


Research Article

# Entrepreneurial Start-Up Rates and Challenges Among Fashion Design Graduates in Ghana

Moses Opoku<sup>1,\*</sup> , Sarah Baiden<sup>1</sup> , Josephine Aboagyewaa-Ntiri<sup>2</sup>,  
Stella Daah-Siaw<sup>3</sup>, Kofi Kyeremeh<sup>1</sup>, Andoh Kwaku Conduah<sup>1</sup>,  
Sylvester Kumi Boakye<sup>4</sup>

<sup>1</sup>Department of Visual and Industrial Art, Sunyani Technical University, Sunyani, Ghana

<sup>2</sup>Department of Fashion and Textiles Education, University of Skills Training and Entrepreneurial Development, Kumasi, Ghana

<sup>3</sup>Department of Home Economics, Wesley College of Education, Kumasi, Ghana

<sup>4</sup>Department of Geography and Sustainable Science, University of Energy and Natural Resources, Sunyani, Ghana

## Abstract

This study investigated the characteristics of fashion education in Ghana and analyzed the factors facilitating and hindering entrepreneurial ventures among fashion design graduates. A descriptive survey approach was employed to analyze quantitative data from 120 graduates across six metropolitan areas, examining the impact of educational experiences, skill development, and institutional barriers on entrepreneurial success. The study found that fashion education in Ghana has changed over the past decades, and graduates vehemently confess that they have improved their technical, creative, and business skills. Along with the growing demand for fashion made in Ghana, graduates were strongly encouraged to start their own businesses by getting hands-on training, joining industry groups, and taking business-related classes. Even with these positive initiatives, it was found that long-lasting structural problems still make it hard for people to go from training to starting their own businesses. Some of these problems are limited access to start-up funds, high production costs, bad management skills, unpredictable market conditions, regulatory bottlenecks, and a lack of modern technology and supply chains. These problems make it tough for fashion start-ups to grow and stay in business. The study concludes by recommending that to help Ghana's fashion graduates become more entrepreneurial and ensure the growth of the local fashion industry, TVET reforms need to be strengthened, links between institutions and businesses need to be improved, financing mechanisms need to be enhanced, and training infrastructure needs to be updated.

## Keywords

Fashion Education, TVET, Entrepreneurship, Self-Employment, Fashion Graduates

\*Correspondence: Moses Opoku ([moses.opoku@stu.edu.gh](mailto:moses.opoku@stu.edu.gh))

**Received:** 13 March 2026; **Accepted:** 27 March 2026; **Published:** 15 April 2026



Copyright: © The Author(s), 2026. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

## 1. Introduction

In Ghana, the unemployment rate among the youth is averagely estimated to be 22.5%, and this data is largely associated with individuals aged 15-35 [1-3]. However, these data or statistics do not entirely reflect the problem, since underemployment and informal work are important elements affecting the workforce in Ghana. Underemployment is even worse because a large part of the workforce in Ghana does not have jobs, but the little that have, are also not paid well. Despite all these, individuals required to work longer hours. It should be noted that about 43% of the labour force in Ghana is engaged in informal employment, often without social security or job security.

Different regions in Ghana show varying unemployment rates, with metropolitan areas such as Accra and Kumasi typically facing higher unemployment compared to rural regions [4]. Kabeeer believes that gender disparity, on the other hand, is becoming another problem in the global job market, which Ghana cannot be isolated [5]. Looking at the level of differences, women are rather disadvantaged, while the men stand a better chance of securing decent employment.

The above statistics indicate that the unemployment rate is a major challenge confronting the youth in Ghana. This pathetic phenomenon is largely experienced by graduates emanating from the country's tertiary institutions [6, 7].

Ameyaw-Ampadu et al., and Baah-Boateng are of the view that policies from past and successive governments in Ghana are all geared towards decent and sustainable job employment for the Ghanaian youth, especially graduates from the tertiary institutions upon the completion of their programmes of study [3, 8]. Irrespective of these measures, graduates in Ghana still struggle to secure meaningful employment. Undoubtedly, the technical and vocational schools in Ghana have the key mandate to train people with the requisite skills and knowledge to excel in their various capacities.

Again, training students to be gainfully employed is a core value that should be embraced by all stakeholders. Considering the numerous issues surrounding public sector employment globally, graduates are required to establish and own their businesses without roaming about looking for government jobs or employment which do not exist [9, 10].

A vast array of tertiary education programmes appears lucrative and less difficult or challenging for an individual to set-up when offered training in such disciplines or trade areas [11]. Fashion design is one of the programs that offers easy access to establishment, although it is labour-intensive, it does not demand expensive or excruciating facilities to begin with.

It is interesting to note that the very few fashion design graduates who are currently in business with their creative ideas are now making a great difference in the face of the Ghanaian fashion industry. These individuals are always striving to match their expertise with the local fashion market and even beyond.

Despite the commitments and efforts showcased by these

young graduates, there are several obstacles that make their presence in the fashion business very difficult and deter others from establishing themselves after school [12]. Some of the challenges include financial limitations: such as difficulty in obtaining loans, inadequate skills acquisition, and a lack of start-up capital [13]. The Ghanaian fashion industry is also hampered by the flood of low-cost imported goods and other foreign merchandise [14].

Lang and Liu argued that, managerial, marketing as well as promotional problems are some of the challenges that make it hard for fashion graduates to venture into business and this could be related to inadequacy in entrepreneurship skills or a skills gap within specific trade areas [15]. Furthermore, fashion design graduates do not receive sufficient mentoring and the necessary industry contacts and are often left unsupported or not even primarily targeted by institutional and structural support networks (incubators, government assistance measures, market access), which is crucial for entrepreneurship to succeed.

Fernandes asserts that if entrepreneurial education and training offered in the tertiary institutions are accorded the needed attention, then students leaving our universities will not struggle so much finding their feet in the business environment, and fashion graduates will do so confidently [16]. The author further reiterates that in every year, the number of graduates produced cannot match the job vacancies in the public and private sectors respectively. In the same vein, Bart-Addison relates that a sizable percentage of these graduates have either vocational or technical education and training that is good enough to propel them to start something at the end of their programs [17]. Irrespective of the number of highly qualified fashion designers who graduate yearly, the actual business start-up rate among these graduates is still disproportionately low. Senanayake and Wovenu contend that many fashion graduates inadequately leverage their technical and creative skills due to limitations that force them into related occupations, lead to unemployment, or result in subpar employment opportunities [18, 19].

It seems that there isn't enough real-world data on how well fashion graduates from Technical and Vocational Education and Training (TVET) do when it comes to starting, running, and keeping their businesses. This is despite the fact that the Ghanaian government is pushing TVET more and more as a way to help young people find jobs and as a way to help industry grow. As a result, stakeholders and policymakers lack the essential logistics required to create interventions that can support a healthier entrepreneurial system in the fashion sector.

This study therefore seeks to consider the features of fashion education in Ghana, find the main factors that help fashion design graduates get jobs, and identify the problems that new fashion businesses face. Understanding of these parameters will enhance the rate at which fashion graduates can create

jobs, thereby improving and promoting the Ghanaian fashion industry.

*The following research questions guided the study:*

- 1) What is the nature of fashion education in Ghana?
- 2) What are the key drivers of job creation among fashion design graduates?
- 3) What are the challenges facing fashion design business start-ups in Ghana?

## 2. Literature Review

### 2.1. The Nature of Fashion Education and Training in Ghana

Ademtsu and Pathak are of the view that fashion education like any other vocational training programme in Ghana is faced with many challenges ranging from progression, training facilities, recognition and male participation [20]. Considering the mode of progression of fashion education in retrospect, this phenomenon used to be worrying some years ago. The highest level or certificate that individual could attain somewhere in the 19th century up to the 20th century was Higher National Diploma (HND) [21, 22]. In order to get admission to pursue HND in fashion design, the requirement was Advanced Certificate in fashion and other generics from the grammar schools. An Advanced certificate holder had to go through Intermediate I and Intermediate II Fashion training programmes where practical courses dominated the entire programme at that level. Successful applicants to enroll in Intermediate had to complete National Vocational Training Institute Grade II (proficiency) and Grade I respectively. These programmes were purely practical based. The trend has over the years changed to pave the way for higher certificates to come on board. Currently, fashion education in Ghana is offered via second cycle and tertiary institutions [20].

Traditional Universities, Technical Universities, and Specialized Fashion Institutions provide a range of programmes from certificate, diplomas to undergraduate and post graduate degrees in fashion design [21, 22]. In view of these provisions, progression is no more a problem since right from secondary school you can get admission to pursue a degree programme in fashion design, which was not possible in the past. Again, the introduction of the National Qualification Framework and some policies or interventions have greatly helped streamline the curriculum employed in the various levels and most importantly the qualification awarded at the end of the training. Hussain and Allais writing on the former framework relate that it has many challenges such as programme overlapping, mismatches of courses, and certification [23, 24].

Fashion design courses that are embedded in the program of study may include pattern making, garment construction, fashion illustration, beauty culture, computer aided design, basic design and some business or marketing courses, and even with this, the level of study may influence the choice of

courses [25, 26].

Khan believes that fashion design as a programme of study requires a well-equipped (laboratories) with different sewing machines, cutting facility, designing machines, pressing equipment, pattern making tools, finishing apparatus, measuring tools, and fitting equipment [27]. These items are relevant to ensure smooth training of learners to become well prepared for the job market. Most of the institutions that offer fashion design are doing well by securing the requisite machinery for training learners. Graduates of fashion design programme can become designers, design consultants, illustrators, design instructors, fashion journalist, stylists, pattern makers, machine/sewing operators and others. Some of the careers mentioned are dependent on the courses involved in the programme.

### 2.2. The Drivers of Job Creation Among Fashion Graduates

From the perspectives of Hofmann et al., and Todeschini et al., setting up a fashion business to many people has never been a difficult venture. You do not need huge sum of money and other resources as startup base, but with little resources one can begin and nature a small fashion firm to become a global fashion brand [28, 29]. Fashion graduates entering this dynamic and creative industry are often seen as job seekers, but also as potential job creators. With the rising youth unemployment worldwide, understanding the drivers that enable fashion graduates to create and manage their own businesses is of great importance. The most frequently cited factors influencing job creation among fashion graduates is the nature of skills acquired during tertiary education period. A study carried out by Todeschini et al. revealed that many fashion graduates in Ghana struggle to secure or create employment due to the theoretical biases of University Curricula [29]. It is obvious that some of the tertiary institutions that offer fashion design programmes fail to impart hands-on and industry-relevant skills such as pattern making/drafting, garment construction, computer aided design (digital design) and production management skills to students. Sometimes, what is taught in the schools appear quite different from what goes on in the real industry [30].

Nunfam et al. and Dondofema et al. believe that the introduction of industrial attachment is necessary to bridge the gap between the educational institutions and that of the industry [31, 32]. Over the years, some institutions which offer vocational and technical programmes do not consider industrial attachment initiative as relevant. Students' monitoring whilst on attachment programme has been trivialized and this phenomenon is however affecting students' academic performance. Undoubtedly, students require adequate skills and other engagements to be able to establish themselves after school [33]. Similarly, Senayah and Asare et al. relate that fashion graduate in Ghana, face a gap in core technical competencies in areas such as production workflow and manufacturing processes,

which are vital for starting up fashion enterprises or contributing meaningfully to existing firms [34, 35]. Practical difficulty particularly is very problematic because the fashion industry values experiential learning and craftsmanship alongside innovation than any other factors.

Furtherance to the assertion of Seneyah and Asare et al., Boateng et al. posit that work-based learning is very important since it appears to be a critical component of fashion education [34-36]. These authors further write that integrating internships, studio practice, and live projects into fashion curricula significantly improves graduates' ability to launch independent businesses or work within SMEs. In this regard, work-based learning serves as a transformative driver for job creation because it aligns graduates' skills with industry needs. A study carried by Ademtsu and Pathak revealed that taking some courses in entrepreneurship in the tertiary institutions is paramount to business creation and management [20]. Ameyaw-Ampadu believes that entrepreneurial skill development is a major factor influencing business establishment among fashion graduates [3].

A study conducted by Vitariyanti et al. revealed that fashion students with access to entrepreneurial education and mentorship are more likely to introduce and nurture their own fashion labels or brands [37]. These entrepreneurs not only create employment for themselves but also hire other job seekers, apprentices and marketing staff. Fernandes supports this view by suggesting that fashion entrepreneurship, especially in developing countries like Ghana is a sustainable strategy for reducing graduate unemployment [16]. Entrepreneurial training assists students to build business models, understand fashion marketing and navigate sourcing and production channels [38, 39].

Tondi and Meunmany assert that government policies, particularly the reform of TVET, are significant variables influencing the employment creation rate among fashion graduates [40, 41]. These policy measures are very important since they help and encourage many students to study fashion. Anene-Okeakwa and Gyimah stress how important it is to make changes to Technical and Vocational Education and Training (TVET), especially in nations like Ghana and Nigeria [42, 43]. The goal of these changes is to close the skills gap and encourage graduates to start their own businesses.

Public-private partnerships have also been shown to improve graduate business initiatives. A study by Remington & Yang found that collaborations between educational institutions and existing industries can lead to better job placement and higher entrepreneurial rates [44]. Such partnership exposes students to real world challenges and promote networking, which is essential for employment generation.

### 2.3. The Challenges of Setting Up a Fashion Business

There are problems with starting a fashion business, just

like with any other business. This makes new fashion graduates less likely to want to work in this creative field [45, 46]. Moses et al. relate that the clothing and fashion industry is always changing, with customers' tastes changing and competition getting tougher around the world [47].

This situation according to Tondi presents unique challenges for entrepreneurs. Some people view creativity and design acumen as the main factors necessary for setting up fashion business without considering strategic planning, financial management, market understanding, and resilience against economic and technological disruptions as equally important contributors that fight and sometimes kill graduates' interest and desire for creating their own businesses [40]. Financial barriers and access to capital have severally been mentioned as the initial challenges for establishing fashion business. Fashion start-ups typically face high initial cost related to production, inventory, branding and marketing [39]. Fashion is different from other industries in that it requires a lot of money up front before it can start making money. This makes financial sustainability a critical issue. Zhao et al. contend that numerous aspiring fashion designers underestimate the expenses involved in launching a collection, encompassing material sourcing, skilled labour recruitment, and manufacturing [38].

The dynamic and seasonal nature of fashion industry compounds the issue as returns on investment may take longer time to materialize. Traditional-financial institutions often perceive fashion start-ups as high-risk venture due to their volatility and reliance on trends, therefore limiting access to bank loans. Other challenges that need to be considered are branding and market differentiation. In oversaturated market, creating a distinctive brand identity is very relevant yet challenging. Fashion graduates have to compete with well established brands that have significant market share, customer loyalty, and economies of scale. Distinguishing a new brand in such a competitive space demands a clear value proposition and strategic marketing [38].

Authenticity and congruence with customer values like sustainability and inclusivity have become important factors that set brands apart in today's branding world. However, for new businesses, it can be challenging to get real branding because design, communication, and operations all have to work together.

A study conducted by Macchion et al. identified supply chain and production difficulties as significant barriers encountered by fashion graduates aspiring to enter the fashion industry [48].

The authors further asserted that inventory management and lead times are crucial setbacks for new fashion brands, particularly in fast context where responsiveness is so important. In some jurisdictions where compliance with labour standards and sustainability expectations is of high interest to the people, this tends to discourage fresh graduates or designers from setting-up their own fashion businesses.

### 3. Methods and Materials

#### 3.1. Research Design

The study employed a descriptive survey research design to investigate the rate of business start-ups and challenges or barriers among fashion design graduates in Ghana. A descriptive design was appropriate because it allowed the researchers to obtain quantitative data at the same time to describe, analyze, and interpret the present state of fashion design graduates in relation to business establishment [49]. This particular approach facilitated the identification of patterns and relationships between the nature of fashion education, drivers of job creation, and challenges facing start-ups.

#### 3.2. Sample and Sampling Technique

In order to ensure representativeness of different regions, a sample size of 120 graduates were chosen from six (6) traditional metropolitan regions/cities in Ghana. On the other hand, the study employed a multi-stage sampling technique which included stratified sampling that initially placed graduates into stratum based on the various regions since fashion education and start-up opportunities vary across regions.

## 4. Results and Discussion

#### 3.3. Data Collection Methods

The study used primary and secondary data collection methods. In this case, a structured questionnaire on a five-point Likert scale with closed-ended items were administered to graduates.

#### 3.4. Data Analysis Procedures

This paper made use of quantitative data, and information from the questionnaires were coded and entered into the Statistical Package for the Social Sciences (SPSS). Simple descriptive statistics (frequencies, percentages, and means) were used to analyze the data accrued from the questionnaire.

#### 3.5. Ethical Considerations

Ethical principles were adhered to throughout the study. Participants for the study were provided with information sheets detailing the purpose, procedures, and implications of the study, after which their voluntary consent were obtained. Again, respondents' identities were not disclosed, and all data kept confidential. Codes rather than names were utilized during analysis. Participants were not coerced, but they were informed of their right to withdraw from the study at any stage without penalty. Data obtained were reported accurately, and findings not manipulated to suit any predetermined outcome.

*Table 1. Respondents' Perceptions of Fashion Design Education.*

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)	Mean	SD	Decision
The nature of the fashion curriculum used in the tertiary level of education is adequate enough to prepare students for the job market.	17 (15.5%)	7 (6.4%)	14 (12.7%)	15 (13.6%)	57 (51.8%)	3.80	1.51	Low Perception
Higher educational institutions that offer fashion design programmes have standard laboratories for students' training.	11 (9.8%)	7 (6.4%)	22 (19.6%)	22 (19.6%)	50 (44.6%)	3.83	1.33	Low Perception
The fashion design curriculum provided me with strong technical skills (e.g., sewing, pattern drafting, garment construction).	9 (8.0%)	5 (4.5%)	12 (10.7%)	20 (17.9%)	66 (58.9%)	4.15	1.26	Highly Positive Perception
The training I received in fashion design emphasized creativity and innovation.	8 (7.3%)	3 (2.8%)	9 (8.3%)	25 (22.9%)	64 (58.7%)	4.23	1.18	Highly Positive Perception
The curriculum for fashion	4 (3.6%)	7 (6.3%)	13 (11.6%)	25 (22.3%)	63 (56.3%)	4.21	1.10	Highly Positive Perception

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)	Mean	SD	Decision
programme adequately integrated entrepreneurship and business management courses.								
During my studies, I was exposed to practical industry experiences (e.g., internships, apprenticeships, or collaborations).	4 (3.6%)	6 (5.5%)	10 (9.1%)	16 (14.5%)	74 (67.3%)	4.36	1.09	Highly Positive Perception
The learning environment (equipment, laboratories, and studios) was adequate to support skill development.	16 (14.3%)	6 (5.4%)	14 (12.5%)	27 (24.1%)	49 (43.8%)	3.78	1.43	Low Perception
The teaching methods used by lecturers/instructors were effective in preparing me for the fashion industry.	9 (8.1%)	8 (7.2%)	16 (14.4%)	21 (18.9%)	57 (51.4%)	3.98	1.30	Moderately Positive Perception
Fashion design education I received reflected current trends and technological advancements in the fashion industry.	7 (6.3%)	5 (4.5%)	15 (13.4%)	35 (31.3%)	50 (44.6%)	4.04	1.15	Moderately Positive Perception
My institution provided career guidance and counseling related to business startups in the fashion sector.	9 (8.1%)	2 (1.8%)	16 (14.4%)	32 (28.8%)	52 (46.8%)	4.05	1.19	Moderately Positive Perception
The program encouraged innovation and problem-solving in addressing fashion industry needs.	6 (5.4%)	6 (5.4%)	15 (13.4%)	28 (25.0%)	57 (50.9%)	4.11	1.16	Highly Positive Perception
The fashion design education I received prepared me well for self-employment.	4 (3.6%)	5 (8.1%)	14 (20.7%)	20 (38.7%)	68 (61.3%)	4.29	1.08	Highly Positive Perception

Note: Respondents rated each statement on a five-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

Table 1 revealed that fashion design graduates generally had good things to say about Ghanaian fashion design education, even though there were still differences in the quality and resources of different schools. The study assessed the infrastructure, entrepreneurial integration, practical exposure, and curriculum adequacy of tertiary fashion programmes utilizing five-point Likert-scale variables. The standard deviations (SD) were between 1.08 and 1.51, and the weighted mean scores were between 3.78 and 4.36. This indicates that there is a general consensus that fashion education and training in Ghana is getting better, but this phenomenon still varies from one institution to another. A higher SD value meant that the experiences at different institutions were different, while a weighted mean above 3.5 meant that the view was good. The results show that people thought the fashion design programme was

only moderately competent (Mean = 3.80), which means that it gives students a basic understanding of how to get a job, but it does not specifically meet the needs of the industry yet. This result is in consonance with the conclusions of Ademtsu and Pathak and Donkor who observed persistent challenges at Technical Universities concerning curriculum alignment and resource distribution [20, 21]. Respondents were also not happy with the laboratory and workshop facilities (Mean = 3.83), which shows that the infrastructure is still not up to standard, and equipment not enough to augment teaching and learning at the tertiary level.

On the other hand, creativity, technical skill development, and innovation were all rated very highly (Means ranged from 4.15 to 4.23). This shows that the programmes are doing well in terms of teaching practical skills and new design ideas.

Training in entrepreneurship and business management (Mean = 4.21) also appeared promising, showing how Ghana's TVET reforms that promoted self-employment were good for the country development.

Industrial exposure through internships and apprenticeships also received the highest score (Mean = 4.36), highlighting the importance of real-world experience in bridging the gap between theory and industry practice and this phenomenon falls in line with the perspectives of [31, 36] on the relevance of industrial training.

Even though instructional efficacy (Mean = 3.98) and technological relevance (Mean = 4.04) showed moderate to high levels of satisfaction, the learning environment (Mean = 3.78) was still a problem. This showed that some institutions currently have problems with their infrastructure. What is more, respondents indicated that the curriculum is progressively incorporating innovation and market trends, and that career counseling (Mean = 4.05) is emerging as a more prominent aspect of fashion design schools. These changes show that Ghana's higher education system is gradually changing to meet the needs of today's employers and workers.

**Table 2.** Factors Motivating Fashion Graduates toward Self-Employment.

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)	Mean	SD	Decision
My passion for fashion and creativity motivates me to pursue self-employment.	7 (6.4%)	3 (2.7%)	6 (5.5%)	30 (27.3%)	64 (58.2%)	4.28	1.12	Strong Motivation
The high demand for customized and locally-made clothing encourages me to start a business.	7 (6.4%)	1 (0.9%)	11 (10.1%)	34 (31.2%)	56 (51.4%)	4.20	1.10	Strong Motivation
Lack of formal employment opportunities after graduation pushes graduates into self-employment.	9 (8.1%)	6 (5.4%)	6 (5.4%)	25 (22.5%)	65 (58.6%)	4.18	1.25	Moderate Motivation
Financial and material support from family and friends facilitates business start-ups.	11 (10.0%)	3 (2.7%)	13 (11.8%)	33 (30.0%)	50 (45.5%)	3.98	1.26	Weak Motivation
Exposure to apprenticeship and mentorship opportunities drives graduates to establish their own businesses.	7 (6.3%)	5 (4.5%)	11 (9.9%)	28 (25.2%)	60 (54.1%)	4.16	1.17	Moderate Motivation
Entrepreneurship and business training during education motivates graduates to create jobs.	4 (3.6%)	2 (1.8%)	14 (12.6%)	29 (26.1%)	62 (55.9%)	4.29	1.00	Strong Motivation
The availability of fashion shows, exhibitions, and trade fairs encourages graduates to start businesses.	6 (5.5%)	4 (3.6%)	12 (10.8%)	36 (32.4%)	53 (47.7%)	4.14	1.10	Moderate Motivation
The growth of the Ghanaian fashion industry creates opportunities for self-employment and job creation.	5 (4.5%)	3 (2.8%)	11 (9.9%)	40 (36.0%)	52 (46.8%)	4.18	1.03	Moderate Motivation
Access to digital platforms and social media motivates fashion graduates to start their own businesses.	4 (3.7%)	5 (4.6%)	14 (12.8%)	36 (33.0%)	50 (45.9%)	4.13	1.05	Moderate Motivation

Note: Respondents rated each statement on a five-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

A review of the factors influencing venture start-ups among Ghanaian fashion design graduates indicates that a blend of personal passion, market potential, and educational experiences foster a significant inclination towards entrepreneurship. The study employed weighted mean and standard deviation

(SD) values to evaluate respondents' levels of agreement and variation, utilizing nine significant motivational indicators rated on a five-point Likert scale. Graduates exhibited varying levels of opportunity and support, with mean scores between 3.98 and 4.29 and standard deviation values ranging from 1.00

to 1.26, despite their strong aspiration for self-employment.

Strong motivation was indicated by a weighted mean above 3.5, while varied experiences across institutions were reflected by SD values above 1.20.

The most powerful motivator discovered was a passion for fashion and creativity (Mean = 4.28, SD = 1.12), highlighting the importance of individual interest and self-expression in entrepreneurship. This assertion is highly related to Fernandes and Todeschini et al. studies, which emphasize that graduates are often inspired and ginger to start their own businesses by design innovation and creative autonomy [16, 29]. Similarly, the high demand for locally and custom-made clothing (Mean = 4.20, SD = 1.10) emerged as another critical motivator as Ghanaian consumers place a higher value on authenticity and cultural identity; a trend that promotes import substitution and job creation [14, 28].

Another significant factor was availability of formal employment opportunities (Mean = 4.18, SD = 1.25) also pushed graduates to entrepreneurship more due to necessity rather than choice. Such a finding affirms broader unemployment concerns highlighted by Baah-Boateng and Ampong, who argue that self-employment commonly serves as an alternative source of survival for new graduates [7, 8]. On the other hand, the lower mean of 3.98 for material and financial support from friends and family shows irregular or insufficient access to startup funding. Mefful et al. and Duggal and Jain assert that this is one of the longest-standing challenges faced by Ghanaian small-scale fashion entrepreneurs to surmount, compelling

many of them to depend on their scant personal savings [13, 46].

Finally, a consistent but minor motivator, was exposure to apprenticeship and mentorship opportunities (Mean = 4.16, SD = 1.17), which validates the importance of real-world practical learning bridging the gap between theory and industry practice.

From the perspectives of Nunfam et al. and Boateng et al., industry ties enhance confidence and readiness for entrepreneurship [31, 36]. Evidence of Ghana's improved Technical and Vocational Education and Training (TVET) system was further strengthened by the highest overall mean 4.29 (SD = 1.00) for entrepreneurship and business training throughout education. Those who completed these programmes now have the creativity and business planning skills needed for working independently.

The growth of the Ghanaian fashion industry (Mean = 4.18, SD = 1.03) and other outside factors like fashion shows and trade shows (Mean = 4.14, SD = 1.10) were also found to be important. These platforms help new designers get their work seen and get clients by encouraging visibility, networking, and working together [15, 40].

As indicated in Table 2, digital and social media platforms (mean = 4.13, SD = 1.05) have emerged as essential tools for brand-building and marketing, allowing new designers to access a larger audience without having to make huge financial investments.

**Table 3.** Challenges Affecting Fashion Entrepreneurs in Ghana.

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)	Mean	SD	Decision
Limited access to start-up capital is a major barrier to establishing a fashion business.	8 (7.1%)	7 (6.3%)	11 (9.8%)	28 (25.0%)	58 (51.8%)	4.08	1.23	Severe Challenge
The high cost of raw materials and equipment negatively affects business start-ups.	5 (4.5%)	6 (5.4%)	9 (8.0%)	32 (28.6%)	60 (53.6%)	4.21	1.09	Severe Challenge
Lack of proper business management skills makes it difficult to sustain fashion businesses.	6 (5.4%)	4 (3.6%)	16 (14.4%)	33 (29.7%)	52 (46.8%)	4.09	1.12	Severe Challenge
Competition from imported ready-made clothing poses a significant challenge to local fashion start-ups.	8 (7.2%)	5 (4.5%)	20 (18.0%)	36 (32.4%)	42 (37.8%)	3.89	1.18	Mild Challenge
Inadequate access to modern technology (e.g., sewing machines, design software) hinders business creation.	11 (9.9%)	4 (3.6%)	11 (9.9%)	37 (33.3%)	48 (43.2%)	3.96	1.26	Moderate Challenge
Unstable market conditions and low customer loyalty affect the survival of fashion start-ups.	6 (5.4%)	5 (4.5%)	13 (11.7%)	36 (32.4%)	51 (45.9%)	4.09	1.12	Severe Challenge
High taxation and unfavorable regulatory policies create difficulties for	5 (4.5%)	6 (5.4%)	14 (12.6%)	36 (32.4%)	50 (45.0%)	4.08	1.10	Severe Challenge

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)	Mean	SD	Decision
fashion entrepreneurs.								
Limited access to reliable supply chains affects production efficiency.	8 (7.2%)	6 (5.4%)	12 (10.8%)	38 (34.2%)	47 (42.3%)	3.99	1.19	Moderate Challenge
Inadequate mentorship and industry support limit the success of new fashion businesses.	10 (9.1%)	4 (3.6%)	19 (17.3%)	35 (31.8%)	42 (38.2%)	3.86	1.23	Mild Challenge
Limited marketing and networking opportunities make it difficult to attract and retain customers.	6 (5.4%)	5 (4.5%)	20 (18.0%)	32 (28.8%)	48 (43.2%)	4.00	1.14	Moderate Challenge

Note: Respondents rated each statement on a five-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

An assessment of the challenges encountered by Ghanaian fashion entrepreneurs reveals a series of interconnected issues that hinder the establishment and sustainability of fashion enterprises. The study employed weighted mean and standard deviation (SD) values to assess the level of agreement among respondents and the severity of the issues, utilizing 10 key indicators scored on a five-point Likert scale. A lot of people believe that Ghana's apparel sector had a lot of problems with how it works and how it is set up. The SD values went from 1.09 to 1.26, while the weighted mean values went from 3.86 to 4.21. A weighted mean of more than 3.5 revealed that there was a substantial problem, while SD values of more than 1.20 showed that different individuals and institutions had diverse experiences.

With a mean score of 4.08 (SD = 1.23), inadequate access to start-up capital was highlighted as one of the most significant impediments. This shows that financial problems are still a major obstacle to the entrepreneurial growth of fashion graduates. Mefful et al. and Duggal and Jain conducted analogous studies, demonstrating that small-scale fashion firms often face financial constraints, particularly for recent graduates lacking access to formal credit or bank loans [13, 46]. From the respondents' point of view, the high cost of equipment and raw materials (mean = 4.21, SD = 1.09) is another big problem. Ghana's production costs are still high since it has to buy machines and textiles from other countries, which cuts into profits [14, 40]. The results align with the conclusions of Zhao et al. and Jamaluddin et al., who observed that increasing input costs hinder the fashion industry's capacity to expand and compete in developing countries [38, 39].

It seemed that not having business management knowledge was one of the problems (mean = 4.09, SD = 1.12). Even though fashion programs now feature lessons on entrepreneurship, people said that many graduates still have issues with marketing, managing clients, and making financial plans. Fernandes and Lang and Liu say that these shortcomings in management often stop creative graduates from putting their creative skills into enterprises that are sustainable [15, 16].

The survey also found that low client loyalty and uncertain

market conditions were big difficulties (mean = 4.09, SD = 1.12). The respondents who answered the survey said that it is hard to plan production or keep track of inventory since customers are unpredictable, fashion trends change quickly, and customers come and go. Macchion et al. contend that fashion marketplaces are notoriously volatile and need strategic preparation, a challenge for many new entrepreneurs to sustain [48].

Respondents also said that high taxes and strict rules were another tough problems (mean = 4.08, SD = 1.10). High taxes, import duties, and lengthy registration processes make it harder for new enterprises to start and diminish their profit margins, especially for unofficial fashion entrepreneurs [40, 47]. Not having easy access to modern technology was also seen as a small but important problem (mean = 3.96, SD = 1.26). Some institutions now use digital tools like Computer-Aided Design (CAD), but many graduates cannot afford to buy high-tech tools when they graduate. Boateng et al. and Khan assert that this difference in technology makes the market less competitive, lowers productivity, and makes quality control harder [27, 36].

The research indicated that moderate impediments to business expansion encompass restricted marketing and networking opportunities (mean = 4.00, SD = 1.14), alongside constrained access to reliable supplier networks (mean = 3.99, SD = 1.19). Ghana often has problems with supply because its textile ecosystem is broken apart and it depends on foreign materials [48]. Lang and Liu and Zhao et al. also relate that many firms have trouble selling their items since they cannot get to marketing channels or take part in digital campaigns or fashion shows [15, 38]. These setbacks make it difficult for emerging designers to get clients and see their work in the market.

Competition from imported ready-made garments (mean = 3.89, SD = 1.18) and a lack of industry support and mentorship (mean = 3.86, SD = 1.23) were seen as little concerns, but they are nevertheless important. Many Ghanaian designers have made a name for themselves in the markets for custom-made

and culturally inspired clothing, but the flood of cheaper imported clothes still puts pressure on local producers [14, 28]. In the meantime, graduates are less sure of their ability to run their own businesses because they don't have enough access to mentorship and institutional support once they finish their training. [16, 44]. Nunfam et al. noted that industrial mentorship systems in Ghana are still uneven, and the large SD values show differences in access to such support across institutions and locations [31].

## 5. Conclusion of Findings and Limitations of the Study

In the past, Ghana's fashion design schools only offered limited vocational training. Now, they offer structured post-secondary programs that combine creativity, technical skills, and business knowledge. Overall, graduates were pleased with their education, especially how it helped them get better at technical skills, be more creative, and come up with new ideas. Adding classes in business management and entrepreneurship, as well as links to the industry, has greatly increased the chances of fashion graduates getting a job and build their confidence. However, differences in resources and facilities still limit the quality of education at different schools. Some of the main things that prevent professionals from entering the field include insufficient lab space, outdated equipment, and unequal access to new technology.

The results also showed that fashion graduates really want to work for themselves because they are naturally creative and enthusiastic, and there is a growing market for clothes made in the Ghana. Mentorship, entrepreneurship education, and the growing interest in Ghanaian fashion are some key reasons for venturing into fashion businesses. Irrespective of these, a lot of graduates can't turn their dreams into successful businesses because they don't have steady support from institutions or start-up capital. Trade shows, exhibitions, and online platforms are helping the fashion industry in Ghana get better, but not all graduates can use these resources in the same way.

The study showed that fashion sector start-ups have a lot of operational and structural problems, even though there is a lot of entrepreneurial enthusiasm. The most important problems were the graduates' inability to get money to start a business, high production costs from imported supplies, managing of employees or workers, and complicated tax laws. These data indicate that the transition from training to entrepreneurship is hindered by numerous challenges faced by fashion graduates. New fashion ventures have a harder time staying in business because of moderate problems like not having enough marketing networks, unreliable supplier chains, and technical issues. At the same time, new designers are not able to reach their full potential because they have to compete with imported ready-made clothes and do not have many opportunities to learn from more experienced designers.

The results have a big impact on changes in institutions and

national policy. Digital design classes, firm incubation, and organized industrial attachments should be added to all fashion programs in both Technical Vocational Education and Training (TVET) and higher education to connect the curriculum with the industry. If the National Qualification Framework were made stronger to make sure that all certifications, evaluations, and course content were the same, the results of training would be less different.

Additionally, fashion businesses really need help with their infrastructure and finances at initial stage. The Ghana Enterprises Agency (GEA) and the Ghana Export Promotion Authority (GEPA) should create special ways for young designers to get money and rent equipment. Partnerships between Technical Universities and businesses can help move technology from one place to another, make it easier to get raw materials, and improve the value chains for fashion and textiles in Ghana.

Small fashion houses also need changes to the rules and budgets to help them deal with high import taxes and fees. More graduates would make their businesses official if the laws were better, such as easier registration, tax breaks, and fair-trade rules. Fashion and innovation hubs in different parts of the world can help new designers get more attention, advice, and help from well-established designers.

This study has major flaws, but it still offers useful information about how graduate motivation, fashion education, and business problems in Ghana are all connected. A cross-sectional descriptive design limited the capacity to evaluate changes in entrepreneurial behaviour or corporate performance over an extended period by capturing participants' perspectives at a single moment in time. Utilizing self-reported data from structured questionnaires heightens the risk of response bias, as certain participants may have overstated their accomplishments or downplayed the difficulties faced.

The study's sample size of 120 graduates, predominantly from six urban areas, may not sufficiently reflect the experiences of fashion graduates in less industrialized or rural settings, where market opportunities and resource availability may differ markedly. The study lacked quantifiable metrics of corporate performance that could have validated the causal relationship among motivation, education, and entrepreneurial success, including profitability, sustainability, or job creation.

Even with these problems, the study gives a strong base for understanding the problems that Ghanaian fashion graduates face when they start their own businesses. It also offers researchers and policymakers a way to test their ideas and make rules that will help new fashion businesses do better.

## Abbreviations

TVET	Technical Vocational Education and Training
GEA	Ghana Enterprises Agency
GEPA	Ghana Export Promotion Authority

## Acknowledgments

The authors strongly declare that they have no competing interest that could influence the findings of the study.

## Author Contributions

**Moses Opoku:** Conceptualization, Investigation, Methodology, Writing – original draft

**Sarah Baiden:** Data curation, Methodology, Resources

**Josephine Aboagyewaa-Ntiri:** Investigation, Methodology, Writing – review & editing

**Stella Daah-Siaw:** Formal Analysis, Writing – review & editing

**Kofi Kyeremeh:** Data curation, Writing – review & editing

**Andoh Kwaku Conduah:** Investigation, Resources

**Sylvester Kumi Boakye:** Formal Analysis

## Data Availability Statement

The raw data supporting the conclusions of this study will be made available on request from the corresponding author.

## Conflicts of Interest

The authors declare no conflict of interest.

## References

- [1] Ghana Statistical Services (2025). Labour statistics bulletin (2025 July edition), Ghana.
- [2] Padi, A., & Musah, A. (2022). Entrepreneurship as a potential solution to high unemployment: A systematic review of growing research and lessons for Ghana. *International Journal of Entrepreneurship and Business Innovation*, 5(2), 26-41. <https://doi.org/10.52589/IJEBINNERQQR>
- [3] Ameyaw-Ampadu, R., Jumah, E. T., Owusu-Arthur, J., Boadu, P., & Fatunbi, O. A. (2020). A review of youth employment initiatives in Ghana: Policy perspective. In *Forum for Agricultural Research in Africa (FARA) Research Report (Vol. 5, No. 5)*.
- [4] Owusu-Ansah, K. K. (2024). Sustainable Development: Implications for Urban Employment in Emerging Global Cities, a Case Study of Accra, Ghana. University of Wyoming.
- [5] Kabere, N. (2021). Gender equality, inclusive growth, and labour markets. In *Women's economic empowerment* (pp. 13-48). Routledge.
- [6] Biney, I. K. (2015). Exploring graduate unemployment problem in Ghana: Challenges and Strategies. *Journal of Education* Vol. 3, No. 2. February, 2015. Retrieved October 19, 2025 from [www.researchgate.net/publication/322301411](http://www.researchgate.net/publication/322301411)
- [7] Ampong, E. (2020). Graduate unemployment in Ghana: challenges and workable strategies. *International Journal of Research Publications*, 57(1), 108-29. <https://doi.org/10.47119/10.47119/IJRP100571720201344>
- [8] Baah-Boateng, W. (2004). Employment policies for sustainable development: the experience of Ghana. Department of Economics, University of Ghana.
- [9] Odoom, S. K., Payne, E. K., & Boateng, D. A. (2016). Prospects of TVET for Ghana's Industrial development. *American Journal of Engineering Research*, 5(7), 280-285.
- [10] Ernest, K., & Ansah, S. K. (2013). Technical and vocational education and training in Ghana: A tool for skill acquisition and industrial development. *J Educ Pract*, 4, 16.
- [11] Yingzhe, Z. (2025). Reform of Graduation Project Teaching in Fashion and Apparel Design Major Under Emerging Industry Trends. *Science Journal of Education*, 13(2), 49-61.
- [12] Wilson, K. E., Vyakarnam, S., Volkmann, C., Mariotti, S., & Rabuzzi, D. (2009, April). Educating the next wave of entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st century. In *World economic forum: A report of the global education initiative*.
- [13] Mefful, O. O., Asante-Kyei, K., & Mefful, J. (2023). Financing ceramic artists and fashion designers in small and medium-scale enterprises (SMEs) in Sekondi-Takoradi, Ghana. *International Journal of Small Business and Entrepreneurship Research*, 11(3), 1-11.
- [14] Essel, B. K. C., Adams, F., & Amankwah, K. (2019). Effect of entrepreneur, firm, and institutional characteristics on small-scale firm performance in Ghana. *Journal of Global Entrepreneurship Research*, 9(1), 55.
- [15] Lang, C., & Liu, C. (2019). The entrepreneurial motivations, cognitive factors, and barriers to become a fashion entrepreneur: A direction to curriculum development for fashion entrepreneurship education. *International Journal of Fashion Design, Technology and Education*, 12(2), 235-246.
- [16] Fernandes, C. E. (2019). Fashion design entrepreneurship: Skills and solutions to create a fashion business. *Journal of Textile Science & Fashion Technology*, 3(1), 1-10. <https://doi.org/10.33552/JTSFT.2019.03.000553>
- [17] Bart-Addison, V. I. V. I. A. N. (2021). The application of entrepreneurial skills in the fashion industry: A case of Tanoso in the Kwadaso Municipality (Doctoral dissertation, University of Education, Winneba).
- [18] Senanayake, R. J. (2024). Fashion design for the emerging creative economy of Sri Lanka (Doctoral dissertation, RMIT University).
- [19] Wovenu, M. (2017). Some Underlying Reasons Accounting for Fashion Graduates of the Polytechnics not Operating in the Fashion Industry.
- [20] Ademtsu, J. T., & Pathak, P. (2023). A Review on the Challenges of Fashion Students' Training Based on Curriculum Structure of Technical Universities in Ghana. *International Journal of Science and Research (IJSR)*, 12(11), 433-448. <https://dx.doi.org/10.21275/SR231105042644>

- [21] Donkor, E. M. M. A. (2022). Evaluation of the HND fashion programme of Accra Technical University (Doctoral dissertation, University of Education, Winneba).
- [22] Sylvester, S. (2021). Clothing and textiles course as a foundation for the fashion design and textiles programme in Accra Technical University (Doctoral dissertation, University of Education Winneba).
- [23] Hussain, D. W. (2022). Do National Qualification Frameworks Help Reduce the Skills Gap? A Critical Perspective. A Critical Perspective (May 9, 2023). IN4OBE Global Virtual Summit. <https://doi.org/10.2139/ssrn.4442249>
- [24] Allais, S. (2010). The implementation and impact of National Qualifications Frameworks: Report of a study in 16 countries (Vol. 3). Geneva: ILO.
- [25] Mohamed, O. S., & Abd Elradi, W. (2015). Designing a training program to develop the students' skills in building fashion design portfolios. *International Design Journal*, 5(2), 337-350.
- [26] Seivewright, S. (2012). Basics fashion design 01: Research and design (Vol. 1). A&C Black.
- [27] Khan, S. I. (Ed.). (2023). *Fashion Design Mastery: Trends, Techniques, and Creative Insights*. Libertatem Media Private Limited.
- [28] Hofmann, K. H., Jacob, A., & Pizzingrilli, M. (2022). Overcoming growth challenges of sustainable ventures in the fashion industry: a multinational exploration. *Sustainability*, 14(16), 10275. <https://doi.org/10.3390/su141610275>
- [29] Todeschini, B. V., Cortimiglia, M. N., Callegaro-de-Menezes, D., & Ghezzi, A. (2017). Innovative and sustainable business models in the fashion industry: Entrepreneurial drivers, opportunities, and challenges. *Business horizons*, 60(6), 759-770. <https://doi.org/10.1016/j.bushor.2017.07.003>
- [30] Berner, B. (2010). Crossing boundaries and maintaining differences between school and industry: forms of boundary-work in Swedish vocational education. *Journal of education and work*, 23(1), 27-42.
- [31] Nunfam, V. F., Adjei, N. A. K., Adam, H., & Eshun, J. F. (2022). Industrial attachment and human capital of higher education students: constraints of Ghanaian technical universities. *Education+ Training*, 64(6), 737-753.
- [32] Dondofema, J., Mwenje, J., & Musemwa, L. (2020). The Industrial Attachment Programme--History, Benefits, Challenges and Its Adoption in Zimbabwe: A Review. *Asian Journal of Education and Training*, 6(3), 412-420.
- [33] Idaya, A. S., Aliyu, Y. P., Jidda, N. A., & Babayo, M. M. (2021). Strategies for Improving School-Industry Collaborations for Effective Students' Industrial Attachment in Technical Colleges of Gombe State. *Gombe Technical Education Journal*, 13(1).
- [34] Senayah, W. K. (2018). Skill-Based Competence and Competitiveness in the Garment-Manufacturing Firms of Ghana (Doctoral dissertation, University of Ghana).
- [35] Asare, T. O., Nyarko, M. O., Fobiri, G. K., & Ayesu, S. M. (2023). Design Development Gaps in Apprenticeship-Trained Garment Producers in Ghana. *International Journal of Innovation and Development*, 1(1).
- [36] Boateng, O., Ayesu, S. M., Asinyo, B. K., & Crentsil, T. (2025). The use of apparel cad technology in pedagogical training among technical universities in Ghana. *Indonesian Journal of Education and Social Sciences*, 4(1), 97-112.
- [37] Vitariyanti, D., Cahyono, B. T., Pambudi, N. A., & Efendi, A. (2024). Entrepreneurial Interest and Career Development of Vocational High School Graduates Fashion Design in the Digital Era. *Indonesian Journal of Learning and Instructional Innovation*, 2(01), 76-87.
- [38] Zhao, L., Davis, L., & Copeland, L. (2018). Entrepreneurial intention: An exploratory study of fashion students. *Journal of Enterprising Culture*, 26(01), 27-50.
- [39] Jamaluddin, R., Ali, M. H., Kadir, S. A., Kamis, A., & Mohamed, S. (2019). Impact of fashion entrepreneurship programme on entrepreneurial interests, intention and competencies. *Journal of Technical Education and Training*, 11(1).
- [40] Tondi, N. M. (2023). Challenges faced by TVET entrepreneurship graduates in establishing their own businesses.
- [41] Meunmany, S. (2024). Linkage between vocational training institutions and industry: TVET programme contributing to the ready-made garment sector in Lao PDR.
- [42] Anene-Okeakwa, J. E., Chukwurah, M. O., & Ikenga, E. E. (2020). Policy reforms in Technical and Vocational Education and Training (TVET): Lessons for the Nigerian government towards sustainable industrial growth. *Vocational and Technical Education Journal*, 2(2).
- [43] Gyimah, N. (2020). Assessment of Technical and Vocational Education and Training (TVET) on the development of the World's Economy: Perspective of Africa, Asia and Europe. *Asia and Europe* (February 19, 2020).
- [44] Remington, T. F., & Yang, P. (2020). Public-private partnerships for skill development in the United States, Russia, and China. *Post-Soviet Affairs*, 36(5-6), 495-514.
- [45] NZEI, J. A. (2022). Entrepreneurship in Fashion Design Business Ventures at Retirement.
- [46] Duggal, G., & Jain, L. K. (2019). Challenges and Issues Faced by Entrepreneur in Fashion Industry. *Cosmos: An International Journal of Management*, 8(2), 5-8.
- [47] Moses, O., & Sarah, B. (2023). The impact of social media on small-scale businesses in Ghana: A case of fashion brand marketing and promotion in Sunyani Municipality. *American Journal of Art and Design*, 8(3), 82-86.
- [48] Macchion, L., Moretto, A., Caniato, F., Caridi, M., Danese, P., & Vinelli, A. (2015). Production and supply network strategies within the fashion industry. *International Journal of Production Economics*, 163, 173-188.
- [49] Creswell, J. W. (2019). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Thousand Oaks, CA: Sage. *English Language Teaching*, 12(5), 40.