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INFLUENCE OF SENSE OF SELF AND EMERGING TECHNOLOGIES ON ENTREPRENEURSHIP INTENTIONS OF STUDENTS OF BLOCKLAYING/BRICKLAYING AND CONCRETING IN TECHNICAL COLLEGES IN ENUGU STATE

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Abstract

The study was carried out to determine the influence of Sense of Self and Emerging Technologies on Entrepreneurship Intentions of Blocklaying, Bricklaying and Concreting (B/BC) students in Technical Colleges in Enugu State. The study adopted correlation survey design. The population for the study was 142, made up of NTC III students. As a result of the manageable number of the respondents no sampling was made. Blocklaying, Bricklaying and Concreting Students Entrepreneurship Intentions Questionnaire (BBCSEIQ) was used for data collection. The 40 items on the questionnaire were rated on a five-point Likert scale ranging from Strongly Agree to Strongly Disagree. The BBCSEIQ was validated by three experts. Cronbach alpha reliability technique was used to determine the internal consistency of the instrument. The overall reliability coefficient was 0.75. Copies of the questionnaire were administered by the researcher. One hundred percent of the questionnaires were returned. The data collected were analyzed using bivariate correlation for research questions. Structural Equation Modelling (SEM) was used to interpret data for testing the null hypotheses. Three research questions were answered while three null hypotheses were formulated and tested at 0.05 level of significance. The statistical package employed was SPSS software. The findings of the study revealed moderate significant influence of sense of self on entrepreneurship intentions of BBC students in Technical Colleges, ($r=.234, N=142, p<0.05$), emerging Technologies has a moderate significant influence on entrepreneurship intentions of BBC students in Technical Colleges ($r=.417, N=142, P<0.05$) and a moderate significant influence of sense of self and emerging technology ($r=.449, N=142, p<0.05$) on entrepreneurship intentions of B/BC students of Technical Colleges. It was recommended therefore that B/BC students should be introduced to more entrepreneurship classes using new technologies. The duties of the college guidance counselor should be stepped up to help the students get necessary stimulation to think positively towards venturing in entrepreneurship.

Keywords: sense of self, emerging technologies, entrepreneurship, intentions

Introduction

The importance of having students of Blocklaying, Bricklaying and Concreting (B/BC) who have the intention of venturing into entrepreneurship cannot be over emphasized. Blocklaying, Bricklaying and Concreting is a programme whereby students are trained in the art of using blocks and bricks to construct walls and other masonry. To Ayonmike, Okwelle and Okeke (2014) Blocklaying, Bricklaying and Concreting (B/BC) is one of the trades at the National Technical Certificate (NTC) level and the curriculum which is aimed at equipping students with skills on the application of the right blocks, bricks, tools and concrete as applicable in the construction industry. Federal Republic of Nigeria, FRN, (2013) described B/BC as the

programme offered in Technical Colleges that impart necessary knowledge, attitude and skills leading to production of Bricklaying, Block laying and Concreting (B/BC) craftsmen and technicians. Skills in B/BC can help individuals to earn a living by working in one or more trade areas in building construction and development. According to FRN (2013), B/BC students, completing Technical College education shall be able to set up their own businesses and become self-employed and be able to employ others. Uwameiye and Oviawe (2010) stated that the B/BC aspect of technical education deals with the acquisition of skills and techniques in building trades to enable an individual venture into entrepreneurship activities.

Entrepreneurship is referred to as the art of venturing into business for the purpose of making financial profit. Entrepreneurship is seen by Bilic, Prka, and Vidovic (2011) as a process of starting a business venture for the provision of goods and services, and creation of jobs which contribute to economic development. Blundel and Locket (2011) argued that entrepreneurship is a phenomenon associated with entrepreneurial activity. To Sata, (2013) entrepreneurship creates a significant opportunity for individuals to achieve financial independence and benefit the economy by contributing to job creation, innovation and economic growth. In a developing country like Nigeria, according to Owoseni (2014), entrepreneurship is very important because of its role in the creation of self-employment opportunities and reduction in unemployment situations. Entrepreneurship according to Barringer and Ireland, (2010) is the process by which individuals pursue opportunities regardless of the resources they currently control. To Barringer and Ireland, entrepreneurship is the art of turning ideas into a business. Akinwumi (2012), opined that entrepreneurship is the act of identifying, initiating, organizing and bringing a vision to life, be it a new product, service, process, organizational strategy, promotional strategy or a niche in the market. To Fal, Safolo, Williams, Herrington, Goldberg, & Klaasen, (2010), entrepreneurship is a way of alleviating the challenges of poverty and unemployment; furthermore, it creates new, competitive markets and businesses which lead to job creation and have a multiplying effect on the economy. Entrepreneurship in B/BC therefore, refers to the establishment of building construction related business after graduating from college by students who have the intention. Individuals have intentions for most actions they take.

Intention is the state of an individual's mind which directs the person towards something or objects for achieving a specific objective (Rasli, Khan, Malekitfar, & Jabeen, 2013). It is intention that leads people to decide to take part or not to participate in certain activities including setting up a business enterprise and becoming a B/BC entrepreneur. Ramraini and Mohamed (2016) refer to entrepreneurial intentions as an individual's inclination to start an entrepreneurial activity sometime in the future.

Entrepreneurship intention is based on Ajzen's Theory of Planned Behavior (TPB). The theory by Ajzen (1991), states that people intend to perform a behaviour when they evaluate it positively (*attitude*), when they experience social pressure (subjective norms) to perform it, and when they believe that they have the

means and opportunities (Perceived behavioural control) to do so. Students' intentions can be influenced in different ways by the various factors such as the belief that they can start a business. Hence belief about the capacity to venture into entrepreneurship is peculiar to an individual student due to their sense of self.

Sense of self can be described as how a person feels that the traits (characteristic determined by a gene) that he or she has can determine what he/she can do or not. Mustaq, shakoor, Azeem, and Zia (2012), stated that sense of self is the temperament to experience oneself as being competent to cope with the basic challenges of life and of being worthy of happiness. To Flury and Ickes (2007), positive sense of self individuals have a concrete sense of who they are; they know what their opinions are on certain issues; they have strong personal preferences, and they have no need of following the personality of another person because they already have a personality that is well defined. A healthy sense of self serves as driver that brings about positive results including school adjustment, satisfaction, achievement, and future aspirations (McInerney 2008). According to McInerney, negative sense of self is a significant negative predictor of intention for entrepreneurship, and even academic achievement. Sense of self of B/BC students therefore, is the belief that a student might have that which the student is made up of as a person determines whether he/she can succeed in BBC business even with new and emerging technologies in B/BC.

Emerging technologies as a term commonly refers to advancements that can technologically help people to complete tasks more efficiently and safely. According to Alfred (2010) technology comprises the science of knowledge and usage of tools and techniques or its systems, methods, organization and material products thereof. Teischinger and Müller 2010, sees technology as the entities, both material and immaterial, created by the application of intellectual and physical efforts (sometimes referred to as techniques) in order to meet demands of the users and create values. Emerging technologies are new devices, materials, and intellectual capabilities whose development, practical applications, or both are still largely unrealized, such that they are visibly emerging into prominence from a background of nonexistence or obscurity. Emerging technologies are expected to create significant economic effects especially in B/BC entrepreneurship. The products of industrial revolution include; buildings on wheels, driverless cars, Internet of things (IoT), Robotics and drones, 5G cellular network and big data for decisions (Sutopo, Bayu, and

Muhammad 2020). Big data are gathered from internet services, mobile phones, digital photographs, social media and many other forms of digital communication tools that help the B/BC students in developing intentions and sense of self. Information from these new (emerging) technologies are analyzed and used for decision making in different aspects B/BC trade. Emerging technologies play important role in B/BC business. According to Craft 2000, emerging technologies give students the opportunities for exploration and play with materials, information and ideas. In their opinion however, Nabil, & Salih, (2018) observed weakness of students in the skills of learning programs, and their belief that existing techniques meet the purpose so there is no need to apply modern techniques. Nabil & Salih continued that the enabling curriculum for the inclusion of emerging technologies is still lacking in the colleges. They continued that emerging technology makes content delivery easier; it therefore can enhance entrepreneurial decisions by students.

Entrepreneurial decisions by students of B/BC can lead to many unexpected outcomes. To Udofia, Ekpo, Nsa and Akpan (2012), many of the Technical College students complete their study and are not employed or in any form of entrepreneurship. Kibuka (2011) stated that as a result of joblessness, many of the unemployed youths drift into crime and other social ills. According to Piperopoulos and Dimov (2014), Poor entrepreneurial decisions can affect the aspirations of a promising future entrepreneur (student). Bakere (2013) opined that college students' entrepreneurial decision (if not right), could result in increased unemployment rate among graduates and much dependence on relations and parents for financial sustenance. Setibi and Mapfiara (2014) stressed that many graduates of Technical Colleges B/BC are without a means of livelihood because they do not opt for self-employment.

Even as opportunity abounds for entrepreneurs to thrive, sense of self can hinder students from intending to venture into B/BC business, Hisrich and Peters (2013), in their study showed that students have mixed feelings about considering entrepreneurship as a career and very few intend to pursue an entrepreneurship career immediately after graduation. The nation has many institutions, but the graduates according to Okon and Uke (2015) are not gainfully employed either by self or by government. This is because, according to Oladele, Akeke and Oladunjoye (2011), many students in Nigeria lack entrepreneurial intentions to facilitate self-employment. This, according to Alabi (2015) has caused most of the

youths to be wandering the streets and becoming social burden to their parents and the society. Uzezi (2014) stated that when Technical College students are well prepared to exploit their personality traits (sense of self), then there will be the assurance that they will be self-employed after graduation. There is no literature to show the influence of sense of self and emerging technologies on B/BC students' entrepreneurship intentions in Technical Colleges in Enugu State. Therefore, this investigation would help to indicate the influence which sense of self and emerging technology has on entrepreneurship intentions of B/BC students in technical colleges in Enugu State. Result of the study will help to guide students to develop the right frame of mind towards establishing a B/BC business after graduation thereby reducing unemployment and crimes, attracting financial benefits by offering B/BC services to the society.

Research Questions

- 1 What is the influence of sense of self on entrepreneurial intentions of Blocklaying, Bricklaying and Concreting students in Technical Colleges in Enugu State?
- 2 What is the influence of emerging technologies on the entrepreneurial intentions of Blocklaying, Bricklaying and Concreting students in Technical Colleges in Enugu State?
- 3 What is the combined influence of sense of self and emerging technologies on entrepreneurial intentions of students of Blocklaying, Bricklaying and Concreting in Technical Colleges in Enugu State?

Hypotheses

1. There is no significant influence of sense of self on the entrepreneurial intentions of Blocklaying, Bricklaying and Concreting students in technical colleges.
2. Emerging technologies do not have significant influence on the entrepreneurial intentions of Blocklaying, Bricklaying and Concreting students in Technical Colleges.
3. There is no significant influence of sense of self and emerging technology on the entrepreneurial intentions of Blocklaying, Bricklaying and Concreting students in Technical Colleges.

Methodology

This study adopted correlation survey design. The population for the study was 142 B/BC students who were in their senior secondary three (NTC III) classes. A structured questionnaire titled "Blocklaying, Bricklaying and Concreting Students' Entrepreneurship Intention Questionnaire (BBCSEIQ)" was used for data

collection in this study. Twelve items on Sense of self were adapted from the Sense of Self Scale (SOSS) developed by Judith, and William (2012) twenty items on entrepreneurial intention were adapted from the Entrepreneurial Intentions Questionnaire (EIQ) developed by Linan and Chen (2009), while eight items on emerging technologies were developed by the researcher. The questionnaire for this study was revalidated by three experts from Department of Industrial Technical Education, University of Nigeria, Nsukka. The reliability of the instrument was established using the B/BC students in the Government technical college Abakaliki, Ebonyi State. Cronbach Alpha reliability method was employed to determine the internal consistency of the questionnaire items. The reliability coefficients (alpha values) of 0.75 was obtained for the items administered by the researcher. bivariate correlations with emphasis on Pearson Product Moment Correlation (PPMC) Establishing a relationship via bivariate correlations was based on correlation coefficients ranging between -.35 to +.35 for

weak/no correlation; +.35 to +.65 or -.35 to -.65 for moderate correlation; and +.65 to 1.00 or -.65 to -1.00 for strong correlation (Gay et al., 2011). Correlation coefficient with unity (1) is regarded as perfect correlation, while zero (0) coefficient means none or no correlation. In taking decisions for the hypotheses, significant levels less than or equal to 0.05 relative to a test means rejection of null hypothesis. However, any test with p-values greater than 0 .05 implies acceptance of null hypothesis relative to the test.

Results

Research Questions 1: What is the influence of sense of self on entrepreneurial intentions of Blocklaying, Bricklaying and Concreting students in Technical Colleges in Enugu State?

Hypothesis 1: There is no significant influence of Sense of Self on entrepreneurial intentions of students of Blocklaying Bricklaying and Concreting of Technical Colleges in Enugu State.

Table 1: Summary of Pearson correlation showing the relationship between Sense of Self and Entrepreneurship intentions.

Sense of Self		Entrepreneurial intentions	
	Pearson Correlation		1.234**
Sense of Self	Sig. (2-tailed).005		
	N142		
	Pearson Correlation		.234**1
Entrepreneurial intentions	Sig. (2-tailed) .005		
	N 142		

** . Correlation is significant at the 0.01 level (2-tailed). e

It is shown in table 1 that there is a moderate significant relationship between Sense of Self and Entrepreneurship Intentions (r=.234, N=142, p<.05). This implies that Sense of Self has a moderate significant influence on Entrepreneurship intentions of BBC students of Technical colleges. The table further revealed that p<0.05 leading to the conclusion that there is significant influence of Sense of self on Entrepreneurship intentions therefore the null hypothesis is rejected.

Research Question 2: What is the influence of emerging technologies on the entrepreneurial intentions of Blocklaying, Bricklaying and Concreting students in technical colleges in Enugu State?

Hypothesis 2: There is no significant influence of Emerging technologies on entrepreneurial intentions of students of Blocklaying Bricklaying and Concreting of Technical Colleges in Enugu State.

Table 2: Summary of Pearson correlation showing the relationship between Emerging technologies and Entrepreneurship intentions.

Emerging	Entrepreneurial	Technologies	Intentions
		Pearson Correlation1.417**	
Emerging Technologies	Sig. (2-tailed).000	N142142	
		Pearson Correlation.417**1	
Entrepreneurial intentions	Sig. (2-tailed).000	N142142	

** Correlation is significant at the 0.01 level (2-tailed). It is shown in table 2 that there is a moderate significant relationship between Emerging technologies and Entrepreneurship Intentions ($r=.417$, $N=142$, $p<.05$). This implies that Emerging technologies has a moderate significant influence on Entrepreneurship intentions of BBC students of Technical colleges. While the hypothesis reveals that the $p<.05$ leading to the conclusion that there is significant influence of Emerging technologies on entrepreneurial intentions, therefore the hypothesis is rejected.

Table 3: Summary of Pearson correlation showing the relationship between combined influence of Sense of self and Emerging technologies on Entrepreneurship intentions.

Entrepreneurial	Sense of self and Emerging	Technology	intentions
		Pearson Correlation1.449**	
Entrepreneurial intentions	Sig. (2-tailed).000	N142142	
Sense of self and Emerging technology	Pearson Correlation.449**1	Sig. (2-tailed).000	N142142

** Correlation is significant at the 0.01 level (2-tailed).

It is shown in table 3 that there is a moderate significant relationship between combined influence of Sense of self and Emerging technologies on Entrepreneurship Intentions ($r=.449$, $N=142$, $p<.05$). This implies that sense of self and Emerging technologies has a moderate significant influence on Entrepreneurship intentions of BBC students of Technical colleges. While the hypothesis reveals that the $p<.05$ leading to the conclusion that combined influence of Sense of self and Emerging technologies have significant influence on entrepreneurship intentions, therefore the hypothesis is rejected.

Research Question 3: What is the combined influence of sense of self and emerging technologies on entrepreneurial intentions of students of Blocklaying, Bricklaying and Concreting in technical colleges in Enugu State?

Hypothesis 3: There is no significant influence of Sense of self and Emerging technologies on entrepreneurial intentions of students of Blocklaying Bricklaying and Concreting of Technical Colleges in Enugu State.

Findings

Based on the correlates,

1. Moderate support was found for the influence of Sense of self on entrepreneurship intentions of BBC students of Technical Colleges in Enugu State. This implies that sense of self moderately influences entrepreneurship intentions of BBC students.
2. Significant relationship also exists between Emerging technologies and Entrepreneurship intentions of BBC students of Technical Colleges in Enugu State. This

implies that Emerging technologies moderately influences entrepreneurship intentions of BBC students. 3. The study also shows that the combined influence of sense of self and emerging technologies was positively correlated with entrepreneurship intentions as discussed in the results. This implies that combined influence of Sense of self and emerging technologies moderately influences entrepreneurship intentions of BBC students.

Conclusion

Based on the findings of the study, the following conclusions were made;

1. That sense of self moderately influences entrepreneurship intentions of BBC students. It is therefore recommended that the study of Entrepreneurship and self-appreciation should be encouraged in Technical colleges so as to enhance the level of awareness among students.
2. Emerging technologies moderately influence entrepreneurship intentions of BBC students. It is recommended that Technical College policy makers therefore, should create avenues for students to also study new and emerging technologies and develop a flexible capacity to appreciate and apply them in B/BC decisions.

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