



Prior Knowledge, Creativity and Entrepreneurial Alertness of Undergraduate Students in Ogun State-Owned Universities

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Abstract. This research examined prior knowledge, creativity, and entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities, Nigeria. A descriptive survey design was adopted for the study. Six hundred (600) respondents were selected as the sample for this study. The respondents were randomly drawn from four (4) Faculties (Faculty of Science, Faculty of Arts, Faculty of Education, Faculty of Administrations and Management Science). Prior knowledge to the business questionnaire, Creativity questionnaire, and Entrepreneurial alertness scale were used as instruments for data collection. The statistical methods of analysis used for testing the raised research questions were independent t-test and regression analysis at 0.05 level of significance. Findings revealed that there Prior knowledge of entrepreneurship and creativity had a significant influence on entrepreneurial alertness of undergraduate students. It was recommended among others that more activities will provide opportunities to gain authentic experience that will create bridges between the knowledge gained and the application of that knowledge in practice should be enforced in our tertiary institutions.

Keywords: Prior Knowledge, Creativity, Entrepreneurial Alertness, Opportunity recognition and Undergraduates

1. Introduction

Unemployment issue is one of the factors affecting the economic security of Nigerians, and this is a big challenge to the government, the masses and even researchers. Due to the rising unemployment rates

and the richer opportunities offered by rapid globalization and marketization (Hu, Wang, Zhang & Bin, 2018), the call for tertiary institutions students to start their own businesses becomes imperative. This necessitated the introduction of entrepreneurship education in order to alleviate the problem and to encourage Nigerian graduate to become job creators instead of job seekers. This has led to the adoption of entrepreneurship studies as a general course for all university students so as to encourage educational institutions to develop entrepreneurial intention and to address the issue of graduate unemployment (Fungai Roseline, Rumbidzai, Njanike, Silas and Fungai, 2011).

Despite the introduction of entrepreneurship education, majority of the students' alertness to opportunities around them are questionable, they do not show the intention of using the skills possessed to create opportunities for themselves (Okafor, Iloani, Onochie, Abah, Ramoni & Edozie, 2018). Entrepreneurial alertness is describe as "the ability to recognise opportunities, and is the result obtained after receiving entrepreneurial education". The teaching of entrepreneurship education in our tertiary institutions supposes to motivate the generation of entrepreneurial intentions through improving the entrepreneurial alertness of the students (Sang & Lin, 2019).

According to Montiel-Campos (2018), the term **entrepreneurial alertness** was first used by Kirzner in 1973. He described it as a distinctive set of perceptual and cognitive processing skills that direct the opportunity recognition process that are overlooked for others. Entrepreneurial alertness is

important for recognizing the opportunities which can assist in availing the needed opportunities (Alvi, Sharma & Alvi, 2017). Tang, Kacmar and Busenitz (2012) describes entrepreneurial alertness as a particular idea that contributes significantly to our perceiving ability to initiate and pursue a new plan, has been acknowledged as the key for opportunity identification. Entrepreneurial alertness is an ability which can be investigated either as a cognitive feature or a conscious search behaviour, for it increases the individual's awareness about his surrounding environment and access to information, and consequently leads him to identify more opportunities (Puhakka, 2011).

Tang, Kacmar, and Busenitz (2012), in their view, conceptualise entrepreneurial alertness into three distinct elements, which are: Scanning and searching for new information, association and connection of that information with existing knowledge, and evaluation and judgment. Consequently, alertness is linked to students' creativity or students' ability to produce new and apt ideas. For students to develop an enterprising disposition which entrepreneurial capability represents, students must acquire a creative skill, and be well disposed to problem solving (Aboluwodi, 2018). In spite of the fact that creativity had been linked to entrepreneurial alertness and opportunity (Tang et al., 2012; Ghasemi & Rowshan, 2016; Montiel-Campos, 2016), only a small number of research has explicitly and empirically addressed creativity as an antecedent of entrepreneurial alertness of undergraduates in Nigeria.

Creativity is a key element of entrepreneurship, as it contributes to the unfolding of the whole entrepreneurial process and, within the entrepreneurial process, it entails ideas that are novel and useful for recognition of opportunities that can lead to new entrepreneurial ventures (Biraglia and Kadile, 2017; McMullan and Kenworthy, 2015; Gielnik, Frese, Graf, and Kampschulte, 2012; Shane, 2012; Heinonen, Hytti, and Stenholm, 2011). This is why Puhakka (2011) described Entrepreneurial alertness to business opportunity as the creativity of an individual, consisting of creativity base, creative process and creative product. According to Tang, Kacmar and Busenitz in Montiel-Campos (2018), creative potential is related to the level of practised creativity and that practised creativity, in turn, is related to the recognition of opportunities through the concept of entrepreneurial alertness. Shepherd and Patzelt (2018) believed that prior knowledge is an important element of creativity, because the prior possession of relevant knowledge and skill is what gives rise to creativity, that increase individuals'

ability not only to produce more opportunities but also to enhance the level of innovativeness.

According to Hajizadeh and Mohammadreza (2016), entrepreneurial perception and creation can be facilitated through prior knowledge. According to Shepherd and Patzelt (2018), Prior knowledge is the unique information a person has on a particular topic which can be gained through education, experience and experiential learning that can enable that person to recognize particular opportunities. Prior knowledge acts as a guide that helps persons to pursue a situation as an opportunity (Nimeshi, 2018). Prior knowledge with the assistance of entrepreneurship education does trigger individual alertness into identifying gaps or opportunities that have been overlooked by others (Solesvik, 2013). Prior knowledge and information contribute to the development of one's repository of domain-specific tacit and explicit knowledge. This knowledge serves as the foundation for the development of cognitive frameworks that are required for processing and utilizing stored information. The knowledge can be garnered through education. Therefore, such entrepreneurial education enhances learner's entrepreneurial alertness ability.

Several researchers (Ghasemi & Rowshan, 2016; Li, Wang & Liang, 2015) in other countries had discovered that students' prior experience or knowledge, creativity in entrepreneurial activities have significant influence on students' entrepreneurial alertness. However, to the best of the researcher's knowledge, the composite and relative influences of prior knowledge and creativity on entrepreneurial alertness are still under-explored among Nigerian undergraduates. It is therefore important to connect prior knowledge and creativity with entrepreneurial alertness of Nigerian students to provide new theoretical and practical insights to how the teaching of entrepreneurship education can help to reducing the problem of unemployment in Nigeria, hence, this study on prior knowledge, creativity and entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities. Specifically, the following research questions were raised to guide the study:

- What is the level of entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities?
- Is there any significant influence of prior knowledge of entrepreneurship on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities?

- Is there any significant influence of creativity on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities?
- Is there any significant combined influence of prior knowledge of entrepreneurship and creativity on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities?

2. Methodology

For the purpose of this research, a descriptive research design of ex-post-facto type was adopted. This was appropriate because all the variables were not manipulated but were described as they existed. The population of this study comprised all undergraduates in the two State-Owned Universities in Ogun State, Nigeria. Olabisi Onabanjo University, Ago-Iwoye was randomly selected for this study and Six hundred (600) respondents were selected as the sample for this study. The respondents were drawn from 4 faculties (Faculty of Science, Faculty of Arts, Faculty of Education, Faculty of Administrations and Management Science. One hundred and fifty (150) respondents were selected through a simple sampling technique from each of the four faculties to make up for a total of six hundred (600) respondents. Three instruments were used to elicit responses or to collect data for this study. The instruments were prior knowledge of business, creativity questionnaire and entrepreneurial alertness questionnaire.

Prior Knowledge of Business Questionnaire: This is a self-constructed questionnaire. This questionnaire was divided into two (2) sections (i.e. Section A & B). Section A requested the personal information of the respondents e.g sex, age, department, etc. while section B consisted of 17 items designed to elicit information on the respondents’ prior knowledge of business and its formation.

3. Results

Table 1: Distribution of respondents’ characteristics

Demographic variables	Frequency (f)	Percentage (%)
Gender	Male	468
	Female	132
	Total	600
Age	15- 20	02
	21- 25	134
	26 & above	464
	Total	600

Table 1 presented the distribution of respondents by gender. According to the result of the analysis, 468 (78%) of the respondents were male while 132 (22%) were female. This showed that the majority of the respondents that constitute the target population were male. Furthermore, the Table also showed that the majority of the respondents

Creativity Questionnaire: This is an adapted form of the scale developed by Soh (2000). It is a 4-point Likert type scale of 20 items and 4 factors. The Cronbach alpha coefficient of the questionnaire was 0.96. The scale has a factor structure of (i.e., judgment, flexibility, evaluation and frustration). Sample items for the factors are “I like to do things differently although doing this takes up more time” for judgment, “I often ask questions freely even if they appear irrelevant” for flexibility, “I like showing my work to my friends before submission” for evaluation, “Whenever I am frustrated, I love going to my teachers for emotional support” for frustration.

Entrepreneurial Alertness Scale: This is a scale developed by Cardon, Gregoire, Stevens & Patel (2013). This is a 13-item scale of 3 subscales for measuring Entrepreneurial Passion’s two dimensions (Intense Positive Feelings and Identity Centrality) across the three domains of inventing, founding, and developing. Scale analysis techniques were used to identify items that showed poor item-to-total correlations to their intended construct. The Item-total correlations for the 3 subscales were 0.69 (for the feelings for inventing), 0.54 (for the feelings for founding) and 0.60 (for the feelings for developing) and the alpha reliabilities for the 3 subscales were .85, .72 and .77 respectively. These showed that the scales are reliable and form internally consistent subscales.

The researcher personally visited the respondents that were selected for the study. The respondents were asked to fill the instrument independently before returning them to the researcher. The statistical methods that were used for answering the research questions raised for the study were Descriptive Statistics (Mean response) and Regression analysis at 0.05 level of significance.

464 (77.3%) were 26 years and above, followed by 134 (22.3%) who were within the age range of 21 to 25 years while 2 (0.3%) were within 15-20 years of age. This showed that the majority of the respondents that constituted the target population were 26 years and above.

Analysis of Research Questions

Research Question One: What is the level of undergraduate students’ entrepreneurial alertness in Ogun State-Owned Universities?

Data collected on undergraduate students’ entrepreneurial alertness were used to classify respondents’ score into two groups namely: low (below 2.50 cut off point) and high (above 2.50 cut off point). Based on this classification, the data on respondents’ responses on entrepreneurial alertness were subjected to descriptive statistics as presented in Table 2.

Table 2: Mean responses of the level of undergraduates’ entrepreneurial alertness

S/N	Items	Mean	Remarks
1	Readiness to do anything to become an entrepreneur	2.76	High
2	Professional goal is to become an entrepreneur	3.05	High
3	Make every effort to start and run own business	2.57	High
4	Determination to create a business venture in the future	2.51	High
5	Not having doubts about ever starting own business	2.73	High
6	Strong alertness of ever starting a business	2.51	High
7	Reading news, magazines, or trade publications regularly to start own business	2.57	High
8	Thought about work-related matters in free time to start own business	2.70	High
9	Thought about work-related matters even during holidays to start own business	2.55	High
10	Thought about new business ideas in free time to start own business.	3.05	High
Grand Average		2.70	High

Table 2 indicated that items numbered 1 to 10 were with the mean scores above 2.50. This means that the students possessed a high level of entrepreneurial alertness. However, items 10 - “thought about new business ideas in free time to start my own business.”, 2 - “students’ professional goal is to become an entrepreneur” and 19 - “students’ readiness to do anything to become an entrepreneur” with mean scores of 3.05, 3.05 and 2.76 respectively proved to be some of the most critical level of entrepreneurial alertness of undergraduates students. The implication of this is that majority of the students who participated in this study possessed high level of entrepreneurial alertness.

Research Question Two: Is there any significant influence of prior knowledge of business on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities?

Table 3: Regression analysis of prior knowledge of business and entrepreneurial alertness

REGRESSION		ANOVA				
Model	Source	Sum of Squares	df	Mean Square	F	Sig
R = .049 ^a	Regression	133.921	1	133.921	1.196	.027 ^b
R ² = .020	Residual	55758.551	598	111.965		
Adj. R ² = .000	Total	55892.472	599			

Table 3 revealed that prior knowledge and entrepreneurial alertness yielded a co-efficient of regressions (R) of 0.049 and a regression square (R²) of 0.02. This shows that 2.0 % of the total variance in entrepreneurial alertness is accounted for by prior knowledge of business. The table also indicated that the analysis of variance of the regression data produced an F-ratio value of 1.196, significant at 0.05 level. This implies that prior knowledge of business had a significant influence on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities.

Research Question Three: Is there any significant influence of creativity on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities?

Table 4: Regression analysis of creativity and entrepreneurial alertness

REGRESSION		ANOVA					
Model	Source	Sum of Squares	df	Mean Square	F	Sig	Remarks
R = .033 ^a	Regression	114.104	1	114.104	.553	.045 ^b	Sig.
R ² = .010	Residual	102727.278	598	206.280			
Adj. R ² = -.001	Total	102841.382	599				

Table 4 revealed that creativity and entrepreneurial alertness yielded a co-efficient of regressions (R) of 0.033 and a regression square (R²) of 0.10. This showed that 1.0 % of the total variance in students’ entrepreneurial alertness is accounted for by creativity. The table also indicated that the analysis of variance of the regression data produced an F-ratio value of .553, significant at 0.05 level. This implies that creativity had a significant influence on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities.

Research Question Four: Is there any significant combined influence of prior knowledge of business and creativity on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities?

Table 5: Regression analysis of prior knowledge, creativity and entrepreneurial alertness

REGRESSION		ANOVA					
Model	Source	Sum of Squares	df	Mean Square	F	Sig	Remarks
R = .756 ^a	Regression	19249.04	2	9624.52	397.87	.000 ^b	Significant
R ² = .571	Residual	14441.20	597	24.19			
Adj. R ² = .570	Total	33690.24	599				

Table 5 revealed that prior knowledge, creativity and entrepreneurial alertness yielded a co-efficient of multiple regressions (R) of 0.756 and a multiple regression square (R²) of 0.571. This showed that 57.1 % of the total variance in entrepreneurial alertness is accounted for by the combination of prior knowledge of entrepreneurship and creativity. The table also indicated that the analysis of variance of the multiple regression data produced an F-ratio value of 397.87, significant at 0.05 level. This implied that prior knowledge of business and creativity had a significant influence on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities.

4. Discussion

The purpose of this research was to investigate the influence of prior knowledge and creativity on entrepreneurial alertness of undergraduate students at Ogun State-Owned Universities. Research question one stated what is the level of entrepreneurial alertness of undergraduate students at Ogun State-Owned Universities? The result revealed that the students possessed a high level of entrepreneurial alertness. The result revealed that Undergraduate students always thought about new business ideas in free time to start their own business. Their professional goal was to become an entrepreneur and the students were ready to do anything to become an entrepreneur. This revealed that the undergraduates had the determination to become an entrepreneur which was evident from their responses.

Research question two stated that is there any significant influence of prior knowledge of business on entrepreneurial alertness of undergraduate students at Ogun State-Owned Universities? This result corroborated the findings of Kusumawardhany and Trisnawati, (2019) which showed that prior

knowledge has a positive effect on business idea alertness. The study revealed that the higher the prior knowledge and business idea alertness, the higher the entrepreneurial opportunity. This is also in line with the findings of Sarpinah, Naimullah, Anis, and Naim (2017) and Li, Wang and Liang (2015) which revealed that prior knowledge had significant and direct influence on entrepreneurial alertness of students at public universities.

Research question three stated that is there any significant influence of creativity on entrepreneurial alertness of undergraduate students at Ogun State-Owned Universities? The result revealed that creativity had a significant influence on entrepreneurial alertness of undergraduate students at Ogun State-Owned Universities. This result corroborates the findings of Montriell-Campos (2016) and Hu, Wang, Zhang and Bin (2018) who used a moderated mediation model to identify a positive correlation between creativity and entrepreneurial alertness.

Research question four stated that is there any significant influence of prior knowledge of business and creativity on entrepreneurial alertness of undergraduate students in Ogun State-Owned Universities? The result revealed that prior knowledge of business and creativity had a significant influence on entrepreneurial alertness of undergraduate students at Ogun State-Owned Universities. This result is in consonance with Ghasemi and Rowshan (2016) who discovered that students’ prior experience or knowledge, creativity in entrepreneurial activities have significant influence on students’ entrepreneurial alertness. This result is also supported by Li, Wang and Liang (2015) whose study showed that entrepreneurial alertness significantly and directly predicted opportunity recognition, whereas prior knowledge significantly

and indirectly affected opportunity recognition through its impact on entrepreneurial alertness.

5. Conclusion and Recommendations

Entrepreneurship alertness is vital in enhancing the entrepreneurship career of students at the tertiary level of education. The findings of this study revealed that undergraduate students always thought about new business ideas in free time to start their own business. Their professional goal was to become an entrepreneur and the students were ready to do anything to become an entrepreneur” It was also revealed that Prior knowledge of entrepreneurship and creativity had a significant influence on entrepreneurial alertness of undergraduate students. Based on the findings of the study, it was recommended that activities that will provide opportunities to gain authentic experience that will create bridges between the knowledge gained and the application of that knowledge in practice should be enforced in our tertiary institutions. Students should be advised to possess entrepreneurial skills that could be useful to them in the future. The government should endeavour to create a skill acquisition centre that can prepare university students on how to recognize the opportunities around, irrespective of their courses at the University. Entrepreneurship education should be practically oriented so as to sustain students’ interest.

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