



## **Psycho-social Factors and Creativity of Undergraduates in South-West Nigeria**

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### **Abstract**

*The fact that the individual is at the centre of creative expression continues to influence studies that focus on the individual and their roles in the quest for a more creative society. In an attempt to grow and develop, Nigeria relies on the graduates of higher institutions, especially the universities, to supply the pool of leaders that would utilize creativity for developmental goals. This agrees with the universal trend that makes university graduates the fulcrum on which a nation's workforce is built. The concern is whether these future leaders possess the qualities that would facilitate the nurturing of creativity. Eight psychosocial variables (knowledge of creativity, attitude towards creativity, risk taking behaviour, parental influence, age, peer pressure, gender and course of study) that are peculiar to the conditions of undergraduates and might influence creativity were examined. Three valid and reliable instruments were designed and another adopted for the purpose of surveying participants. Using the multistage sampling, 651 respondents were sampled (330 females and 321 males). It was discovered that six psychosocial factors (knowledge of creativity, attitude towards creativity, risk taking behaviour, parental influence, age, and course of study) significantly correlated with creativity in that order. Findings portend hope for the Nigerian search for a more creative set of graduates and workforce. The study articulates suggestions for stakeholders in the educational system in the hope that Government at all levels will facilitate a nurturing environment for creativity among the country's undergraduates.*

**Keywords:** Creativity, Undergraduates, South-west Nigeria, Psychosocial variables

### **Introduction**

Researchers have continuously underscored the importance of creativity in human growth and development. Puccio (2012) described creativity in human growth and development as an essential life skill. One can, therefore, assert that creative living is a way of life whose purpose is living a deeper and richer life (Puccio, Mance, Switalski and Reali, 2012). If creativity is a way of life, it becomes necessary to promote it. Understanding and

promoting creative living is a function of a number of factors which researchers and practitioners of creativity have grappled with since the beginning of research into the phenomenon of creativity. In spite of the groundbreaking successes recorded in the global creativity literature, Nigeria cannot qualify as a country that has truly made creativity a deliberate part of her existence (Obialo, 2017a). This lack of the promotion of deliberate creativity in Nigeria has brought more challenges for Nigerian creativity researchers who have to evolve solutions that would facilitate the transformation of the Nigerian experience through the promotion of deliberate creativity.

Rhodes (1961) introduced the idea of the 4Ps of creativity into the creativity discourse; this means that creativity can be understood from four broad perspectives which represent the foundations for research in the field of creativity. These cornerstones are the person, process, product and press (environment). For creativity to thrive therefore there is need to begin with the individual creator. "Literature suggests that highly creative individuals are characterized by a number of dispositional traits that predict achievement (Dawson and Andriopolous, 2014). Runco (2018) asserted that, "Creativity can indeed be an entirely personal thing". Rhodes (1961) explaining the "person" in his 4Ps model of creativity, posits that, "The term person, as used here, covers information about personality, intellect, temperament, physique, traits, habits, attitudes, self-concept, value systems, defense mechanisms, and behaviour." (p. 307).

What then are the qualities in the individual that foster creativity? While this concern might not be a serious worry for other societies that have made creative living a deliberate part of their systems, it might not be the case for a society like Nigeria. There is therefore the need to establish those factors that foster creativity among people. Nigeria relies on quality manpower development as the bases for growth and development (Obialo, 2017a). This is found in the higher institutions of learning whose products are major determiners of the direction the country heads. That is why the outcomes of researches on the circumstances of these future leaders are necessary guides in judging them. The present study investigates the relationship between the psychosocial conditions of university undergraduates in south-western Nigeria and creativity. This will promote an understanding of how interactions between the variables and creativity will enhance deliberate techniques to nurture creativity in university undergraduates. The variables are parental influence, risk taking behaviour, peer pressure, knowledge/awareness, attitude, age, course of study and gender.

The study focused on the following research questions:

1. Is there any significant relationship between the predictors (parental influence, risk taking behaviour, peer pressure, knowledge/awareness, attitude, age, course of study and gender) and creativity?
2. What are the relative contributions of parental influence, risk taking behaviour, peer pressure, knowledge/awareness, attitude, age, course of study and gender to level of creativity among undergraduates in Oyo, Osun and Lagos States?

## **Methodology**

### **a) Sample**

Multistage sampling was used to purposively select four public (federal and state) universities in south-western Nigeria on the basis of age, availability of courses and location (coastal or hinterland). The sample was put together through stratified cluster sampling procedure. Consequently, 651 respondents were sampled (330 females and 321 males). Their ages ranged from 20 to 35 years (Mean=20.84; SD=1.82).

### **b) Instrumentation**

Four valid and reliable instruments were used to generate data:

#### **1. Predictors of Creativity among Nigerian University Undergraduates Questionnaire (POCANUQ) (Obialo, 2011)**

The investigators adopted the Predictors of Creativity among Nigerian University Undergraduates Questionnaire. The POCANUQ is in four (4) parts. Part I elicited demographic information from the undergraduates. Name of the university, gender, course of study, level of study and age of the respondent were obtained in this part. Part II is about the parental influence on undergraduates. It consists of fifteen (15) items responded to on a four point Likert Scale: Very Much Like Me (VMLM); Just Like Me (JLM); Unlike Me (UM) and Very Much Unlike Me (VMUM). The reliability coefficient was 0.87 (Cronbach Alpha).

Part III measured the risk taking behaviour of undergraduates. It comprised eighteen (18) items responded to on a four point Likert Scale of Very Much Like Me (VMLM); Just Like Me (JLM); Unlike Me (UM) and Very Much Unlike Me (VMUM). The reliability coefficient was 0.86. Part IV concerned the influence of peer pressure on undergraduates. This was also measured on a four point Likert Scale of Very Much Like Me (VMLM); Just Like Me (JLM); Unlike Me (UM) and Very Much Unlike Me (VMUM). The reliability coefficient was 0.88 (Cronbach Alpha). The overall reliability coefficient of the whole instrument was 0.87 (Cronbach Alpha).

#### **2. Knowledge/Awareness of Nigerian Undergraduates on Creativity Questionnaire (KNUCQ) (Obialo, 2011)**

The researchers adopted this instrument. It is divided into two parts. Part I generated information on the following demographical aspects of the undergraduate, name of university, course of study, level of study, gender and age. Part II measured the respondent's knowledge/awareness of creativity. This was achieved by the respondent's answer to seventeen (17) items on a four point Likert Scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) indicating the extent of agreement or disagreement with each statement. The reliability coefficient of 0.78 was obtained (using Cronbach Alpha).

### **3. Attitude of Nigerian Undergraduates towards Creativity Questionnaire (ANUCQ) (Obialo, 2011).**

This instrument was divided into two parts. Part I generated information on the following demographical aspects of the respondent, name of university, course of study, level of study, gender and age. Part II tested the attitude of the undergraduate towards creativity. It was divided into two response formats. The first consisted of twelve (12) items, which were on a four point Likert Scale of Scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). A reliability index of 0.78 was obtained. In the second section, the respondents simply answered True or False to each of the four statements. The reliability coefficient was 0.79 (using KR20 formula).

### **4. Creativity Assessment Package (CAP) (Williams, 1993).**

The researchers adopted this instrument. It is a three- in- one package designed to measure creativity based on the Williams Model of Creativity (Williams, 1993). The first instrument is the Test of Divergent Thinking (Forms A and B). The second is Test of Divergent Feeling. The last instrument is a rating scale for parents and teachers. These instruments are used to screen, identify and evaluate the most important factors of creativity found in children (Williams, 1993).

The researchers adopted Test of Divergent Feeling for this study. This instrument is a 50-item multiple choice exercise. It tests respondents' curiosity and imagination (ideation), complexity and risk taking by asking them to indicate how they believe they fare in all the aforementioned factors. Out of the 50-items, 12 items measure curiosity, 12 items also measure imagination while 13 items measure risk taking and another 13 items measure complexity. All these are affective factors connected to creativity. The reliability indices as quoted by the author are between 0.71 and 0.76 (Test retest Method). However, the researchers revalidated the instrument-Exercise in Divergent Feeling and obtained a reliability coefficient of 0.71 (Cronbach Alpha).

### **Data Collection and Analysis**

The instruments were administered by the investigators with the support of trained research assistants in three states and the four universities for about two months. Multiple regression analysis was used to examine the relationship between the psychosocial factors and creativity.

### **Results**

**Research Question 1:** Is there any significant relationship between the predictors (parental influence, risk taking behaviour, peer pressure, knowledge/Awareness, attitude, age, course of study and gender) and the criterion (creativity)?

	Parental Influence	Risk Taking	Peer Influence	Knowledge/Awareness	Attitude	Williams Creativity Test	Age	Course of Study	Gender
Parental Influence	1.000								
Risk Taking	.157*	1.000							
Peer Pressure	.227*	.615*	1.000						
Knowledge/Awareness	.205*	.159*	.280*	1.000					
Attitude	.182*	.155*	.363*	.427*	1.000				
Williams Creativity Test	.064	.007	.200*	.545*	.532*	1.000			
Age	-.023	-.029	-.018	.124*	-.099*	.104*	1.000		
Course of Study	-.050	-.149*	-.071	.051	.003	-.047	-.209*	1.000	
Gender	.116*	-.147*	-.074	.016	-.017	.036	-.170*	0.000	1.000

\*Significant at P < 0.05

**Table 1b Relationship between the criterion and the predictors**

Variable	Criterion (Williams Creativity Test)	P value
Parental influence	0.064	0.106
Risk taking behavior	0.007	0.868
Peer Pressure	0.200	0.000*
Knowledge/Awareness of Creativity	0.545	0.000*
Attitude towards Creativity	0.532	0.000*
Age	0.104	0.008*
Course of Study	-0.047	0.235
Gender	0.036	0.368

\*Significant at P < 0.05

Tables 1a and 1b present the correlation coefficients among the predictors (parental influence, risk taking behaviour, peer pressure, knowledge/awareness, attitude, age, course of study and gender) and the criterion (creativity). Table 1b shows that peer pressure, knowledge/awareness of creativity, attitude and age show positive and significant correlation with creativity. For instance, peer pressure and creativity have a correlation of 0.200 meaning direct relationship. Knowledge/awareness of creativity and creativity have a correlation of 0.545. The correlation between attitude and creativity is 0.532 and it is statistically significant showing direct relationship. The correlation between age and creativity is 0.104. This shows that age and creativity have direct relationship because of the positive relationship. However, the correlation between gender and creativity is 0.036, which is not statistically significant. Risk taking behaviour and creativity have a correlation of 0.007 which is not statistically significant. The correlation between parental influence and creativity is 0.064; it is not statistically significant. Course of study and creativity have a correlation of -0.047 which is not statistically significant. This shows that gender, risk taking behaviour, parental influence and course of study have no direct relationship with creativity.

**Research Question 2:** What are the relative contributions of parental influence, risk taking behaviour, peer pressure, knowledge/awareness, attitude, age, course of study and gender to level of creativity among undergraduates in Oyo, Osun and Lagos States?

**Table 2: Relative Contributions of the predictors to the Criterion**

Model	Unstandardized Coefficients		Standardized coefficients	T	Sig.
	B	Std. Error	Beta $\beta$		
(Constant)	-19.045	12.60		-1.511	.131
Parental influence	-.368	.128	-0.090	-2.884	.004*
Risk Taking behaviour	-.431	.127	-0.132	-3.409	.001*
Peer Pressure	.184	.155	.048	1.189	.235
Knowledge/awareness of Creativity	1.463	.129	.392	11.305	.000*
Attitude to Creativity	1.511	.137	.390	11.050	.000*
Age	1.088	.432	.080	2.520	.012*
Course of Study	-1.184	.554	-0.067	-2.137	.033*
Gender	2.247	1.529	.046	1.469	.140

\*Significant at  $P < 0.05$

Table 2 shows the standardized regression weight ( $\beta$ ), the standard error of estimate ( $SE\beta$ ), the degree of freedom (df), the T-ratio and the level at which the T-ratio is significant for each of the independent variables. The table also shows that out of the eight independent variables, the value of T-ratio associated with the respective variables, indicates that six out of the eight predictor- variables (parental influence- $\beta=0.090$ ,  $t(639)=2.884$ ; risk taking behaviour- $\beta=-0.132$ ,  $t(639)=3.409$ ; knowledge of creativity- $\beta=0.392$ ,  $t(639)=11.305$ ; attitude towards creativity- $\beta=0.390$ ,  $t(639)=11.050$ ; age-  $\beta= 0.80$ ,  $t=2.520$ , and course of study- $\beta=-0.067$ ,  $t(639)=-2.137$ , contributed significantly to the students' results in creativity. Two of the predictor variables, peer pressure and gender, did not contribute significantly to the criterion. The values of the standardized regression weights associated with the six significant variables indicate that knowledge of creativity is the most potent contributor to the prediction. This is followed by attitude towards creativity, risk taking behaviour, parental influence, age, and course of study in that order.

## Discussion

Knowledge of a construct influences how information about it is sourced, promoted and protected. We live in a world transiting from knowledge-based economy to creativity based economy (McWilliams, 2007). The quest for knowledge is perceived as the foundation of progress and development. As such, creativity assists in using the knowledge as tool for the transformation of individuals, groups, societies and phenomena. Lack of knowledge means absence of information because as attested to by



Runco, (2007) knowledge transforms information and brings understanding. Obialo (2017b) reviewed the different methods of teaching creativity to different groups of individuals and reported that teaching people deliberate creativity truly changes their ability to think and excel in different endeavours. Consequently, creativity is needed to transform any form of knowledge an individual possesses.

Mostert and Frijling (2001), Burnett and Figliotti (2015) and Obialo (2017b and 2018) showed that providing knowledge or awareness to people transforms their performance in creativity. Shriki (2009) also reported a complete transformation of not only the creative performance of his sample, which comprised mathematics teachers in creativity, but also in their mathematical and didactic knowledge. This shows that creative knowledge is not restricted to only a domain of ability. It transforms the entire person. Creativity could thus be described as revolutionary.

An undergraduate that exhibits a negative attitude towards the idea of creativity might see creativity as a waste of time because attitude involves outlook, compassion and trust (Akinboye, 2003). Trust would therefore manifest in how persons exposed to creativity perceive it as capable of transforming their life for good. In spite of the general notion that anyone can be trained to acquire the knowledge of creativity, Keong & Soon (1996), found that attitude was important to the process of attaining the knowledge of creativity. They found that despite the training aimed at changing the attitude of managers and executives, the negative attitude of some of them did not change. The lack of passion for creativity made the training a waste as the trainees had neither trust nor confidence that the training was designed for their good. This finding suggests that some trainees may not be prepared for creativity training because of their negative attitude.

When an undergraduate feels as found in the questionnaire, that “Passing exams is more important than thinking about creativity”; “It does not matter whether one is creative or not”; “Creativity should be the least of people's concerns in the university” and “There is no need to lose sleep over creativity”, one can rightly assert that the undergraduate has a negative attitude towards creativity. On the contrary, respondents with a positive attitude will be well disposed to receiving new facts about creativity. This attitude will shape their outlook towards the novel idea called creativity (Akinboye, 2003; Keong and Soon, 1996).

Next in the hierarchy of significance to the prediction is risk-taking behaviour. Literature (McWilliams and Dawson, 2007; Piirto, 2004; Driver, 2001 and Beetlestone, 1998) identified risk as an important element in creativity. The quest to discover is a constant characteristic of creative people (Akinboye, 2003). Discovery entails risks as they think outside the box and venture into areas where conventions and expectations do not accommodate. Undergraduates are generally prepared to assume positions of leadership and responsibility in their respective societies (Kenawy, 2006) and the Nigerian university system needs to address this fact the present Driver (2001) discovered that risk-taking behaviour aimed at preparing students for the challenges of

the work place increased the creativity of business education undergraduates. . This study reiterates the global quest for more creative workers to drive both industry and other areas of the creative economy.

Literature reports different types of environments that influence creativity (Bowkett, 2007; Sawyer, 2006 & Pirto, 1998). The family, as the first environment of the student, is crucial in shaping their creativity. This fact explains the significance of parental influence in predicting the creativity of Nigerian undergraduates. Kemple and Nissenberg (2000) studied the role of families in fostering creativity and reported that the environment in which children live, work and play could develop or stifle their creativity. Parental influence becomes relevant in Nigeria where a lot is expected by society from parents in the upbringing of their children. Moreover, the numerous ethnic groups in the country tend to impose many responsibilities on institutions that are considered traditional. The family is one. It is a common practice to find many undergraduates living with their parents since the free education programme of the various tiers of government does not cover university education. Parents become catalysts for creativity. They nurture creativity in their children in accordance with the level of awareness they have of the concept of creativity (Mostert & Frijling, 2001). Consequently, parents who have good knowledge and are positive towards creativity to nurture creativity in their children, no matter their ages.

Age comes next to parental influence. Kuster (2005), Nwazuoke, Osiki and Nwazuoke, (2000) and Nesvetailov, (1999) revealed conflicting facts on the best age for creative accomplishments. They however showed that both the young and the old can be creative. This suggests that there may be some extraneous factor contributing to the creativity of people no matter their age. Gable (2000) suggests that the younger one is the more prone the person will be to psychosocial factors which nurture creativity because youths seem to enjoy freedom from conventions, societal expectations and even peer pressure. This sense of freedom is manifested in the leeway provided at times by parents of creative people for their children to freely express themselves at an early age (Dacey, 2007b). The ability to freely express oneself thus becomes a prelude to creative manifestations.

Dacey (2007b) identified six critical periods during which creativity is best cultivated. These are the first five years of life, early adolescence, early adult years to about 20 years; from 29 to 31 years; the early forties, and from 65 to 70 years. The present study showed the average age of the sample to be 20.8 years. Dacey's finding gives credence to this study as the result shows that the subjects returned a moderate creativity score with a mean score of 72.73. Since, the average age of the sample is 20.8 years, there is a possibility that the sampled undergraduates are gradually leaving the critical period of vibrant creativity and are left with average creative ability. The consequence is that the sample is averagely creative. By the time they graduate from the university, they might have lost their creative skills or tendencies. Loss of creative



ability at the point of employment would seem to be responsible for the lack of creativity noticed in graduates by stakeholders.

Nevertheless, since age did not correlate highly with creativity in comparison with other variables like knowledge/awareness, attitude, risk taking behaviour and parental influence, it might be explicable in the sense that the university system might have acted as a leveler of some sort for all categories of undergraduates. The transition from home to the university in terms of freedom from parental control seems insignificant as most undergraduates in Nigerian universities might still be living with their parents. This fact differentiates this sample from samples from the developed world where children usually stop living with their parents when they go to the universities or when they are 18 years (Gould, 1978). The fact that those who are 18 years and above do not enjoy independence in the Nigerian society might be what Runco (2007) refers to as age differences in cultures. Thus while the samples in the developed world enjoy some kind of freedom, the Nigerian sample does not. This freedom is very important in determining creative abilities as creative people thrive in an atmosphere of freedom (Sawyer, 2006). The absence of true independence on the part of the Nigerian undergraduates might impede the creative potential since the parents still exercise great influence on them. In this circumstance, creativity might not make any difference to the undergraduate no matter the age. This position supports the report of Dacey (2007a) that there is no ideal age for creativity as it seems to be a matter left to the individual (Runco, 2007).

Course of study is next in the hierarchy of significance. . This work revealed no discrimination in terms of courses and supports earlier findings that all academic disciplines require creativity (Animashahun, 2002, Akinboye, 2003, Runco, 2007 & Obialo, 2017). This fact seems to have motivated Akinboye's (2003) work on categories of creativity and his affirmation that creativity is interdisciplinary. Every aspect of human development is driven by new ideas borne out of creativity. Driver, (2001), Akinboye (2003) and Kuster (2005) reported different aspects of disciplinary creativity confirming that all disciplines make use of creative skills as tools. Creativity is, therefore, not the preserve of any domain of knowledge.

As if in corroboration of Gable's (2000) findings, peer pressure showed no significant relationship in this study. Braun (2008) identifies desire for acceptance as a reason why people submit to pressure. Once this desire to conform and be socially accepted is fulfilled, it provides some sense of security to the individual. . The desire to conform can lead to temporary decrease in creativity (Gable, 2000). This should be further explicable from this present study in the sense that the average Nigerian undergraduate sampled might be enjoying a kind of freedom that shields from peer pressure. The results show the sample to be creative. The findings also revealed a strong correlation between creativity and knowledge. It could be safe to say that the sample is creative due to knowledge of creativity and since the average undergraduate is at the

stage of self-actualization and independence (Gould, 1978), it could not be influenced by their peers in matters of creativity.

Gender is not significant to the prediction. This is not surprising because the ability to create or be creative is a natural endowment of everyone (Akinboye, 2003, Etuk, 2007 & Runco, 2007) which is not gender biased. This result thus confirms earlier studies that gender has no significance in predicting creativity (Dacey, 2007b & Runco, 2007 & Sawyer, 2006). That gender has no significant correlation with creativity in this study could be accounted for by the fact that the Nigerian society is opening up to the global movement to make all genders to equally realize their potentials. Lack or presence of creativity might no longer be a gender based consideration.

The changing perception of the female gender in the society could also have removed the differences in their creativity score. This shift in perception would rub off positively on the female undergraduates as the changing trend would make them scale the wall of discrimination and bias and see themselves as equals with their male counterparts. This changing perception would mean that the female undergraduates would likely share attitudes and perceptions with their male colleagues as they are now provided the same level playing ground by society, especially the university community. The female respondents thus share the same opportunities and undergo the same experiences while in school. This result is even more important in the sense that the sample for this study had nine more female than the male participants. Thus there were 330 female participants to 321 male respondents. This was as a result of more females returning their questionnaires after the participants were sampled.

## **Conclusion**

The results presented in this study proved an empirical source for positing that stakeholders of the university system in Nigeria, especially lecturers, use the six significant psychosocial factors (knowledge of creativity, attitude towards creativity, risk taking behaviour, parental influence, age, and course of study) as a predictor set in understanding and promoting creative living among university students in the country. Policy makers should design deliberate strategies that would facilitate a synergy between the homes/families of undergraduates so that whatever they learn in the university to nurture creativity in them would be sustained by the family environment. Curriculum developers should facilitate creativity content of the university curriculum. The National Universities Commission (NUC), as a matter of urgency, should review the current university educational curriculum to incorporate deliberate creativity. It would also be beneficial to the Nigerian society if the corporate world would fund the training of undergraduates in deliberate creativity.

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