance, the trainers' skills and training quality, training facilities and equipment, industry collaboration and the learning environment and resources on one hand and the dependent variables including technical, soft and entrepreneurial skills gaps. The two variables are influenced by the intervening variables which include trainee motivation and attitudes, socio-economic background, technological advancements in fashion and the industry expectations and standards technological advancements and industry requirements.

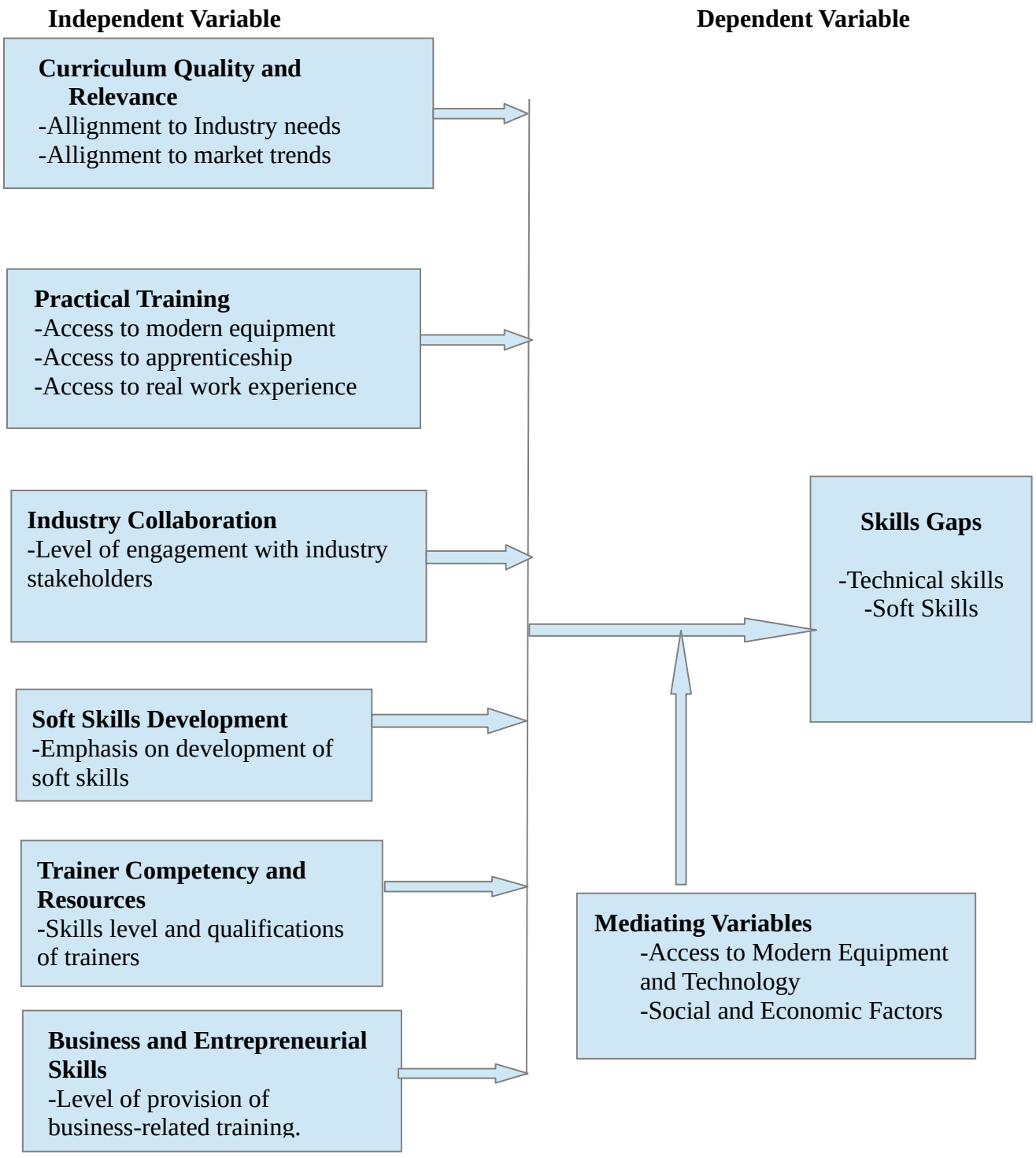

Figure 1.1. **Conceptual Framework**

Under the independent variables, curriculum quality and relevance entail alignment of VTC curriculum with industry needs while the trainer skills and training quality comprises of expertise, experience, and teaching approach of trainers with training facilities and equipment comprising of availability and quality of sewing machines, cutting tools, fabrics among others. The other two factors include industry collaboration which comprises of opportunities for internships, partnerships, and exposure to industry practices; and the learning environment and resources comprising of access to study materials, digital resources, and suitable learning conditions.

The dependent variable which is the identified skills gaps entail technical skills gaps comprising of specific skills lacking in graduates, such as stitching techniques, garment finishing, or pattern drafting; soft skills gaps which include shortages in customer service, communication, and time management skills. The entrepreneurial skills gaps entail the business skills for self-employment, such as marketing, pricing, and client management.

The independent and dependent variables are influenced by the intervening variables including trainee motivation and attitudes comprising of their interest and commitment to pursuing a career in tailoring and dressmaking; socio-economic background which entails trainees' financial resources, which may affect access to private lessons or internships. The intervening variables also include the technological advancements in fashion comprising of innovations in tailoring that may increase demand for new skills; and the industry expectations and standards which comprise of the requirements set by employers or clients that graduates are expected to meet.

1.11. Theoretical Background

The Person-to-Job (P-J) Fit Theory is a framework used to understand the alignment between an individual's characteristics including their skills, abilities and values and the requirements of a specific job. In relation to the research topic on Determining Skills Gap of Tailoring and Dressmaking Graduates of Vocational Training Centres in Nairobi City County, Kenya, the P-J fit theory was applied to assess how well the skills acquired by vocational training graduates matched the demands of the tailoring and dressmaking industry.

The theory suggests that tailoring and dressmaking graduates possess specific technical skills such as basic sewing, garment fitting, and pattern making. However, the theory implies that when these skills do not meet the evolving industry needs such as advanced techniques, creativity, or modern production methods, then there is a poor fit between the person (graduate) and the job (industry demands).

The study found that graduates, while competent in fundamental tasks, often lacked proficiency in more complex skills for example, advanced pattern making and garment fitting, leading to a mismatch between what they are trained to do and what employers expect. According to the P-J fit theory, employers seek individuals who can effectively perform tasks that align with organizational goals. The study identified that employers in the tailoring and dressmaking industry expect not only technical skills but also soft skills like communication, customer service, and business management, which were found to

be lacking among graduates. The theory suggests that when individuals fail to meet these broader skill requirements, they may experience challenges in the workplace, resulting in job dissatisfaction, lower productivity, and reduced employability.

The P-J fit theory implies that a mismatch between the person (graduate) and the job (industry) can occur when there is a misalignment between the training curriculum and the actual skills required in the workforce. The study highlights a gap between the knowledge and competencies taught in vocational training centres and the practical demands of employers. If the curriculum fails to provide training in advanced techniques, modern tools, and soft skills, graduates may struggle to meet the full spectrum of job requirements, leading to a poor fit.

To improve P-J fit, the study suggests revising vocational training programs to better align with industry needs. This includes ensuring that the programs are not focusing on technical skills but also foster the development of personal characteristics that are aligned with industry expectations; providing real-world, practical experiences that allows trainees to adapt their personal characteristics to actual industry demands. For instance, exposure to modern sewing machines, high-demand garment styles, and customer-facing scenarios will help graduates develop both technical skills and the personal traits necessary for success in the industry. Others include involving the industry professionals or experienced trainers in mentoring trainees, providing feedback on both technical execution and personal traits such as professionalism, time management, and adaptability to market trends.

In the context of the Person-to-Job Fit theory, personal characteristics play a crucial role in how well graduates align with industry demands in tailoring and dressmaking. To ensure a good fit, it is essential that vocational training programs not only equip trainees with technical skills but also focus on fostering key personal traits that align with employer expectations, especially in the areas of creativity, attention to detail, and soft skills. Bridging any gaps between the personal characteristics of graduates and the job market can be achieved through tailored training, industry collaboration, and continuous feedback.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

Prior to starting a research study, it is essential to conduct a review of the studies in the literature available to provide a background and direction for the various dimensions and factors of the study. This chapter reviews literature on vocational and technical skills acquisition in tailoring and dressmaking. It is arranged in parts to cover the following subheadings: trainees acquired skills; skills required by the industry; identified skills gaps and finally ways of addressing gaps in skills imparted and required by the industry from VTC graduates.

2.1 Skills Acquired by Tailoring and Dressmaking Graduates from VTCs

The core of tailoring and dressmaking programs in VTCs focuses on practical skills such as garment construction, pattern making, fabric handling, and fitting. According to Atchoarena and Delluc (2019), technical skills such as cutting, sewing, and assembling garments are foundational for tailoring graduates. These skills enable individuals to either join the workforce as employees or set up their own tailoring businesses. Pattern making, in particular, is critical for graduates aspiring to work in fashion design, as it allows them to translate creative ideas into practical garments (Kamunge, 2019).

Internationally, vocational training programs in countries such as India and Bangladesh, which have robust garment industries, also focus on building technical expertise (ILO, 2019). However, compared to Nairobi, these programs often incorporate advanced

machinery handling and automated techniques that increase productivity and quality. Kamunge (2019) found that while trainees may have learned basic garment construction techniques, they often struggle with advanced tasks such as complex pattern drafting and fabric manipulation, which are required by employers in more specialized areas of the fashion industry. Technical skills are essential for quality control and efficiency in tailoring. While Nairobi VTCs provides a solid foundation, the absence of advanced skills training places graduates at a disadvantage compared to their international counterparts. As reported by Mwangi (2020), incorporating contemporary techniques and tools could significantly improve the employability of Nairobi's VTC graduates in both local and international markets.

This skill deficiency is exacerbated by outdated equipment and limited exposure to modern industry practices within VTCs (Mohochi & Magiri, 2020). On the skills deficiency, UNESCO (2021) suggests that integrating digital tools in garment training such as computer-aided design (CAD) and computerized embroidery machines enhances graduates' competitiveness in the global garment sector. Unfortunately, most Nairobi VTCs lack these advanced tools, which could broaden graduates' technical skillsets. Nairobi County, VTCs emphasize basic garment making skills as a key component of their curricula.

Similarly, Muthomi and Kathuri (2018) found that vocational centers in Nairobi prioritize foundational skills, such as stitching, hemming, and pattern cutting, to prepare trainees for entry-level positions in the tailoring industry. However, the study notes a tendency

toward traditional methods, which can limit graduates' ability to meet evolving market demands in fashion and modern garment production.

In addition to technical skills, tailoring and dressmaking programs aim to develop entrepreneurial skills, particularly for graduates who intend to start their own businesses. As Kimemia and Oyucho (2021) suggest, successful tailoring graduates must not only be skilled in sewing but also in marketing, customer service, and financial management. This is because entrepreneurship training in VTCs can empower graduates to manage their businesses effectively and navigate the challenges of running a small enterprise, such as sourcing raw materials, pricing, and managing cash flow (Ogula, 2009). In contrast, vocational training centers in countries like Germany and the Netherlands include soft skills as a critical part of the curriculum (UNESCO, 2019). These programs emphasize customer relations, communication, and time management, equipping trainees to meet the service expectations in the global garment sector.

Studies by the European Centre for the Development of Vocational Training (CEDEFOP, 2020) indicate that soft skills training enhances graduates' adaptability in dynamic industries, such as tailoring, where trends and client preferences evolve rapidly. The skills acquired by tailoring and dressmaking graduates from VTCs are crucial for their success in the labor market, but the existing training often fails to meet the current demands of the garment industry. As Kimemia and Oyucho (2021) suggest, while technical skills in garment construction remain important, there is a need for greater emphasis on advanced techniques, entrepreneurial skills, and adaptability to modern industry practices.

However, there is limited evidence that many VTCs offer comprehensive entrepreneurship education.

According to Mohochi and Magiri (2020), while some VTCs include aspects of business management in their curricula, the emphasis is often weak, leaving graduates with insufficient knowledge in handling the financial and operational aspects of their businesses. Business and entrepreneurial skills are increasingly vital for tailoring graduates, particularly those who aim to start their businesses. These skills include pricing, budgeting, marketing, customer relations, and inventory management, all crucial for establishing and managing a successful tailoring business. The International Labour Organization (ILO, 2020) underscores the critical role of entrepreneurial skills in vocational training, especially in developing countries where self-employment rates are high. Programs in countries like Vietnam and Indonesia integrate entrepreneurship into VTC curricula, recognizing that such skills are essential for graduates to succeed in highly competitive markets.

These programs often include modules on business planning, financial literacy, and customer engagement, equipping graduates to navigate market challenges. Muthomi and Kathuri (2018) found that VTCs in Nairobi often overlook business and entrepreneurial training, focusing primarily on technical skill development. According to a study by the Kenya National Bureau of Statistics (KNBS, 2020), vocational training centers in Nairobi often prioritize technical skill acquisition at the expense of soft skills training. As a result, graduates may lack the interpersonal and customer service skills necessary to build

rapport with clients, which is essential for customer loyalty and repeat business in the tailoring industry (KIPPRA, 2020).

In contrast, vocational training centers in countries like Germany and the Netherlands include soft skills as a critical part of the curriculum (UNESCO, 2019). These programs emphasize customer relations, communication, and time management, equipping trainees to meet the service expectations in the global garment sector. Studies by the European Centre for the Development of Vocational Training (CEDEFOP, 2020) indicate that soft skills training enhances graduates' adaptability in dynamic industries, such as tailoring, where trends and client preferences evolve rapidly. However, studies by KIPPRA (2020) emphasize the importance of business skills, noting that many tailoring graduates who lack business training struggle with sustainable self-employment.

Additionally, Kinyua and Mugo (2019) highlight that Nairobi VTC graduates with business skills tend to exhibit higher success rates in establishing stable, profitable businesses, as they can effectively manage resources and attract clients through pricing and marketing. For Nairobi's tailoring graduates, the lack of business skills training presents a significant barrier to self-employment and economic sustainability. UNESCO (2019) suggests that embedding business skills training in VTC curricula can enhance job creation and reduce youth unemployment, as tailoring graduates with business acumen are better equipped to start and sustain small businesses. Including business and entrepreneurial modules could therefore increase the self-reliance of Nairobi VTC graduates.

In my view, this oversight significantly hinders the potential of graduates to succeed in the competitive tailoring industry, where entrepreneurial acumen is just as important as technical expertise. This study aimed to identify specific skill gaps in the training of these graduates and suggest ways to address these challenges, thereby improving the employability of graduates and the overall competitiveness of the tailoring industry in Kenya.

2.2 Skills Levels Required by the Industry from Tailoring and Dressmaking Graduates of Vocational Training Centres

Vocational education and training (VET) play an essential role in preparing graduates for employment by equipping them with the skills necessary to meet industry demands. The tailoring and dressmaking sector, a critical component of Kenya's garment and fashion industries, provides a significant number of employment opportunities. According to the Kenya National Bureau of Statistics (KNBS, 2014), the garment sector employs thousands, offering both formal and informal employment opportunities. The industry demands a range of skills, from basic garment construction to advanced techniques in fashion design, pattern making, and the use of modern sewing technology. However, the nature of these skills and the level of expertise required for industry readiness varies significantly.

However, there remains an ongoing debate about the alignment between the skills acquired by graduates from Vocational Training Centres (VTCs) and the expectations of the industry. This literature review explores the skills levels required by the industry from tailoring and dressmaking graduates and identifies potential gaps that hinder the employability and success of VTC graduates in the workforce. The core competencies required by the tailoring and dressmaking industry include technical skills, creativity, and business acumen. Research by Kamunge (2019) highlights the importance of technical skills such as garment construction, fabric handling, fitting, and pattern making.

The industry demands that workers have a high degree of proficiency in these areas, as they form the foundation for producing high-quality garments. However, it is not just about basic sewing skills; employers are increasingly seeking graduates who are capable of using modern tools and techniques, such as computerized sewing machines and digital pattern drafting software (Afeti, 2018). This shift towards more technologically advanced methods in garment production emphasizes the need for VTC curricula to incorporate up-to-date tools and techniques to keep graduates competitive in the industry.

In my opinion, the growing demand for digital skills, such as proficiency in fashion design software (e.g., Adobe Illustrator and AutoCAD), is one of the significant gaps in the current training offered at many VTCs. While technical training in traditional tailoring methods is well-established, modern industry standards require that graduates be familiar with technological tools that enhance production efficiency and creativity (Rogerson, 2018).

Beyond the technical skills in garment construction, the tailoring industry also values creativity. Graduates must possess an ability to interpret fashion trends and adapt designs accordingly, as noted by Ogula (2009). Fashion design, which includes conceptualizing garment aesthetics, color coordination, and fabric selection, is crucial in meeting the demands of an ever-evolving market. In my view, creativity is often underemphasized in the training offered at VTCs, which tend to focus more on technical skills. However, employers in the fashion industry are increasingly demanding graduates who can demonstrate a blend of technical mastery and creative flair, with the ability to make personalized garments that meet customer preferences (Mohochi & Magiri, 2020).

Employers often look for graduates who can not only construct garments based on patterns but also innovate by designing original pieces or modifying existing ones to reflect current fashion trends (Kamunge, 2019). This level of creativity is essential for entrepreneurs in the tailoring business, as it sets them apart in a competitive market. In addition to technical and creative skills, the tailoring and dressmaking industry places a high value on entrepreneurial skills. Many graduates from VTCs in Kenya, particularly those in Nairobi, opt to start their own businesses rather than seek employment. This shift in career trajectory requires a broad set of skills, including business management, customer service, pricing strategies, and marketing (Kimemia & Oyucho, 2021).

However, studies show that entrepreneurial training is often inadequate in many VTCs, leaving graduates unprepared for the practical realities of running a business. Research

conducted by KIPPRA (2020) indicates that while many tailoring graduates possess basic technical skills, there is a significant deficiency in their business acumen. Employers express a preference for graduates who understand market dynamics and can effectively manage their own businesses. On the same note, Kinyua and Mugo (2019) note that graduates lacking business training often face challenges in pricing their services competitively, managing resources efficiently, and building a customer base.

Research by Afeti (2018) underscores that successful entrepreneurs in the garment industry must possess not only technical and creative skills but also a sound understanding of the business environment. Globally, vocational training programs increasingly integrate entrepreneurial education into their curricula. For instance, programs in India and South Africa equip trainees with essential business skills, fostering a mindset geared toward self-employment and innovation (ILO, 2020). Graduates who receive such training are better prepared to navigate the complexities of running a business, which is vital in a competitive industry where many practitioners operate independently. Graduates need to be equipped with financial management skills, the ability to identify market trends, and the competence to run day-to-day operations efficiently.

Unfortunately, many VTC curricula offer limited exposure to these vital business aspects, which can impede the success of graduates who intend to venture into entrepreneurship.
The gap between the skills acquired by graduates and the demands of the industry has been a recurring issue in Kenya. A study by Mohochi and Magiri (2020) found that

employers often express dissatisfaction with the preparedness of VTC graduates. Employers indicated that while graduates possess foundational skills in tailoring, they lack advanced skills in areas such as pattern making, fabric selection, and the use of modern sewing technologies. This mismatch is compounded by a lack of industry exposure, as many VTCs do not offer internships or practical work experience that would allow trainees to apply their learning in real-world contexts.

From my perspective, this skills gap is a major barrier to enhancing the employability of graduates. The industry's increasing reliance on advanced technological tools, combined with an ever-growing demand for high-quality, fashion-forward garments, requires that VTCs adapt their curricula to address these challenges. Incorporating more hands-on training, exposure to industry standards, and digital tools will better prepare graduates for the demands of modern tailoring and dressmaking practices.

The skills levels required by the tailoring and dressmaking industry from VTC graduates encompass a range of competencies, including technical skills, creativity, and entrepreneurial abilities. While VTC graduates are generally well-prepared in basic garment construction, there is a clear need for more advanced training in areas such as pattern making, digital design, and the use of modern garment production technologies. Muthomi and Kathuri (2018) highlight the importance of adaptability, as the fashion and tailoring industry is influenced by trends and consumer preferences that evolve quickly. Additionally, the inclusion of entrepreneurship training would better equip graduates to navigate the competitive nature of the tailoring industry.

Mwangi (2020) notes that employers in the tailoring industry value graduates who can communicate effectively and build strong relationships with customers, as these skills contribute significantly to business success. Addressing these skill gaps would not only improve the employability of graduates but also enhance their ability to contribute to the growth and competitiveness of the tailoring and dressmaking sector in Kenya.

2.3 Skill Gaps from Graduates of Vocational Training Centres

In Kenya, vocational education and training (VET) is seen as a key solution to addressing the high levels of youth unemployment by providing market-relevant skills. Tailoring and dressmaking programs at VTCs are designed to equip trainees with the practical skills required in the garment and fashion industries, including sewing, pattern making, garment construction, and fitting (Kamunge, 2019). However, a significant portion of the training provided in VTCs falls short of industry expectations, particularly with the growing demands for advanced technical skills and the adaptation to new technologies in the fashion and garment sectors.

According to the Kenya National Bureau of Statistics (KNBS, 2014), the tailoring industry provides significant employment opportunities, especially in the informal sector, where many graduates of VTCs seek self-employment or small-scale business opportunities. Yet, despite the growing number of graduates, a large proportion of them remain underemployed or face challenges in securing jobs that match their skill levels

(Mohochi & Magiri, 2020). In my research, this research focused on identifying these skill gaps and understanding how they hinder the transition from VTCs to the labor market.

Several studies have highlighted the specific skill gaps faced by graduates from VTCs in the tailoring and dressmaking sector. A key issue is the insufficient mastery of advanced garment construction techniques, such as pattern drafting and fabric manipulation. Kamunge (2019) noted that while VTCs offer basic training in garment making, graduates often struggle with complex pattern drafting and adapting designs to fit varying body types. A study by Muthomi and Kathuri (2018) highlighted that a significant proportion of tailoring graduates lacked proficiency in modern garment construction techniques, largely due to the use of outdated sewing machines and limited exposure to modern tools. This lack of exposure results in graduates struggling to meet the quality and efficiency standards expected by employers and clients in a highly competitive market.

An area of mismatch identified by employers, graduates and trainees according to Green (2015) and GoK (2013) is in critical or occupational skills including exposure to modern machines, equipment and tools; trade knowledge; ability to utilize and operate current technology machineries, tools and equipment; and hands-on industrial experience. Employers in the fashion industry have expressed concerns that many graduates lack the ability to produce high-quality, customized garments that meet the specific needs of customers or adhere to high industry standards (Afeti, 2018).

Additionally, there is a noticeable gap in the knowledge and application of modern sewing technologies. The tailoring industry has become increasingly reliant on computerized sewing machines, digital pattern-making tools, and automated embroidery systems (Rogerson, 2018). However, many VTCs still focus on traditional hand-sewing methods and basic machinery, leaving graduates ill-prepared for the technological advancements that characterize the current garment production environment.

As noted in the Daily Nation, the skills deficiency between college leavers and the industry requirements is an alarming tendency in the country with lots of graduates being left without jobs for long time (DN, September, 2nd 2018). As the researcher, I believe that this gap represents a fundamental challenge, as the industry increasingly requires professionals who can seamlessly integrate modern tools into their work processes.

Another critical skill gap among graduates of VTCs in tailoring and dressmaking is the lack of entrepreneurial training. Many graduates aspire to start their own tailoring businesses, but the majority lack the necessary business management skills, including financial management, marketing, and customer service. Kimemia and Oyucho (2021) argue that although vocational training equips trainees with technical skills, it does not adequately prepare them for the realities of running a business in a competitive market.

In Kenya, the skills gap is exacerbated by challenges in the vocational training system, where curricula often fail to address industry-specific requirements and lack essential modern competencies like digital literacy and entrepreneurship (Kikechi, 2018). This gap

affects graduates' ability to transition smoothly into the labor market and undermines the country’s economic goals of reducing youth unemployment and fostering local industries (Ministry of Education, 2019).

The Kenya National Bureau of Statistics (KNBS, 2020) reported that many VTC graduates in Nairobi were unable to sustain their tailoring businesses due to inadequate entrepreneurial training. Research indicates that VTCs focus more on technical training, often neglecting business skills that are essential for graduates aiming to become self-employed. A report by UNESCO (2019) noted that graduates from VTCs in Nairobi often lack soft skills training, which negatively impacts their customer relations. In tailoring and dressmaking, clients often require personalized services that demand strong interpersonal skills. Without these, graduates may face challenges in building lasting customer relationships, which are critical for success in a service-oriented trade like tailoring. Without these skills, graduates struggle to compete with established tailoring businesses and often experience challenges in attracting and retaining customers. Graduates often struggle with pricing, sourcing materials, managing inventory, and building a customer base.

Without these skills, many VTC graduates fail to scale their businesses or remain stuck in the informal sector, unable to compete with larger enterprises that have access to better resources and more refined management practices. According to Mwangi (2021), the lack of comprehensive training in vocational centers in Nairobi has led to high underemployment and job dissatisfaction among tailoring graduates. Many end up taking

low-wage jobs or abandoning tailoring altogether due to the challenges they face in establishing viable careers in the industry in my opinion, VTCs need to integrate entrepreneurial education into their curricula to ensure that graduates are not only skilled in tailoring and dressmaking but also have the knowledge required to run a successful business.

A significant cause of skill gaps in VTC graduates is the mismatch between the skills taught in VTCs and the evolving needs of the tailoring and dressmaking industry. Employers in Kenya's garment sector have reported dissatisfaction with the readiness of VTC graduates, citing gaps in critical areas such as technical skills, creativity, and adaptability to new technologies (Mohochi & Magiri, 2020). For example, while VTCs train trainees to follow standard patterns and construction techniques, modern fashion design often requires the ability to innovate, alter, and create custom designs based on individual client needs. Creativity, design thinking, and innovation are increasingly valued in the industry, and employers are seeking graduates who can work with minimal supervision and demonstrate initiative (Kamunge, 2019).

Moreover, the industry's demand for sustainable and eco-friendly fashion practices has grown in recent years, yet many VTCs fail to incorporate these emerging trends into their curricula (Afeti, 2018). As the researcher, I see this as another critical area where VTCs need to evolve their training to meet industry expectations, especially given the growing importance of sustainability in global fashion trends. To address the existing skill gaps, it is essential to revamp the curricula at VTCs to ensure they reflect industry needs. The

integration of modern technologies such as Computer-Aided Design (CAD) software and automated sewing machines is crucial in equipping graduates with the skills required for contemporary garment production.

Additionally, the inclusion of entrepreneurship modules that teach financial literacy, marketing strategies, and business management can better prepare graduates to thrive in both employment and self-employment opportunities. Moreover, there is a need for VTCs to establish stronger links with industry players through internships, mentorship programs, and collaborations. Practical exposure to real-world garment production processes will enhance the trainees' ability to apply theoretical knowledge in the workplace, while also keeping them informed of the latest trends and technologies in the industry (Rogerson, 2018).

The skill gaps in tailoring and dressmaking training at VTCs present significant challenges for both graduates and the garment industry. While foundational skills in garment construction are being taught, there is a clear need to enhance training in advanced techniques, technological proficiency, and entrepreneurial capabilities. By addressing these gaps, VTCs can better align their training with the expectations of the industry and improve the employability of their graduates. In my view, curriculum reforms, modern technology integration, and the inclusion of entrepreneurship education are key steps toward bridging the existing skills gap and ensuring that graduates are well-prepared for the labor market.

2.4 Strategies for Addressing Skill Gaps from Graduates of Vocational Training Centres

The skill gaps among tailoring and dressmaking graduates from Vocational Training Centres (VTCs) present a significant challenge for the industry, limiting the employability of graduates and their ability to meet industry standards. These gaps are characterized by deficiencies in both technical skills and soft skills, including entrepreneurship and creativity. In this section, I will explore various strategies for addressing these skill gaps and enhancing the quality of training in VTCs to better align with the needs of the tailoring and dressmaking industry.

One of the key strategies for addressing skill gaps in tailoring and dressmaking is the reform of the curricula offered in VTCs. Muthomi and Kathuri (2018) advocate for a curriculum overhaul that incorporates modern techniques, technologies, and materials relevant to the current market demands. This includes introducing advanced garment construction techniques, fabric technologies, and contemporary fashion trends. As noted by Kamunge (2019), many vocational institutions still focus on traditional sewing methods, which do not reflect the technological advancements or the dynamic nature of the garment industry. To bridge this gap, VTC curricula must be updated to include modern techniques, such as computerized sewing machines, CAD software for pattern making, and digital design technologies.

In my view, the lack of exposure to modern garment production tools and design software is one of the major contributors to skill gaps. To address these issues, the Ministry of Education (2019) has emphasized the need for VTC curriculum reform, advocating for the inclusion of digital skills, entrepreneurship training, and industry-specific modules. By aligning vocational training more closely with employer needs, Kenya can enhance the employability of its VTC graduates and support the growth of the local fashion industry. Employers in the tailoring and dressmaking sector express a need for graduates who can combine technical skills with business acumen and customer relations skills, all of which are critical for success in today's fashion landscape (Kikechi, 2018).

However, Kenya's VTC programs often fall short in these areas, resulting in graduates who lack the well-rounded skills needed for success in a competitive job market. Integrating these technologies into the curriculum would better prepare graduates for the demands of the industry. Similarly, in countries like Germany, vocational education has been successful partly due to its dual system, which combines classroom instruction with hands-on training in real work environments (ILO, 2019). This model ensures that trainees acquire skills that are directly applicable in the industry. The integration of industry experts in curriculum design can also help align training with current practices and technologies. Additionally, VTCs should partner with industry players to ensure that the training materials reflect the current practices and technologies used in the fashion and garment sectors.

KIPPRA (2020) suggests that collaboration with local businesses and industry associations can facilitate internships and apprenticeship opportunities for trainees. Such partnerships not only enhance practical training but also help trainees build professional networks that are crucial for employment after graduation. Engaging employers in the training process ensures that the skills taught are relevant and up to date. While theoretical knowledge is important, practical skills are essential for success in the tailoring and dressmaking industry. Many graduates of VTCs lack the hands-on experience needed to excel in the workplace. According to Afeti (2018), employers often report that graduates are not job-ready because they have not had sufficient exposure to real-world garment production processes.

To address this, VTCs should increase the amount of time spent on practical training, internships, and apprenticeships. In my experience, graduates often struggle to apply their classroom knowledge in actual work settings, especially when it comes to customization and production on a larger scale. By providing more hands-on training opportunities and facilitating internships with industry partners, VTCs can enhance the practical skills of their trainees. International studies indicate that successful vocational training systems are marked by a close alignment between education providers and industry needs, often facilitated by dual education models (Euler, 2013; OECD, 2018). In countries such as Germany and Switzerland, trainees benefit from a combination of classroom instruction and practical training within companies, which ensures they acquire relevant, work-ready skills (UNESCO, 2012).

This approach contrasts sharply with the situation in Kenya, where limited industry partnerships and outdated curricula leave graduates underprepared for the demands of the fashion and textile industry (TVETA, 2018; Kikechi, 2018). For instance, employers in Nairobi report that graduates often lack skills in garment finishing, customer service, and digital marketing, which are critical for both employment and entrepreneurship in the fashion industry (Ministry of Education, 2019). This not only improves employability but also ensures that graduates can handle the real-life challenges of the tailoring industry.
Many tailoring and dressmaking graduates aspire to start their own businesses but lack the necessary entrepreneurial skills to succeed.

As highlighted by Kimemia and Oyucho (2021), while VTCs equip trainees with technical skills, there is a significant gap in business management, marketing, and financial literacy. VTCs need to integrate entrepreneurship education into their curricula, teaching trainees not only how to sew and design but also how to manage a business. In my opinion, integrating entrepreneurial training into the VTC curriculum is essential for preparing graduates for self-employment. Tailoring graduates who possess both technical skills and business acumen are more likely to succeed in the competitive fashion industry. Offering courses in small business management, customer relations, and financial planning would provide graduates with the tools needed to start and run sustainable businesses.

Creativity is a vital aspect of tailoring and dressmaking that is often overlooked in traditional training programs. Employers in the garment industry increasingly value the

ability to create unique and customized garments that reflect current fashion trends. As noted by Mohochi and Magiri (2020), graduates who lack creativity and innovation are less likely to succeed in the industry, which demands originality alongside technical expertise. To address this, VTCs should include modules that foster creativity, design thinking, and trend analysis. Based on my observations, many VTC graduates are proficient in basic garment construction but struggle with creativity and adapting to design trends.

Creativity is not only about artistic flair but also about problem-solving and innovation. Encouraging trainees to engage in fashion design projects, attend fashion shows, and create custom designs would allow them to develop their creative potential, which is critical for success in the competitive tailoring and dressmaking industry. A key strategy to bridge the skills gap is strengthening the partnership between VTCs and the tailoring and dressmaking industry. According to Rogerson (2018), VTCs that collaborate with industry partners can provide trainees with opportunities for internships, mentorships, and exposure to industry best practices. These collaborations would help ensure that the skills taught in VTCs are in line with current industry requirements.

One of the most effective ways to address skill gaps is through internships and work-based learning opportunities. These allow trainees to gain practical experience in a real-world environment, making them more job-ready upon graduation. Additionally, close collaboration between VTCs and industry players can ensure that the training programs remain relevant and that employers have a say in the curriculum design.

2.5 Summary of the Literature Review

This chapter gives an over review of literature linked to vocational and technical skills acquisition in tailoring and dressmaking. The gaps in skills were identified in pattern drafting, construction skills, usage of commercial pattern, taking body measurements and cutting out skills. Addressing the skill gaps in tailoring and dressmaking graduates from VTCs requires a multi-faceted approach that includes curriculum reform, increased practical training, entrepreneurial education, and enhanced industry collaboration.

Focusing on these strategies, VTCs can better align their training with industry needs, ensuring that graduates are equipped with the skills and knowledge necessary for success in the competitive tailoring and dressmaking sector. In my opinion, the future of tailoring education lies in bridging the gap between what is taught in training institutions and what is demanded by the industry. By doing so, we can create a highly skilled and adaptable workforce that contributes significantly to the growth of the fashion and garment industries in Kenya and beyond.

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This chapter offers an overview of the various steps and methods employed in conducting the research. It includes a discussion of the research design, the measurement of variables, the study area, target population, sampling techniques, sample size, research instruments, data collection procedures, data analysis, and ethical considerations.

3.1 Research Design

A research design encompasses a set of strategies researchers use to structure their investigation (Kothari,2017). This study adopted a mixed-method approach combining quantitative and qualitative methods to provide a comprehensive understanding of factors influencing trainee enrolment decisions.

This approach allows researchers to integrate numerical data with in-depth insights, enhancing the richness of findings (Creswell & Plano Clark, 2017). Seeram (2019) considers a research design to be a detailed roadmap that guides the researcher throughout the research process, from identifying the research participants to data collection methods and statistical data analysis. It is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Ary, et al, 2010).

The study adopted a descriptive survey research design which is the systematic collection and analysis of data to answer questions about the status of an education programme, project or activity (Oso & Onen, 2005). The use of descriptive survey research designs permits use of interview, questionnaires and document checklists (analysis) as instruments of data collection (Ogula, 2009).

In application, descriptive survey was useful because it enabled the researcher gather opinions and information from a large population. The study collected information from trainees, trainers, employers and institutions principals to help establish the skills gaps of tailoring and dressmaking graduates of vocational training centres in Nairobi City County. Descriptive research is used in preliminary and exploratory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification at a particular point in time (Orodho, 2005).

3.2 Measurement of Variables

The independent variables in relation to the study were the factors influencing skills gap and these included curriculum quality and relevance; access to practical training; business and entrepreneurial skills; industry collaboration, trainer competency and resources and soft skills development. The intervening variables represented elements that either enhanced or hindered the translation of training into actual job performance or business success and these included access to modern equipment and technology; continuous professional development (CPD) and social and economic factors.

The dependent variable was the skills gap, and it represented the disparity between the skills that graduates possess and the skills required by the employers or for successful entrepreneurship in the tailoring and dressmaking industry. The study interviewed the employers, trainers and the trainees to examine their views and perceptions towards the skills acquired, required and the skills gaps in the tailoring and dressmaking among the graduates. The views were recorded on an audio and transcribed for thematic analysis.

3.3 Study Area

The study was carried out in Nairobi City County, the largest and capital city of Kenya. Nairobi was selected as the research location due to its cosmopolitan nature, numerous shopping outlets, excellent infrastructure, and fast-paced lifestyle (Socio Economic Atlas of Kenya, 2014). The city is also known for its strong fashion culture, with many fashion businesses located centrally, making it easier to reach a substantial number of respondents involved in dressmaking and tailoring. This allowed the researcher to access a representative sample for the study. Additionally, the employers of VTC graduates, who are informal dressmakers and tailors, are organized into an association, facilitating easier access to study participants. Nairobi City County is divided into nine sub-counties: Embakasi, Makadara, Kamukunji, Westlands, Langata, Starehe, Njiru, Dagoretti, and Kasarani (CIDP, 2023-2027).

3.4 Target Population

According to Matula, Kyalo, Mulwa, and Gichuhi (2018), a target population refers to the

total number of objects, events, or people that the researcher wishes to generalize the findings of a study. The population of this study included all graduates from vocational training centers specializing in tailoring and dressmaking in Nairobi City County. The population also includes all tailoring and dressmaking trainers in the 11 VTCs, employers (tailoring shops, fashion designers, clothing factories), and other industry stakeholders. The target population of this study was 2,056 comprising of 2,034 graduates of tailoring and dressmaking course in the 11 public VTCs in Nairobi City County Kenya, who had graduated in the last five years.

These were selected from the records of graduates from the various VTCs for the last five years. A total of 11 trainers who headed tailoring and dressmaking departments also formed the target population because they were involved in training the trainees. Small and Medium Enterprises (SMEs) employers of the graduates with stalls in the Nairobi City County markets also formed part of target population because they had knowledge in the area of study the researcher aimed. In addition, they had experience of having attached trainees in their stalls.

3.5 Sampling Techniques

Sampling is a technique that involves selecting a representative sample from a large population for investigation and generalization of findings to a larger sample (Matula *et al.*, 2018). According to Kothari (2017), sampling is a statistical process of selecting a subset (sample) from a population of interest to make observations and statistical inferences about the population. Saunders *et al.*, (2015) assert that an optimum sample

size is required to achieve significant results vis-a-vis the study population and to ensure that research resources have been used effectively and efficiently. This study employed cluster sampling method which is a probability sampling technique where researchers divide a large population up into smaller groups known as clusters, and then select randomly among the clusters to form a sample.

The sampling was conducted in three levels with the first being clustering the VTCs by sub-counties which were seventeen in number. The researcher employed simple random sampling to pick nine sub counties from a list of seventeen from which all the VTCs offering tailoring and dressmaking courses were purposively picked. Six out of 11 trainers who headed tailoring and dressmaking departments were also picked purposively. Purposive sampling enables the selection of participants with specific insights relevant to the study's objectives (Palinkas et al., 2015). The last group that was also selected purposively were the Small and Medium Enterprises (SMEs) employers of the graduates with stalls in the Nairobi City County markets as they had some knowledge in the area of study the researcher aimed to study.

3.6 Sample Size

Creswell and Creswell (2017) and Mugenda and Mugenda (2013) postulate that if the target population is not large enough, an ideal sample size of 10% to 20% should be considered sufficient for the study. Seeram (2019) argues that 20% of the target population is a good representative sample size for a study. According to Mugenda and Mugenda (2013), when the study population is less than 10, 000, a sample size of

between 10 and 30% is a good representation of the target population and hence10 % is adequate for analysis. As per the recommendations of Mugenda and Mugenda therefore, 205 VTC graduates were considered as respondents. The sample size as determined from the various sampling procedures is shown in table 3.1.

Table 3.1. ***Sample Size of Study Respondents***

Sample/ respondent	Sampling Method	Respondents/ sample size
Graduates	Random	205 (10% of graduates from each of the 9 VTCs)
Employers	Purposive	21 (10% employers of the graduates interviewed)
VTC Trainers	Random	6 VTC Trainers (1 from each VTC for tailoring and dressmaking
TOTAL		**232**

3.7 Research Instruments

The study employed the use of questionnaires and interviews schedules as tools to gather information from the respondents sampled.

3.7.1 Questionnaires for Graduates

The researcher also created a competency survey questionnaire for graduates (Appendix D) to gather their views on various aspects of the tailoring and dressmaking course. The questionnaire, which consisted of sections A to H, covered topics such as the technical and entrepreneurial skills acquired during training, the relevance of these skills in today's job market, graduates' self-assessment of their skill proficiency and any gaps, as well as

the challenges faced when seeking employment or managing businesses in the tailoring industry. The close-ended questionnaire was structured in line with the study's objectives. It utilized a 5-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree," and was designed to efficiently collect data from a large number of respondents in a short amount of time.

Mugenda and Mugenda (2013) recommend using a questionnaire as an instrument of data collection because it helps to collect data from a large population in a short time. Kothari (2017) further advocates using questionnaires as they can be used conveniently and economically. This study adopted a questionnaire because it would enable the researcher to collect and analyze data conveniently using SPSS, which allows for coding and analyzing quantitative data easily. The full questionnaire is provided in Appendix D.

3.7.2. Interview Schedules for Employers

According to Creswell and Clark (2017), a semi-structured interview guide contains a set of questions prepared by the interviewer that are not asked in a particular order or sequence but rather according to the flow of the interview. A structured interview guide was developed and administered to employers of VTC graduates, including executives from informal dressmaking and tailoring businesses. The interview schedule as in appendix E, focused on identifying perceived skill gaps and areas for improvement in both soft and technical skills. Questions were designed in line with the study's objectives and were semi-structured to allow for further probing on topics relevant to the research. The schedule also gathered insights into the curriculum and its alignment with industry

needs. Information obtained from these interviews provided additional data that could not be captured through other research instruments.

3.7.3 Interview Schedules for VTCs Trainers

An interview schedule was prepared for trainers responsible for Tailoring and Dressmaking at the vocational training centers. This approach was chosen to gather qualitative data, enabling a deeper understanding of responses beyond the literal meaning of the questions, as respondents could also communicate through gestures. The interview schedule explored perceptions of skill gaps and identified soft skills and technical competencies needing improvement. It also collected insights into the curriculum's alignment with industry needs. The semi-structured format allowed for additional probing on topics related to the study's objectives, as outlined in Appendix F. The information obtained offered valuable insights that could not be captured through other data collection instruments.

3.7.4. Interview guide for graduates

The research also prepared an interview schedule for VTC graduates. The reason of choosing an interview technique was to get qualitative data on a number of areas based on the study objectives. Interviews assist to capture the meaning beyond the words as respondents can express themselves through gestures. The interview consisted of questions relating to the objectives of the study as shown in Appendix G. The interview schedule was semi-structured to allow probing of more questions relating to the study objectives during the interview. The interview schedule explored perception of skills gaps and also identification of soft skills and technical competencies that need improvement.

The schedule also gathered information about the curriculum and its alignment with the industry needs. The information from the interview was used to collect additional information that could not be captured when using other instruments.

3.8 Pilot Study

A pilot study will be carried out before the actual study to assess and enhance the validity and reliability of the questionnaire. This will help identify potential issues or areas of failure for the main research project, as well as any protocol violations or overly complicated techniques or instruments. The pilot study will involve 26 trainees selected from one of the colleges with the highest population. According to Kothari (2017), the sample for a pilot study should have similar features and should be 10% of the sample anticipated for the main study. According to Mugenda (2009) a pilot study refers to a mini version of the study. In order to pre-test the research instruments. A pilot study was conducted at Kiwanja VTC to enable the researcher to identify it's weaknesses and correct them before finalizing it.

This VTC was selected through multi-stage stratified random sampling where one Sub-County from the nine Sub-Counties in NCC, Kenya was picked and the selected VTC randomly selected from that Sub-County. The sample comprised of 21 former dressmaking and tailoring trainees and 2 trainers from tailoring and dressmaking departments. The interview guide for the employers will be pretested in Kangemi market where the study will access the potential employers of the graduates. This pretest helped

the researcher identify any discrepancies and modify the questionnaire and the interview guide for ease of use during the actual research. Pretesting of the instrument ensured that the questionnaire was reliable as all the respondents understood the questions.

3.9 Validity and Reliability

According to Orodho (2009), validity is the degree to which a test measures what it intended to measure. After designing the instruments, the researcher forwarded them for review by the supervisors. The supervisors checked for content coverage and clarity of the actual questions in line with the objectives. Reliability indicates the accuracy and precision of an instrument (Radhakrishna, 2007). To ensure consistency in responses the researcher provided very clear instructions for both surveys and interviews. The researcher also conducted a pilot test that helped to refine the instruments and also ensured clarity. The researcher also used multiple sources of getting data through the graduates, employers, trainers and reports to cross validate the findings.

3.10 Data Collection Techniques

Data collection is a process of systematically collecting information based on the research objectives (Cooper, Schindler, & Sharma 2018). Before the data collection exercise, the researcher will apply for and receive all the necessary permits, such as those of the university's board of graduate studies and the National Commission of Science, Technology, and Innovation. The researcher obtained research permission from the National Commission for Science, Technology and Innovation (NACOSTI), Kenya

University, and the managers of the 11 vocational training centers (VTCs) involved in the study.

The researcher then visited these training centers for familiarization, introductions, and to distribute and collect questionnaires, which were delivered directly to the respondents. Both primary and secondary data were collected. To gather primary data, trainers were interviewed with a set of open-ended questions prepared by the researcher in line with the research objectives. The researcher also identified school leavers to help locate other participants for interviews, which were conducted to enable data triangulation.

3.11 Data Analysis and Presentation

Cooper *et al.*, (2018) define data analysis as the process of inspecting, cleaning, transforming, and modelling raw data to uncover meaningful information, draw conclusions, and support decision-making. This process enabled the researcher to apply statistical techniques to establish similar patterns through descriptive statistics and examine the nature and significance of the relationship between variables through inferential statistics.

In this study, data were gathered from respondents and then refined and organized to ensure clarity and manageability. After data collection, the researcher thoroughly reviewed the raw data, providing interpretations and clarifications, and then compiled a report of the findings, drawing evidence-supported conclusions. Data collected from the

questionnaires were analyzed using descriptive statistics, including mean and frequency counts, with the SPSS software (Wiersma & Jurs, 2005).

Qualitative data analysis involves using techniques such as coding, categorization, and thematic analysis to identify recurring patterns, extract meaning from narratives, and gain a deeper understanding of underlying phenomena (Bergin, 2018). According to Braun and Clarke (2021), thematic analysis is crucial in capturing the intricacies of people's perspectives, cultural contexts, and social dynamics, ultimately contributing to a holistic and in-depth comprehension of the problem under study. The coded data were then imported into SPSS to calculate frequencies, and all SPSS frequency results were manually transferred into a table with variable and response columns.

Meanwhile, data from personal interviews were transcribed verbatim, segmented, and coded for analysis. Emerging themes were recorded as interpreted ideas and cross-checked with related data from other methods for triangulation. Quantitative and qualitative data were integrated in the interpretation of findings and used in compiling the research report, with the findings and report discussed in a descriptive format. Results from the analysis were presented in narrative form, as well as in tables and figures.

3.12 Logistical and Ethical Considerations

Research approval was sought from Graduate School of Kenyatta University (see appendix C) and a permit from the National Commission for Science Technology and Innovation (NaCOSTI) (Appendix B). Ethical approval was gotten from Kenyatta University Ethical Review Board (KUERB). Through the Chief Officer for Education and Information, Communication and Technology (Nairobi City County), consent to carry out the research in the study was sought. Letter of consent (Appendix A) was read and presented to the respondents for their approval.

In the form, the respondents were furnished with the purpose of the research study. They were assured of confidentiality, foreseen risks, voluntary participation and withdrawal from the study without victimization. The participants were also assured that their identity would remain unknown by not collecting personal information such as names, phone numbers, photos and email addresses. The respondents were assured that the research would not harm them individually and the entire community in any way.

Confidentiality of research subjects was assured through excluding unauthorized access to data during storage and analysis. The researchers also ensured adherence to Covid-19 protocol. In a bid to give back to the community to be studied and to subscribe to the rights to academic freedom, the researcher will freely discuss and publish the research findings for both academic progress and community’s consumption.

CHAPTER FOUR: FINDINGS

4.0 Introduction

In this chapter the findings of the study are presented with regard to the stated objectives and research questions. The chapter comprises of data on tailoring and dressmaking skills acquired by graduates of Vocational Training Centres; tailoring and dressmaking skills required of tailoring and dressmaking graduates by the employers; Skill gaps in tailoring and dressmaking courses among graduates of Vocational Training Centres and framework to align tailoring and dressmaking curriculum to industry performance expectations. The study aimed to identify the skills gaps among tailoring and dressmaking graduates from vocational training centers (VTCs) in Nairobi, Kenya. The findings reveal several critical areas where graduates are lacking in skills that are essential for their success in the industry. These findings are categorized into technical skills, soft skills, business acumen, and adaptability to industry changes.

4.1 Demographic Characteristics

From table 4.1 out of the total interviewed trainees 46 (22.4%) were male while the rest 159 (76.6%) were female.

Table 4.1. ***Gender of Participant***

	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Male	46	22.4	22.4	22.4
Female	159	77.6	77.6	100.0
Total	205	100.0	100.0	

According to table 4.2, the majority (18%) of the respondents were operating in Kangemi followed by Dandora (13.7%) while the lowest number of respondents were from Waithaka (5.4%) followed by Mathare (8.8%) VTCs.

Table 4.2. ***Area of Operation of Participant***

	Frequency	Percent	Valid Percent	Cumulative Percent
Kangemi	37	18	18	45.4
Dandora	28	13.7	13.7	87.8
Jericho	25	12.2	12.2	22
Mathare	25	12.2	12.2	100
Kahawa Garrison	22	10.7	10.7	56.1
Kiwanja	20	9.8	9.8	9.8
Embakasi	19	9.3	9.3	74.1
Mathari	18	8.8	8.8	64.9
Waithaka	11	5.4	5.4	27.3
Total	205	100	100	

4.2 Tailoring and Dressmaking Skills Acquired by Graduates of Vocational Training Centres

To assess the tailoring and dressmaking skills acquired by graduates of Vocational Training Centres in Nairobi City County, the trainees were asked which skills they had acquired and from the questionnaire responses as per table 4.3, the trainees indicated that the main areas of skills being imparted to them include how to keep the shop clean, care

and maintenance of sewing machines, garment assembly and interpretation of garment designs.

Table 4.3. ***Levels of Skills Acquired by Trainees on VTCs***

S/NO	Statement	MEAN
1	Keeping the Shop clean	**4.22**
2	Care and Maintenance of Sewing Machines	**3.87**
3	Garment Assembly or Stitching	**3.72**
4	Interpretation of Garment Designs	**3.69**
5	Customer Care	3.66
6	Studying Fashion Trends	3.63
7	Record Keeping	3.57
8	Buying Fabric	3.42
9	Marketing	3.25
	OVERALL MEAN	3.68

From the overall look at the summary of trainee's questionnaire responses on their level of skills in the various skill indicators, it can be deduced that the trainees have acquired high level of skills in keeping the shop clean (mean= 4.22); care and maintenance of sewing machines (mean=3.87); garment assembly or stitching (3.72) and interpretation of garment designs (mean =3.69) all of which scored above the overall mean of 3.68. All the other five skill areas scored below average with the least being the area of marketing with a mean of 3.25 as shown in table 4.3.

When the graduates were asked during key informant interview about the tailoring and

dressmaking skills they are getting from the institutions, majority of their responses included designing and sketching, drafting, cutting, fixing accessories, assembling a garment and ironing. Others mentioned customer care, repair and maintenance of machines, marketing and communication skills. One of the trainees said that:

> *"We get the skills of assembling a garment, cutting, ironing, drafting, drawing, and making the full garment".*

The majority, 75% of trainers stated that the main skills imparted to the trainees included pattern drafting, pattern development, cutting, sketching, garment construction, fixing accessories, free hand cutting, use of sewing machines, machine maintenance, cleaning the shop, entrepreneurship, effective communication and computer skills. The trainers added that the trainees were able to interpret a particular design, develop it and make it, other skills include tie and dye, printing and embroidery. One of the trainers said that;

> *"Other skills taught are pattern drafting, machine maintenance, life skills, entrepreneurship, and effective communication"* while another mentioned that:
>
> *"The skills imparted to youths undergoing training are drafting and cutting a particular design and the trainees can make a complete garment. That is, they can interpret a particular design, develop it and make it".*

The employers were asked about the tailoring and dressmaking skills that the graduates had prior to employment. The majority of the respondents identified basics in cutting; garment drafting; drawing; knitting; fitting accessories; sewing; sketching; designing; measuring and ironing skills. One of the prospective employers noted that:

> *"They have the basics skills that are necessary for tailoring and dressmaking including* knitting, *cutting, sketching, drawing, ironing, drafting sewing and*

cutting. Since they are from different technical institutions their skills vary according to the nature of their technical institutions e.g. some have drawing skills, decoration and others do not have"

About 35% of the employers stated that trainees' skills included oiling machines; garment repair; listening and garment assembling. There is concurrence between the knowledge imparted according to the trainees, trainers and employers but the trainers and employers differed with the trainees in terms of soft skills like communication skills which most trainees did not mention.

In conclusion, most trainees had high levels of skills in keeping the shop clean and in the care and maintenance of sewing machines. Others had average levels of skills in garment assembly or stitching, customer care, and interpretation of garment design. The trainees had low levels of skills in marketing and in buying fabric.

4.3 Tailoring and Dressmaking Skills Required of Tailoring and Dressmaking Graduates by the Employers

The second objective was to analyze the tailoring and dressmaking skills required of the graduates by the employers in which they were asked if they are aware of what kinds of skills the industry requires from them. The instruments used to assess this included the questions in appendices E, F and G in which the employers, trainers and graduates were involved as key informant persons.

The majority (85.7%) of the trainees confirmed that they were aware of what kind of skills the industry requires from them while only (14.3%) responded that they were not aware of the kind of skills the garment and textile industry require from them. Those who

confirmed said the industry needed presentable and trending fashionable clothes, needed them to know how to use modern equipment, perform decorations, to know how to sketch and interpret designs. A follow up question on their opinion on whether or not they have all the skills required for tailoring and dressmaking job. Only four out of 42 said they had all the skills required for tailoring and dressmaking.

Those who did not have all the skills indicated that they were still not competent in making some designs, professionally assembling garments, drafting and embroidery and they attributed this to unavailability and non-functioning of electric machines. When asked if the trainees were aware of what kinds of skills the industry requires from them, majority of trainers acknowledged that, trainees know what the industry requires from them in terms of skills because they have three months' mandatory industrial attachment. One of the trainers said that:

> *"Yes, many trainees are aware that industries offer more information on training e.g material processing and garment construction"*

A few of the trainers indicated that some trainees are forced into the training by sponsoring organizations or parents and are therefore not so much concerned with what is going on around them. One of the trainers said that:

> *"Some do and some don't depend on the cutting point and expectations of each trainee. Some of them are sponsored by organizations and are forced to do it but others it is their passion".*

When asked if in their opinion the youth trained in the various VTCs have all the skills required for tailoring and dressmaking job, majority of the trainers said that a few of the

trainees from the VTCs have all the skills required for tailoring and dressmaking because not all of them have the_passion and this will also depend on the level, duration of training and their background prior to joining training. One of the trainers said that:

> *"This is also true because a number of VTCs do not have modern functional equipment". "I can say that 80% have the skills required but still more efforts need to be added like giving them more machines which are updated, according to the new technology".*

When asked on the required tailoring and dressmaking skills which the graduates are lacking, about 85% of the employer's respondents mentioned assembling garments professionally; repair and maintenance of the machines; lack of teamwork; conducting and recording customer cloth measurements; relating well with the customers; decorating clothes; observation and proper communication with colleagues and customers. One employer commented that:

> *"Most of trainees from VTC are not competent. I expect them to have skills such as knowing how to use electric machines, to differentiate different types of garments and to fix and decorate neatly and, they don't know how to talk to customers".*

In conclusion most trainees agreed that the industry needed skills that ranged from knowing how to sketch, interpret designs, and sew trending fashionable garments that are presentable, use modern equipment and performing of decorations. However, trainees are weak in sewing garments professionally, unable to cut some garments using free hand cutting and making some designs, drafting and embroidery. Trainers also attributed these to lack of continuous development of trainers, inadequate number of trainees, high rates of drop out or absenteeism due to lack of fees, lack of electric power and due to

unavailability and non-functioning of electric machines. One of the trainers said that that:

> *"We lack current machines and equipment to match the market demand, we lack enough staff to teach the trainees and materials to use for training".*

4.4 Training Gaps in Tailoring and Dressmaking Courses in Vocational Training Centres

This objective sought to determine the training gaps if any in tailoring and dressmaking courses in Vocational Training Centres in Nairobi City County. The areas tested included all the aspects of tailoring and dressmaking process namely: Interpretation of garment designs; Garment assembling; Machine care and maintenance; Customer care; Record keeping; Keeping the shop clean; Purchases; Fashion trends and Marketing.

4.4.1 Interpretation of Garment Designs

To ascertain the trainees' level of skills in interpretation of garment designs, the trainee respondents were asked their opinion on a list of nine items on a 5-point Likert scale and their responses were as per table 4.4.

Table 4.4. ***Interpretation of Garment Designs***

Statement	SD	D	U	A	SA	Total	Mean
I lay out fabric on cutting surfaces using correct procedure	30 (14.6%)	00 (0%)	00 (0%)	64 (31.2%)	111 (54.1%)	205 (100%)	4.10
I cut out lining, facing and interfacing pieces where needed using correct procedure	10 (4.9%)	25 (12.2%)	13 (6.3%)	56 (27.3%)	101 (49.3%)	205 (100%)	4.04
I observe garment designs provided by customers before making a dress	24 (11.7%)	0 (0%)	13 (6.3%)	102 (49.8%)	66 (32.2%)	205 (100%)	3.91
I cut drafted patterns to garment components according to design	10 (4.9%)	45 (22.0%)	16 (7.8%)	32 (15.6%)	102 (49.8%)	205 (100%)	3.83
I draft garment patterns on paper according to design using customer's body measurements	48 (23.4%)	10 (4.9%)	0 (0%)	62 (30.2%)	85 (41.5%)	205 (100%)	3.61
I translate garment designs to pattern components	25 (12.2%)	22 (10.7%)	21 (10.2%)	82 (40%)	55 (26.8%)	205 (100%)	3.59
I lay patterns on a fabric using correct procedure	32 (15.6%)	25 (12.2%)	12 (5.9%)	79 (38.5%)	57 (27.8%)	205 (100%)	3.51
I understand the different garment components	49 (23.9%)	20 (9.8%)	5 (2.4%)	44 (21.5%)	87 (42.4%)	205 (100%)	3.49
I sketch garments designs using customer's specifications	24 (11.7%)	68 (33.2%)	5 (2.4%)	62 (30.2%)	46 (22.4%)	205 (100%)	3.19
Overall mean for Interpretation of Garment Designs						(3.69)	

The trainees felt competent on all the statements as shown by those who answered as agreeing and strongly agreeing with the statements. On all the items tested, over three quarters of the trainees were competent in laying out fabric on cutting surfaces using correct procedures (85.2%), followed by observing garment designs provided by customers before making dresses (82%), and lastly in cutting out lining, facing and interfacing pieces where needed using correct procedures (76.6%).

Further analysis indicated that the trainees in their self-analysis felt averagely competent in cutting drafted patterns to garment components according to design, in drafting garment patterns on paper according to design using customer's body measurements and

in translating garment designs to pattern components. The trainees said that their levels of competency in interpretation of garment design was low on three indicators namely, laying patterns on fabrics using correct procedures, in understanding the different garment components and the least of all was on their ability to sketch garment designs using customer's specifications (52.6%).

4.4.2 Garment Assembling

Figure 4.2 presents the results on the opinions of the trainees when they were asked about their level of competency on a number of items on garment assembling. The results show that the trainees felt competent in three areas that got means that were above the overall group mean of 3.72. From their responses the trainees indicated that their best skill is in assembling cut out garment components to make a complete garment (4.29) followed by neatening raw edges of seams using correct procedure with a mean of 4.00 followed by competency in pressing out seams to flatten and achieve a finished look on a garment (3.97). In terms of percentages 180 (87.8%) were very competent in assembling of cut out garment components to make a complete garment, 169 (82.5% in neatening raw edges of seams using correct procedures with 157 (76.6%) being able to press out seams to flatten and achieve a finished look on a garment.

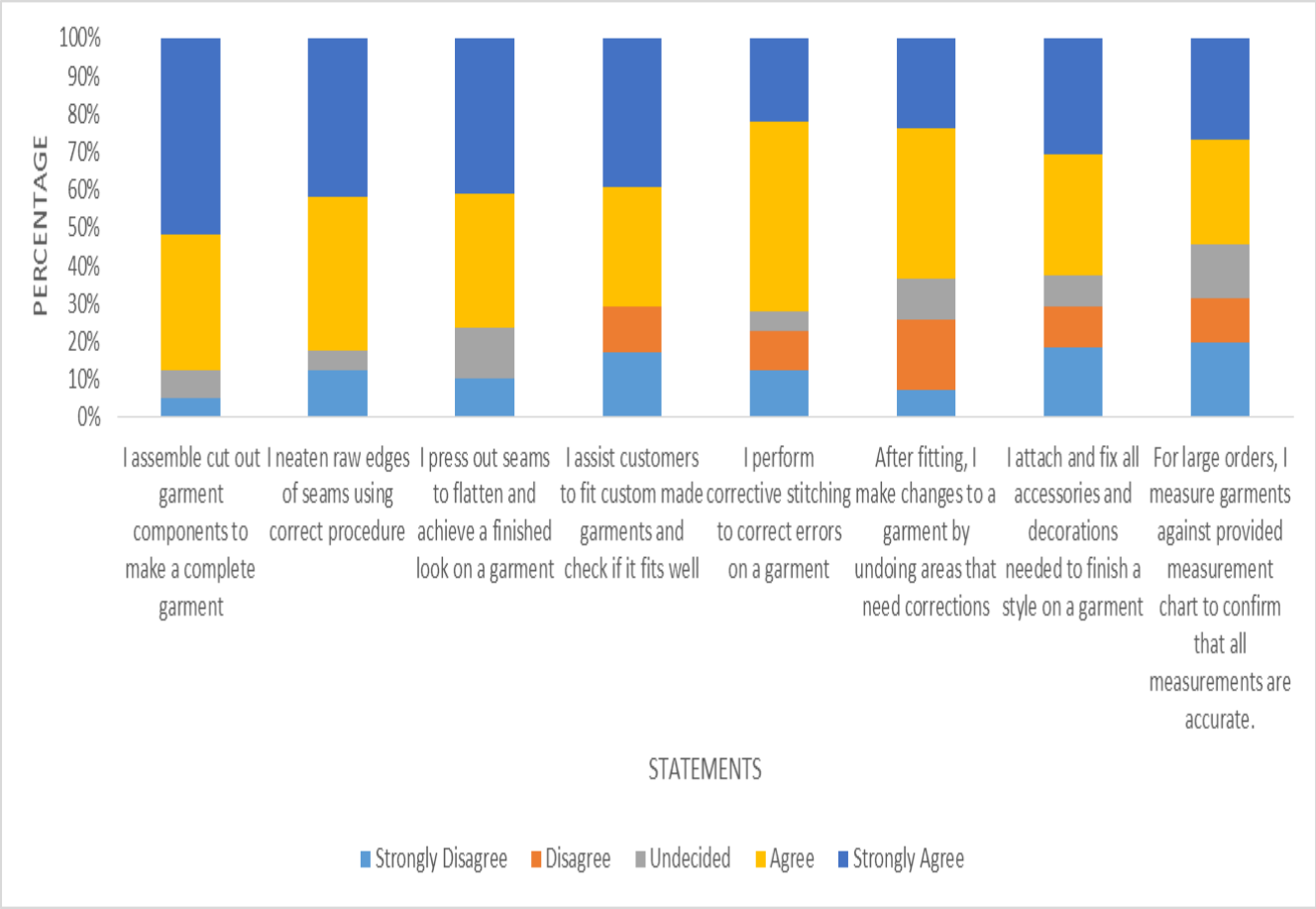

Figure 4.1. **Garment Assembling Skill Level**

Contrarily, the respondents also felt competently weak in three areas presented including how to make changes to a garment by undoing areas that need corrections with a mean of 3.54; attaching and fixing all accessories and decorations needed to finish a style on a garment (mean=3.45) and the least of all is in not able measure garments against provided measurement chart to confirm that all measurements are accurate especially for large orders. All these three indicators fell far below the group mean of 3.74.

While the trainees felt very competent assembling cut out garment components and be able to make a complete garment with a mean score of 4.29, they also felt competently

weak in measuring garments against provided measurement chart and be able to confirm that all measurements are accurate especially for large orders.

4.4.3 Sewing Machine Care and Maintenance

Respondents were asked of their feelings on their level of competency on a number of items under care and maintenance of sewing machines and their responses were as recorded in table 4.5.

Table 4.5. ***Care and Maintenance of Sewing Machines***

	Statement	**SD**	**D**	**U**	**A**	**SA**	**Total**	**Mean**
1	I observe a sewing machine for signs of friction to determine when oiling is required	10 (4.9%)	13 (6.3%)	13 (6.3%)	36 (17.6%)	133 (64.9%)	205 (100%)	4.31
2	I check for loose parts on a sewing machine	23 (11.2%)	0 (0%)	0 (0%)	67 (32.7%)	115 (56.1%)	205 (100%)	4.22
3	I tighten loose parts of a sewing machine	10 (4.9%)	13 (6.3%)	10 (4.9%)	72 (35.1%)	100 (48.8%)	205 (100%)	**4.16**
4	I adjust settings of a sewing machine to correct stitching problems	23 (11.2%)	0 (.0%)	16 (7.8%)	70 (34.1%)	96 (46.8%)	205 (100%)	**4.05**
5	I check for missing parts on a sewing machine	32 (15.6%)	15 (7.3%)	0 (0%)	46 (22.4%)	112 (54.6%)	205 (100%)	3.93
6	I check the quality of stitches a sewing machine makes to determine any need to adjust settings	23 (11.2%)	9 (4.4%)	0 (0%)	99 (48.3%)	74 (36.1%)	205 (100%)	3.93
7	I oil sewing machines regularly	22 (10.7%)	10 (4.9%)	28 (13.7%)	75 (36.6%)	70 (34.1%)	205 (100%)	**3.78**
8	I check for worn-out parts on a sewing machine	27 (13.2%)	22 (10.7%)	0 (0%)	83 (40.5%)	73 (35.6%)	205 (100%)	3.74
9	I get qualified mechanics to repair sewing machines when the problem detected is beyond me	53 (25.9%)	15 (7.3%)	11 (5.4%)	41 (20.0%)	85 (41.5%)	205 (100%)	**3.43**
10	I replace worn-out and missing parts of a sewing machine	52 (25.4%)	25 (12.2%)	23 (11.2%)	44 (21.5%)	61 (29.8%)	205 (100%)	3.18

Overall mean for Care and Maintenance of Sewing Machines (Mean 3.87)

In terms of care and maintenance of sewing machines, out of a list of 10 indicators the respondents indicated that they were very competent in observing a sewing machine for

signs of friction to determine when oiling is required (4.31); checking for the loose parts on a sewing machine (4.22); and in tightening loose parts of a sewing machine (4.16). All the three indicators were way above the group mean of 3.87. Otherwise, the respondents felt weak on their ability to check for worn-out parts on a sewing machine (3.74); in sourcing for qualified mechanics to repair sewing machines when the problem detected is beyond their knowledge (3.43); and lastly is how to replace worn-out and missing parts of a sewing machine (3.18) whose individual means were below the group mean of 3.87.

For machine care and maintenance, the trainees generally felt incompetent in four skills including not being able to oil sewing machines regularly and not being able to check for worn-out parts on a sewing machine. The trainees were also not competent in sourcing qualified mechanics to repair sewing machines when the problem detected is beyond their knowledge and the least is not being able to replace worn-out and missing parts of a sewing machine.

4.4.4 Customer Care

To get the views of the trainees on their level of competency in customer care, they were asked to respond to a number of statements relevant to customer care. Their responses were tabulated in table 4.6.

Table 4.6. ***Customer Care***

S/NO	Statement	SD	D	U	A	SA	Total	Mean
1	I greet and welcome customers to my tailoring shop	22 (10.7%)	20 (9.8%)	6 (2.9%)	44 (21.5%)	113 (55.1%)	205 (100%)	**4.00**
2	I write down the customer's order and specifications (fabric, accessories, decorations)	35 (17.1%)	35 (17.1%)	0 (.0%)	6 (2.9%)	129 (62.9%)	205 (100%)	**3.77**
3	I take customers body measurements and record them	35 (17.1%)	35 (17.1%)	0 (.0%)	20 (9.8%)	115 (56.1%)	205 (100%)	**3.70**
4	I calculate cost of products and services and inform customers	22 (10.7%)	40 (19.5%)	15 (7.3%)	31 (15.1%)	97 (47.3%)	205 (100%)	**3.68**
5	I keenly listen to customers and take note of what they want	35 (17.1%)	35 (17.1%)	0 (.0%)	30 (14.6%)	105 (51.2%)	205 (100%)	3.65
6	I negotiate with customers and agree on total payments for their orders and payment terms	35 (17.1%)	35 (17.1%)	0 (.0%)	40 (19.5%)	95 (46.3%)	205 (100%)	3.60
7	In case a customer is not fully decided on the design of garment they wish to order, I help them by suggesting the latest styles and even showing them style magazines to choose a preferred style	22 (10.7%)	35 (17.1%)	25 (12.2%)	69 (33.7%)	54 (26.3%)	205 (100%)	3.47
8	I make rough sketches of the style's customer have ordered and allow the customers to confirm	32 (15.6%)	50 (24.4%)	0 (.0%)	57 (27.8%)	66 (32.2%)	205 (100%)	3.36

Overall mean for customer care (Mean 3.66)

From the results we can deduce that the trainees felt competent in three main areas of customer care that had their means above the group mean of 3.66. These included being able to greet and welcome customers to the tailoring shop (mean=4.00), being able to write down the customer's order and specifications (fabric, accessories, decorations) (mean=3.77) and being able to take customers body measurements and record them well with a mean of 3.70. The trainees also felt that there are some areas of customer care in

which they are still weak as per table 4.6. They felt that they are still not able to negotiate with customers and agree on total payments for their orders and payment terms (mean=3.60), still not able to convince a customer who has not yet made a choice by suggesting the latest styles and even showing them style magazines to choose a preferred style (mean=3.47) and the least being not able to make rough sketches of the style's customer have ordered and allow the customers to confirm with a mean of 3.36.

While the trainees felt competent in a number of areas of customer care, there still exists knowledge gaps that need to be worked including how to negotiate with customers and agree on total payments for their orders and payment terms, how to support customers in making choices and lastly on how to make rough sketches of the style's customer have ordered and allow the customers to confirm.

4.4.5 Record Keeping

In order to get the levels of competency in record keeping, the trainees were asked to give their feelings on a number of aspects of record keeping. The results of their responses are as shown in table 4.7.

Table 4.7. ***Record Keeping***

S/ NO	Statement	SD	D	U	A	SA	Total	Mean
1	I record the amount of profits made each day, week, and month	22 (10.7%)	35 (17.1%)	0 (0.0%)	47 (22.9%)	101 (49.3%)	205 (100%)	3.82
2	I record all materials and accessories bought and their quantities	22 (10.7%)	25 (12.2%)	10 (4.9%)	68 33.2	80 (39.0%)	205 (100%)	3.77
3	I record the amount of money used by the business each day,	35 (17.1%)	35 (17.1%)	0 (0.0%)	27 (13.2%)	108 (52.7%)	205 (100%)	3.67

	week, and month							
4	I record all the money owed by customers	22 (10.7%)	48 (23.4%)	0 (0.0%)	47 (22.9%)	88 (42.9%)	205 (100%)	3.63
5	I keep records of all materials and accessories used while making dresses in terms of type and quantities	22 (10.7%)	40 (19.5%)	13 (6.3%)	50 (24.4%)	80 (39.0%)	205 (100%)	3.61
6	I keep a record of all dresses collected by customers	22 (10.7%)	50 (24.4%)	6 (2.9%)	46 (22.4%)	81 (39.5%)	205 (100%)	**3.55**
7	I record all the money owing to suppliers	35 (17.1%)	35 (17.1%)	5 (2.4%)	47 (22.9%)	83 (40.5%)	205 (100%)	**3.52**
8	I keep a record of dresses work-in-progress and finished dresses	32 (15.6%)	25 (12.2%)	23 (11.2%)	70 (34.1%)	55 (26.8%)	205 (100%)	3.44
9	I have a record of all customers' contact details	22 (10.7%)	68 (33.2%)	26 (12.7%)	41 (20.0%)	48 (23.4%)	205 (100%)	**3.12**

Overall mean for record keeping (Mean 3.57-Agree)

The trainees felt they have competency in three main areas which included being able to record the amount of profits made each day, week, and month (mean=3.82); being able to record all materials and accessories bought and their quantities (mean=3.77) and lastly being able to record the amount of money used by the business each day, week, and month (mean=3.67). Other than these three areas, the trainees also felt they were not competent enough to perform some tasks under record keeping. These skills areas fell far below the group mean of 3.57 and included not being very competent to record all the money owing to suppliers (mean=3.52); to keep a record of dresses work-in-progress and finished dresses (mean= 3.44) and the least being not very able to keep record of all customers' contact details (mean=3.12).

The highest score showed that majority 148 (72.2%) of respondents were very able to record the amount of profits made each day, week, and month by indicating agree and

strongly agree but were not competent enough in maintaining records of customer contact details 89 (43.4%) by indicating disagree and strongly disagree. These two skill areas had a mean of 3.82 for the most competent area and mean of 3.12 for the weakest skill area as in table 4.7.

4.4.6 Keeping the Shop Clean

The trainees were also tested on a number of skill areas in keeping the shop clean to determine their level of competency. Out of all the main skills areas tested, shop cleanliness had the highest overall mean of 4.22 and therefore had the indicators with highest scores as presented in table 4.8.

Table 4.8. ***Keeping the Shop Clean***

S/NO	Statement	SD	D	U	A	SA	Total	Mean
1	I dust all the surfaces in my shop to keep it clean	12 (5.9%)	10 (4.9%)	13 (6.3%)	35 (17.1%)	135 (65.9%)	205 (100%)	4.32
2	I sweep and mop the floor of my shop to keep it clean	12 (5.9%)	10 (4.9%)	13 (6.3%)	42 (20.5%)	128 (62.4%)	205 (100%)	4.28
3	I arrange and organize fabrics, garments, and equipment	35 (17.1%)	0 (0%)	0 (0%)	51 (24.9%)	119 (58%)	205 (100%)	4.06

Overall mean for Keeping the Shop clean (Mean 4.22-Agree)

The trainees felt very competent in dusting all the surfaces in the shop to keep it clean with a mean of 4.32 followed by ability to sweep and mop the floor of the shop to keep it clean with a mean of 4.28. The item on which the trainees felt incompetent in shop cleanliness was in their ability to arrange and organize fabrics, garments, and equipment in the shop. The area of shop cleanliness was the best performed meaning that majority of

the trainees felt that they are very able to perform in all the three skill areas tested. These high levels of competency could be because they are routine activities that are repeated over and over even in other areas other than the shop.

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4.4.7 Purchases

Purchasing is another major skill that was tested for competency levels. The trainees were asked about their feelings on four variables under purchases to help judge areas of their strengths and weaknesses if any. The results are presented in table 4.9.

Table 4.9. ***Buying Fabrics and Items Needed for Completing Orders***

S/NO	Statement	SD	D	U	A	SA	Total	Mean
1	I take stock of all materials and accessories at the shop from time to time to determine what needs to be bought and how much	47 (22.9%)	23 (11.2%)	0 (.0%)	61 (29.8%)	74 (36.1 %)	205 (100.0%)	3.44
2	I check customer orders to determine the fabric and accessories that may be needed and are not usually stocked and calculate the amounts needed	37 (18.0%)	30 (14.6%)	0 (.0%)	80 (39.0%)	58 (28.3 %)	205 (100.0%)	3.44
3	I create a complete list of all materials and accessories that must be bought and the quantities to be bought	37 (18.0%)	38 (18.5%)	0 (.0%)	64 (31.2%)	66 (32.2 %)	205 (100.0%)	3.40
4	I travel to the nearest fabric and accessories supplier and buy the materials required to make a dress	42 (20.5%)	35 (17.1%)	15 (7.3%)	30 (14.6%)	83 (40.5 %)	205 (100.0%)	3.37

Overall mean for Buying fabrics and items needed for completing orders (Mean 3.42-

Agree)

Based on the group mean of 3.42, the trainees felt competent in two areas whose means were above the group mean.

These included the ability to take stock of all materials and accessories at the shop from time to time to determine what needs to be bought and at what price with a mean of how much and the second being able to check customer orders to determine the fabric and accessories that may be needed and are not usually stocked and calculate the amounts needed both of which tied at a mean of 3.44. The other two areas had their means below the group mean implying that the trainees felt they were not competent enough in them, these were ability to create a complete list of all materials and accessories that must be bought and the quantities to be bought (mean=3.40) and being able to travel to the nearest fabric and accessories supplier and buy the materials required to make a dress at a mean of 3.37.

Even though the trainees had two items above the group mean, the means were still low compared to the earlier ones. The area of the ability to create a complete list of all materials and accessories that must be bought and the quantities to be bought and being able to travel to the nearest fabric and accessories supplier and buy the materials required to make a dress needs more effort in theory and practically.

4.4.8 Fashion Trends

Another area of competency required in tailoring and dressmaking is in study of fashion trends in the market. In this area the trainees were tested on three skill areas to determine

their level of competency. The results of the trainees' feelings are presented in table 4.10.

Table 4.10. ***Studying Fashion Trends***

S/NO	Statement	SD	D	U	A	SA	Total	Mean
1	I search the internet/ social media for trending fashion styles for dresses	25 (12,2%)	10 (4.9%)	10 (4.9%)	66 (32.2%)	94 (45.9%)	205 (100%)	3.94
2	I consult friends and customers on trending fashion styles for dresses	50 (24.4%)	5 (2.4%)	0 (0%)	76 (37.1%)	74 (36.1%)	205 (100%)	3.58
3	I source for latest fashion magazines with trending styles for dresses	33 (16.1%)	33 (16.1%)	26 (12.7%)	49 (23.9%)	64 (31.2%)	205 (100%)	3.38

Overall mean for Studying Fashion Trends (Mean 3.63-Agree)

From table 4.10 the trainees in their responses felt competent in one indicator of being able to search the internet/ social media for trending fashion styles for dresses (m=3.94) that scored above the group mean of m=3.63. The respondents therefore felt less competent on the other two with the remaining indicators being below the group mean including consulting friends and customers on trending fashion styles for dresses (M=3.58) and being able to source for latest fashion magazines with trending styles for dresses scored below the group mean at (m=3.38).

The trainee's responses on the area of their strength reflects the love of the young people in using the social media platforms to source for information. In terms of gaps in skills the two areas will still need adjustment to enable the trainees to achieve the levels of competency required from them to fit into the industry.

4.4.9 Marketing

The last area of skill in tailoring and dressmaking tested was in marketing. The trainees were taken through four statements on which they were to gauge their level of competency. The feelings of the trainees based on the four areas are presented in table 4.11 with an overall mean of 3.25.

Table 4.11. ***Marketing***

S/NO	**Statement**	SD	D	U	A	SA	Total	Mean
1	I reach out to my customers when new dress styles come out	33 (16.1%)	25 (12.2%)	43 (21.0%)	60 (29.3%)	44 (21.5%)	205 (100%)	3.27
2	I reach out to potential customers through use of social media	55 (26.8%)	29 (14.1%)	6 (2.9%)	35 (17.1%)	80 (39.0%)	205 (100%)	3.27
3	I reach out to potential customers through word of mouth by existing customers	27 (13.2%)	51 (24.9%)	18 (8.8%)	58 (28.3%)	51 (24.9%)	205 (100%)	3.26
4	I reach out to potential customers through use of signboards	38 (18.5%)	44 (21.5%)	11 (5.4%)	63 (30.7%)	49 (23.9%)	205 (100%)	3.20

Overall mean for marketing (Mean 3.25-Agree)

The respondents felt highly competent in three of the four areas that had their means above the overall mean. These included being able to reach out to customers when new dress styles come out and being able to reach out to potential customers through use of social media that tied at a mean of 3.27 followed by ability to reach out to potential customers through word of mouth by existing customers with a mean of 3.26. The lowest mean from this category was 3.20 for not being sure about reaching out to potential

customers through use of signboards.

Trainees in this category were not able to use signboards to reach out to potential customers and this gap could be as a result of the costs involved or them not being the decision makers on the issue of signboards.

4.4.10 Conclusion

In order to ascertain the overall gaps in skills a summary was derived from the individual responses in each of the categories. This summary of the average for each of the nine items tested is presented in table 4.12.

Table 4.12. ***Summary of the Nine Categories Tested***

S/NO	Statement	MEAN
1	Keeping the Shop clean	**4.22**
2	Care and Maintenance of Sewing Machines	**3.87**
3	Garment Assembly or Stitching	**3.72**
4	Interpretation of Garment Designs	**3.69**
5	Customer Care	3.66
6	Studying Fashion Trends	3.63
7	Record Keeping	3.57
8	Buying Fabric	3.42
9	Marketing	3.25
	OVERALL MEAN	3.68

From the summary out of nine categories that were being tested the respondent's responses indicated that they were above average on only four broad areas. These areas that were above average of 3.68 included competency in keeping the shop clean (mean=4.22); care and maintenance of sewing machines (m=3.87); and garment assembly or stitching (mean=3.72). The trainees still also felt less competent in all the other five areas that were tested as in table 4.12. The least three of the five skills being that they are not good at keeping records (mean=3.57); buying of fabric (mean=3.42) and lastly marketing with a mean of 3.25.

Under the category of ensuring that the shop is kept clean, the trainees still had one skill gap of arranging and organizing fabrics, garments, and equipment. For care and maintenance of sewing machines, the trainees had gaps in oiling of sewing machines regularly, checking for worn-out parts on a sewing machine, getting qualified mechanics to repair sewing machines when the problem detected is beyond me and in replacing worn-out and missing parts of a sewing machine.

In the category of garment assembling, the trainees still felt that they are not able to assist customers to fit custom made garments and checking if it fits well; perform corrective stitching to correct errors on a garment; not able to make changes to a garment by undoing areas that need corrections after fitting; attach and fix all accessories and decorations needed to finish a style on a garment and lastly not competent to measure garments against provided measurement chart to confirm that all measurements are accurate especially for large orders.

For interpretation of garment designs the trainees still felt less competent in drafting garment patterns on paper according to design using customer's body measurements; translating garment designs to pattern components; laying patterns on a fabric using correct procedure; understanding the different garment components and lastly in sketching garments designs using customer's specifications.

The other category with skill gaps is in customer care where the trainees felt they are still not competent to keenly listen to customers and take note of what they want; negotiate with customers and agree on total payments for their orders and payment terms and incase a customer is not fully decided on the design of garment they wish to order, they can't help them by suggesting the latest styles and even showing them style magazines to choose a preferred style and lastly not able to make rough sketches of the style's customer have ordered and allow the customers to confirm. For fashion trends studying the respondents still lacked skill to be able to consult friends and customers on trending fashion styles for dresses and source for latest fashion magazines with trending styles for dresses.

The trainees were also able to indicate that they are still not competent enough in record keeping. The main aspects here still having gaps include trainees not able to keep records of all dresses collected by customers; to record all the money owing to suppliers; to keep record of dresses work-in-progress and finished dresses and to have records of all customers' contact details. In buying of fabrics, they are still not able to create a

complete list of all materials and accessories that must be bought and the quantities to be bought and even to travel to the nearest fabric and accessories supplier and buy the materials required to make a dress. Under marketing the trainees felt still not able to reach out to potential customers through use of signboards.

4.5 Strategies for addressing Skills Gaps from Tailoring and Dressmaking graduates of Vocational Training Centres.

The specific objective here was to develop a framework to align tailoring and dressmaking curriculum to industry performance expectations. The first three objectives looked at the skills acquired by the trainees, skills required by the employer and the skills gap identified by the trainers, employers and trainees themselves. Based on the conceptual framework, the acquisition of knowledge that will fit the industry without having gaps is determined by the type of curriculum used; the training methodology employed; appropriate technology used during training and the methods used to assess the trainees.

A number of issues were raised under objective one for skills acquired by trainees which included lack of modern equipment and materials for training. This implied that most of the VTCs do not have the necessary modern equipment to enable better acquisition of knowledge. From the issues raised by the trainees and trainers it can be deduced that the curriculum being used stresses much on theory and exam oriented and very little practical work. This is aggravated by the fact that most VTCs do not have the necessary

equipment. They also do not have sufficient and trained personnel to take the trainees through skills acquisition. It also came out that the nature of industrial attachment is not comprehensive enough to enable trainees to fill the gaps on what they cannot get in college.

With the deficiencies identified earlier, the three different groups had their different views on what needs to be done to ensure that trainees from the VTCs graduate when they are able to fit into the industry. When the respondents were asked on what can be done to the tailoring and dressmaking curriculum to match industry expectations all the three groups of respondents which included trainers, employers and trainees concurred that it should be made mandatory for the trainees to go for industrial attachment as stipulated in the curriculum to enable them to get the skills that is not acquired during training in VTCs.

The other areas of concurrence included making the curriculum to be more practical than theoretical oriented because tailoring and dressmaking is a hands-on skills that requires a lot of practice; ensuring that the VTCs are equipped with modern electric machines and materials equivalent to those found in the industry. The three groups also concurred that there should be continuous employment of more competent trainers and having them go for refresher training to be abreast with modern trends and technology in the market. Another area of concurrence was provision of capitation to enable needy trainees' complete respective courses and assisting the trainees in getting new trending designs in the market by connecting them to designers for guidance.

The employers on their own felt that trainees should be taught soft skills that include communication skills, teamwork, critical thinking, decision making and interpersonal skills. Since the world has gone into the era of information technology, there is a serious need for acquisition of computer skills. To be able to catch up with the trending fashion the trainees should be oriented in the use of social media; use of fashion magazines to explore trending fashion; and be given opportunity to visit selected markets and observe the changing designs.

Trainers on their side felt that the provision of equipment and materials to be of top priority so as to enhance practical based training. Trainees on their part felt that they need to be taught all clothing designs, assembling garments professionally, be supported by respective institutions to be attached both in textile industries and jua kali sector for varied experiences and that there is need to shorten the theory part in the syllabus and increase practical sessions. From the analysis most trainees did not have industry practical skills. There is therefore a great need to go for supervised industrial attachment for the periods stipulated in the curriculum to enable them to get the skills not acquired in college. There is also the urgent need to make their curriculum to be more of practical than theoretical.

Summary

The research findings highlight significant skills gaps among tailoring and dressmaking graduates from vocational training centers in Nairobi, Kenya. Key areas of concern

include deficiencies in technical skills related to garment construction and equipment usage, soft skills such as communication and customer service, business acumen including financial literacy and marketing, and adaptability to new technologies and market trends. Addressing these gaps through enhanced curricula, industry partnerships, practical training opportunities, and entrepreneurial education is essential for improving the employability and success of graduates in the competitive tailoring and dressmaking landscape.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.0 Introduction

This chapter discusses the findings and interpretation of the results from the analytical statistic techniques. Based on the findings of the study as presented in chapter four, in line with the objectives of the study, this chapter analyses and discusses the empirical results of this study as well as referring to the relevant literature review linked to vocational and technical skills acquisition in tailoring and dressmaking for comparison with the findings.

5.1 Skills Acquired by Tailoring and Dressmaking Graduates from Vocational Training Centres

The results from the study on the skills acquired by tailoring and dressmaking graduates from Vocational Training Centers (VTCs) in Nairobi County reveal significant insights into the competencies that these graduates possess upon completion of their training. This discussion analyzes the findings concerning technical skills, business and entrepreneurial skills, soft skills, and the role of digital skills, supported by both local and international references. The data indicates that graduates possess a foundational understanding of technical skills such as garment construction, sewing techniques, pattern drafting, and fabric selection.

However, many graduates exhibit varying levels of proficiency in these areas. Research

by Muthomi and Kathuri (2018) illustrates that while VTCs in Nairobi focus on core technical competencies, the practical application of these skills is often hindered by inadequate resources, including outdated sewing machines and limited access to diverse fabrics. This finding resonates with Mwangi (2020), who reports that although graduates understand basic techniques, the lack of exposure to advanced methods, such as computerized sewing and design technology, leaves them unprepared for the demands of the modern tailoring industry.

In contrast, international programs, such as those in countries with established garment industries like Vietnam and Bangladesh, incorporate more advanced technical training and equipment (ILO, 2019). These countries emphasize the importance of adapting training to contemporary industry needs, which not only enhances graduates' skillsets but also increases their employability. The disparity between local and international training standards highlights the necessity for Nairobi VTCs to upgrade their curricula and resources to better equip trainees for current market demands.

Another critical area identified in the results is the gap in business and entrepreneurial skills among graduates. While technical proficiency is essential, the ability to manage a business effectively is equally vital for those pursuing self-employment. Muthomi and Kathuri (2018) and KIPPRA (2020) highlight that the curricula at many Nairobi VTCs often neglect business training. Graduates often lack knowledge in pricing strategies, budgeting, marketing, and customer relationship management, which are essential for

establishing and sustaining a successful tailoring business. Kinyua and Mugo (2019) further emphasize that graduates without business acumen face challenges in sustaining their enterprises, leading to high failure rates among small tailoring businesses.

Comparative studies from countries like South Africa and India indicate that integrating entrepreneurial skills into vocational training significantly enhances graduates' success in self-employment (ILO, 2020). For instance, programs that offer modules on business planning and financial management help graduates navigate the complexities of running a business, contributing to better economic outcomes. This highlights the need for Nairobi VTCs to incorporate comprehensive business training in their curricula to empower graduates to thrive in competitive markets.

The results further indicate a noticeable deficiency in soft skills among graduates. While technical skills may qualify them for jobs, soft skills are essential for client interactions, teamwork, and effective communication. The Kenya National Bureau of Statistics (KNBS, 2020) reports that vocational training centers in Nairobi primarily focus on technical training, leading to graduates who are ill-equipped in interpersonal communication and customer service. This lack of soft skills can severely limit their ability to engage with clients effectively, ultimately affecting business success. Mwangi (2020) suggests that graduates with strong communication and teamwork skills can significantly enhance customer satisfaction and loyalty, which are crucial in the service-oriented tailoring industry.

Conversely, international programs, such as those in European countries, place a significant emphasis on developing soft skills alongside technical training (UNESCO, 2019). Studies indicate that graduates trained in environments that prioritize soft skills demonstrate greater adaptability in the workplace and are more successful in building client relationships. This contrast underscores the importance of integrating soft skills training into the curricula of Nairobi VTCs to enhance graduates' overall employability.

Integration of Digital Skills in vocational training is emerging as a vital component in the tailoring and dressmaking sector.

While the results show limited exposure to digital tools among graduates, this gap represents an opportunity for improvement. The study reveals that many VTCs in Nairobi do not include digital skills training, such as the use of design software or online marketing strategies, in their curricula (Kinyua & Mugo, 2019). As a result, graduates may struggle to leverage digital platforms for marketing their services and reaching broader audiences. This limitation can hinder their competitiveness in an increasingly digital economy.

In contrast, programs in countries like South Africa and Turkey are increasingly integrating digital skills training, recognizing its importance for contemporary business practices (World Bank, 2020). Graduates equipped with digital competencies can utilize e-commerce platforms and social media marketing to enhance visibility and attract clients. Incorporating digital skills into Nairobi's VTC curricula could significantly

elevate the market readiness of graduates, allowing them to tap into new business opportunities.

The findings indicate that while tailoring and dressmaking graduates from Nairobi's VTCs acquire essential technical skills, significant gaps in business acumen, soft skills, and digital competencies persist. Addressing these gaps is crucial for enhancing the employability and entrepreneurial potential of graduates in a competitive market. By updating curricula to include business training, soft skills development, and digital competencies, VTCs can better prepare graduates for the realities of the tailoring industry, thereby contributing to their success and the economic growth of the region.

5.2 Skills Required by the Industry from Tailoring and Dressmaking Graduates of Vocational Training Centres

The findings from the study on the skill levels required by the industry from tailoring and dressmaking graduates of vocational training centres (VTCs) illuminate crucial insights into the competencies expected by employers. This discussion analyzes the results regarding technical skills, business and entrepreneurial skills, soft skills, and adaptability, integrating both local and international perspectives to emphasize the importance of aligning vocational training with industry needs.

The results indicate that technical skills remain a top priority for employers in the tailoring and dressmaking sector. Graduates are expected to have a solid foundation in garment construction, sewing techniques, pattern drafting, and an understanding of fabrics. Kenya's vocational training sector has the potential to play a transformative role in addressing youth unemployment; however, it faces significant obstacles that contribute to skills gaps.

According to the Technical and Vocational Education and Training Authority (TVETA) (2018), Kenyan VTCs often lack adequate funding, modern equipment, and industry connections, making it difficult to offer training that aligns with labor market requirements. For instance, a study by Gakuu (2021) highlighted that VTCs in Nairobi have limited access to advanced sewing machinery, design software, and digital marketing tools, all of which are essential for success in the fashion and textile industry.

In the absence of these resources, graduates enter the workforce with outdated skills and struggle to meet employer expectations. Moreover, the tailoring and dressmaking industry increasingly demands skills in business management, customer service, and digital marketing, reflecting a shift toward e-commerce and direct-to-consumer models (Kenya National Bureau of Statistics, 2020). However, many VTC programs in Nairobi still focus primarily on traditional garment construction and patternmaking, with little emphasis on these complementary competencies (Nyerere, 2009). Consequently, graduates face challenges in securing jobs or launching successful businesses, impacting

the overall competitiveness of Kenya's fashion industry.

According to Muthomi and Kathuri (2018), employers in Nairobi express a clear demand for graduates who can demonstrate proficiency in basic to advanced garment construction techniques. However, many graduates report feeling inadequately prepared to handle complex designs or to operate modern sewing equipment. The lack of exposure to advanced technologies during training is a significant barrier to meeting industry expectations. In contrast, vocational training in many African countries, including Kenya, faces challenges in curriculum relevance, industry linkages, and resource availability, often resulting in a misalignment between training outcomes and industry needs (African Development Bank, 2020).

Comparatively, international programs, particularly in countries like Vietnam and Bangladesh, emphasize comprehensive technical training that includes both traditional skills and modern techniques (ILO, 2019). Graduates from these programs often exhibit a higher level of preparedness due to their extensive hands-on experience with industry-standard tools and processes. This contrast underscores the need for Nairobi VTCs to enhance their technical training curricula, incorporating modern equipment and advanced methodologies to produce more competent graduates.

With a growing trend toward self-employment in the tailoring industry, the results highlight the necessity of integrating business skills into vocational training programs. The research indicates that many graduates lack essential business acumen, which hinders their ability to navigate the competitive landscape of the tailoring industry (KIPPRA, 2020). Graduates are often unprepared for tasks such as pricing, budgeting, and marketing their services. Kinyua and Mugo (2019) found that employers value graduates who possess not only technical skills but also a strong understanding of business principles, as this knowledge is critical for running successful enterprises.

In contrast, vocational training programs in countries like India and South Africa have increasingly integrated entrepreneurial training into their curricula (ILO, 2020). Graduates from these programs tend to be more adept at managing their own businesses, demonstrating the importance of equipping trainees with business knowledge to enhance their employability and entrepreneurial success. This disparity highlights the urgent need for VTCs in Nairobi to include comprehensive business training as part of their standard curricula. Soft skills are essential in the tailoring and dressmaking sector, particularly for enhancing customer relations and ensuring effective teamwork.

The results reveal a significant gap in soft skills among graduates. The Kenya National Bureau of Statistics (KNBS, 2020) notes that graduates often struggle with communication and customer service skills, which are crucial for building and maintaining client relationships. Mwangi (2020) highlights that employers frequently cite

strong interpersonal skills as a key requirement, indicating a mismatch between graduates' training and industry expectations.

Programs in countries such as Germany and the Netherlands emphasize the development of soft skills alongside technical training (UNESCO, 2019). Graduates from these programs are better equipped to handle customer interactions and collaborate effectively in teams, which contributes to their overall success in the workforce. The emphasis on soft skills in these international contexts underscores the need for Nairobi VTCs to prioritize this area within their training programs. The ability to adapt to changing industry trends and technologies is increasingly important for graduates in the tailoring and dressmaking sector.

The study results suggest that while graduates possess technical skills, they often lack the mindset of adaptability and lifelong learning necessary for ongoing success. Muthomi and Kathuri (2018) emphasize that employers value graduates who are willing to learn and adapt to new techniques and trends, particularly in a rapidly evolving industry.

The World Bank (2020) highlights the significance of fostering a culture of lifelong learning within vocational training programs, particularly in industries subject to rapid technological advancements. Graduates who are encouraged to engage in continuous professional development are more likely to remain relevant and competitive in their fields.

The discussion of results illustrates that while tailoring and dressmaking graduates from VTCs in Nairobi acquire essential technical skills, significant gaps remain in business acumen, soft skills, and adaptability. The alignment of training programs with industry requirements is crucial for enhancing the employability of graduates. By updating curricula to include comprehensive business training, prioritizing soft skills development, and promoting a culture of lifelong learning, Nairobi VTCs can better prepare graduates for the challenges and opportunities of the contemporary tailoring and dressmaking industry.

5.3 Skill Gaps from Graduates of Vocational Training Centres

This discussion explores the findings on skill gaps identified among tailoring and dressmaking graduates from vocational training centers (VTCs) in Nairobi. Skill gaps observed include deficits in technical competencies, business and entrepreneurial skills, and soft skills essential for client relations. Each of these gaps significantly impacts graduates' employability and entrepreneurial potential, which are crucial for survival in Nairobi's competitive tailoring industry. This section discusses these gaps in light of relevant literature, providing context for the implications and recommendations.

The results reveal that technical skills gaps, especially in garment construction, pattern drafting, and fabric handling, are prevalent among tailoring and dressmaking graduates. Despite completing training programs, many graduates lack the technical proficiency

expected by employers and clients. According to Muthomi and Kathuri (2018), this issue is rooted in outdated curricula that fail to cover modern techniques and skills required by the industry. Many VTCs in Nairobi rely on traditional garment-making methods, and graduates often lack familiarity with contemporary fashion trends and the use of advanced tools and equipment.

This gap is further exacerbated by limited practical exposure. UNESCO (2019) emphasizes that vocational training is most effective when there is substantial hands-on practice. However, many VTCs in Nairobi operate with limited resources, such as outdated sewing machines and inadequate fabric supplies, which restrict trainees' ability to refine their skills through practice. The gap between the training provided and the demands of the industry leaves graduates ill-equipped to meet the standards expected by employers in the tailoring sector. Consequently, as Mwangi (2021) notes, graduates struggle to secure well-paying jobs or may end up working in informal, low wage tailoring setups where technical skills may not be rigorously tested.

The technical skill deficiencies hinder graduates' employability, as many tailoring businesses in Nairobi prefer skilled individuals who can work efficiently with minimal supervision. Employers often report a reluctance to hire recent graduates due to the additional training required to bring them up to industry standards (KNBS, 2020). For those seeking self-employment, limited technical expertise affects their ability to produce quality products, which in turn limits customer satisfaction and retention, crucial

elements for sustaining a business in a competitive market.

The skills gap among tailoring and dressmaking graduates has direct implications on their employability and income-earning potential. According to a World Bank study, the skills mismatch in Kenya's vocational sector is one of the main contributors to youth unemployment and underemployment (World Bank, 2019). In Nairobi, where the fashion industry has a demand for skilled professionals, the inability of VTC graduates to meet industry standards limits their opportunities for stable employment and income generation. This finding is consistent with studies from other developing countries, where vocational graduates often face similar challenges due to misaligned training and industry needs (Adams et al., 2013).

The study also highlights a notable gap in business and entrepreneurial skills, essential for graduates aspiring to start their own businesses. Business skills gaps encompass knowledge in pricing, budgeting, marketing, customer management, and inventory management. A report by the International Labour Organization (ILO, 2019) underscores the importance of entrepreneurial training for vocational graduates, noting that without these skills, graduates find it difficult to establish and sustain their businesses.

Many VTCs in Nairobi tend to focus predominantly on technical skill acquisition, often neglecting the integration of entrepreneurial skills into their curricula (Muthomi & Kathuri, 2018). According to a survey conducted by the Kenya National Bureau of

Statistics (2020), employers in Nairobi's fashion sector report difficulties in finding skilled labor with practical expertise and business acumen.

Inadequate industry partnerships further compound the problem. Unlike vocational programs in developed countries, where trainees benefit from apprenticeships and on-the-job training, most VTC trainees in Nairobi have limited access to real-world work experiences (Gakuu, 2021). This lack of exposure to the workplace environment leaves graduates underprepared for the demands of the industry and constrains their capacity to adapt to industry changes quickly. As a result, graduates lack the competencies needed to effectively manage finances, attract clients, and sustain profitable operations. For instance, due to inadequate training in cost management, graduates may either underprice their services or struggle with resource allocation, which can lead to unsustainable business practices (UNESCO, 2019).

Graduates without business acumen struggle to differentiate themselves in a saturated market where clients expect tailored, high-quality garments. A lack of marketing skills means that many struggle to create visibility for their services, which limits client reach and affects revenue. Muthomi and Kathuri (2018) report that many tailoring graduates in Nairobi, despite having basic technical skills, face high business failure rates due to limited understanding of customer acquisition and retention strategies.

Business skills are indispensable for graduates who aspire to become self-employed. Without these skills, tailoring graduates are less likely to sustain their businesses, which has implications for their economic security and the broader tailoring industry. Strengthening business training within VTCs could equip graduates with the skills necessary to thrive as independent tailors, contributing to Nairobi's economy and reducing youth unemployment rates (ILO, 2019).

The study further identifies gaps in soft skills, including communication, customer service, and time management. These skills are particularly relevant in tailoring, as tailoring and dressmaking require close interactions with clients to understand their preferences and provide personalized services. Graduates with poor communication and customer service skills may find it challenging to meet client expectations, impacting customer satisfaction and loyalty (Mwangi, 2021).

Research by the Kenya Institute for Public Policy Research and Analysis (KIPPRA, 2020) highlights that soft skills are often overlooked in vocational training programs, yet they are increasingly important in service-oriented industries like tailoring. UNESCO (2019) also stresses that soft skills contribute to customer retention, especially in small businesses where client relationships are critical to repeat business. Despite this, many VTCs in Nairobi fail to provide sufficient training in customer relations and interpersonal communication, focusing solely on technical skills.

Soft skills deficiencies affect graduates' ability to build strong client relationships, which are essential for reputation and long-term success in tailoring. Poor communication skills can lead to misunderstandings regarding design specifications, timelines, and pricing, resulting in dissatisfied clients who may seek services elsewhere. Muthomi and Kathuri (2018) suggest that these skill gaps result in lost business opportunities, especially for graduates in self-employment, where customer loyalty can determine a business's success or failure.

Addressing the gap in soft skills is crucial for tailoring and dressmaking graduates in Nairobi. By fostering strong client relationships, graduates can ensure customer satisfaction, build a loyal client base, and improve their reputation in the market. Integrating soft skills training into the VTC curriculum could help graduates develop the customer-centric approach needed for sustainable business in a service industry.

The study identifies several systemic factors contributing to these skill gaps among VTC graduates in Nairobi. Many vocational training programs have curricula that do not align with the current requirements of Nairobi's tailoring industry, resulting in graduates lacking essential skills (UNESCO, 2019). Limited access to modern sewing equipment and materials constrains practical training, as many VTCs in Nairobi cannot provide sufficient hands-on opportunities for trainees (KIPPRA, 2020). The lack of internship or apprenticeship opportunities means graduates lack exposure to real-world expectations and practices, hindering their career readiness (KNBS, 2020).

These findings align with the work of Mwangi (2021), who observed that the combination of resource constraints, outdated instructional methods, and limited industry connections perpetuates skill gaps, leaving graduates ill-prepared for Nairobi's job market. The lack of modern equipment and insufficient industry exposure create a mismatch between training outcomes and labor market demands, resulting in high unemployment rates among VTC graduates in the tailoring and dressmaking sector.

The findings of this study illustrate the need for a comprehensive overhaul in the training approaches used in Nairobi's vocational training centers for tailoring and dressmaking. The skill gaps in technical, business, and soft skills highlight the limitations in the current vocational training framework. Addressing these gaps requires curriculum updates, improved resource allocation, and enhanced industry partnerships. Such efforts could empower tailoring graduates to succeed as skilled professionals and entrepreneurs in Nairobi's competitive tailoring industry.

5.4 Strategies for Addressing Skill Gaps from graduates of Vocational Training Centres

The findings regarding strategies for bridging the skills gap in tailoring and dressmaking among graduates from vocational training colleges (VTCs) in Nairobi underscore a critical need for comprehensive interventions. This discussion analyzes the results concerning curriculum development, industry partnerships, technological integration,

hands-on training, and entrepreneurial education. The emphasis is on local and international approaches that can be adopted to enhance the skill sets of graduates and improve their employability in the competitive tailoring and dressmaking market.

One of the primary findings emphasizes the necessity of revising and updating vocational training curricula to align with industry standards and technological advancements. The results indicate that many VTCs in Nairobi utilize outdated curricula that do not adequately prepare graduates for the demands of the current market. Muthomi and Kathuri (2018) highlight that graduates often lack exposure to modern techniques and materials, resulting in a skills gap that hinders their employability. Therefore, a comprehensive curriculum overhaul is essential, integrating contemporary garment construction techniques and emerging trends in fashion design.

To address the identified skills gaps, it is essential for Kenyan VTCs to adopt a more market-responsive curriculum that integrates both technical and business skills. The Ministry of Education (2019) and TVETA (2018) have called for reforms that align vocational training with labor market needs, advocating for greater industry involvement in curriculum development. By fostering partnerships between VTCs and the fashion industry, Kenyan VTCs could facilitate work-based learning experiences, which would provide trainees with hands-on training in real-world environments (Kenya National Bureau of Statistics, 2020). This approach mirrors the dual training model seen in countries like Germany and Switzerland, which could be adapted to Kenya’s vocational

education system to improve graduates' job-readiness (Euler, 2013).

Furthermore, investing in modern equipment and digital resources within VTCs would enhance training quality and help bridge the technology gap that hinders graduates' competitiveness. Access to current technologies and tools is particularly important in fields like tailoring and dressmaking, where new techniques and digital tools are becoming industry standards.

Internationally, successful vocational education systems frequently employ dynamic curricula that evolve in response to market needs. For instance, in Germany, the dual education system allows trainees to gain practical experience while receiving classroom instruction tailored to current industry practices (ILO, 2019). This model not only equips trainees with relevant skills but also fosters a culture of continuous learning and adaptability. Nairobi VTCs can benefit from such models by incorporating stakeholder feedback into curriculum development to ensure alignment with industry demands.

The results also emphasize the critical role of establishing strong partnerships between vocational training institutions and industry stakeholders.

Collaborations with local businesses can facilitate internship opportunities, thereby enhancing trainees' practical skills. KIPPRA (2020) points out that employers are more inclined to hire graduates who have gained relevant work experience during their studies.

Engaging industry partners in curriculum design can further ensure that training programs reflect the specific skills and competencies sought by employers.

Countries like Singapore exemplify the effectiveness of strong industry partnerships. Their vocational training system emphasizes collaboration between educational institutions and industry leaders, resulting in programs that are responsive to labor market needs (World Bank, 2020). Such partnerships can be instrumental in creating pathways for graduates to transition smoothly into the workforce, equipping them with the necessary skills to succeed.

The integration of technology into vocational training is highlighted as a vital strategy for enhancing the skill sets of tailoring and dressmaking graduates. Findings suggest that many graduates lack familiarity with modern tools and technologies, limiting their competitiveness in the industry. Kinyua and Mugo (2019) indicate that the introduction of digital pattern-making software and online marketing strategies can significantly improve graduates' employability. By equipping trainees with digital skills, VTCs can prepare them to meet the demands of a technologically driven market.

Internationally, there is a growing recognition of the importance of technological competencies in vocational training. In the UK, initiatives have been launched to integrate digital design tools into fashion education, ensuring that trainees acquire relevant skills that align with industry practices (ILO, 2020). Such technological

integration not only enhances learning but also prepares graduates for the realities of modern tailoring and dressmaking.

To address the identified skills gaps, it is essential for Kenyan VTCs to adopt a more market-responsive curriculum that integrates both technical and business skills. The Ministry of Education (2019) and TVETA (2018) have called for reforms that align vocational training with labor market needs, advocating for greater industry involvement in curriculum development. By fostering partnerships between VTCs and the fashion industry, Kenyan VTCs could facilitate work-based learning experiences, which would provide trainees with hands-on training in real-world environments (Kenya National Bureau of Statistics, 2020). This approach mirrors the dual training model seen in countries like Germany and Switzerland, which could be adapted to Kenya's vocational education system to improve graduates' job-readiness (Euler, 2013).

Furthermore, investing in modern equipment and digital resources within VTCs would enhance training quality and help bridge the technology gap that hinders graduates' competitiveness. Access to current technologies and tools is particularly important in fields like tailoring and dressmaking, where new techniques and digital tools are becoming industry standards. The need for hands-on training is evident from the results, underscoring the importance of experiential learning in vocational education.

Many graduates report feeling unprepared for the practical demands of the workplace due to insufficient hands-on training during their studies. Mwangi (2020) emphasizes that practical experiences, such as internships and workshops, are essential for helping trainees apply theoretical knowledge and develop confidence in their skills. This practical exposure can significantly enhance graduates' readiness for employment.

Successful vocational training systems, such as those in Switzerland, prioritize hands-on training through apprenticeships and work placements (World Bank, 2020). By adopting similar practices, Nairobi VTCs can ensure that graduates not only understand theoretical concepts but can also apply them effectively in real-world settings. Given the rise of self-employment in the tailoring industry, incorporating entrepreneurial education into VTC curricula emerges as a crucial strategy.

Findings indicate that graduates often lack the necessary business skills to manage their own ventures, which can limit their opportunities for self-employment. KIPPRA (2020) highlights the importance of teaching trainees about business management, marketing, and financial literacy. Equipping trainees with these skills can empower them to pursue entrepreneurial opportunities confidently and sustainably.

Globally, vocational training programs are increasingly integrating entrepreneurship education. For instance, programs in Canada focus on developing trainees' business skills through practical training in areas such as business planning and marketing strategies

(ILO, 2020). Such initiatives not only enhance graduates' employability but also encourage innovation and economic growth within the tailoring sector. The discussion of results underscores the necessity of a multifaceted approach to bridging the skills gap in tailoring and dressmaking among vocational training college graduates in Nairobi. Key strategies include revising curricula to reflect industry needs, strengthening partnerships with local businesses, integrating technology into training, emphasizing hands-on experience, and incorporating entrepreneurial education. By adopting these strategies, VTCs can better prepare graduates to meet the challenges of the competitive tailoring and dressmaking industry, ultimately enhancing their employability and fostering economic development.

6.0 CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This chapter presents the summary of findings, conclusion and recommendations. It also explains the implication of findings and suggestions for additional research areas including future projections based on the study.

6.2 Summary of the Findings

This study was carried out among the trainees, trainers and employers of trainees from the various Vocational Training Centres in Nairobi City County with the purpose of analyzing the skills gap of the tailoring and dressmaking graduates of Vocational Training Centres in Kenya's Nairobi City County. This was to enable coming up with a framework of tailoring and dressmaking by looking at the gaps that may exist between training and what the sector requires. The study was guided by the following specific objectives.

1. To assess the tailoring and dressmaking skills acquired by graduates of Vocational Training Centres Nairobi City County
2. To analyze tailoring and dressmaking skills required of tailoring and dressmaking graduates by the employers in Nairobi City County
3. To analyze the training gaps if any in tailoring and dressmaking courses in Vocational Training Centres in Nairobi City County
4. To recommend strategies for bridging the skills gap in tailoring and dressmaking among graduates of Vocational Training Centres in Nairobi City County

The first objective sought to assess the tailoring and dressmaking skills acquired by graduates of Vocational Training Centres Nairobi City County. The study found that all three categories of respondents (trainees, trainers and employers) concurred that trainees had been imparted high levels of technical skills in sketching, taking body measurements, interpretation of garment design, pattern drafting, basic cutting, care and maintenance of sewing machines, garment assembly, and ironing.

The focus of the second objective was to analyze the tailoring and dressmaking skills required of tailoring and dressmaking graduates by the employers. The results showed that trainees were aware of what skills the industry required. These included talking to customers well, conducting and recording customer body measurements, interpreting designs, professional assembling of garments, use of modern equipment to perform decorations, and lastly production of presentable and trending fashionable clothes.

The third objective aimed at analyzing the training gaps if any in tailoring and dressmaking courses in Vocational Training Centres. The findings revealed that trainees had low levels of soft skills. These included marketing and buying fabric, customer care, studying fashion trends, record keeping, lack of teamwork, conducting and recording customer cloth measurements and decorating clothes. In addition, they were weak in professionally assembling garments and were unable to cut some garments using free hand cutting and making some designs, drafting and machine embroidery.

The focus of the fourth objective was to recommend strategies for bridging the skills gap in tailoring and dressmaking among the VTC graduates. The results also highlight that most graduates have minimal exposure to real-world tailoring environments. Internships or apprenticeships are rare, leading to a lack of practical, hands-on experience that could prepare them for the industry. This limited exposure affects graduates' understanding of job market expectations, making it difficult for them to transition smoothly into employment.

6.3 Conclusions

Based on the findings of this study, the following conclusions are made.

i. More technical skills were imparted to trainees in the VTCs as opposed to soft skills. The current nature of demand in the tailoring and dressmaking industry requires graduates with both soft and hard skills competencies.

ii. Tailoring and dressmaking skills required by the industry are known by trainees, trainers and employers. This has been attributed to the unavailability and non-functioning of electric machines and inadequate linkage between the training institutions and industry.

iii. The graduates had gaps in skills in areas of advanced garment construction and in use of modern machines. This was attributed to the limited resources affecting the ability of the graduates to access and be exposed to the advanced equipment in the industry.

iv. It is essential to strengthen partnerships between colleges and industry, as this will significantly aid in identifying the skills and competencies that should be prioritized in the training curriculum. Additionally, vocational training centers should be equipped with modern training tools, and soft skills should be incorporated into the curriculum.

6.4 Recommendations for Policy/Practice

Based on the study's various findings, the following recommendations are proposed.

i. The curriculum developers should ensure that their emphasis on soft skills including aspects of communication, entrepreneurship, customer care, teamwork, are embedded into the VTC curriculum.

ii. The national government and the Nairobi City County to support the VTCs in Nairobi County by equipping them with adequate modern training tools, equipment and training materials to enhance innovation and creativity for the trainees.

iii. The county and national governments should increase funding for vocational training centers to enable them to acquire the necessary tools and equipment to effectively deliver quality education to the VTC trainees.

iv. To enhance the quality of the graduates the link between the training institutions and the industry needs to be improved through the provision of industrial attachments and by inviting visiting trainers from the industry to share with the

VTC trainees.

6.4 Recommendations for Further Research

The following recommendations are given as gaps left out by the study, which would need further investigation through further research.

i. Conduct a study on how the current consumer fashion trends influence the tailoring and dressmaking required skills.

ii. Further research to be conducted within the rural regions of Kenya because the current study was urban based.

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APPENDICES

Appendix A: Letter of Consent

Date.....

Serial no.....

Jacqueline Mandere Barongo,

Kenyatta University,

Fashion Design and Marketing,

Dear Sir/Madam,

My Name is Jacqueline Mandere Barongo. I am MASTER trainee from Kenyatta University. I am conducting a study on "DETERMINING SKILLS GAP OF TAILORING AND DRESSMAKING GRADUATES OF VOCATIONAL TRAINING CENTRES IN NAIROBI CITY COUNTY, KENYA." The information will be used by the Ministry of Education, TVET subsector to enhance access and quality training in TVET institutions in Kenya.

Procedures to be followed

Participation in this study will require that I ask you some questions and record the responses I receive from you. In some instance the study will require you to fill in the questionnaire provided to you yourself.

Please remember that participation in the study is voluntary. You may ask questions related to the study at any time. You may refuse to respond to any questions, and you may stop an interview at any time. You may also stop being in the study at any time without any consequences.

Discomforts and risks

Participation in this study is voluntary and there are no known or anticipated risks. Some of the questions you will be asked are personal and may be embarrassing or make you uncomfortable. If this happens, you may refuse to answer these questions if you choose so. You may also stop the interview at any time.

Benefits

If you participate in this study, you will help us to establish skills gap analysis of tailoring and dressmaking graduates of VTCs in Nairobi City County.

Confidentiality

The filing of questionnaires and interviews will be conducted in a private setting within the school and/ or your workplace at a convenient schedule e.g. during break time and lunch time. Your name will not be recorded on the questionnaire. The questionnaire will be kept in a locked cabinet for safe keeping at Kenyatta University. Everything will be kept private.

Contact information

If you have any questions, you may contact Dr. Bosibori Oigo On 0733826829 or Dr. Everlyn Nguku On 0722304665 or the Kenyatta University Ethical Review Committee Secretariat on chairman.kuerc@ku.ac.ke.

Participant's statement

The above information regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that I have the right to refuse participation in this study and I may stop being in the study at any time without

any consequences.

Code of participant……

…… ……

Signature or thumb print Date

Investigator`s Statement

I, the undersigned, have explained to the volunteer in a language she/he understands, the procedures to be followed in the study and the risks and benefits involved.

Name of interviewer: ……...

…….. ……..

Interviewer signature Date

Appendix B: Research License from National Council for Science and Technology

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: 797570

Date of Issue: 24/January/2023

RESEARCH LICENSE

This is to Certify that Ms.. JACQUELINE BARONGO of Kenyatta University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: DETERMINING SKILLS GAP OF TAILORING AND DRESSMAKING GRADUATES OF VOCATIONAL TRAINING CENTRES IN NAIROBI CITY COUNTY, KENYA. for the period ending : 24/January/2024.

License No: NACOSTI/P/23/20460

797570

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

See overleaf for conditions

Appendix C: Ethical Review Committee Clearance Letter

KENYATTA UNIVERSITY
CENTRE FOR RESEARCH ETHICS AND SAFETY

Fax: 8711242/8711575 **P. O. Box 43844,**
Email: chairman.kuerc@ku.ac.ke
Nairobi, 00100
Tel: 8710901/12
Website: www.ku.ac.ke
Our Ref: **KU/ERC/APPROVAL/VOL.1** Date: 13th /12/2022

Jacqueline Barongo
P.O Box 43844, 00100
Nairobi.

Dear Ms. Barongo,

APPLICATION NUMBER: PKU/2625/E1750- DETERMINING SKILLS GAP OF TAILORING AND DRESS MAKING GRADUATES OF VOCATIONAL TRAINING CENTERS IN NAIROBI CITY COUNTY, KENYA

This is to inform you that ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE*** has reviewed and approved your above research proposal. Your application approval number is **PKU/2625/E1750.** The approval period is ***13th/12/2022 to 13th /12/2023***

This approval is subject to compliance with the following requirements;

i. Only approved documents including (informed consents, study instruments, MTA) will be used
ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE***
iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE*** within 72 hours of notification
iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE*** within 72 hours
v. Clearance for export of biological specimens must be obtained from relevant institutions.

vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.

vii. Submission of an executive summary report within 90 days upon completion of the study to ***KENYATTA UNIVERSITY ETHICS REVIEW COMMITTEE***

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) https://research-portal.nacosti.go.ke and also obtain other clearances needed.

To serve you better, researchers are kindly requested to access and complete a customer feedback form and sent it back online as you continue with research and upon completion of data collection found on the following website link; ;(https://docs.google.com/forms/d/1ytWefDwvyz5h1oz_VIn0xbxg3uGdlDzMXFWNDsMrRPQ/edit?usp=sharing

Yours sincerely

KENYATTA UNIVERSITY
OFFICE OF THE CHAIRMAN
13 DEC 2022
ETHICS REVIEW COMMITTEE
P.O. BOX 43844-00100 NAIROBI

Prof. Judith Kimiywe

Director: Centre for Research Ethics and Safety

Appendix D: Competency Survey Questionnaire for Graduates

What are your opinions on the following statements on a scale of 1 to 5? (Tick where appropriate)

	Statements	**1 Strongly Disagree**	**2 Disagree**	**3 Undecided**	**4 Agree**	**5 Strongly Agree**
A	**Interpretation of Garment Designs**					
1	I observe garment designs provided by customers before making a dress					
2	I sketch designs for garments using customer's specifications					
3	I understand the different garment components					
4	I translate garment designs to pattern components					
5	I draft garment patterns on paper according to design using customer's body measurements or standard body measurements					

6	I lay out a fabric on cutting surfaces using correct procedure					
7	I lay patterns on a fabric using correct procedure					
8	I cut drafted patterns to garment components according to design					
9	I cut 'lining', 'facing' and 'interfacing' pieces where needed using correct procedure					
B	**Garment assembly or stitching**					
1	I assemble cut out garment components to make a complete garment					
2	I neaten raw edges of seams using correct procedure					
3	I attach and fix all accessories and decorations needed to finish a style on a garment					
4	I press out seams to flatten and achieve a finished look on a garment					
5	I assist customers to fit custom					

	made garments and check if it fits well					
6	For large orders, I measure garments against provided measurement chart to confirm that all measurements are accurate.					
7	After fitting, I make changes to a garment by undoing areas that need corrections					
8	I perform corrective stitching to correct errors on a garment					
C	**Care and Maintenance of Sewing Machines**					
1	I check for loose parts on a sewing machine					
2	I check for missing parts on a sewing machine					
3	I check for worn-out parts on a sewing machine					
4	I observe a sewing machine for signs of friction to determine when oiling is required					

5	I check the quality of stitches a sewing machine makes to determine any need to adjust settings					
6	I oil sewing machines regularly					
7	I adjust settings of a sewing machine to correct stitching problems					
8	I replace worn-out and missing parts of a sewing machine					
9	I tighten loose parts of a sewing machine					
10	I get qualified mechanics to repair sewing machines when the problem detected is beyond me					
D	**Customer care**					
1	I greet and welcome customers to my tailoring shop					
2	I keenly listen to customers and take note of what they want					
3	I write down the customer's order and specifications (fabric,					

	accessories, decorations)					
4	In case a customer is not fully decided on the design of garment they wish to order, I help them by suggesting the latest styles and even showing them style magazines to choose a preferred style					
5	I calculate cost of products and services and inform customers					
6	I make rough sketches of the style's customer have ordered and allow the customers to confirm					
7	I take customers body measurements and record them					
8	I negotiate with customers and agree on total payments for their orders and payment terms					
E	**Record keeping**					
1	I record all materials and accessories bought and their quantities					
2	I keep records of all materials and					

	accessories used while making dresses in terms of type and quantities					
3	I have a record of all customers' contact details					
4	I keep a record of dresses work-in-progress and finished dresses					
5	I keep a record of all dresses collected by customers					
6	I record the amount of money used by the business each day, week, and month					
7	I record all the money owed by customers					
8	I record all the money owing to suppliers					
9	I record the amount of profits made each day, week, and month					
F	**Keeping the Shop clean**					
1	I dust all the surfaces in my shop to keep it clean					
2	I sweep and mop the floor of my					

	shop to keep it clean					
3	I arrange and organize fabrics, garments, and equipment					
4	**Buying fabrics and items needed for completing orders**					
5	I take stock of all materials and accessories at the shop from time to time to determine what needs to be bought and how much					
6	I check customer orders to determine the fabric and accessories that may be needed and are not usually stocked and calculate the amounts needed					
7	I create a complete list of all materials and accessories that must be bought and the quantities to be bought					
8	I travel to the nearest fabric and accessories supplier and buy the materials required to make a dress					
G	**Studying Fashion Trends**					

1	I consult friends and customers on trending fashion styles for dresses					
2	I source for latest fashion magazines with trending styles for dresses					
3	I search the internet/ social media for trending fashion styles for dresses					
H	**Marketing**					
1	I reach out to my customers when new dress styles come out					
2	I reach out to potential customers through word of mouth by existing customers					
3	I reach out to potential customers through use of signboards					
4	I reach out to potential customers through use of social media					

Appendix E: Interview Guide for Employers

1. What is your training background?
2. What is your background as far as tailoring and dressmaking is concerned?
3. Do you have students on attachment at your enterprise? If yes, how many? If no,why not?
4. Which tailoring and dressmaking skills do they have?
5. Which tailoring and dressmaking skills do you require as an employer from theVTC graduates?
6. Which tailoring and dressmaking skills do you require but the graduates arelacking?
7. Which skills are imparted to the students on attachment at your enterprise?
8. What can be done to ensure that graduates from Vocational Training Centres haveall the skills required for tailoring and dressmaking job?

Appendix F: Interview Guide for Trainers at Vocational Training Centres (VTCs)

1. What is the tailoring and dressmaking training background of the VTC trainees?
2. Are you using the recommended tailoring and dressmaking curriculum? If not, why not?
3. Which skills are imparted to youth undergoing training at the VTCs?
4. Do the trainees know what the industry requires from them in-terms of skills?
5. In your opinion, do the youth trained in VTCs have all the skills required for tailoring and dressmaking jobs?
6. Which areas of skills do they lack?
7. What can be done to address the skills mismatch?
8. Are you having the equipment and resources required for imparting the required skills to the trainees? If not which ones?
9. Which challenges are you facing as an institution in implementing the tailoring and dressmaking curriculum?

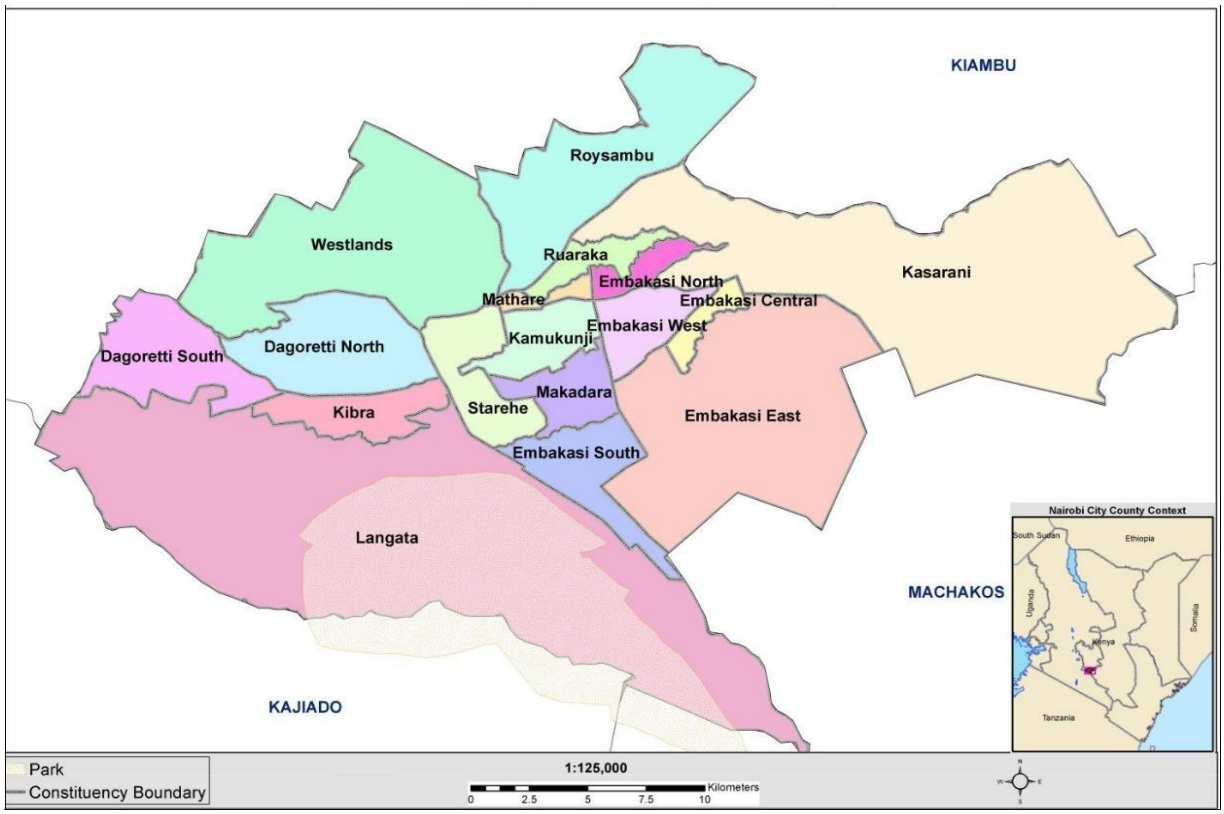
Appendix G: Interview Guide for Graduates

1. What is your tailoring and dressmaking training background?
2. Are you using the recommended tailoring and dressmaking curriculum? If not, why not?
3. What kind of equipment and machinery do you use in training?
4. In your opinion do you find them effective?
5. Which tailoring and dressmaking skills are you getting?
6. Do you know what the industry requires from you in-terms of skills in tailoring and dressmaking?
7. In your opinion, do you have all the skills required for tailoring and dressmaking job? If yes which ones?
8. Which areas of skills are you well equipped in?
9. Which areas of skills do you lack?
10. What in your opinion can be done to address the skills mismatch?
11. Are you having the equipment and resources required to acquire the necessary skills? If not which ones?
12. Which challenges are you facing as a trainee in tailoring and dressmaking?

THE END

THANK YOU FOR FINDING TIME TO RESPOND TO THIS GUIDE.

Appendix H: Study Area Map Showing Nairobi City County, Administrative Units



Nairobi City County Government CIDP 2013-2017