

# Psychological Precursors of Entrepreneurial Intentions Among Tertiary Students in Ghana

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## **Abstract**

Entrepreneurship is labelled as the panacea for graduate unemployment in Ghana. In the training process, students are mandatorily required to read a course in entrepreneurship, so as to be able to start their own businesses in the face of job adversities caused by the inadequacy of job opportunities created by government and lack of government drive to diversify the economy for more jobs to be created. This study, therefore aimed at investigating the critical precursors of entrepreneurial intentions among higher education students in Ghana. Using the analytical cross-sectional survey design, 250 respondents were recruited from public universities using probability sampling techniques (stratified-disproportionate and simple random) to participate in the survey. Respondents were required to respond to three constructs (entrepreneurial scaffolding, psychological capital, and entrepreneurial intentions). The data analyses were performed using multivariate regression. The study findings showed that entrepreneurial scaffolding and psychological capital were significant predictors of entrepreneurial intentions. The researchers concluded that students' convictions in succeeding or otherwise and planning to engage in entrepreneurial behaviours depended on proper entrepreneurial guidance and a positive mind-set. Therefore, it was recommended that higher education institutions in Ghana strengthened and included practical guides to entrepreneurial training. This will encourage higher education students to consider entrepreneurship, hence, reducing graduate unemployment in Ghana.

## Introduction

Statistically, the young population (between 15-25 years) of Africa is around 60%. It is reported that the current population of Africa stands at 1.3 billion, with the projection that it will multiply twice by 2050. The increase in population shows that the search for jobs by the young will eventually increase over time (Penar, 2021). The increase in the young population has led to the transformation of Labour market analysis in most African countries in recent years (Meyer & Mncayi, 2021). However, it is noted that employment and unemployment measures have not been adequate in understanding the growing intricacies of labour markets (Lacmanovic, Burić, & Tijanić, 2016; Wilkins & Wooden, 2011). This assertion is supported by the International Labour Organisation (ILO, 2016a) report, which re-echoed that statistics on unemployment underreport the veracity of challenges faced by young people in the labour market. ILO (2016a) notes that, with the skills and educational development of young people, their inclusion in the labour market are critical to acknowledging a thriving, sustainable, and a fair socio-economic environment. On the hand, Berglund, Håkansson, Isidorsson, and Alfonsson (2017) and ILO (2020a) allege that high structural unemployment and underemployment among youth are significant risks facing the global economy. This situation might increase exponentially in the African continent as most higher education institutions continue to graduate young ones every academic year without readily available job opportunities. In 2016, Kelvin Balogun, the President of Coca Cola stated that 'Almost half of the 10 million graduates churned out of the over 668 universities in Africa yearly do not get job'. This unemployment phenomenon was attributed to the lack of required skill set needed for these graduates to get absorbed in the job market. According to the United Nations Resident Coordinator in Kenya, one critical reason that prevents organisations from engaging graduates of sub-Saharan Africa is that these graduates complete their education without possessing the required skills to be engaged in any meaningful job opportunity (Obonyo, 2019).

The issue of unemployment is dangerous to the graduates themselves and their respective African nations. The World Bank (2014) report shows that this ever-increasing unemployment situation in Africa has compelled many young graduates to resort to crime, radicalisation, and risking their precious lives to pass through routes to Europe in search of decent and befitting jobs (World Bank, 2014). Unemployment is a political, socioeconomic, and development challenge for any affected nation. Unemployment harms economic growth and development in every nation (Mohseni & Jouzaryan, 2016). Unemployment affects economic growth. While economic growth helps create jobs, more jobs lead to economic growth and development.

With no immediate antidote to the unemployment situation in Africa, most higher education institutions (HEIs) have resorted to imparting entrepreneurial knowledge onto their students so that they can best be equipped to face-off the glary picture of unemployment by engaging in self-motivated entrepreneurial jobs. According to Wu

and Tian (2022), entrepreneurship is significant that researchers have begun investigating the key factors that drive individuals to become entrepreneurs and harbour initial entrepreneurial behaviours. Entrepreneurship is an activity or action that includes identifying, judging and taking opportunities to develop new goods and services, strategies of organising, marketing and processing of raw materials through organised efforts that were not evident initially (Shane & Venkataraman, 2000). According to Diandra and Azmy (2020), entrepreneurship is a part of business life that contributes to successful business organisation. Those who actively deal with business activities are most responsible for achieving their vision in entrepreneurial ventures.

It is important to note that people's behaviours most often are by their intention. From the psychological point of view, if "any human being wants to achieve something, there should be an intention for that" (Bhasin & Gupta, 2017, p. 26). This is synonymous to entrepreneurship as those engaged in it need to possess an entrepreneurial intention as a foundation. According to Moriano, Gorgievski, Laguna, Stephan, and Zarafshani (2012), the entrepreneurial intention has been defined 'as the conscious state of mind that precedes action and directs attention towards a goal such as starting a new business.

Wu and Tian (2022) note that, numerous scholars have recognised the importance of entrepreneurial intention (EI). For example, Krueger, Reilly, and Carsrud (2000) reported that reflexive behaviour does not initiate entrepreneurial behaviour. Instead, it is intentional from the person. Likewise, Cai and Zhao (2014) and Kolvereid and Isaksen (2006) stated that people who engage in entrepreneurial activities are those who possess strong EI. For students in higher education institutions (HEIs) in Africa, the zeal to engage in entrepreneurial behaviours and actions could come from entrepreneurial intentions and the needed actions towards any chosen self-motivated, entrepreneurial entity. The intention of students in HEIs to engage in entrepreneurial actions can be influenced by entrepreneurial scaffolding (ES) from their institutions and their psychological possessions, such as psychological capital (PsyCap).

### **Entrepreneurial Scaffolding and Entrepreneurial Intention**

In the field of psychology, scaffolding is a strategy in which professionals in a given field display the process of problem solving for their students and then explain each step as they go along. After providing a few preliminary explanations, the instructor will then step back from the students and only provide assistance when it is required (Lantolf & Poehner, 2014; Nordlof, 2014; Vygotsky, 1987). Applied in business and entrepreneurship, entrepreneurial scaffolding is the support, training, strategies, and ideas offered to people to pursue business as a way of becoming independent in the job market. The importance of entrepreneurial scaffolding in fostering the development of a business mindset in individuals cannot be overstated. According to Nambisan, Siegel, and Kenney (2018) and Scott, Penaluna, and Thompson (2016), the role of entrepreneurship scaffolding is considered

to be one of the primary factors in creating optimistic expectations of capabilities for new business start-up ventures, cultivating desirable self-employment behaviours, and aspirations for entrepreneurship. This is because the role of entrepreneurship scaffolding is considered to be one of the primary factors in creating optimistic expectations of capabilities for new business start-up ventures (Scott, Penaluna, & Thompson, 2016).

Entrepreneurial scaffolding in this study covers entrepreneurial educational support, entrepreneurial activities support, and entrepreneurial commercialization support. According to Tarling, Jones, and Murphy (2016), entrepreneurial instruction imparts the numerous features of starting a new business through sequences of subjects and hands-on activities that aim to increase the probability of entrepreneurial success. Literature demonstrates that entrepreneurs can be fostered by entrepreneurship education (Gibb, 2002; Gianiodis & Meek, 2020; Liu et al., 2019). Also, Entrialgo and Iglesias (2016) assert that entrepreneurship education is necessary because it can support and shape entrepreneurial intentions and reduce the likelihood of start-up failure. Available literature shows that entrepreneurial scaffolding is necessary since it allows for discovery, revival, and entrepreneurship confidence building (Karimi, Biemans, Lans, Aazami, & Mulder, 2016; Parker, 2018). Entrepreneurial scaffolding in terms of education and awareness activities helps transform the unfavourable impression of entrepreneurship and helps replace the entrepreneur's uncertainties (Nabi, Lián, Fayolle, Krueger, & Walmsley, 2017). Entrepreneurial scaffolding promotes entrepreneurial intent and spirit, improves knowledge, reduces ambiguity, and boosts confidence (Kierulff, 2005; Michaelides & Benus, 2012; Mozahem & Adlouni, 2021).

With entrepreneurial scaffolding, higher education institutions play a key role in fostering student entrepreneurship and implementing entrepreneurship through entrepreneurial education, special lectures, awareness sessions, club activities for concept development, and commercialization support (Maresch, Harms, Kailer, & Wimmer-Wurm, 2016; Minai, Raza, bin Hashim, Zain, & Tariq, 2018). Entrepreneurial scaffolding helps establish an entrepreneurial attitude toward starting a new firm (Schwarz et al., 2009). Literature acknowledges the relevance of an entrepreneur's education, as it helps in generating positive opinions of start-up businesses' competency (Scott, Penaluna, & Thompson, 2016). Entrepreneurial scaffolding leads to better behaviour and innovative start-up plans (Liao, Javed, Sun, & Abbas, 2022). Students who took entrepreneurship classes were more entrepreneurial than others (Neto, Rodrigues, & Panzer, 2017). An effective entrepreneurial education curriculum and university entrepreneurial encouragement urge young people to pursue an entrepreneurial future (Van der Zwan, Thurik, Verheul, & Hessels, 2016).

Liguori, Bendickson, and McDowell (2018) discovered that many students' entrepreneurial aspirations are hampered by poor preparation, insufficient market experience, and an unwillingness to take risks. Shamsudeen,

Keat, and Hassan (2017) said entrepreneurial education helps participants build creativity and the drive to think creatively and see transitions as opportunities. Kraaijenbrink, Bos, and Groen (2010) suggested quantifying their impact on students, even though higher education institutions foster entrepreneurship in other ways. Entrepreneurship scaffolding procedures vary. First, institutions should teach the general information and abilities needed to launch a new project to demonstrate entrepreneurial talents. Second, institutions may offer more focused resources to students or student groups to develop entrepreneurial companies (Lim, Oh, & De Clercq, 2016; Mustafa, Hernandez, Mahon, & Chee, 2016).

Souitaris, Zerbinati, and Al-Laham (2007) used the pre-test and post-test experimental design to find out about undergraduate students' entrepreneurial education and their plans to start their own business. The study found that the average values of subjective norm and intention to work for oneself after the programme were higher than they were before the programme. However, entrepreneurial intentions at the end of the programme had nothing to do with emerging entrepreneurs. They said that the lack of a link between entrepreneurial education and intention at the end of the programme could be explained by the fact that there is a well-known time lag between entrepreneurial intentions and actions. However, the study found that entrepreneurship programmes provide students with 'trigger events' that make them want to try business ventures.

### **Psychological Capital (PsyCap) and Entrepreneurial Intention**

Psychological capital (PsyCap) is an aspect of positive psychology. Positive psychology emerged in the late 1990s, emphasising what is good about people rather than what is wrong (Csikszentmihalyi & Seligman, 2000; Seligman, 1975; Snyder & Lopez, 2002). According to Cameron, Dutton, and Quinn (2003), positive psychology has two channels of manifestation, including the macro-oriented positive organisational scholarship (POS) movement and the micro-oriented state-like positive organisational behaviour (POB) approach. Therefore, psychological capital consists of numerous sub-components of these channels of manifestation in positive psychology. Psychological capital refers to the mental state of a person who demonstrates excellent organisational behaviour and strong job performance (Costa & Neves, 2017). Luthans (2002) defines PsyCap as the positive psychological development of an individual, including self-efficacy, optimism, hope, and resilience. In addition, Jiang and Na (2013) assert that PsyCap consists of six dimensions: self-efficacy, hope, optimism, resilience, opportunity recognition, and social ability. Psychological capital affects a person's career and personal success and influences their behaviour in numerous ways. PsyCap places a greater emphasis on power, success, adornment, and happiness (Donaldson, 2013), and it can increase both performance and satisfaction. Psychological capital also affects an individual's entrepreneurial behaviour. Psychological capital is tied to an individual's accomplishments and well-being. When

created, this evidence will determine the existence of entrepreneurial intent and the growth and success of a business (Costa & Neves, 2017; Darvishmotevali & Ali, 2020; Margaça, Hernández-Sánchez, Sánchez-García, & Cardella, 2021; Peters, Kallmuenzer, & Buhalis, 2018; Stephan, 2018). PsyCap can influence the ability of entrepreneurs to acquire financial and human capital (Zhao, Wei, Chen, & Yien, 2020). In a study, it was found that PsyCap (self-efficacy, need for achievement), and entrepreneurial orientation were highly related to entrepreneurship ambitions (Frese & Gielnik, 2014). In other research works, EI was found to relate to all components of PsyCap (e.g., self-efficacy and resilience) (Contreras, De Dreu, & Espinosa, 2015). Hmieleski (2008) found that entrepreneurs' PsyCap could explain variance in new venture performance. In a study among higher education students in China, Zhao, Wei, Chen, and Yien (2020) found that PsyCap indirectly predicted their entrepreneurial intentions.

### **The Case of Ghana**

It is reported that small businesses represent about 85% of businesses and contribute about 70% of Ghana's gross domestic product (GDP) (World Bank, 2020). Regardless of SMEs dominance and their contribution to the GDP, they are faced with several financial and regulatory challenges. For instance, the World Bank Report on Doing Business for 2020 indicated that the average cost of starting business in Ghana is US\$125.46 while it only cost US\$56.51 and US\$32.32 in Togo and Benin respectively (Amaglo, 2019; Poole, 2021; Sodokin, 2022; World Bank, 2020). For those in Rwanda, registering a new business is free and small businesses are exempted from all fees for a period of two years. Among 10 countries, Ghana is ranked 7th best African country out of 10 to become an entrepreneurial hub (CEOWORLD Magazine Entrepreneurship Index, 2022). Despite this, entrepreneurship is seen as one of the major drivers of the economy. According to Bawakyillenuo and Agbelie (2021), several Ghanaians consider entrepreneurship to be a good occupational choice. In this regard, government have made a step by providing financial backing to aspiring entrepreneurs through flagship programmes such as National Entrepreneurship and Innovation Programme [NEIP] (2020) and Ghana Enterprise Agency [GEA] (2021). This complement with these efforts, government keeps imploring universities to be entrepreneurial-oriented in their programmes. By this, universities could help hone entrepreneurial skills through entrepreneurial support strategies so that their products can take advantage of the available government's funding opportunities.

No matter how innovative an entrepreneurial programme may look and offered to students, its success can barely be realised without considering their entrepreneurial intention as a key variable, which is also influenced by entrepreneurial scaffolding and psychological capital. Several scholarly works have been conducted on the factors

influencing EI from diverse dimensions. Recent studies precisely investigated psychological characteristics such as internal locus of control and personality traits as determinants of EI (Arkorful & Hilton, 2021; Bazkiaei, Heng, Khan, Saufi, & Kasim, 2020; Tentama & Abdussalam, 2020; Uysal, Karadağ, Tuncer, & Şahin, 2022; Wang, Chang, Yao & Liang, 2016; Vodă & Florea, 2019). However, it is advised that emphasis should be placed on developmentally-based psychological resource (PsyCap) and school-oriented support strategy (entrepreneurial scaffolding) because they are the key drivers of entrepreneurial behaviour (Darvishmotevali & Ali, 2020; Khuong & An, 2016; Margaça, Hernández-Sánchez, Sánchez-García, & Cardella, 2021; Peters, Kallmuenzer, & Buhalis, 2018; Saeed, Yousafzai, Yani-De-Soriano, & Muffatto, 2018; Stephan, 2018; Wegner, Thomas, Teixeira, & Maehler, 2019). Again, it is important to note that scaffolding and psychological capital (PsyCap) are frequently studied in education and health but are rarely employed in business-related areas (entrepreneurship). This creates a huge gap in the literature and the current study seeks to bridge this gap by analysing the entrepreneurial intention using entrepreneurial scaffolding and psychological capital (PsyCap) as predictors among Ghanaian universities. In this way, a representation of the underlying connection among the variables will be established through the following questions:

1. Will the entrepreneurial scaffolding leads to entrepreneurial intention among HEIs students in Ghana?
2. Will students' psychological capital lead to entrepreneurial intention among HEIs students in Ghana?

## **Methods and Procedures**

### **Participants**

The study design was an analytical cross-sectional survey, where final-year undergraduate students were recruited. The analytical cross-sectional design was chosen because several final-year undergraduate students in public and private institutions were identified from different locations and situations in Ghana. In all, 250 students were selected through stratified and simple random procedures. The stratification was done because the universities had different population figures, which required fair representation. The simple random sampling (table of random numbers) was applied to ensure fairness in the selection of cases to respond to the survey.

### **Measures**

#### **Entrepreneurial Scaffolding**

Institutional entrepreneurial scaffolding is assessed using a HEInnovate self-assessment (European Commission, 2012). The scale was used for students to assess the entrepreneurial level of their universities. The tool comprised 37 items across seven components. This allowed students to assess their entrepreneurial support ranging from 1=totally disagree to 5=totally agree. leadership and governance, (5-items), organizational capacity (5-items),

entrepreneurial teaching and learning (5-items), preparing and supporting entrepreneurs (6-items), knowledge exchange and collaboration (5-items), the internationalised institution (5-items), and measuring impact (6-items). Sample statements on the seven components of the scale include “entrepreneurship is an important part of my university’s strategy, business goals are supported by a wide range of sustainable financing and investment sources, the university offers several formal learning opportunities to develop entrepreneurial skills, the university emphasises the value of entrepreneurship, the university is committed to collaborating and sharing knowledge with the industry, the public sector, and society, internationalization is an important part of the university’s entrepreneurial agenda, and the university regularly assesses the impact of its entrepreneurial agenda”. The scale recorded an improved internal consistency of .87 less than the generally established internal consistency of .98.

### **Psychological Capital (PsyCap)**

Students’ psychological capital was measured using Compound Psychological Capital Scale [CPC-12] (Lorenz, Beer, Putz, & Heinitz, 2016). The components are hope (3-items; e.g., ‘Right now, I see myself as being pretty successful’); resilience (3-items, e.g., ‘Sometimes I make myself do things whether I want to or not’); optimism (3-items, e.g., ‘The future holds a lot of good in store for me’) and self-efficacy (3-items, e.g., ‘I can solve most problems if I invest the necessary effort’). Items were answered using a 5-point Likert-type scale ranging from 1 = ‘strongly disagree’ to 5 = ‘strongly agree’. The scale recorded an improved internal consistency of .85 against the original reported as .82 by Lorenz et al. (2016).

### **Entrepreneurial Intention**

Students’ entrepreneurial intentions were measured using adapted items from the entrepreneurial intentions questionnaire (EIQ) developed by Linan and Chen (2009). These items are designed specifically to assess intentions to engage in entrepreneurial activities. The scale is uni-dimensional and had 5-items, with a sample item as e.g., ‘My professional goal is to be an entrepreneur’. Items were answered using a 5-point Likert-type scale ranging from 1 = ‘strongly disagree’ to 5 = ‘strongly agree’. The internal consistency of the scale was .71, is less than .77 to .94 threshold established by Linan and Chen (2009) in the validation process.

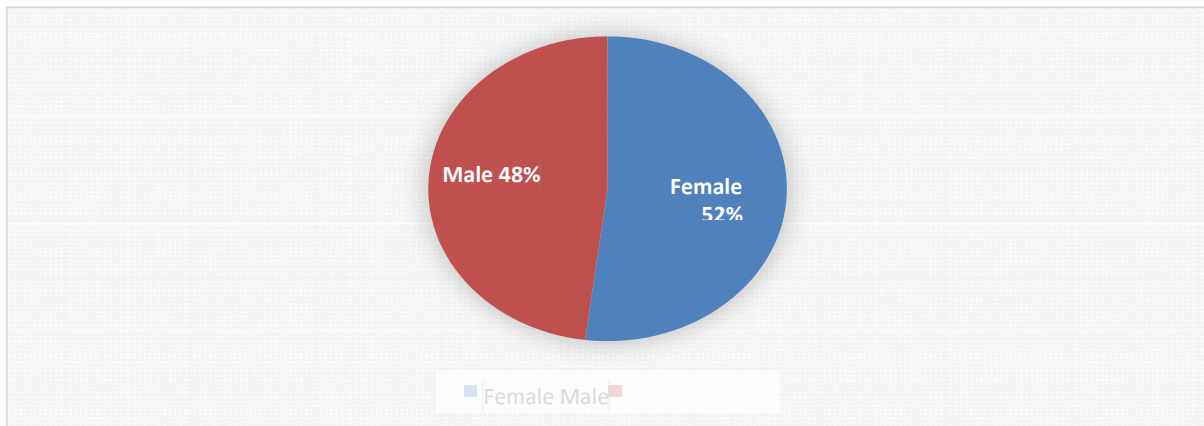
### **Analysis**

The data analysis was performed after taking into consideration data management. Specifically, multiple linear regression was used as the main statistical procedure because the aim of the study to ascertain the contribution of the independent variables on the dependent variable.



## Results of the Study

### Gender of the Respondents



**Figure 1:** Pie Chart on Respondents' Gender

The pie chart reflects gender of the respondents and it is evident that the number of female respondents (N=130) were slightly more than male respondents (120).

**Table 1: Descriptive Statistics**

Variable	N	Mean	SD	Skewness	Kurtosis
Entrepreneurial Scaffolding (ES)	250	5.25	1.223	-0.85	0.76
Psychological Capital (PsyCap)	250	5.44	1.32	-1.04	0.86
Entrepreneurial Intention (EI)	250	5.43	1.37	-1.11	1.01

Descriptive statistics showing on Table 1 indicates that PsyCap generated the highest mean and standard deviation, followed by entrepreneurial intention and entrepreneurial scaffolding. The examination of the results concerning departure from symmetry, skewness statistics produced negative values less than zero, with the implication that data were negatively skewed while kurtosis statistics show platykurtic (less peaked with less outliers) with values less than three (Westfall, 2014).

**Table 2: Correlation and Collinearity Results**

Variable	ES	PsyCap	EI	$\rho$	Tolerance	VIF
Entrepreneurial Scaffolding (ES)	1	.586	.699	.000	.53	1.88
Psychological Capital (PsyCap)	.586	1	.734	.000	.56	1.99
Entrepreneurial Intention (EI)	.699	.734	1	.000	.50	1.79

From Table 2, it is evident the variable correlated significantly among themselves but there were no issues of multicollinearity among the predictors (ES and PsyCap) as the values of Variance Inflationary Factor (VIF) were all less than 2 (Johnston, Jones, & Manley, 2018).

**Table 3: Regression Results**

Variable	B	SE	$\beta$	R	T	R <sup>2</sup>	Ad R <sup>2</sup>	F	Sig.
ES*EI	.389	.053	.376	.808	7.34	.653	.649	154.14	.000
PsyCap*EI	.564	.061	.466	.808	9.25				.000

a. Predictors: Entrepreneurial Scaffolding (ES) and Psychological Capital (PsyCap)

b. Dependent Variable: Entrepreneurial Intention (EI)

Table 3 indicates the result of regression analysis of entrepreneurial scaffolding and psychological capital predicting entrepreneurial intentions among undergraduate students. The regression correlation shows that there is a large significant positive relationship among the variables. This implies that entrepreneurial scaffolding and psychological capital jointly explained 80.8% of the variance in students' entrepreneurial intentions ( $R^2=.808$ ,  $F(2, 247) = 154.14$ ,  $p < .000$ ). Further interpretation shows that there were significant predictions among the variables. For instance, entrepreneurial scaffolding experienced by students positively and significantly predicted students' entrepreneurial intentions ( $\beta=.376$ ,  $p < .000$ ) while students' psychological capital positively and significantly predicted their entrepreneurial intentions ( $\beta=.466$ ,  $p < .000$ ). The results imply that a unit increase in either entrepreneurial scaffolding or psychological capital will lead to a unit increase in students' entrepreneurial intentions.

## Conclusion

The study aimed to ascertain the contribution of universities' drive in entrepreneurship through entrepreneurial scaffolding and mental possessions through psychological capital on entrepreneurial intentions among undergraduate students of a Ghanaian university. The study found that entrepreneurial scaffolding provided by higher education institutions and psychological capital positively influenced undergraduate students' drive to engage in entrepreneurial ambitions and behaviours. The revelation shows that these undergraduate students regard the theoretical-based entrepreneurial education and training offered as most laudable and may venture into personal enterprises after graduating. The intentions harboured by the undergraduate students to engage in entrepreneurial activities could be motivated by the constant reports made by stakeholders in the job market

that graduate unemployment kept soaring, hence the need for graduates to refocus and re-orient their prospects for jobs.

### **Recommendations for Policy and Practice**

In Ghana, the job market looks blurry as the government's drive to provide jobs for the teeming youth appears to experience a nosedive. Therefore, it is crucial to make entrepreneurial training compulsory for all higher education institutions. This will allow every higher education student to have entrepreneurial training and offer the needed guidance and support for job creation. For this to be achieved, higher education institutions that are yet to enrol entrepreneurial courses in general and provide occupational guidance/opportunities for their students should embrace themselves and accept any entrepreneurial proposal from the government or stakeholders so that the canker of unemployment can be marginalised. For higher education institutions that have implemented entrepreneurial education and training already, there is the need to advocate for its value and strengthen the training program from theory to practice so that those trained can apply the knowledge in their start-ups. In moving from theory to practice, higher education institutions could help their students with start-up capital for minor entrepreneurial ventures while they are under training so that the knowledge gained can be applied in such ventures.

### **Limitations and Future Research Directions**

As much as the study findings contributed to literature in the area of entrepreneurship, it is not free from limitations. For instance, the study used only two higher education institutions in Ghana. Hence, concluding that findings reflect all higher education institutions will be problematic. Therefore, future research should focus on all public and private higher education institutions in Ghana, with diverse backgrounds that could influence the outcome. In addition, the study is more or less perceptual and reflects not the entrepreneurial actions of those involved. Therefore, future research should focus on tracer studies so that those churned out from the higher education institutions could be tracked and studied on the application of entrepreneurial knowledge.

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