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Personal and Contextual Factors as Correlates of Entrepreneurial Intentions among Pre-service Science, Technology, and Mathematics Teachers

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ABSTRACTS

This study through a quantitative paradigm investigated personal and contextual factors as correlates of entrepreneurial intention among 1120 pre-service science, technology, and mathematics teachers. The results showed that personal factors (need for achievement, internal locus of control, risk-taking propensity, and creativity) and contextual factors (perceived structural support, perceived educational support, and perceived relational support) contributed 84.1% to the prediction of entrepreneurial intention among participants. The entrepreneurial intention of pre-service science, technology, and mathematics teachers had a positive correlation with each dimension of personal and contextual factors. In line with these results, both personal (need for achievement, internal locus of control, risk-taking propensity, and creativity) and contextual (perceived structural support, perceived educational support, and perceived relational support) factors be strengthened in pre-service science, technology, and mathematics teachers' preparation university.

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1. INTRODUCTION

The present universal economic encounters and speedy high-tech improvements have thrown it open that university education is not a sure bet for employment and entrepreneurship is the sine qua non to the economic expansion and employment formation of any country. Arguably, entrepreneurship education is an efficient means of enhancing and expanding the curiosity about entrepreneurship among undergraduates. In essence, there exist substantial treaties regarding the significance of enhancing entrepreneurship to promote economic growth and enlargement, and job creation. The training accessible in the universities majorly affects the occupational choice of undergraduates, and this is an impending source for prospective entrepreneurs. Presently, most universities globally have expended a substantial amount of money in designing a worthwhile entrepreneurship education for their students so that they can be real entrepreneurs. One critical challenge threatening Nigeria is the mass of jobless graduates.

The employment market is currently incapable of accommodating the growing group of trained fledging graduates (Omuvwie, 2013). In line with the National Bureau of Statistics, the unemployment rate in Nigeria stood at 21.1% in 2010, 23.9% in 2011, 24.3% in 2012, 28.5% in 2013, and 30% in 2014. Recently, the World Bank has put the unemployment rate among the youth in Nigeria at 38%. Unofficial information shows that four out of ten graduates in Nigeria are unwaged with the majority engaging in menial jobs that are not befitting graduates. These young unemployed graduates are a major liability to the nation due to their privation in entrepreneurial skills required to be self-employed. The lack of entrepreneurial skills may be due to fear of failure, deficiency in social support, stumpy entrepreneurial self-confidence, deficiency in financial capability to begin a business, and failure to access loans from the bank because of deficiency in collateral. These concerns have led the Federal Government of Nigeria to introduce entrepreneurship education into the University curriculum as a measured course of action to furnish graduates with important skills for subsistence and international attractiveness (Omuvwie, 2013).

A major conception of entrepreneurship defined it as "the whole set of education and training activities – within the educational system or not – that try to develop in the participants the intention to perform entrepreneurial behaviors, or some of the elements that affect that intention, such as entrepreneurial knowledge, the desirability of the entrepreneurial activity, or its feasibility" (Linan, 2004). Entrepreneurship is the practice of discovering and evolving a prospect to formulate value via origination and grabbing that prospect without concern for either resource (and capital) or the setting of the entrepreneur-in a novel or prevailing company. It is clear that most developing nations including Nigeria, have agreed that entrepreneurial education is a potent weapon for inducing university students to settle for entrepreneurship and grow not only into self-employed but as job creators and innovators who will be able to promote the overall well-being and prosperity of their nations. Entrepreneurship not only provides a ready source of income for people but that it provides positive social value.

The amplified interest in entrepreneurship has become an international affair due to the growing global race established on suppleness, ingenuity, and origination (Lüthje & Franke, 2003). The notion of self-employment is eye-catching to students because it is a treasured means of partaking in the employment market devoid of mislaying one's freedom. Furthermore, the attractiveness of entrepreneurship is similarly associated with growing disenchantment with customary careers in outsized corporations (Kolvereid, 1996). In reacting to global rivalry, these corporations have passed through a reformation procedure,

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which contains key cost-cutting. Therefore, the occupation-dependence merits of reputable corporations, which include occupation safety, the incentive for allegiance, and permanency, have lost their desirability.

It is evident that the background of non-economic and business education students meaningfully affected their intentions to become entrepreneurs in the nearest future (Indati *et al*., 2010). Most nations encourage entrepreneurship to inspire growth in a developing sentient world. Thus, stakeholders in the university must pay attention to the question of why some students choose an entrepreneurial profession and others do not. Excitingly, prior studies in the extant literature offer some marginal elucidations for this question. The majority of prior authors primarily focused on the influence of personality features on the decision-making process (Bonnett & Furnham, 1991; Brockhaus, 1980; Johnson, 1990).

Nevertheless, their results fluctuate through the studies; in which they show a relation between entrepreneurial intention and some personality elements such as self-assurance, thrill-seeking ability, and need for achievement. Yet, people swim in a pool of traditional, communal, fiscal, governmental, demographical, and technical elements. The extant literature revealed that some authors were preoccupied with some of these elements. Accordingly, Hisrich (1990) said people could be pushed or dragged by situational elements, which are connected with their peculiar upbringings and contemporary way of life. Thus, traditional and formal contexts also influence entrepreneurship (Wennekers & Thurik, 1999).

The literature on entrepreneurship-focused majorly on adult entrepreneurs between the age of 25 to 44 with little attention given to the younger entrepreneurs of the lesser age group. Therefore, it is the pre-occupation of the present study, to comprehend the factors that could influence the entrepreneurial intentions of young individuals who are less than 25 years. This is because little or nothing is known about young adults and entrepreneurship (Henderson & Robertson, 2000). Evidence suggests a positive relationship between education and entrepreneurship (Galloway & Brown, 2002; Gorman & Hanlon, 1997; Henderson & Robertson, 2000; Kolvereid & Moen, 1997) in which acquiring a worthwhile education may nurture a person's entrepreneurial intention. The objective of the present study is to determine the predictors of pre-service science, technology, and mathematics teachers' entrepreneurial intentions in Nigeria.

2. LITERATURE REVIEW

Entrepreneurial intention is defined as the readiness of people to execute entrepreneurial behavior, to engross in entrepreneurial action, to be freelance, or to institute new business (Dhose & Walter, 2010). The intention to begin a business is influenced by several factors, which include individual or personal factors and contextual factors (Bird, 1988). The individual or personal factors include demographics, personal traits, psychological characteristics, individual skills and prior knowledge, individual network, and social ties. The contextual factors encompass environmental support, environmental influences, and organizational traits.

2.1. Personal Variables

Demographic variables: The extant literature revealed that demographic factors are vital in influencing the intention to start up a business. Mazzarol *et al*. (1999) found that males were more likely to be originators of business than females and adult men in the United States are twice as likely as women to be in the process of starting a new business. Evidence suggests that teenage girls have fewer intentions than teenage boys to engage in entrepreneurial

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professions (Kourilsky & Walstad, 1998) and males had significantly higher entrepreneurial intentions than females (Mazzarol *et al*., 1999; Kolvereid, 1996).

However, Khan *et al*. (2011) showed that female students appear to possess a less entrepreneurial spirit, but the finding showed that irrespective of gender, there was an equal predisposition towards entrepreneurial attitude between male and female students. Age is another factor capable of predicting entrepreneurial intentions as Boyd (1990) revealed that age is positively associated with entrepreneurial intention. Evidence suggests that the intention and the possibility to be entrepreneurial rises with age climaxing as people reach age 40 and then smoothing out. However, worldwide, youth aged 18-34 are more probable to begin a novel business than those aged 35 to 64. Therefore, it can be resolved that both age and gender have influences on entrepreneurial intentions but the influences could be weakened by other elements.

2.2. Personality Traits

The extant literature has revealed that personality traits have meaningful effects on entrepreneurial intentions. Personality traits such as self-efficacy (Akinsola & Awofala, 2009), optimism (Cooper *et al*., 1988), and passion have been established to be completely associated to begin a new business. Ismail *et al*. (2009) investigated the effects of big five personality traits on entrepreneurial intentions of undergraduate students in Malaysia. The results showed that only extraversion and openness to experience meaningfully predicted the intention to start up a new business.

2.3. Need for Achievement

Introduced the need for achievement into the psychological literature and the construct is positively related to entrepreneurial intentions (Lüthje & Franke, 2003). People with a great level of need-for-achievement display a greater inclination to engross in entrepreneurial activities. Thus, there is support for the association amid the need for achievement and entrepreneurial intentions. In a meta-analysis, which showed the association between achievement motivation and entrepreneurial behavior Collins *et al*. (2004) found that achievement motivation was meaningfully associated with both choice of an entrepreneurial profession and entrepreneurial performance. The need for achievement is the strongest predictor of entrepreneurial intention (Tong *et al*., 2011).

2.4. Locus of Control

Locus of control is a psychosomatic feature that is associated with the capability of people to regulate the events in life (Rotter, 1990). There are two types of locus of control namely: internal locus of control and external locus of control (Awofala *et al*., 2012). Internals believe that events primarily result from their behavior and generally perceive themselves as having a high degree of control over their lives. Externals believe that events primarily are the result of chance or someone else's actions and perceive themselves as being influenced largely, if not wholly, by external factors (Awofala *et al*., 2012).

People who have an internal locus of control trust that they can control life's events whereas people who have an external locus of control trust that life's events are the outcome of exterior elements, such as chance, luck, or fate (Hay *et al*., 1990). Those people with a higher internal locus of control are thought to be self-employed and have high motivation to improve the efficiency of work (Göksel & Aydintan, 2011). People with an internal locus of control can regulate their environments via their actions and they display a readiness to take risks (Mueller & Thomas, 2000). Khan *et al*. (2011) found that people with an internal locus of

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control have a high possibility of becoming entrepreneurs. Thus, it is succinct to note that the higher the internal locus of control of students, the higher their entrepreneurial intention.

2.5. Risk-taking Propensity

A risk-taking propensity is another strong predictor of entrepreneurial intention. Entrepreneurs hold higher risk propensity and uncertainty tolerance than non-entrepreneurs (Begley & Boyd 1987). Simon *et al*. (1999) supported the high risk-taking inclination of entrepreneurs due to their intellectual prejudices. McGrath *et al*. (2002) maintained that entrepreneurship is connected with a low indecision evasion level, which implies a high-risk propensity. Amit *et al*. (1993) supported this in their examination of entrepreneurs, in which they found that entrepreneurs as a group have an above-average propensity to take risks.

2.6. Creativity

Creativity is a potent motivating force for constructing knowledge required for the social and economic development of society (Awofala & Fatade, 2015). The extant literature has advocated the role creativity played in entrepreneurial intention as creativity is a sine qua non in fostering the intention to start a business. Creativity is a principal predictor of entrepreneurial intention, as entrepreneurs need to spot prospects, create ideas, and be innovative. The more creative people are the more they can engage in entrepreneurial intentions (Hamidi *et al*., 2008). Creative people have a strong inclination to become self-employed (Gorman *et al*., 1997; Feldman & Bolino, 2000). People with creative intelligence are capable of thinking outside the box and this can influence their capacity to start up a new business (Sternberg, 2004).

2.7. Contextual Factors

Contextual factors include perceived structural support, perceived educational support, and perceived relational support. Turker and Selcuk (2008) found that perceived educational support and perceived structural support were significant predictors of entrepreneurial intention whereas perceived relational support was not a statistically significant predictor of entrepreneurial intention. Turker *et al*. (2005) found that perceived level of education, opportunities, and support were statistically significant factors in the entrepreneurial propensity of university students.

Backing and reassurance from family members, relatives, and friends are connected to the growth of entrepreneurs (Davidson & Honig, 2003; Baughn *et al*., 2006). Contextual factors such as support from family and friends, support from a government initiative, credit facilities and policies interventions, and support from teaching and learning adequate knowledge and inspiration are vital mostly in determining the supposed popularity of a specific commercial undertaking as well as providing monetary and knowledge succor.

At present, few studies (Denanyoh *et al*., 2015; Phuong & Hieu, 2015) had been carried out that quantitatively defined the relationship between personal factors, contextual factors, and entrepreneurial intention. These few studies were outside the shores of Nigeria. Thus, this study is on one hand to fill this lacuna in the literature. The study resolved to investigate the association among personal factors, contextual factors, and entrepreneurial intention of pre-service science, technology, and mathematics teachers in Nigeria.

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3. RESEARCH QUESTIONS

RQ1: What are the relationships among pre-service science, technology, and mathematics teachers' factors (need for achievement, internal locus of control, risk-taking propensity, and creativity), contextual factors (perceived structural support, perceived educational support, and perceived relational support), and entrepreneurial intention?

RQ2: What is the contribution of pre-service science, technology, and mathematics teachers' factors (need for achievement, internal locus of control, risk-taking propensity, and creativity), and contextual factors (perceived structural support, perceived educational support, and perceived relational support) to the prediction of entrepreneurial intention?

4. METHODS

4.1. Research Design

This study employed a quantitative methodology within the blueprint of correlational research design (Awofala *et al*., 2022).

4.2. Participants

The population comprised pre-service science, technology, and mathematics teachers from year 1 to year 4 at the Department of Science and Technology Education at the University of Lagos, Nigeria. There are 6 Departments in the Faculty of Education, at the University of Lagos and a purposive sampling technique was used to select the Department of Science and Technology Education for the study. The Department of Science and Technology Education has seven cohorts namely: Education Biology, Education Chemistry, Education Home Economics, Education Integrated Science, Education Mathematics, Education Physics, and Technology Education. All seven cohorts were used for the study.

A simple random sampling technique was deployed to select 40 pre-service teachers from year one to year four in each of the seven cohorts to make a sample of 1120 pre-service science, technology, and mathematics teachers involving (600 males and 520 females) in which 60% were Christians and 40% Muslims. Their age ranged from 16 to 28 years with a mean age of 20 years 4 months and a standard deviation of 1 year 4 months. However, there was no attrition and no participant was pulled out from the sample. Thus, a 100% return rate was recorded and this means that the final sample was the same as the initial sample, which was representative of the population.

4.3. Instrumentation

Three instruments used for the data collection in the study are the Entrepreneurial Intention Scale (EIS), Personal Factors Scale (PFS), and Contextual Factor Scale (CFS).

4.3.1. Entrepreneurial intention scale (EIS)

The EIS consisted of 4 items anchored on a four-point scale ranging from: Strongly Agree (SA) -4, Agree (A) -3, Disagree (D) - 2, and Strongly Disagree (SD) - 1. The maximum and minimum summative scores achievable in the EIS are 16 and 4 respectively. The EIS was adopted by Muhammad *et al*. (2015). The coefficient alpha for this scale was .85.

4.3.2. Personal factors scale (PFS)

The PFS consisted of four sub-scales of need for achievement, internal locus of control, risk-taking propensity, and creativity in which their items were anchored on a four-point scale ranging from: Strongly Agree (SA) -4, Agree (A) -3, Disagree (D) - 2, and Strongly Disagree (SD)

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- 1. The PFS was adopted by Karimi *et al*. (2017). The Need for Achievement contained a 4-item scale with a Cronbach alpha coefficient of 0.82. The Locus of control was measured with 4-items with a Cronbach alpha coefficient of 0.84. Risk-taking propensity was measured with a 5-item scale and a Cronbach alpha coefficient of 0.86 was computed for it. Creativity was assessed using 3-items with a Cronbach alpha coefficient of 0.78.

4.3.3. Contextual factor scale (CFS)

The CFS consisted of three sub-scales of perceived structural support, perceived educational support, and perceived relational support in which their items were anchored on a four-point scale ranging from: Strongly Agree (SA) -4, Agree (A) -3, Disagree (D) - 2, and Strongly Disagree (SD) - 1. The CFS was adapted using Denanyoh *et al*. (2015). The perceived educational support scale has three items. The coefficient alpha for this scale was .82. The perceived relational support has three items and the Cronbach coefficient alpha for this scale was .84. The perceived structural support scale has four items and the Cronbach coefficient alpha for this scale was .86.

4.4. Data Collection Procedure

Permission to use the pre-service science, technology, and mathematics teachers for research purposes was sought from the Head of the Department of Science and Technology Education, University of Lagos. The researchers in conjunction with eight research assistants administered the three instruments to the target sample. The involvement of the participants in the study was voluntary and all the participants remained anonymous. The participants were free to pull out at any stage of the study and no penalty was meted out for pulling out of the study. The administration of the instruments lasted for one week and the data collected from the field were arranged for coding on the Statistical Package for the Social Sciences (SPSS) version 20.

4.5. Data Analysis

SPSS version 20 was used for the coding of the collected data. Research question one was answered using the Pearson product-moment correlation coefficient. Research question two was answered using multiple regression analysis. The p-value for all the statistical analyses was put at a 0.05 level of significance.

5. RESULTS AND DISCUSSION

5.1. Research Question One

Table 1 showed the results of the relationships between personal and contextual factors and pre-service science, technology, and mathematics teachers' entrepreneurial intention. As indicated in the **Table 1** there was a significant positive correlation between the pre-service science, technology, and mathematics teachers' entrepreneurial intention and need for achievement ($r = 0.28$, $p < 0.01$), Internal locus of control ($r = 0.64$, $p < 0.01$), risk-taking propensity ($r = 0.43$, $p < 0.01$), and creativity ($r = 0.63$, $p < 0.01$).

There was also a significant positive correlation between entrepreneurial intention and perceived structural support ($r = 0.44$, $p < 0.01$), perceived educational support ($r = 0.32$, $p < 0.01$), and perceived relational support ($r = 0.26$, $p < 0.01$). The low correlations among the personal and contextual factors as shown in **Table 1** were expected in that they represented different constructs.

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Table 1. Correlations matrix for the relationship between personal and contextual factors and pre-service science, technology, and mathematics teachers' entrepreneurial intention.

		1	2	3	4	5	6	7	8
1.	Entrepreneurial intention	1							
2.	Need for achievement	0.28*	1						
3.	Internal locus of control	0.64*	0.63*	1					
4.	Risk-taking propensity	0.43*	0.88*	0.49*	1				
5.	Creativity	0.63*	0.45*	0.73*	0.27*	1			
6.	Perceived structural support	0.44*	0.68*	0.57*	0.63*	0.74*	1		
7.	Perceived educational support	0.32*	0.30*	0.31*	0.27*	0.40*	0.35*	1	
8.	Perceived relational support	0.26*	0.73*	0.49*	0.63*	0.40*	0.52*	0.29*	1
Mean		**12.46**	**10.96**	**7.04**	**8.64**	**7.54**	**7.26**	**8.12**	**10.30**
SD		**2.61**	**2.76**	**1.10**	**1.98**	**2.26**	**1.93**	**2.34**	**2.90**
N		**1120**	**1120**	**1120**	**1120**	**1120**	**1120**	**1120**	**1120**

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

5.2. Research Question Two

As contained in **Table 2**, the R-value of 0.917 indicates a simple high correlation for the study shown in **Table 2**. Consequently, 84.1%, which portrays the R2-value described the joint contribution of the predictors (need for achievement, internal locus of control, risk-taking propensity, and creativity, perceived structural support, perceived educational support, and perceived relational support) to the explanation of variance in pre-service science, technology, and mathematics teachers' entrepreneurial intention. This percentage contribution is significant with an F value of 235.80 at a 0.05 level of significance. This shows that the regression equation fitted the data.

Table 2. model summary, coefficient, and t-value of multiple regression analysis of personal and contextual factors and pre-service science, technology, and mathematics teachers' entrepreneurial intention.

Model	B	Std Error	Beta	t	Sig
Constant	11.31	0.92		12.24	0.000
Need for achievement	2.65	0.12	1.3	22.25	0.000
Internal locus of control	1.86	0.20	0.38	9.21	0.000
Risk-taking propensity	3.93	0.15	1.45	25.98	0.000
Creativity	2.03	0.13	0.85	16.09	0.000
Perceived structural support	1.13	0.13	0.41	8.43	0.000
Perceived educational support	1.03	0.11	0.32	6.47	0.000
Perceived relational support	1.01	0.10	0.30	5.34	0.004

Table 2 provides evidence of the relative contributions of the predictors to the explanation of variance in the outcome measure. Hence, risk-taking propensity was the best meaningful predictor of entrepreneurial intention in pre-service science, technology, and mathematics teachers ($\beta = 1.45$, $t = 25.98$, $p = 0.000$). This was trailed by the need for achievement, which positively predicted pre-service science, technology, and mathematics teachers' entrepreneurial intention ($\beta = 1.36$, $t = 22.25$, $p = 0.000$). This was trailed by creativity, which positively predicted pre-service science, technology, and mathematics teachers' entrepreneurial intention ($\beta = 0.85$, $t = 16.09$, $p = 0.000$). This was followed by an internal locus of control, which positively and meaningfully contributed to the explanation of variance in pre-service science, technology, and mathematics teachers' entrepreneurial intention ($\beta = 0.38$, $t = 9.21$, $p = 0.000$). Perceived structural support made the next positive and meaningful

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contribution to the prediction of entrepreneurial intention (β = 0.41, t = 8.43, p = 0.000). Perceived educational support made the next positive and meaningful contribution to the prediction of entrepreneurial intention (β = 0.32, t = 6.47, p = 0.000). Finally, perceived relational support made the least positive and meaningful contribution to the prediction of entrepreneurial intention (β = 0.30, t = 5.34, p = 0.004). In this study the regression equation is depicted by Entrepreneurial Intentionpredicted = 11.31 + 1.30 need for achievement + 0.38 internal locus of control + 1.45 risk-taking propensity + 0.85 creativity + 0.41 perceived structural support + 0.32 perceived educational support + 0.30 perceived relational support.

As a model summary, we can concluded several points: Multiple R= 0.917; Multiple R^2= 0.841; Multiple R^2 (Adjusted)= 0.837; Standard Error Estimate= 2.17; F=235.80; p < 0.001; df1=7; df2=1112.

The results of this study indicated that the need for achievement, internal locus of control, risk-taking propensity, creativity, perceived structural support, perceived educational support, and perceived relational support all strappingly predicted the pre-service science, technology, and mathematics teachers' entrepreneurial intention in Nigeria. The need for achievement, internal locus of control, and risk-taking propensity are personality variables that are quite stable and difficult to change. However, the need for achievement can be taught as Phuong and Hieu (2015) remarked that some researchers have developed training programs for corporate individuals to advance their level of achievement motivation. It should be noted such programs necessitate a lot of time and determination. Correspondingly, researchers have developed programs and practices for individuals to take on the locus of control and modify their risk-taking propensity. However, the effectiveness of these programs is unsubstantiated. Thus, to inspire entrepreneurial intentions in youths and students, programs and facilities should be focused on youths with a developed need for achievement, internal locus of control, and those with sophisticated risk-taking propensity. The present study has shown that the need for achievement, locus of control, and risk-taking propensity are significant predictors of entrepreneurial intention. This result agreed with the results of Karimi *et al*. (2017) in which the need for achievement, locus of control, and risk-taking propensity are significant predictors of entrepreneurial intention.

One other predictor of entrepreneurial intention is creativity and it is a skill that can be taught. A thinking program should be implemented at the university level that will encourage students to think outside the box. Such programs should allow students to solve problems in novel ways. Courses whose goal is to cultivate and refine students' creativity should be entrenched and implemented at the University. Furthermore, creativity-prone subjects such as art and music should be included in undergraduate curricula. Universities in Nigeria should endeavor to float courses that will enable students to be efficacious in using information and communication technologies (Awofala *et al*., 2015; Awofala *et al*., 2017; Awofala *et al*., 2019) to enhance their creativity. Pre-service science, technology, and mathematics teachers need to reposition their background knowledge (Ogunleye *et al*., 2014) from creativity stifle practices to inspiration-enhanced practices.

Supports of all kinds such as relational, educational, and structural are vital variables that influenced pre-service science, technology, and mathematics teachers' entrepreneurial intention. Policy architects and program supervisors must pay much attention to these supports to ensure that students put up the entrepreneurial spirit. The involvement of a private individual in the running of government enterprise in Nigeria is a welcome development as this could enhance the development of entrepreneurship. The atmosphere in Nigeria now is that government has no business in business and this has encouraged youths

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to engage in starting up their businesses. Large government corporations have been privatized and a renewed efficiency has surfaced. The results of this study showed that educational support is a strong determinant of pre-service science, technology, and mathematics teachers' entrepreneurial intention. Thus, the onus is on the university to provide a strong knowledge base and stimulation for entrepreneurship, so that students will have the propensity of electing an entrepreneurial career after graduation. With this entrepreneurship can be improved through the learning process as creative ideas gained via learning could serve as a springboard for students to engage in entrepreneurship. Structural support in the form of loans from banks and the government providing the enabling environment through laws and regulations could help to initiate entrepreneurial intention in students, most of whom are youths. Support from family, friends, and relatives could spur students to engage in entrepreneurship, as these are strong determinants of entrepreneurial intentions among pre-service science, technology, and mathematics teachers.

6. CONCLUSION

The study has established the role of personal and contextual factors in reinforcing the entrepreneurial intentions of pre-service science, technology, and mathematics teachers in Nigeria. The positive correlation between entrepreneurial intention and each dimension of personal and contextual factors points to the fact that as each dimension increases, the entrepreneurial intentions of pre-service science, technology, and mathematics teachers in Nigeria will increase. No doubt, the findings of the study may have contributed to the further study of entrepreneurship in Nigeria thereby serving as a springboard for policy architects and program managers in creating training in entrepreneurship and communication blueprint to back and inspire fresh business creators. In line with these results, the study recommended that both personal (need for achievement, internal locus of control, risk-taking propensity, and creativity) and contextual (perceived structural support, perceived educational support, and perceived relational support) factors should be strengthened in pre-service science, technology, and mathematics teachers' preparation university.

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8. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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