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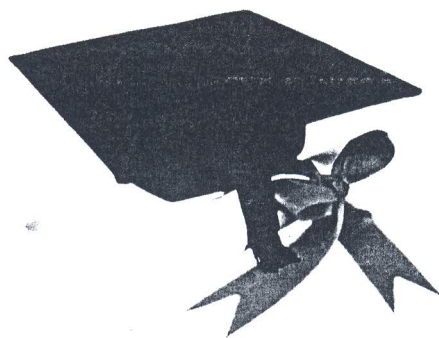
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# GENDER DIFFERENCES IN CREATIVE BEHAVIOURAL RATINGS AND ACADEMIC ACHIEVEMENT OF STUDENTS IN NIGERIAN UNIVERSITIES

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## Abstract

*This paper focused on gender differences in creative behavioural ratings and academic achievement of students in Nigerian Universities. The study adopted a descriptive survey design. One Thousand Eight Hundred (1800) students from six randomly selected universities in the south-east geo-political zone constituted the sample. Behavioural Rating Scale for Students (BRASS) was used for data collection. Students' GPA in their general studies constituted their academic achievement data. Mean and Standard Deviation scores, t-test, and chi square statistics were used to analyze the data collected. Results revealed that significant differences exist in the creative behavioural ratings of male and female students. Differences also exist in the academic achievements of students who have high and low level of creative behavioural ratings. It was recommended among others that seminars and workshops should be organized by psychologists, physicians, and lecturers to sensitize student, especially female ones on the effects of poor creative behavioural ratings on their academic achievement.*



Education is a key instrument for developing human capabilities and sustainable development in any country. In Nigeria, government perceives education as an instrument par-excellence for the realization of national growth and development (FRN 2004). This becomes a good avenue that could be utilized to change people's way of thinking, attitude, orientation, perception and mindset through impartation of right type of knowledge in basic skills, academics, discipline, citizenship, scientific and divergent thinking (Okeke, Edikpa and Obi 2013).

However, the last two decades in Nigeria, has witnessed serious increase in academic failure and in job performance of University graduates. Onyiliofor (2008) confirmed the increasing decline in the nation's standard of education vis-à-vis, the poor performance of students especially the female ones. Azikiwe (2004) Okereke and Uzoma (2010) reported the outcry of parents, lecturers, government and the public over the deteriorating quality of tertiary education in Nigeria. This in fact according to Dike (2002) is increasingly leading to breeding of half-backed graduates who lack creative and innovative capabilities.

There are many factors outlined by previous researchers on the causes of poor academic achievement and differences in male and female students' academic achievement. Such factors include; poverty, family background, poor feeding habits (Mgbeodili, 2006); time management, anxiety (Onyeliofor, 2008) stress (Ipem, 2013). The present researchers opine that a more possible reason for poor academic achievement and difference in the academic achievement of male and female students among Nigerian Universities could be lack of creative behavioural ratings in their studies.

An important task for this study is to investigate if differences in gender can influence students' creative behavioural ratings. Gender in this context refers to the social construct, social attributes and opportunities associated with being male or female and the relationship that exists between women and men as well as the relation between men and those between women. Gender is a serious issue in Education setting. Ipem (2013) found that gender difference in students can influence their academic achievement. Ogbede (2007) in his study revealed that girls tend to drop out of school earlier than boys. His findings also revealed that few females who found themselves in school, performs poorly than males.

Behavioural ratings in this study refer to the adjustment level of students in Nigerian universities in relation to their studies and academic achievement. This adjustment level may contribute to their academic success and failure. Aremu (2008) found that when students express lack of interest in the courses offered, it affects their reasoning and listening skills and when they believe that they cannot pass their

examinations, their academic achievement are affected. A plausible reason for this according to Ipem (2013) is that believe, informs behaviour which in turn affects performance. Mather and Goldsten (2001) also noted that poor behavioural pattern exhibited by students could make them prone to stress which will eventually affect their performance. Adjustment according to Mather and Goldstein (2009) is aimed at manipulating the antecedent and consequence of behaviour so that the likelihood of appropriate behaviour is increased.

There has been controversy over who achieve better academically, male or female students. Aremu (2008) found that most student problems are more of academics than personal. He stated that time management, procrastination, difficulties in concentration, attention, organization and productivity are some of the academic problems. Academic achievement according to Ipem (2013) is the performance of students in various courses offered in school over the years. Academic achievement is of two forms; one leads to success and the other to failure. Ogbede (2000) found that male students achieve more academically than females. Yoruk (2004) revealed that women are more accurate than men in spellings and verbal works. Academic achievement according to Alao (2003) involves reading and studying with determination and making use of one's creative ability, it then implies that for a student to improve academically, he needs to be creative and innovative.

Creativity is focused on changing how one thinks and acts (Norman, 2006) so as to contribute meaningfully to the society and to the individual's life. To be creative according to Paulus (2013) is to make something from nothing. It involves divergent thinking on how to solve problems. It is the ability to come up with a clever or particular way of solving problems. Creative students according to Legrenz (2013) are likely to be innovative. This is because innovation usually stems from creativity. It is the implementation of creative ideas or actions; the ability to turn new ideas into reality (Legrenz, 2013). Mgboro and Eke (2013) posited that creative behaviour is needed in students to overcome the out dated lines where students follow detailed instructions to perform respective unskilled tasks.

This study is based on the fact that a student who is creative may achieve high academically because he will also have high behavioural ratings. When a student is creative, his behavioural rating scale will no doubt be high. Studies revealed that the more independent thinking students are, the more successful they will be in their academic achievement (Paulus, 2013; Legrenz, 2013). Sidiq (2007) observed that student's behaviour towards school subjects could influence their performance in those subjects either positively or negatively. Ipem (2013) found that males and females who have high behavioural ratings performed high academically, while



students with low behavioural ratings performed low academically and the findings were in favour of male students.

The unfortunate state is that most students have not been able to discover the tactics for academic success. The more reason for this is because they lack creative thinking. Most students in Nigerian Universities may not realize their study habit until in their final year. Some cannot plan their private time-table thus cannot study on their own. Mgbeodili (2006) asserted that an average Nigerian student is believed to have poor reading and writing habits. Ipem (2005) stated that it takes a lot more than reading to achieve high academically. She opines that many things are involved. For instance, asking questions for clarifications, listening and paying attention in the class, intrinsic motivation, positive learning styles, just to mention a few. It takes only a creative person to understand himself, his academic environment and to create conducive environment for his study. Most university students find it difficult to make use of their library for study and research purposes.

Similarly, most Nigerian students especially the female ones at this computer age have no knowledge of computer, much more about internet usage for assignments. A number of students especially the female ones perceives the reading of news papers as waste of time, but enjoy preparing foreign materials and taking them into the examination halls. Paulus (2013) found that when creative skills improve, student's engagement in learning also improves. Leong, Bonz and Zarcher (1997) in their study found meaningful and predictive relationship between student's creative behaviours and their academic achievement.

Melgosa (1997) identified behaviour characteristics of students as: absenteeism from school, absent mindedness in the class, truancy and poor study habits. Abdulahi (1999) identified avoidance behaviour and speech deficiency. Adeoye (1992) found withdrawal from school and social activities, smoking and drinking habits. It is against this background that these researchers considered gender differences in creative behavioural ratings and academic achievement of students in Nigeria universities as an important issue for investigation.

### **Statement of the Problem**

Several evidences abound for the decline in the academic achievement of students in Nigerian universities. There has also been an outcry from the society on the serious differences found in the academic achievement of male and female Nigerian university students. Previous researchers on academic related issues like Alao (2003), Mgbeodili (2006); Onyiliofor (2008); Ipem (2013), considered poverty, poor feeding habit, lack of time management, anxiety and stress respectively, but none of these researchers considered the influence of students' creative behavioural

ratings on their academic achievement. This is the gap this study tried to fill by considering creative abilities of students in their behavioural adjustment level that could lead to their academic success or failure.

The main purpose of this study therefore, is to investigate the influence of the creative behavioural ratings on the academic achievement of male and female Nigerian University students.

Specifically, the study tried to:

1. Identify the creative behavioural ratings of male and female students in Nigerian Universities.
2. Ascertain whether differences exist in the creative behavioural ratings of male and female students in Nigerian Universities.
3. Find out if any difference exists in the academic achievement of male and female Nigerian University students who experience high level of creative behavioural ratings and those who experience low level of creative behavioural ratings.

### **Research Questions**

The following three research questions guided the study.

1. What are the creative behavioural ratings of male and female students in Nigerian universities?
2. Does any difference exist in the creative behavioural ratings of male and female students in Nigeria universities?
3. Is there any difference in the academic achievement of male and female students who experience high level of creative behavioural ratings and those who experience low level of creative behavioural ratings?

### **Hypotheses**

The following hypotheses were formulated and tested for the study

**H0<sub>1</sub>:** There is no significant difference in the creative behavioural ratings of male and female Nigerian university students.

**H0<sub>2</sub>:** There is no significant difference in the academic achievement of students who experience high level of creative behavioural ratings and those who experience low level of creative behavioural ratings.

### **Methodology**

The study adopted a descriptive survey design. This design according to Ipem (2013) is a data collected plan in which the researcher goes to the field to obtain information as currently obtainable for the purpose of describing an existing phenomenon without deliberate attempt to control the independent variables. The population for this study comprised all Nigerian university students about (21,912), in the South East Geo-political Zone (Abia, Anambra, Ebonyi, Enugu and Imo). The



sample consists of only one thousand eight hundred (1800) male and female students from the six randomly selected Universities. Nnamdi Azikiwe University Awka and University of Nigeria Nsukka, (Federal). Imo State University and Ebonyi State University (State), Madonna University Okija and Caritas University Enugu (Private).

The selection was done using stratified random sampling technique and the stratification was based on gender.

### **Instrumentation**

An instrument titled Behavioural Rating Scale for Students (BRASS) was used for data collection. It was adapted from Ekennias (2001) Study Behavioural Inventory (SBI) which was designed to identify students' study habits. A proforma was used to collect students' GPA on General Study (GS) in the Use of English. This constituted their academic achievement data. The choice of GS course was justified because it is a general course approved by the NUC to be offered by all university students. BRASS was a 25 item questionnaire with two sections. Section 'A' elicited students demographic data such as matriculation number, school type, faculty and gender. Section 'B' elicits information on behaviours exhibited by students towards their studies. The instrument was face and content validated by experts in measurement and evaluation and psychology.

Test – retest method of an interval of three weeks was applied using Pearson Product Moment Correlation Statistics, and a coefficient value of 0.76 was obtained. The instrument was administered to 1800 Nigerian University students from the selected universities in the south-east geo-political zone and collected with the help of research assistants.

The instrument was fashioned on a four point Likert scale of VOTF – Very Often, OFT – Often, SOMT Sometimes, NEV- Never. Any item that scores between 2.5 and above is rated high creative behavioural rating but item below 2.5 is rated low creative behavioural rating.

### **Data Analysis**

Data collected were analyzed using Mean and Standard Deviation to answer research question one. A t-test statistics was used to test hypothesis one and chi square statistics was used to analyze hypothesis two.

**Research Question One:** What are the creative behavioural ratings of students in Nigerian Universities?

To answer this research question, responses of the respondents to items 1 to 25 of the questionnaire that addressed the creative behavioural ratings of male and female students in Nigerian Universities were collated on statistical coding sheets.

The set of data were subjected to mean and standard deviation and the results are as shown below.

**Table 1: Mean and Standard Deviation of Respondents' Experience on Creative Behavioural Ratings**

S/N	Items	No	Mean	Std. Deviation
1	I have the problem of writing down even the things I recall during examinations	1,800	3.20	.87557
2	I spend too much time on the subjects I like best and pay little or no attention to the difficult ones	1,800	3.16	.82186
3	I find it difficult answering the required number of questions in examinations before the time is up	1,800	3.15	1.03405
4	I always present my assignments in a logical and organized manner	1,800	3.12	.75854
5	I like studying in a quiet place because I hate distraction	1,800	3.06	.83507
6	I take time to plan and organize my points while writing tests and examination	1,800	3.05	.96180
7	I enjoy working in a situation involving competing with others	1,800	3.02	.89582
8	I give opportunity for exchange of idea/information with my colleagues	1,800	2.95	.97152
9	my colleagues and I always hold group studies	1,800	2.93	.94904
10	I use the school library for serious study.	1,800	2.91	.98599
11	I make use of internate information for my assignments	1,800	2.88	.95234
12	There is mutual understanding and respect between me and my colleagues	1,800	2.75	1.10497
13	I work at a fast rate regardless of whether there is time or not.	1,800	2.75	1.04552
14	I always ask questions when I did not understand any topic taught in the class	1,800	2.74	.98737



15	I rebuke some of my colleagues who may come late to class	1,800	2.72	1.01851
16	I strive to lead others in various activities so that they may respect me.	1,800	2.66	1.05594
17	I don't get to meet with any of my colleagues for discussion after school.	1,800	2.60	1.00100
18	I engage in extra-curriculum activities (e.g. sports, face-book, watching films and chatting on phones) which take so much of my time that I have no sufficient time to study.	1,800	2.55	1.15497
19	I stick to the schedule on my timetable for my private study.	1,800	2.48	1.09805
20	My colleagues hold me in high esteem because of my academic performance.	1,800	2.46	1.02458
21	I spend extra time studying to make good grades	1,800	2.44	1.06086
22	I enjoy researching and gathering information from the library.	1,800	2.40	1.08913
23	I miss class activities because I feel that I can always cover the missed lessons	1,800	2.36	1.11103
24	I outline salient points in the materials I studied when I read.	1,800	2.23	1.06240
25	I consider the eligibility and neatness of my written work while writing tests and examinations.	1,800	2.06	.99771

Table 1 shows that having problem with writing down even the things I recall during examinations, had the highest response from the respondents with mean score of 3.20 and standard deviation of .87557. This is followed by spending too much time on the subjects I like best with the mean score of 3.16 and standard deviation of .82166. Paying little or no attention to the difficult ones was the third on the list with mean score of 3.15. While considering the eligibility and neatness of my written work while writing tests and examinations had the least of the responses.

The result was not in favour of most Nigerian University students who must have responded to Never True of Me instead of Always True of Me. Thus, the high mean rating (3.20, 3.16 and 3.15) obtained in the responses on the items are not supportive to high academic achievement. This implies that students of Nigeria universities have low behavioural ratings in their study habits.

**H0<sub>1</sub>:** There is no significant difference in the creative behavioural ratings of male and female students in Nigerian universities.

In order to test this hypothesis, responses of the students to creative behavioural ratings scale (items 1 to 25) were collated on statistical coding sheets on the basis of gender (male and female). The set of data were subjected to t-test statistical analysis with the use of SPSS 17.0 window version and the result is shown below.

**Table 2: t-test Analysis Showing Differences in Creative Behavioural Ratings of Male and Female Students in Nigerian Universities**

Variable	No	Mean	Std	df	Cal. value	P-value	Decision
Male	720	37.83	2.85	1798	55.79	0.000	Sig.
Female	1080	21.65	7.414				

Table 2 shows that the calculated t-value is 55.79 with p-value of 0.000 at 0.05 level of significance. Since the calculated p-value is less than the level of significance, hypothesis 2 is rejected. This means that there is a significant difference in the creative behavioural ratings of male and female Nigerian university students. This is in favour of male students with mean of 37.83 greater than that of the females with mean of 21.65 as indicated in table 2 above.

**H0<sub>2</sub>:** There is no significant difference in the academic achievement of male and female students in Nigerian universities who experienced high level of creative behavioural rating and those who experienced low level of creative behavioural ratings.

In order to test hypothesis 2, GPA scores of sampled students in the use of English were collated and the average computed. The GPA scores computed were transformed and categorized into high and low academic achievements. Responses of the sampled students to items 1 to 25 on Creative Behavioural Rating Scale were also collated on statistical coding sheets. The two sets of data were subjected to chi-square ( $\chi^2$ ) statistical technique with the use of SPSS 17.0 window version and the result is shown below.



**Table 3: Differences in the Academic Achievement of Male and Female Students Who Experienced Low and High Levels of Creative Behavioural Ratings**

Gender	Academic Achievement		Behavioural ratings			Df	Cal. $\chi^2$ value	Sig. (2-tailed)	Remarks
			High	Low	Total				
Male	High academic achievement of male students	Count	301	205	506	3	262.060	0.000	Sig.
		Expected	270.3	295.5	506.0				
	Low academic achievement of male students	Count	103	111	214	3	262.060	0.000	Sig.
		Expected	125.1	88.9	214.0				
Female	High academic achievement of female students	Count	211	175	386	3	262.060	0.000	Sig.
		Expected	160.4	225.6	386.0				
	Low academic achievement of female students	Count	125	569	694	3	262.060	0.000	Sig.
		Expected	288.4	405.6	694.0				
Total		Count	740	1060	1800	3	262.060	0.000	Sig.
		Expected	740	1052.0	1800.0				

Table 3 indicates that the calculated  $\chi^2$  value is 123.469 with p-value of 0.000 at 0.05, level of significance. Since the computed p-value (0.000) is less than the table value at level of significance (0.05), hypothesis 2 is therefore rejected. This means that there is significant difference in the academic achievement of male and female students in Nigerian universities who experienced high and low level of creative behavioural ratings. This is in favour of male students.

Results in table 3 revealed that out of 1800 students, 506 males and 386 females achieved high academically. However, out of 506 male students, who achieved high academically, 301 experienced high creative behavioural rating, while 205 experienced low behavioural ratings. Out of 386 female students who achieved high academically, 211 experienced high creative behavioural ratings and 175 experienced low behavioural ratings. In all, only 214 male achieved high academically and 694 female achieved low academically.

### Discussion of Findings

The findings of this study indicate that majority of the students especially the female ones experience low creative behavioural ratings in their studies. This implies that most students were not creative in their studies. Therefore, they were not adjusting properly to the desirable behaviours towards attaining high level of academic achievement.

This is a more plausible reason for poor academic achievement among Nigerian university students. This finding is in line with the findings of Mather and Goldstein (2001) who posited that the behavioural pattern of an individual could affect him academically.

The findings of this study also revealed a significant difference in the creative behavioural ratings of male and female Nigerian university students. This was in favour of male students with mean of 37.83 greater than that of the females with mean of 21.65. The findings corroborate the result of Aremu (2008) who revealed that poor study habit among students could lead to lack of interest in courses offered, examination, malpractices and poor academic performance. A plausible reason for this could be that students did not receive enough guidance and counselling service in the school.

The study also found a significant difference in the academic achievement of students who experienced low creative behavioural ratings and those who experienced high creative behavioural ratings. This finding was also in favour of male students. This is in line with Paulus (2013) who posited that lack of innovative and creative capabilities could lead to poor performance. Legrenzi (2013) stated that creativity and innovation are the key factors to academic success.

### **Conclusion**

The study investigated gender differences in creative behavioural ratings and academic achievement of students in Nigerian universities. Evidences abound that male and female students in Nigerian universities perform poorly academically. This was traceable to their creative behavioural ratings which contribute to their academic successes and failures. Significant difference was found in the creative behavioural ratings of male and female students and this was in favour of male students. There was also a significant difference in the academic achievement of students who experienced high creative behavioural ratings and those who experienced low creative behavioural ratings. This was also in favour of male students. This implies that male students are more creative in their study than female students and this led to their excellent academic achievement.

### **Recommendations**

The following recommendations were made with a view to improving academic achievement through creative behavioural ratings among students.

Lecturers should be re-oriented to advocate for creativity within the context of their subjects by encouraging students to find, formulate, explore, interpret and resolve their academic problems. They should also pay attention to the development



of their students' academic and social coping skills. This could be achieved by encouraging cooperative and competitive learning, being friendly, accessible and sensitive to students' academic and psychological needs. They should also equip their students with inner strength that tells them that they are competent, creative and worthy.

There is need for counsellors to establish a standard counselling centre in all universities that would be manned by experts in the field. This would give room for referral service of the physicians in case of any psychological problem. Psychologists and sociologists should organize seminars and workshops on academic related issues addressing the importance of creativity and good study habit among students to improve their academic excellence.

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