Influence of Psychosocial Factors on Student's Academic Performance in One of Nigerian Colleges of Education

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Abstract

This paper examined the influence of psychosocial factors on student’s academic performance. Self-administered questionnaire was applied as the method of data collection and a sample of 339 students’ from five faculties/schools in Potiskum College were chosen based on stratified and simple random sampling techniques to complete the survey. After analyzing the data collected, Person’s correlation coefficient reflected that, there was a positive and significant correlation between the all four variables: students’ attitudes towards lecturers, academic self-efficacy, students’-lecturers’ interaction and academic performance. Moreover, multiple regression analysis by using stepwise method was conducted to estimate the prediction power of the independent variables on the dependent variable. The finding indicated that only attitude and interaction could significantly predict students’ academic performance by R²=65.6%. Meaning academic self-efficacy failed to predict academic performance in present study. To conclude in this study, attitude and interaction are important factors in influencing students’ academic performance positively in Potiskum College of education, Nigeria.

Key words: psychosocial factors, students attitude, students' lecture interaction, academic self-efficacy, academic performance, college

Introduction

Psychosocial factors like attitude, self-efficacy and social interaction of students plays a great role in student’s academic performance and are essential for the delivery of high quality teaching and learning process. They remain the key determinant of student academic performance (Fishbein, 1967; Bandura, 1986 & Brophy, 2001). There is also general belief that human behavior and actions are influenced by attitudes whereby attitudes are seen as the cause and behavior as the effect (Chepchieng, 2004). This could be attributed to the fact that lecturers contact with a students in or out of the classroom is very crucial in student’s motivation and involvement in all facets of life. Whereas negative psychosocial factors distort teaching and learning techniques, positive psychosocial factors facilitate academic performance positively and outright expression of both lecturer and student intelligence because Universities or Colleges have no any value without students or lecturers as they are the greatest paramount quality for any educational institution. The development of any society is directly connected with students’ academic performance (Mushtaq et al., 2012). Student academic performance plays a crucial role in bringing qualitative graduates who will move a country to the right path in the near
future (Ali et al., 2009). And poor student academic performance is not only frustrating the students and parents, its effects are equally grave on the society in terms of dearth of manpower in all spheres of the economy and politics (Aremu & Sokan 2003).

Previous studies on the subject on students’ academic performance indicated that there exist several factors that influence students’ academic performance, but students’ and lecturers’ attitudes, students’ academic self-efficacy and students-lecturers’ interaction remained the key determinant of academic performance (Maina, 2012; Li, 2012; Tenaw, 2013; Adeyemo, 2007; Fan, 2012 and Swan 2002). According to Adunola (2011) and Ganyaupfu (2013), lecturing is a collaborative process that involve interaction between students’ and the lecturers that at the end brings about change in the students behavior. But, psychosocial factors in teaching and learning process is a multidimensional concept that measures various interrelated aspect of learning in educational system which include students’ attitudes towards lecturer, students’ academic self-efficacy and student-lecturer interaction. Therefore, consistent evaluation of the aforementioned psychosocial factors is very crucial most especially among students’ of College of education in Nigeria which are potential teachers of primary and junior secondary schools since in practice, the factors are directly linked with students’ academic performance (Maina, 2012; Tenaw, 2013 and Fan 2012).

**Statement of Problem**

A lot of psychosocial constructs influence students’ academic performance. It is therefore not surprising for Mushtaq et al, (2012) to stated that, academic performance is affected either by social, psychological, economic, environmental and personal factors in which the factors have a powerful influence on academic achievement of students’ as either positive or negative, but they vary from one society to another. Hence, the present study examined the factors on one of the College of education in order to bridge the gap in the existing literature particularly in Nigerian context and world at large considering the fact that the factors vary from one institution to another.

**Research Question**

Which of the psychosocial factors (attitude, academic self-efficacy & interaction) influence student academic performance most in the College?

**Research Objective**

The aim of this paper was to examine the influence of psychosocial factors among final year students (NCE, 111) of Federal College of Education (Technical) Potiskum, Yobe State, Nigeria.

**Hypothesis**

Psychosocial factors such as attitudes, academic self-efficacy and interaction are factors to contribute to students’ academic performance in Potiskum College of education, Nigeria.
Literature Review

**Students’ Academic Performance**

Academic performance is often defined in terms of examination performance (Cambridge University Report, 2003). It is also defined as student academic performance in school (Chen, 2007). Evidence from the previous studies indicated that students’ academic performance can be evaluated through different ways (Ganyaupfu, 2013). This is due to the fact that every society has its own criteria or factors of measuring student academic performance like Pakistan use CGPA, GPA and students' test result in academic performance measurement, Malaysia used CGPA (Ali et al., 2009). United States used CGPA (Nonis & Wright 2003). In Nigeria too students are been evaluated by using CGPA to determine their academic performance (Umar et al., 2010). Moreover most of the researchers around the globe uses Grade Point Average (GPA) to evaluate student academic performance (Galiher, 2006; Darling, 2005). In this study, students’ academic performance refers to actual cumulative grade point average (CGPA) of NCE, 111 students’ of Potiskum College of education, Nigeria.

**Attitude and Academic Performance**

According to Fishbein (1967) attitude “are learned predispositions to respond to an object or class of objects in a favorable or unfavorable way”. Attitudes are consistent tendency by student’ or lecturers’ to response or react in a positive or negative towards an academic issues (Eggen and Kauchak, 2001). Attitude play a vital role in influencing student academic performance as either positively or negatively in academic community, because attitude is an expression of like or dislikes against a particular thing, place, event or person. Durajaiye (1976) argued that lecturer’s positive attitudes and good personalities are significantly related to good student academic performance. Studied by Adediwura & Tayo (2007), Li, (2012) & Maina, (2013) found a significant and positive correlation between attitude and academic performance.

**Academic Self-Efficacy and Academic Performance**

Another psychosocial factor that influence student academic performance is student academic self-efficacy which is the belief that an individual can efficiently perform some tasks that usually influence his or her own behavior in a positive way. Self-efficacy was originated from social cognitive theory which states a significant interaction between individual, environment, behavior and cognitive factors (Bandura, 1997). Self-efficacy is a psychological concept that influence healthy behaviors (Von Ah, Ebert, Ngamviro, Park, Kang, 2004). “Self-efficacy is a belief in one’s capabilities to organize and execute the causes of action required to manage prospective situation” (Bandura, 1986). Self-efficacy
implies the belief that we are efficient to do something determine our behavior at the end. According to Schunk (1991) academic self-efficacy refers to individuals’ convictions that they can successfully deliver any academic tasks at designated levels. “Academic self-efficacy refers to students’ perceptions of their competence to do their coursework” (Midgley et al., 2000). Bandura theory of self-efficacy argued that, human behavior can be predicted by an individual levels of confidence in their ability to succeed in a specific task (Bandura, 1997).

A lot of studies have revealed that there is significant influence of self-efficacy on human behavior and this cannot be overemphasized because people use to have high self-efficacy in some situation and lower in others, this shows that it is a behavioral change and it depends on one’s situation or condition (Bandura, 1997; Ando & Asakura, 2007). Student academic performance may be fluctuated because of the varying belief of students’ academic self-efficacy which depend on the performance outcome of the past experience (Tenaw, 2013). “Therefore who regarded themselves as inefficaciuous shy away from difficult task, slacken their effort and give up readily in the face of difficulties, dwell on their personal deficiencies, lower their aspirations, and suffer much anxiety and stress. Such self-efficacy misgivings undermine performance” (Bandura, 1986. P.395). Studied by Tenaw (2013) & Adeyemo (2007) found a positive and significant correlation between self-efficacy and academic performance. Similarly, Li, (2012) & Zajacova et al., (2005) found out that self-efficacy was significant predictor of academic performance.

**Interaction and Academic Performance**

Interaction is reciprocal process, once a lecturer and student interact, their thoughts, feelings and behavior would influence each other in the process of the interaction and resulted in behavioral changes (Thibaut & Kelley, 1959). Interaction of lecturer’s with students in higher learning is consider as important factor in improving student’s performance because is an aspect that consist of communication processes where students exchange information of the course contents and socio-emotional information that help student’s a lot in which certainly contribute to their academic performance positively (Brophy, 2001). Mendes (2003) list some key steps that would build positive teacher-student interaction: Teacher should ask students about their interests and try to understand the interest of the students as the teachers interact with them. Teachers should pay attention to students’ non-verbal response in the body language emitted by the students. Teachers should use self-discloser in order to understand students’ personal feelings in the classroom setting. Teacher should build on what is heard from the students and share his/her personal experience with the students in order for the students to feel free in expressing their own worries, stories and interest. In some cases the teacher should display empathy with students in class by communicating what was determined the needs of feelings of the students (Mendes, 2003). By following this interaction process, the teacher listening skills, communication and professionalism were enhanced significantly in a good effort to know the world of students, then able to open the door of interaction that brought about positive student academic performance (Mends, 2003). This is because effective teaching and learning depends basically on the interaction and relationship between lecturer and students.

Research conducted by Fan (2012), in Nigeria found a significant and positive relationship between teacher students interaction and student academic performance. Wubbels et al., (1993) in their studied found that teachers who exhibited more leadership, friendly and understanding behavior in their interaction with students’ enhanced student’s academic performance positively, while teachers who showed more uncertain, dissatisfied and admonishing behaviors in their interaction with students affect academic performance negatively. Similarly, Fraser et al., (2010) suggested that, lecturers from management department displayed positive interaction to their student’s in terms of leadership, helping/friendly and understanding behaviors that produce positive academic performance than their counterpart computer science department.
Methodology

This study used quantitative approach with correlational research design.

The population of this study is all students of Federal College of Education (Technical) Potiskum, Nigeria which are 4,992 students (FCET, 2016). But the target population consists of only final year students (799) who are currently hopefully to become primary and junior secondary schools teachers that have undergo three to four years teacher education program leading to the award of Nigeria Certificate in Education (NCE). The NCE, being the minimum teaching qualification in Nigeria, is under the umbrella of National Commission for Colleges of Education (NCCE). One of the major role of the Commission is to help ensure that Pre-teachers are given enough exposure to the core elements of the basic Curriculum of teaching and learning (NCCE, 2013).

To calculate the sample size of this study, statistical apparatuses and equations of Cochran, (1977) have been used by the researchers which gave the total sample of 339 respondents. Furthermore, stratified and simple random sampling techniques were used in order to collect the data from the respondents from their various faculties/school in the College.

In present study, questionnaire was used by the researchers as the basic instrument of data collection. In this study, student academic performance was measured based on actual or current CGPA of final year students of Federal College of Education (Technical) Potiskum, Yobe State, Nigeria which is the Sum of first and second semester Grade Point Average (GPA) of the students divided by two which gave their current CGPA.

The questionnaire on students’ attitude towards lecturer was measured based on 22 items, which were adapted from Mehdipour & Balaramulu (2013) in order to suit the study. All the questions utilized a Likert scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree). The Cronbach’s alpha value was 0.849 which was above the general accepted minimum value of .70 for reliability (George and Mallery, 2003).

The questionnaire on academic self-efficacy was measured based on 8 items which were adapted from Muris, (2001) in order to fit the study. All the questions utilized a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach’s alpha obtained was 0.864 which was above the general accepted minimum value of .70 for reliability (George and Mallery, 2003).

The questionnaire on student-lecturer interaction was measured based on 44 statements. All the questions utilized a Likert scale, ranging from 1 (Strongly disagree) to 5 (Strongly agree). The Cronbach’s alpha value was .881 which was above the general accepted minimum value of .70. Items were adapted from Wubbels (1991).

The data collected were analyzed using SPSS statistical package for social science software version 22. Both descriptive and inferential statistics have been employed in this study.

Result and Discussion

Background of the respondents

A general profiles of the respondents’ individual characteristics consisting of age, gender and schools were presented in Table 1.1, which is described as follows. The results displayed that majority (72.3%) of the respondents were male and 27.7% were female. The respondents were between the age of 19 to 34 years old with mean age equals 23.19 (SD= 2.64). The data shows that more than half of the respondents (75.8%) were in the age category of 19-24 years old followed by respondents between 25-29 years old 20.6% and lastly, 3.6% of the respondents were in the age category of 30 years and above. However, on the faculties of the respondents, the findings reveals that majority (25.1%) of the respondents were from the faculty of Science, 24.5% of the respondents were from the faculty
Technical, 22.1% of the respondents were from the faculty of Education, 15.3% of the respondents were from the faculty of Business and finally 13.0% of the respondents were from the faculty of Vocational.

Table 1.1: Background of the respondents (n=339)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Freq</th>
<th>(%)</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Years Old)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19-24</td>
<td>257</td>
<td>(75.8)</td>
<td>23.19</td>
<td>2.64</td>
<td>19</td>
<td>34</td>
</tr>
<tr>
<td>25-29</td>
<td>70</td>
<td>(20.6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 &amp; above</td>
<td>12</td>
<td>(3.6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>245</td>
<td>(72.3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>94</td>
<td>(27.7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>85</td>
<td>(25.1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td>83</td>
<td>(24.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>75</td>
<td>(22.1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business</td>
<td>52</td>
<td>(15.3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational</td>
<td>44</td>
<td>(13.0)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SD=Standard Deviation, Min=Minimum, Max=Maximum**

The Table 1.2 present the inter-variable Correlational analysis between the dependent and independent variables in which there is positive and significant relationship between attitude and students’ academic performance (r=.464, p<0.01), also significant and positive relationship between academic self-efficacy and students’ academic performance (r=.342, p<0.01), positive and significant relationship between interaction and academic performance (r=.407, p<0.01). Moreover, positive and significant relationship between attitude and academic self-efficacy (r=.383, p<0.01) and attitude with interaction (r=.500, p<0.01) and finally, the study found a significant and positive relationship between academic self-efficacy and interaction (r=.243, p<0.01).

Table 1.2: Correlational Analysis between Dependent and Independent Variables

<table>
<thead>
<tr>
<th>Construct</th>
<th>Students’ Academic Performance</th>
<th>Attitude</th>
<th>Academic Self-Efficacy</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic performance</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>.464**</td>
<td>.342**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>339</td>
<td>339</td>
<td>339</td>
</tr>
<tr>
<td>Attitude</td>
<td>Pearson Correlation</td>
<td>.464**</td>
<td>1</td>
<td>.383**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>339</td>
<td>339</td>
<td>339</td>
</tr>
<tr>
<td>Academic Self-Efficacy</td>
<td>Pearson Correlation</td>
<td>.342**</td>
<td>.383**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>339</td>
<td>339</td>
<td>339</td>
</tr>
<tr>
<td>Interaction</td>
<td>Pearson Correlation</td>
<td>.407**</td>
<td>.500**</td>
<td>.243**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>339</td>
<td>339</td>
<td>339</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)**
Multiple Regression by using stepwise method has been used in order to examine the factors that significantly influence students’ academic performance.

Table 1.3 illustrated the result of stepwise multiple regression analysis for the prediction of the students’ academic performance, as well as the influence of each factor in the model. As depicted in the (Table 1.3) students’ attitudes towards lecturers significantly contributes by 61.6% of variance ($R^2=0.616$) towards students’ academic performance for the total of 339 respondents in this study. This means that, students’ attitudes towards lecturers ($\beta=0.786$, $P<0.05$) is the main contributor that caused the respondents to have good academic performance in the Potiskum College. However, with the combination of predictor between students’ attitudes towards lecturers ($\beta=0.864$, $P<0.05$) and students-lecturers interaction ($\beta=0.633$, $P<0.05$) the contribution value of variance towards students’ academic performance is increase to 65.6%. Therefore, the increment is 4% (65.6-61.6= 4%). Whilst the factor which is not significantly contributes to academic performance in this study is academic self-efficacy.

### Table 1.3 : Stepwise Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Beta</th>
<th>t</th>
<th>Sig. Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.297</td>
<td>8.200</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Attitude</td>
<td>1.018</td>
<td>0.786</td>
<td>9.629</td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>1.002</td>
<td>5.936</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Attitude</td>
<td>0.13</td>
<td>0.864</td>
<td>6.412</td>
</tr>
<tr>
<td></td>
<td>Interaction</td>
<td>0.004</td>
<td>0.633</td>
<td>4.287</td>
</tr>
<tr>
<td>R</td>
<td>$R^2$</td>
<td>Adjusted Square</td>
<td>$R^2$ Change</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.806</td>
<td>0.616</td>
<td>0.613</td>
<td>4%</td>
</tr>
<tr>
<td>2</td>
<td>0.864</td>
<td>0.656</td>
<td>0.652</td>
<td></td>
</tr>
</tbody>
</table>

Based on the outcome of this analysis as indicated in Table 1.3 the null hypothesis was rejected. Therefore, it can be concluded that not all the prediction factors are contributing to academic performance. But, on the other hand, it could be reported that only students’ attitudes towards lecturers and student’-lecturer interaction are the two main independent variables that contributes towards positive students’ academic performance and this findings was supported by Li (2012), Maina (2013), Tenaw (2013), Fan (2012) and also is consistent with the findings of Fraser et al., (2010), Swan (2002) & Wubbels et al., (1993).
Figure 1.2: Fit Model of Influence of Psychosocial Factors on Students' Academic Performance in Potiskum College of Education, Nigeria

Moreover, the finding of this stepwise multiple regression analysis revealed that, the most significant factor that influenced students’ academic performance was attitude. Hence based on this findings it can be concluded that students’ attitudes towards lecturers is positively related with academic performance. Furthermore, the results of this study emphasized the demonstration of positive attitude by lecturers towards their students’ as a paramount tool in influencing students’ academic performance positively in the Potiskum College of education.

Conclusion and Recommendations

The purpose of this paper was to examine the influence of psychosocial factors on students’ academic performance. The study found that two of the three prediction factors i.e. attitude and interaction have positive significant influence on students’ academic performance with $R^2=65.6\%$. In this respect, it can be deduced that demonstrating positive attitudes and students’-lecturers interaction can effectively enhance teaching and learning towards the accomplishment of good students’ academic performance in institution of learning. Furthermore, more studies should be conducted on other variables considering the fact that psychosocial factors in this study can only explained the percentage of variance towards academic performance by 65.6%.

References


