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Constraints of Workplace Experience Learning Implementation among Fashion Design TVET in Ghana

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ABSTRACT

Workplace Experience Learning (WEL) programs are vital to Technical and Vocational Education because they enable students to apply classroom learning in real-world settings and develop entrepreneurial skills. In Ghana's fashion design education context, WEL has gained significance; however, there is a paucity of empirical evidence on the effectiveness of these programs in enhancing students' practical and entrepreneurial skills in technical universities. The study aimed to investigate the impact of WEL participation on the cultivation of entrepreneurial competencies among Higher National Diploma (HND) fashion design students in Ghana. The study examined the mediating role of placement activities, including mentorship, practical training, and supervision, and identified critical factors influencing the quality and outcomes of implementation. A sequential mixed-method design with an explanatory focus was utilised. Quantitative data were gathered from 250 students at four technical universities and analysed through regression and mediation models. To enhance interpretation of the findings, qualitative data from semi-structured interviews were analysed thematically using NVivo. The results indicated a substantial positive correlation between WEL participation and improvements in entrepreneurial competencies. Placement activities became important links due to weak ties between universities and industry, limited insurance coverage, limited family support, and communication problems. The study concludes that fortifying institutional coordination, augmenting support systems, and refining industry partnerships are essential to optimise WEL's influence on fashion design education in Ghana.

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INTRODUCTION

Technical Vocational Education and Training (TVET) programs in Ghana are essential for equipping individuals with entrepreneurial competencies that make them fit for purpose in related industries, including the vibrant field of fashion design. The fashion industry in Ghana is a dynamic, rapidly growing sector that requires professionals with both theoretical understanding and practical expertise. The gap is expected to be bridged primarily through Technical and Vocational Education and Training (TVET), which prepares graduates for immediate industry absorption (Appiah, 2023). However, conventional TVET programs often place insufficient emphasis on real-world applications, creating a gap between what students learn in the classroom and employers' needs (Appiah & Pretorius, 2022). One potential way to address this issue is through the Workplace Experience Learning (WEL) program, which provides students with practical exposure in industrial settings. Cognizant of this approach, the Commission for Technical Vocational Education and Training (CTVET-Ghana) has designed and incorporated the WEL program at all levels along the National TVET Qualification Framework (NTVETQF). The prowess of WEL is recognised by the magnitude of the assigned credit value at all levels along the NTVETQF (CTVET, 2022).

Workplace experience learning plays a crucial role in enhancing entrepreneurial competencies, creativity, and employability among TVET students in the fashion design sector (Pongo et al., 2019; Osei et al., 2021; COTVET, 2016; CTVET, 2021; Arthur et al., 2018; Noel, 2023; Paudel & Parajuli, 2023; Huang & Lai, 2020). How ever, practical implementations of WEL faces challenges, including limited industry support, insufficient funding, and logistical difficulties in student placement, which significantly impact the attainment of entrepreneurial competencies and skill transfer (Appiah et al., 2022; Mawonedzo et al., 2020; Kiplagat, 2018; Bowering, 2020; Quansah et al., 2019; Ampadu-Ameyaw et al., 2020; Sarpong-Nyantakyi et al., 2022) Further, the few studies in literature that highlight pathways for its effective deployment have instead focused mainly on policy and or guidelines development to the neglect of effectively uncovering the critical constraints that holds ineffective WEL programme implementation in place in TVET higher learning institutions. Moreover, not only have such studies been centered around developed countries leaving the case of Ghana, but few ones also done in Ghana tend to concentrate mainly on traditional educational institutions and programs rather than the TVET and for that matter fashion design programme (Van der Bijl, 2016; Oviawe, 2017; Ngugi & Muthima, 2017; Tamrat, 2022; Fazli & Farooq, 2023).

These issues create gaps that this study aims to bridge to benefit all stakeholders in Ghana's TVET landscape, particularly the Fashion Design programme.

The objective of this study was to analyse the factors that facilitate or hinder the implementation of the WEL programme for HND (TVET) fashion design.

Piaget (1973) and Vygotsky (1978) both advanced constructivist learning theory, which closely aligns with the study's exploration of the mediating role of placement activities in Workplace Experience Learning (WEL). According to constructivism, students actively create knowledge via experience and engagement with their surroundings. Piaget placed strong emphasis on the stages of individual cognitive development, in which individuals absorb and adapt to new information based on their experiences. Placement activities provide HND fashion design students with practical experience that tests preexisting knowledge structures and promotes the

development of new entrepreneurial abilities within the WEL framework. This is further supported by Vygotsky's (1978) concept of the Zone of Proximal Development (ZPD), which posits that guided interactions within institutional and social contexts, such as those enabled by university-industry partnerships in WEL programs, are more beneficial for students' learning. Through mentoring, teamwork, and contextualised learning, these organised experiences help students internalise professional practices and entrepreneurial thinking. The study emphasises how constructivist learning environments might alleviate structural limitations in Ghana's TVET sector and facilitate more efficient, student-centred skill acquisition by integrating placement activities into WEL (Senler, 2022; Schwartz et al., 2022).

This will provide valuable insights into policy frameworks for implementing WEL programs in Ghana's TVET, ensuring that these programs are effectively deployed to facilitate the acquisition of the required entrepreneurial competencies across the fashion design value chain. However, this study is limited by time and resource constraints that prevented students from the other six Technical Universities offering the same program from being involved.

LITERATURE REVIEW

2.1 Workplace Experience Learning Programme in Ghana

An extended and structured learning opportunity that a learner undertakes in a real-world work environment is known as workplace experience learning, or WEL. The student is required to apply and demonstrate a specific set of competencies associated with an approved training program throughout this period (CCBTR, 2020; CTVET, 2022). WEL, a crucial component of competency-based education and training (CBET), aims to ensure that students are not only academically prepared but also possess employable, real-world skills that meet market demands. To improve employability and career readiness, the method emphasizes developing professional, soft, and technical skills through practical experience.

Constructivist learning theory, which holds that learning is an active process of creating knowledge rather than passively absorbing it, provides the foundation for WEL's implementation (Piaget, 1973). Piaget argues that knowledge is created as students encounter new experiences and that learners build cognitive structures through their interactions with the environment. According to WEL, the workplace serves as a dynamic learning environment that affects learners' growth both directly and indirectly. Theory and practice can be integrated into real-world contexts, helping students understand challenging assignments, adapt to diverse work cultures, and engage in reflective practice. Additionally, WEL is consistent with experiential learning concepts, namely Kolb's (1984) experiential learning theory, which emphasises learning through active exploration, abstract conceptualisation, reflective observation, and authentic experience. These theoretical foundations support the significance of structured workplace involvement as a component of technical and vocational education and emphasise the benefits of learning in real-world settings.

WEL has been officially integrated into Ghana's Technical and Vocational Education and Training (TVET) system as part of broader initiatives to improve the relevance of training and reform skills development. The national regulatory body responsible for the development, implementation, and oversight of WEL initiatives in recognised institutions is the Commission for Technical and Vocational Education and Training (CTVET). Strong industry-academic ties and competency-based programs that incorporate WEL as a fundamental component are encouraged

under the CTVET framework (CTVET, 2022). To ensure workplace learning is purposeful, organised, and aligned with national qualification criteria, CTVET places strong emphasis on cooperation between training facilities and industry partners through its policy initiatives. Accordingly, WEL is viewed as a tool to enhance job placement outcomes, ease the transition from school to the workplace, and ensure that training aligns with labour market expectations (Afeti & Adubra, 2012).

Notwithstanding its strategic significance, Ghana's WEL implementation is beset by several serious obstacles. The challenge that training institutions face in securing sufficient suitable industrial placements for students is one of the most notable problems. This often results in students being assigned to organisations that have little to do with their academic subjects, thereby reducing the educational value of the experience. Additionally, rules governing the monitoring and evaluation of students in professional contexts are often unclear and inconsistent. This makes it more challenging to adequately monitor and assess learning outcomes, leading to variations in the quality of WEL delivery. In such instances, learners are treated more like temporary workers than as trainees on a planned learning path, and industry partners may lack the ability or desire to provide sufficient mentorship and support (Akyeampong, 2014). Inadequate student preparation prior to placements, a lack of financing and resources to support WEL coordination, and poor communication between universities and industry stakeholders are additional limitations. Together, these issues reduce WEL's effectiveness and limit its potential to influence students' growth and employability.

In Ghana's developing TVET system, Workplace Experience Learning (WEL) serves as a crucial link between classroom education and practical application. With strong theoretical underpinnings and a legal framework within CTVET, WEL is well positioned to address skill gaps and enhance worker preparedness. Nonetheless, ongoing implementation issues related explicitly to placement logistics, oversight, industry cooperation, and evaluation emphasise the need for ongoing research and policy development. To fully realise WEL's potential as a revolutionary component of technical and vocational education in Ghana, these deficiencies must be addressed.

2.2 Entrepreneurial Competency Development in Fashion Design

A person's ability to recognise opportunities, innovate, take risks, and manage resources to create and sustain value is referred to as entrepreneurial competencies (Man & Lau, 2005; Mitchelmore & Rowley, 2010). These skills are crucial for fashion designers to navigate the fast-paced, fiercely competitive fashion industry and to start their businesses. Entrepreneurial skills are becoming essential for career success as an increasing number of fashion professionals work as freelancers, independent designers, or startup founders (Protogerou et al., 2022).

To develop skills such as opportunity detection, resilience, financial literacy, and strategic thinking, recent studies emphasise the need to include entrepreneurship education in fashion design schools (Ademtsu & Pathak, 2023). It has been demonstrated that practice-based and experiential learning approaches, including Work-Integrated Learning (WIL), improve these outcomes by exposing students to real-world corporate settings and decision-making situations (Rae, 2020). The development of entrepreneurial competencies among Higher National Diploma (HND) fashion students is especially important in Ghana's technical and vocational education and training (TVET) context, as it provides avenues for self-employment and reduces youth unemployment (Boateng et al., 2022). Fashion graduates can thus benefit substantially from

developing these competencies through well-designed WEL programs, which provide the entrepreneurial and creative skills necessary for long-term employment.

Since the fashion design industry requires not just creative skill but also business acumen and agility, it is increasingly recognized that developing entrepreneurial competencies is crucial to fashion design education. Fashion students who wish to start their own businesses or transition to self-employment must possess entrepreneurial skills, including opportunity recognition, innovation, risk-taking, and strategic thinking (Rae, 2020). For designers to remain relevant and thrive in the fashion industry, which is characterised by quick trend cycles and fierce competition, they must combine innovation and entrepreneurship (Lee & Tsang, 2021). Research indicates that experiential learning settings, such as internships and industrial placements, that provide opportunities for real-world problem-solving and promote proactive decision-making, play a crucial role in developing these competences (Rae, 2020). The development of entrepreneurial competency is significant in the context of technical and vocational education, such as HND programs in Ghana, to combat unemployment and support innovation-driven businesses (Boateng et al., 2022). Thus, the gap between technical proficiency and entrepreneurial preparedness can be closed by including organised entrepreneurship training into the fashion design curriculum, bolstered by real-world WEL components.

2.3 Placement Activities in Workplace Experience Learning

Within the context of Workplace Experience Learning (WEL), placement activities are defined as supervised, structured work experiences that combine classroom instruction with hands-on practice in actual workplace settings. Such internships provide a vital link between classroom education and the practical realities of the fashion business for students studying fashion design. These experiences prepare students for self-employment or jobs in fast-paced, fashion-related industries by immersing them in production processes, customer engagement, trend forecasting, and entrepreneurial operations (UNEVOC, 2016).

Research consistently highlights the importance of placement activities in strengthening technical and entrepreneurial competencies and in bridging academic knowledge with real-world applications (Akkermans et al., 2020; TVET Ghana Report, 2016). These experiences specifically foster creativity, problem-solving skills, business acumen, and creative thinking, all of which are critical for success in the highly competitive fashion industry (Lee & Tsang, 2021). However, insufficient funding, poor coordination between industry and training institutions, and uneven supervisory procedures frequently make placement efforts less successful (UNEVOC, 2016; Boateng et al., 2022).

Pre-placement, placement, and post-placement are the three primary stages of WEL implementation in Ghanaian technical universities. Each stage is intentionally designed to support students' overall growth. Preparation, career counselling, and industry matching are the main goals of the pre-placement phase; skill development through experience learning is the primary focus of the placement phase; and reflection, evaluation, and feedback are supported during the post-placement phase (Nyarko et al., 2021). Fostering an ongoing, cohesive learning process that produces quantifiable entrepreneurial outcomes requires the integrated design of these stages.

Business management skills, technical talents, and personal qualities such as self-efficacy, inventiveness, and resilience are components of entrepreneurial competency, according to Menke (2018), Ustyuzhina et al. (2019), and Kozlinska et al. (2023). These skills reveal a person's values,

attitudes, and approach to entrepreneurship, as well as their knowledge and abilities. Therefore, placement activities reinforce the constructivist learning approach, which promotes learning through real-world involvement, by providing a practical setting for fashion students to internalise and apply these competences in context (Schwartz et al., 2022).

Despite their potential, structural constraints often undermine the impact of placement activities on the development of entrepreneurial competencies. These include a firm reliance on government support, limited participation by the business sector, insufficient insurance coverage, and a lack of uniform evaluation methods across institutions (TVET Ghana Report, 2016; Boateng et al., 2022). Maximising the benefits of WEL programs for fashion design students requires addressing these obstacles through better coordination, stronger institutional support, and closer industry partnerships.

METHODS AND PROCEDURES

The research design employed in this study was an explanatory sequential mixed-methods approach. This involved Higher National Diploma (HND) fashion design students at four (4) Technical Universities in Ghana, including Cape Coast Technical University in the Central Region, Kumasi Technical University in the Ashanti Region, Sunyani Technical University in the Bono Region, and Bolgatanga Technical University in the Upper East Region.

Participants were students with some workplace learning experience, Higher National Diploma (HND) fashion design students with experience in the Workplace, and Experienced Learning (WEL) Programme were involved in the study.

A sample size of 250 was determined using Morgan's formula (Morgan, 1970). Approval was obtained from the Humanities and Social Sciences Research Ethics Committee, KNUST. All participants signed a consent form before the study commenced.

A self-developed, structured questionnaire and a semi-structured interview were used to collect information from participants. Data collected included socio-demographics and scales for variables (Workplace Experience Learning, Placement Activities, and Entrepreneurial Competency). The interview was conducted after the first phase of the data collection (the quantitative aspect of the research). The interview questions were developed based on the results from the first phase of the research. The questionnaire was developed using Google Forms and distributed online via WhatsApp and email.

3.1 Measurements

With the Workplace Experience Learning, LPW –Learning potential at the workplace (Nikolova et al.,2013). The construct was measured with a four-item scale adapted from 2 different scales: the QEEW scale (Van Veldhoven et al., 2002), the SIMPH Scale (Notelaers et al., 2007), with some items scored on a 5-point scale ranging from 1 (=not applicable at all) to 5 (=completely applicable) and others ranging from 1 (=never) to 5 (=always). Cronbach's alpha has been .95, .85, .82, and .83, respectively. ECS –Entrepreneurial Competency Scale (Minimol,2021). Kyndt & Baert (2015) measure entrepreneurial skills using eight constructs: building networks (BN), risk-taking (RT), planning (PF), results orientation (RO), self-knowledge (SK), learning orientation (LO), independence (ID), and seeing opportunities (SO).

The Rating scale ranges from 1 to 9. A score of 9 indicates very skilled, whereas a score of 1 indicates very unskilled on this Rating scale. Cronbach's alpha coefficient is between 0.60 and 0.90,

indicating that the instrument developed in this study has internal consistency in measuring entrepreneurial competency across administrations. Placement evaluation scale (Sturre et al.,2015). Effectiveness of placement settings and evaluation of the scale. Data were thematically analysed, leading to a 25-item evaluation instrument.

3.2 Data Analyses

Data was analysed using statistical software for the quantitative part. The software used was Jamovi 2.3 version built on R. Statistical inference, like regression and Generalised Linear model, was used to get the mediation effect of Placement Activities on Entrepreneurial Competency. A descriptive analysis of participants' demographics and characteristics, and their influence on the Workplace experience learning, was conducted. In the second phase of the analysis, NVivo was used to generate quotations, and similar quotations were classified into themes.

RESULTS

4.1 Characteristics of participants

Table 1 presents the demographic characteristics of the individuals involved in this study within the Technical and Vocational Education and Training (TVET) system. The gender distribution indicates that female participants constitute the majority (68.27%) of the sample, whereas males comprise 31.73%. The age distribution reveals a predominance of younger individuals, with 71.54% in the 18-25 years age category. Moreover, the majority of participants (54.96%) had participated in the Workplace Experience Learning (WEL) program once, with subsequent participation declining. The representation from the four technical universities varies, with Kumasi Technical University contributing the highest participation rate at 37.92%, followed by Sunyani Technical University (31.95%), Cape Coast Technical University (18.57%), and Bolgatanga Technical University (11.86%).

Table 1. Characteristics of the participants

Variables		F(%)
Gender	Male	80(31.73)
	Female	173(68.27)
Age	18-25 years	181(71.54)
	26-30 years	65(25.74)
	31-36 years	4(1.58)
	36 and above	3(1.19)
WEL time	1	139(54.96)
	2	94(37.18)
	3	15(5.94)
	4	5(1.98)
Technical School	Bolgatanga Technical University	30(11.86)
	Cape Coast Technical University	47(18.57)
	Kumasi Technical University	96(37.92)
	Sunyani Technical University	81(31.95)

Note: f = Frequency, %= Percentage

4.2 Quantitative Results

4.2.1 Score analysis of the Workplace Experience Learning, Placement, and Entrepreneur Competencies

Table 2 indicates no significant difference in WEL scores between males (m=38.4, SD=6.59) and females (m=38.0, SD=7.27) (t=-0.439, p=0.661). However, females (m=76.0, SD=16.77) exhibited significantly higher Entrepreneurial Competency scores than males (m=71.5, SD=15.97) (t=1.990, p=0.048). No significant differences were observed in WEL (F=2.247, p=0.180), Placement (F=4.476, p=0.054), or Entrepreneurial Competency scored (F=0.455, p=0.723) across age groups. Notably, participants who had engaged in four or more WEL programs demonstrated significantly higher scores in both WEL (m=45.8, SD=5.07) (F=4.82, p=0.014) and Entrepreneurial Competency (m=89.8, SD=10.71) (F=4.35, p=0.019) compared to those with fewer instances of WEL program participation. A significant variation was observed in WEL scores (F=103.6, p=0.009) and Placement scores (F=101.4, p<0.001) across technical universities, with Sunyani Technical University having the highest mean scores. Higher levels of parental support were associated with significantly higher scores in WEL (F=18.7, p<0.001), Placement (F=36.0, p<0.001), and Entrepreneurial Competency (F=20.4, p<0.001). Participants facing higher levels of challenges (as indicated by a value of 1) tended to score lower on the WEL, Placement, and Entrepreneurial Competency constructs. Conversely, those experiencing lower communication challenges (represented by a value of 5) had higher mean scores across all three constructs. Statistical analyses confirmed significant differences across all constructs related to communication challenges (WEL: F=8.45, p<0.001; Placement: F=9.01, p<0.001; Entrepreneurial Competency: F=3.08, p=0.029). These findings underscore the impact of communication challenges on participants' experiences and competencies within the TVET system, with greater communication challenges associated with lower scores in WEL, Placement, and Entrepreneurial Competency.

Table 2. Score analysis of the Workplace Experience Learning, Placement, and Entrepreneur Competencies

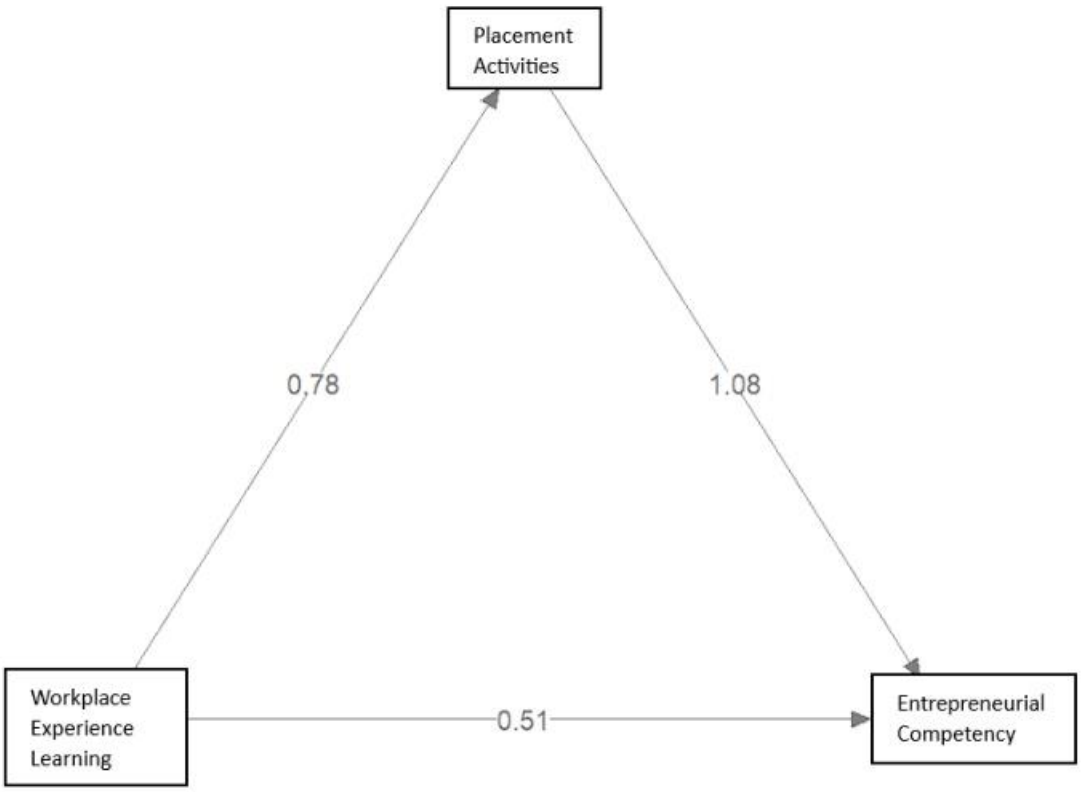
		Workplace Experience Learning	Placement	Entrepreneur Competency
Variables	**Levels**	**m (±SD)**	**m (±SD)**	**m (±SD)**
Gender	Male	38.4(6.59)	36.6(7.23)	71.5(15.97)
	Female	38.0(7. 27)	35.9(8.33)	76.0(16.77)
	t/F; p	--0.439;0.661	-0.590*;0.556	1.990;0.048
Age	18 - 25 years	38.7(7.33)	37.3(8.06)	74.2(16.60)
	26 – 30 years	36.3(5.97)	33.1(7.23)	74.2(16.60)
	31- 35 years	40.0(4.08)	32.5(5.51)	83.0(16.37)
	36 above years	40.3(10.21)	36.3(6.03)	83.0(21.07)
	t/F; p	2.247;0.180	4.476;0.054	0.455;0.723
Years taken in the WEL	1	38.7(6.07)	36.0(6.74)	72.9(14.23)
	2	36.7(8.00)	36.0(9.41)	75.1(19.19)

program	3	39.27.67)	36.1(9.48)	81.3(18.35)
	4 and more	45.8(5.07)	42.8(5.17)	89.8(10.71)
	t/F; p	4.82;0.014	2.57;0.090	4.35;0.019
College	Bolgatanga Technical University	39.2(5.98)	36.1(7.46)	76.3(18.31)
	Cape Coast Technical University	36.6(5.36)	33.6(4.89)	71.9(12.00)
	Kumasi Technical University	36.9(7.05)	34.9(7.16)	72.0(14.88)
	Sunyani Technical University	40.1(7.82)	39.1(9.61)	78.5(19.41)
	t/F; p	103.6;0.009	101.4;<.001	98.0;0.057
Parental Support	1	35.8(5.02)	32.5(3.81)	69.0(12.41)
	2	32.6(8.55)	31.6(5.45)	61.6(16.59)
	3	40.2(8.81)	39.6(5.13)	79.9(15.16)
	4	42.3(6.88)	41.8(8.44)	84.1(14.88)
	5	45.3(7.36)	47.0(8.62)	92.0(17.39)
	t/F;p	18.7;<.001	36.0<.001	20.4;<.001
Communication Challenges	1	39.2(6.63)	36.6(7.46)	73.7(16.24)
	2	34.6(5.30)	32.4(5.70)	71.7(16.78)
	3	38.6(8.81)	38.9(9.15)	78.5(15.68)
	4	39.9(6.73)	39.2(10.65)	84.3(14.93)
	5	42.3(10.91)	44.1(9.82)	82.7(17.22)
	t/F;p	8.45;<.001	9.01;<.001	3.08;0.029

4.2.2 GLM Mediation Analysis

Models Info

Mediators Models	m1	Placement Activities ~ Workplace Experience Learning
Full Model	m2	Entrepreneurial Competency ~ Placement Activities + Workplace Experience Learning
Indirect Effects	IE 1	Workplace Experience Learning ⇒ Placement Activities ⇒ Entrepreneurial Competency
Sample size	N	253



4.2.3 Indirect and Total Effects

				95% C.I. (a)				
Type	**Effect**	**Estimate**	**SE**	**Lower**	**Upper**	**β**	**z**	**p**
Indirect	Workplace Experience Learning ⇒ Placement Activities ⇒ Entrepreneurial Competency	0.843	0.1159	0.616	1.070	0.358	7.27	< .001
Component	Workplace Experience Learning ⇒ Placement Activities	0.778	0.0518	0.677	0.880	0.687	15.03	< .001
	Placement Activities ⇒ Entrepreneurial Competency	1.084	0.1304	0.828	1.339	0.521	8.31	< .001

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Direct	Workplace Experience Learning ⇒ Entrepreneurial Competency	0.515	0.1477	0.226	0.804	0.219	3.49	< .001
Total	Workplace Experience Learning ⇒ Entrepreneurial Competency	1.358	0.1213	1.120	1.596	0.576	11.19	< .001

Note. Confidence intervals computed with method: Standard (Delta method)

Note. Betas are completely standardised effect sizes.

The Generalised Linear Model (GLM) mediation analysis examines the relationships among workplace experience learning, placement activities, and entrepreneurial competency among participants (N = 253). The model comprised two main components: a first model predicting placement activities from workplace experience learning (m1), and a second model predicting entrepreneurial competency from placement activities and workplace experience learning (m2). The indirect influence of experiential learning in the workplace on entrepreneurial ability via placement activities was statistically significant, exhibiting an indirect effect of 0.843 (SE = 0.1159, 95% CI [0.616, 1.070], β = 0.358, z = 7.27, p < .001). This outcome indicates that higher levels of experiential learning in the workplace correlate with greater entrepreneurial competence, with placement activities mediating this relationship. Within the indirect path, workplace experience learning significantly predicted placement activities (B = 0.778, SE = 0.0518, 95% CI [0.677, 0.880], β = 0.687, z = 15.03, p < .001). Furthermore, placement activities significantly predicted entrepreneurial competency (B = 1.084, SE = 0.1304, 95% CI [0.828, 1.339], β = 0.521, z = 8.31, p < .001). The direct impact of workplace experiential learning on entrepreneurial competency was significant (B = 0.515, SE = 0.1477, 95% CI [0.226, 0.804], β = 0.219, z = 3.49, p < .001), demonstrating a direct correlation between workplace experiential learning and entrepreneurial competency, independent of placement activities. The overall impact of experiential learning in the workplace on entrepreneurial competency was substantial (B = 1.358, SE = 0.1213, 95% CI [1.120, 1.596], β = 0.576, z = 11.19, p < .001), highlighting its pivotal importance.

The findings indicate that experiential learning in the workplace is essential for developing entrepreneurial competency, both directly and indirectly via placement activities. Confidence intervals were estimated using the delta method, with betas reported as fully standardised effect sizes.

4.3 Qualitative Results

4.3.1 The Value of Insurance

Participants indicated the critical need for insurance coverage during WEL programmes to protect the students against workplace risks. They requested collaborative efforts between the initial university and host companies to ensure appropriate insurance provisions.

One student from the Bolgatanga Technical University remarked,

"Insurance is important. It will cushion me in times of accidents at the workplace and even while in transit to the workplace. The university and host company should provide this support." (BTU001).

Another stated, from Kumasi Technical University,

"It will help students in case any accidents or natural disasters occur at the workplace. The university must collaborate with insurance providers to ensure adequate coverage." (KsTU002). This highlights students' apprehensions over safety and financial stability during industrial attachments.

4.3.2 *The Need for Specific Learning Outcomes*

Students strongly supported the establishment of explicit and significant learning outcomes for WEL programs, acknowledging their role in guiding learning experiences and evaluations. Many respondents advocated for a collaborative approach between the university initiating the WEL program and the host company to align outcomes with both academic curricula and workplace needs.

Learning outcomes must be developed by the university in consultation with the host company. They should cover current course content and allow for workplace-specific customisation." Shared one student (CTU004).

Integrating theoretical knowledge with practical skills in the Workplace Environment Program is a valuable resource for enhancing the relevance of learning and workplace preparedness.

4.3.3 Creating a Harassment-Free Learning Environment

One recurring concern raised by participants was ensuring that students were in a respectful and safe environment throughout WEL programs. They advocated for cooperative initiatives between colleges and host corporations, encompassing explicit harassment policies, orientation programs, and accessible reporting systems.

"The university should collaborate with host companies on dos and don'ts relative to harassment. Students must be made aware of how the host company manages such situations so they can work within the rules."

Said one participant from Bolgatanga Technical University (BTU003).

"The university, as well as host companies, can educate students and orient them on issues of harassment and how to deal with them at the workplace," another participant said (KsTU004)

This proactive strategy emphasises the necessity of protecting students' welfare and maintaining their concentration on education and professional growth.

4.3.4 Learner Preparation for WEL

Respondents emphasised the importance of adequate preparation prior to the start of a WEL programme. Their opinion was that universities should conduct orientation sessions on key skills like time management, work ethics, and occupational health and safety. Participants also stressed the importance of host company-led workplace-specific training.

"Universities should ensure students are oriented to set learning outcomes and familiarised with the host organisation. Host companies should conduct orientation on workplace policies and culture." Noted one participant (KsTU001).

"The students should be oriented on time management at work and personally as well. This preparation should be the university's responsibility. They should also try and educate. Okay," another also said (BTU001). This approach ensures that students are equipped with both theoretical and practical knowledge, thereby facilitating a smooth transition to the workplace.

4.3.5 Enhanced Programme Supervision

Many participants advocated improvements in the supervision of WEL programmes, calling for frequent and structured interactions between supervisors from both the university and the

company. They also emphasized the need for improved collaboration among these supervisors to assess students' progress effectively.

> *"I want to see more visits from university supervisors during the period. Unannounced visits and better coordination with workplace supervisors will improve assessments and programme quality."* Stated one participant, Cape Coast University (CTU005).
>
> *"I would like to see more visits from the university supervisors during the period. The university can also help build workplace supervisors' facilitation capacity. I also want the inclusion of end-of-program assessment," stated by another respondent (BTU002).*

This illustrates a shared understanding of the need for advanced supervision frameworks to support students' learning and professional growth.

DISCUSSION

The study examined the inherent constraints in the mediating role of placement activities within the Workplace Experience Learning (WEL) programme for Higher National Diploma (HND) fashion design students in Ghana's Technical and Vocational Education and Training (TVET) system. It evaluated how these structured experiences influence the development of entrepreneurial competencies. It emphasised the necessity of well-organised placement activities to reduce constraints in WEL program implementation. The study sought to elucidate these links to propose evidence-based enhancements for TVET programs in Ghana.
The findings found many impediments that significantly affect WEL implementation, including the frequency of WEL participation, communication barriers, institutional support, parental involvement, insurance coverage, and mechanisms for addressing harassment. Consistent participation in workplace learning was essential, as students with greater WEL experience exhibited higher entrepreneurial competence. This aligns with earlier research by Grollmann et al. (2021), which highlighted the need for ongoing exposure to workplace settings to enhance skills in TVET programs.

Furthermore, the study noted that communication challenges were a key obstacle, with students who reported fewer communication issues achieving better outcomes across WEL and entrepreneurial competency constructs. Effective communication between students, mentors, and supervisors is essential to successful workplace learning. Therefore, emphasis must be placed on promoting collaboration for improved mentoring and feedback procedures to deal with the communication issues (Okolie et al., 2020; Lu, 2021; Jackson et al, 2022)

Again, institutional support also featured prominently, with differences observed across institutions. For example, students from Sunyani Technical University demonstrated consistently superior performance in WEL outcomes, underscoring the necessity for strong institutional collaborations with industry and improved resource allocation. This is consistent with Illeris (2018), who discovered that robust industry ties provide more significant workplace learning experiences. In addressing these disparities, it is essential to implement strategies that enhance partnerships between TVET and industry, thereby fostering better mentorship and supervision during placements (Mesuwini, 2021; David, 2023; Winberg et al, 2023).

Additionally, parental involvement emerged as a significant factor, as its presence positively influenced WEL outcomes. The findings revealed that students who received higher levels of parental support exhibited improved performance in both WEL participation and entrepreneurial

competency. This aligns with the findings of Baidoo et al. (2020), who highlighted the significance of family engagement in the educational achievements of students in Ghana. Therefore, it is essential to intentionally include strategies that involve parents in the WEL implementation process, recognising the significance of both academic and emotional support during placements to enhance students' success (Inceoglu et al., 2019)

The findings indicate that students value insurance coverage as a crucial element for ensuring their safety during WEL placements. Insurance was regarded as essential, providing financial and medical assistance in the event of accidents or health concerns. Students supported the idea that both universities and host companies should share the responsibility of ensuring sufficient insurance, proposing that universities take proactive steps to obtain insurance coverage as part of placement agreements. This preventative measure led to a decrease in anxiety levels among students, enabling them to concentrate on their studies without worrying about possible workplace risks.

Furthermore, the study emphasised the importance of a transparent and accessible harassment reporting system within WEL placements. Students indicated a strong demand for clear reporting procedures, including dedicated hotlines, online platforms, or designated desks, to ensure they can report issues with confidence and promptness. Efficient and readily accessible support systems were identified as crucial for mitigating the effects of harassment and promoting a safer, more effective learning environment.

An unexpected gender difference was observed, with female students outperforming male students in entrepreneurial competence. This aligns with findings by Shafie et al. (2021), who noted that women tend to excel in creative sectors like fashion design. Given the sociocultural factors shaping gender roles, the study recommends that WEL programmes consider these dynamics when designing workplace learning experiences to ensure inclusive, supportive settings.

The study's findings provide essential insights for implementing effective WEL policy frameworks in Ghana's TVET sector. By advocating for a structured WEL model that addresses communication, institutional support, parental involvement, and harassment, the study highlighted the value of experiential learning in preparing students for careers across the fashion design value chain. This model could provide a comprehensive approach for enhancing TVET administration and management, ensuring that WEL programmes are effectively matched with industry requirements and support students' entrepreneurial competency acquisition in Ghana's creative economy (Baidoo et al., 2020; Jackson, 2016; Shafie et al., 2021; Grollmann et al., 2021)

CONCLUSIONS AND RECOMMENDATIONS

The study on the constraints affecting the application of Workplace Experience Learning (WEL) among HND (TVET) fashion design students in Ghana emphasises both enabling and hindering factors that affect the effective integration of practical workplace learning into the fashion design curriculum. The findings show that while WEL programs offer important hands-on experience, several hindrances, such as unclear learning outcomes, inadequate WEL opportunity, lack of parental and or guardian involvement, weak university-industry partnership, inadequate insurance coverage, communication challenges, and unclear mechanisms for addressing work environment harassment, among others, often hinder their success.

Notwithstanding this, the study encourages the development of a well-structured WEL model to foster collaboration among all partners for effective WEL execution. Universities must develop and implement strategies to provide WEL opportunities for students and to improve their placement processes. Host companies must also take steps to promote greater gender equality and provide a safer work environment.

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