Determinants of Perceived Students’ Academic Performance in Vocational Education in Tertiary Institutions in Lagos State

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Abstract
The study investigated determinants of perceived students' academic performance in vocational education in tertiary institutions in Lagos State, Nigeria. The study adopted survey research design. A total number of 310 respondents were selected from higher institutions in Lagos State using proportionate stratified sampling technique. The instrument used in the study was a set of questionnaire title Home-School Factors and Students' Academic Performance in Vocational Education Scale (HSFSAPVES). Five finding of the study revealed that there was a significant relationship between teachers' factors and perceived student's academic performance in vocational education courses. Also, there was a significant relationship between provisions of learning facilities and perceived students' academic performance in
vocational courses. It was discovered that there is significant relationship between students' factors and their perceived academic performance in vocational education courses. Based on the findings of the study, it is recommended that the teachers should be more motivated by ensuring participation in continuous training programmes. There should be improvement in the conditions of services and recruitment of more competent teachers. Also, government should endeavour to provide adequate learning facilities like computer, laboratory equipment, audio-visual materials and other learning facilities in order to sustain the interest of the students.

Introduction

The problem of unemployment that is rampant in Nigerian society has become an issue of concern to researchers in recent times. The quest to advance plausible solution to this problem has informed the scholars delving into vocational education as an alternative to general education. Actually, vocational education is pervasive and comprehensive in nature. It is designed to enlist the interest of the students and develop a clear understanding of the world of work. Spence (1992) contends that vocational education is an aspect of education, which leads to the acquisition of practical and applied skills because one has a special fitness or ability to render service to other people. The Nigeria Association of Business Educators (NABE) (1992) submits that vocational education refers to that segment of education that is designed to prepare people for work. In essence, vocational education offers individual opportunity to develop those skills, abilities and understanding that will enable them to handle competently their personal affairs, and assume their citizenship responsibilities. In other words, vocational education is a work-oriented type of education, which often leads to self-reliance and self-sustenance among the beneficiaries.

Bruner (2002) and Ojo-Ajibare (2002) reported that the quality and quantity of what is taught and other outcome of the teaching learning process had been found to be inadequate in tertiary institutions in Nigeria. This implies the need for training teachers to handle teaching
of vocational education courses in various institutions in order to improve academic performance in the subjects. Fagbamiye (1987), Nzerem (1992) and Imarhiagbe (1992) submit that some teachers with specialization in vocational subjects have neither the pedagogy nor industrial antecedent, which has virtually affected students' academic performance in the subjects.

Ekeh (2001), Olatoye (2002) reported that poor learning environments such as qualified teacher, well equipped laboratories, standard classrooms, standard libraries, vocational material and instructional materials were inadequate in schools. These constraints according to them had limited the chance of students' success. They further submit that as a matter of fact since, inadequate learning facilities in schools is a common phenomena, no meaningful teaching and learning can take place in most of the schools, even if the teacher is God chosen disciple and the learners are pack of geniuses in the world. Learning of any vocational subject carries with in affective components that may facilitate or hinder additional learning. This emphasizes the importance of interest and attitude of students in learning process. Obe (1998), Gubert (2002) and Bakare (1998) reported that attitude scales could be important in diagnosing the reasons for student's failure in a particular subject. Mary and Lois (2001) in their attitudinal study of 300 students' academic performance in USA reported that interest and attitude of the students had significantly influenced their academic performances.

Researchers had consistently shown that the most important differences in measuring intelligence between groups are those associated with socio-economic status, which are usually associated with students' academic performance with reference to parental occupation (Eniola, 2002, Olaniyi, 2003 and Gesinde, 1996). They reported that students from higher socio-economic status group performed higher than those from lower socio-economic in their academic performance. Studies reveal further that the middle classes attached great importance to schooling and to educational matters. Middle class parents on the other hand take education very seriously
whereas many lower class parents pay little attention to schooling due to financial constraints.

Benedict (1991), Cookey (2002), and Richo (2004) reported that poor teaching method and inadequacy of learning facilities in schools had significantly affected academic performance of the students. They opined that proper use of teaching materials with appropriate teaching method tend to result in more effective learning vis-a-vis improved academic performance among the students. This result was attached to the fact that most of what we hear could be changed to visual impression that tends to make learning meaningful and permanent, if appropriate teaching materials and method is adopted in teaching the learners. The authors concluded that if high quality of education is expected, it must go hand in hand with high quality and experienced teachers, which emphasized continuous training of teachers.

The studies reviewed in the study established that various dimensions of factors have significantly influenced student's academic performance. These variables include insufficiency of trained teachers, inadequate instructional materials, lack of modern equipment for teaching, the students' interest and attitude, method of teaching and socio-economic status, of the parents. Some studies in these areas had been conducted in Nigeria and other countries of the world. However, those studies focused on secondary school students and general academic performance. In this study, the students of vocational educational courses in tertiary institutions serve as the surge of interest.

**Statement of the Problem**

The study investigated the factor influencing academic performance in vocational education among students of higher institutions in Lagos State, Nigeria. This was for the purpose of ascertaining the causal-factor of failure or success among vocational education students in tertiary institutions in Nigeria.

Specifically, the objectives of the study are to:
1) Determine the factors affecting academic performance of students in vocational education courses.

2) Ascertaining the influence of parental socio-economic status on students' perceived academic performance in vocational education courses.

3) Examine whether lack of interest on the part of students affected their perceived academic performance in vocational education courses.

4) Determines whether insufficient learning facilities had any influence on perceived academic performance of students in vocational education courses.

5) Investigate the influence of school environment on students' academic performance in vocational education courses.

Hypotheses

1) There is no significant relationship between the teachers' factors and perceived students' academic performance in vocational education courses.

2) There is no significant relationship between provision of learning facilities in schools and perceived students' academic performance in vocational subjects.

3) There is no significant relationship between students’ factor and their perceived academic performance in vocational education courses.

4) There is no significant difference between male and female perceived academic performance in vocational education.

5) There is no significant difference between perceived academic performances of the respondents from high and low socio-economic status group.
Method

The study adopted survey research method to investigate the factors influencing students' academic performance in vocational education courses in tertiary institutions in Lagos State.

The target population consists of all students of vocational education courses in tertiary institutions in Lagos State, Nigeria. The sampled institutions consist of three higher institutions out of five tertiary institutions in Lagos State. These institutions include UNILAG, LASU, and Lagos State Polytechnic.

The respondents consist of 310 students of vocational education courses. The respondents were selected using proportionate stratified sampling technique. The respondents consist of 160 (51.6%) male and 150 (48%) female. The age range of the respondents falls within 19-28 years. The mean age of the respondents is 16.76 with standard deviation of 7.36. The students who have spent at least two years in their respective higher institutions participated in the study. The vocational education courses considered in the study include Business Education, Law, Accounting, Agriculture, Pharmacy, Medicine, Food Technology and Engineering.

The Instrument used for measuring the factors influencing academic performance of students in vocational education was a set of questionnaire titled Home - School Factors and Students' Academic Performance in Vocational Education Scale (HSF SAPVES). The questionnaire was developed by Bruner (2002) the questionnaire consisted of two sections. Section A deals with demographic information such as name of institution, age, sex and level of education. Section B consist of home and school factors influencing academic performance, such as insufficient lecturers, insufficient learning facilities in schools, poor family background, parental occupation, socio-economic status of parents and so on. For instance, insufficient qualified lecturer tends to affect your academic performance, insufficiency of learning facilities tends to affect your academic performance; personal interest in vocational courses tends to
affect your academic performance and so on. The author reliability coefficient alpha is 0.89. For the present study, a Coronbach alpha of 0.88 was obtained. The Likert five-point response rating scale of Strongly Agree (5 points) to Strongly Disagree (1 point) was adopted for the study.

The researcher personally administered the questionnaire with the assistance of heads of departments in selected institutions. The researcher consulted with the Deans of faculties offering vocational education courses in all the three institutions under study, and sought for the permission to collect data for the study. The researchers explained all aspects of the questionnaire to the respondents. The respondents were assured of confidentiality of the information. The support received from the head of department aided the cooperation that the researchers receive from the respondents. However, out of 340 copies of questionnaire administered by the researcher, only 310 copies were duly completed. The 310 copies of questionnaires that were duly completed were utilized for the purpose of the study. The administration of the questionnaire took the researcher three weeks due to geographical location of the tertiary institutions considered for the study in Lagos State, Nigeria.

The data collected for the study was collated and analyzed using simple percentage for demographic information. The Analysis of Variance (ANOVA) was used to test hypotheses one, two and three while t-test statistics was used to test hypotheses four and five hypothesis generated for the study. All the five hypotheses were tested at 0.05 alpha levels.

**Results**

The results of the data analysis were presented on the basis of the five hypotheses generated for the study.

**Hol:**  *There is no significant relationship between teachers' factors and perceived students' academic performance in vocational education courses.*
Table 1: Summary of ANOVA Table of Analysis Showing Relationship between Teachers’ Factors and Perceived Students’ Academic Performance in Vocational Education Courses

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>762.16</td>
<td>1</td>
<td>762.16</td>
<td>28.61</td>
<td>.041</td>
<td>Not Significant (P&gt;.05)</td>
</tr>
<tr>
<td>Qualification</td>
<td>526.32</td>
<td>1</td>
<td>526.32</td>
<td>71.62</td>
<td>.000</td>
<td>Significant (P&lt;.05)</td>
</tr>
<tr>
<td>Competence</td>
<td>116.75</td>
<td>1</td>
<td>116.75</td>
<td>36.42</td>
<td>.000</td>
<td>Significant (P&lt;.05)</td>
</tr>
<tr>
<td>Commitment</td>
<td>362.18</td>
<td>1</td>
<td>362.18</td>
<td>48.11</td>
<td>.000</td>
<td>Significant (P&lt;.05)</td>
</tr>
<tr>
<td>Sex</td>
<td>211.48</td>
<td>1</td>
<td>211.48</td>
<td>60.47</td>
<td>.072</td>
<td>Not Significant (P&gt;.05)</td>
</tr>
<tr>
<td>Experience</td>
<td>367.66</td>
<td>1</td>
<td>367.66</td>
<td>71.62</td>
<td>.000</td>
<td>Significant (P&lt;.05)</td>
</tr>
<tr>
<td>Method of Testing</td>
<td>118.79</td>
<td>1</td>
<td>118.79</td>
<td>86.71</td>
<td>.000</td>
<td>Significant (P&lt;.05)</td>
</tr>
<tr>
<td>Residual</td>
<td>14311.61</td>
<td>302</td>
<td>65.16</td>
<td>72.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>16681.76</strong></td>
<td><strong>309</strong></td>
<td><strong>73.96</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 reveals that there was a positive main effect of teachers’ qualification on perceived students’ academic performance \([F (1,302) = 71.32; P < .05]\). Teacher competence was also found to have significantly influenced perceived students academic performance \([F (1,302) = < .05]\). Teacher’s commitment to work was found to have correlated with perceived students’ academic performance \([F (1,302) = 48.11; P .05]\). The method of teaching of the teachers was also found to have significantly influenced perceived students' academic performance \([F (1,302) = 86.71; P < .05]\).

However, age of teachers was found to have no influence on perceived students' academic performance \([F (1,302) = 28.61; P > .05]\). The sex of the teacher has no main effect on perceived students' academic performance \([F (1,302) = 60.41; P > .05]\). In essence, teacher's factors such as qualification, competence, commitment to job, method of
teaching and experience are correlates of perceived students' academic performance. Age and sex of the teacher has no correlation with the perceived students' academic performance. The finding indicated that hypothesis one was partially confirmed.

**Ho2:** There is no significant relationship between provisions of learning facilities and perceived students' academic performance in vocational education course.

**Table 2:** Summary of ANOVA Table of Analysis Showing the Relationship between Provision of Learning Facilities and Perceived Students' Academic Performance in Vocational Education Courses

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio visual material</td>
<td>265011</td>
<td>1</td>
<td>265.11</td>
<td>26.19</td>
<td>.000</td>
<td>Significant (P &lt; .05)</td>
</tr>
<tr>
<td>Well equipped library</td>
<td>378.81</td>
<td>1</td>
<td>378.81</td>
<td>32.42</td>
<td>.000</td>
<td>Significant (P &lt; .05)</td>
</tr>
<tr>
<td>Conducive lecture room</td>
<td>189.32</td>
<td>1</td>
<td>189.32</td>
<td>11.76</td>
<td>.000</td>
<td>Significant (P &lt; .05)</td>
</tr>
<tr>
<td>Residual</td>
<td>438.61</td>
<td>306</td>
<td>96.54</td>
<td>72.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4465.10</strong></td>
<td><strong>309</strong></td>
<td><strong>73.96</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 above shows that there was a main effect of learning facilities being provided on perceived academic of the performance students. In essence, audio-visual material was found to have significantly influenced perceived students' academic performance \[F (1,306) = 26.19; P < .05\]. Well-equipped library was also found to have significantly influenced students' perceived academic performance \[F (1,306) = 32.42; P < .05\]. Conducive lecture room was found to have significantly correlated with the perceived students' academic performance in vocational education courses \[F (1,306) = 11.76; P < .05\].

The results in table 2 above revealed that there was a significant relationship between provisions of learning facilities and perceived
students' academic performance in vocational education courses. The finding of the study indicated that hypothesis two was not confirmed.

**Ho3: There is no significant relationship between students' factors and their perceived academic performance in vocational education courses.**

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>116.11</td>
<td>1</td>
<td>116.1</td>
<td>36.12</td>
<td>.016</td>
<td>Not Significant (P &gt; .05)</td>
</tr>
<tr>
<td>Age</td>
<td>216.02</td>
<td>1</td>
<td>216.02</td>
<td>21.28</td>
<td>.024</td>
<td>Not Significant (P &gt; .05)</td>
</tr>
<tr>
<td>Interest</td>
<td>159.75</td>
<td>1</td>
<td>159.75</td>
<td>30.01</td>
<td>.000</td>
<td>Significant (P &lt; .05)</td>
</tr>
<tr>
<td>Attitude</td>
<td>168.14</td>
<td>1</td>
<td>168.14</td>
<td>36.71</td>
<td>.001</td>
<td>Significant (P &lt; .05)</td>
</tr>
<tr>
<td>Parental background</td>
<td>128.23</td>
<td>1</td>
<td>128.23</td>
<td>31.36</td>
<td>.047</td>
<td>Significant (P &lt; .05)</td>
</tr>
<tr>
<td>Intelligence quotient</td>
<td>171.61</td>
<td>1</td>
<td>171.61</td>
<td>40.18</td>
<td>.000</td>
<td>Significant (P &lt; .05)</td>
</tr>
<tr>
<td>Residual</td>
<td>376.22</td>
<td>303</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>561.71</strong></td>
<td>309</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 reveals that the interest of the students on significantly related to their perceived academic performance \[F (1,303) = 30.11; P < .05\]. Also attitude of the students towards vocational education subjects was found to have significantly influenced their academic performance in the subject areas \[F (1,303) = 36.71; P < .05\]. More so, intelligent quotient of the students was found to be significantly correlated with their perceived academic performance in vocational education courses \[F (1,303) = 40.18; P < .05\]. However, the results as shown in table 3 above further revealed that sex was not significantly related to perceived students' academic performance \[F (1,303) = 36.12; P < .05\]. It was found that age was not significantly related to perceived students' academic performance \[F (1,303) = 21.28; P < .05\]. Moreover, parental background was found to be significantly correlated with perceived students' academic performance in vocational education courses \[F (1,303) = 31.36; P < .05\]. In other words, students’ factors play a dominant role in predicting academic performance of students in vocational education courses. The finding of the study indicated that hypothesis three was not confirmed.
Ho4: There is no significantly difference between perceived academic performance of male and female respondents.

Table 4: Summary of the Test Table of Analysis on Male and Female Respondents Perceived Academic Performance

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>160</td>
<td>24.11</td>
<td>12.76</td>
<td>3.8</td>
<td>10.62</td>
<td>.014</td>
<td>Not Significant (P &gt; .05)</td>
</tr>
<tr>
<td>Female</td>
<td>150</td>
<td>23.65</td>
<td>11.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4 above reveals that there was no significant difference between male and female respondents' perceived academic performance in vocational education courses $t (318) = 10.62; P > .05$. The finding of the study indicated that the hypothesis four was confirmed.

Ho5: There is no significant difference between the perceived academic performances of respondents from high and low socio-economic status groups.

Table 5: Summary of t-test Table of Analysis on the Perceived Academic Performance of Respondents from High and Low Socio-Economic Status Groups

<table>
<thead>
<tr>
<th>Socio-Economic Status</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>T</th>
<th>P</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>160</td>
<td>23.62</td>
<td>12.61</td>
<td>318</td>
<td>16.26</td>
<td>.000</td>
<td>Not Significant (P &gt; .05)</td>
</tr>
<tr>
<td>Low</td>
<td>150</td>
<td>24.61</td>
<td>13.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 reveals that there was a significant difference between perceived academic performances of respondents from high and low socio-economic status groups.
socio-economic status groups. The finding of the study implies that the respondents from high socioeconomic status group performed better academically in vocational education courses than the respondents from low socio-economic status group. The result of the study shows that hypothesis five was not confirmed.

**Discussion**

The study investigated the factors influencing academic performance of students in vocational education in tertiary institutions in Lagos State. The first hypothesis predicted that there is no significant relationship between teachers' factors and students' academic performance in vocational education courses. The findings of the study reveal that there was a significant relationship between teachers' factors (educational qualification, competence, commitment, experiences and method of teaching) and perceived academic performance of the students in vocational education courses. The finding of the study corroborates Bruner (2002), Ojo-Ajibare (2002) and Fagbamiye (1987) who reported that the quality and quantity of teacher has significant influence on the quality of the instructions and learning outcome of the students. The finding further showed that age and marital status of the teacher had no effect on the perceived academic achievement of the students in vocational education courses. This finding tallies with Obe (1998) and Gibert (2000) who contend that age and marital status of the teachers were not found to be significantly related to students' academic performances.

Hypothesis two also postulated that there is no significant relationship between provision of learning facilities in schools and perceived students' academic performance in vocational education courses. The finding of the study showed that there was a significant relationship between provision of learning facilities and perceived students' academic performance. The finding tallies with Cookey (2002) and Richo (2004) who reported that poor teaching method and inadequate learning facilities in schools had significantly affected students’ academic performance. The finding implies that availability of learning facilities in schools would have positive effect on students'
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academic performance. On the other hand, non-availability of learning facilities would negatively influence students' academic performance in vocational education courses.

Hypothesis three predicted that there is no significantly relationship between students' factors and their perceived academic performance. The finding revealed that there was a significant relationship between students' factors (interest, attitude, parental background and intelligence) students' perceived academic performance. The finding is in line with Marry and Lois (2001) who reported that students' factors of attitude, interest and intelligence have significantly influenced students' academic performance in vocational education courses. The finding also corroborates Olaniyi (2003) and Gesinde (1996) who reported that sex and age of the learner were found to have had a significant but low relationship with perceived academic performance of the students.

Hypothesis four stipulated that there is no significant difference between male and female respondents perceived academic performance. The findings of the study revealed that a significant difference was not found between male and female respondent's perceived academic performance. The finding implies that both male and female students equally performed well academically in vocational education courses as perceived by the respondents. The findings corroborates Bakare (1998) who reported that male and female students were found to have equally performed at the same magnitude in vocational school subjects and that if difference in noticed, it is probably due to hereditary and environmental factors.

Hypothesis five predicted that there is no significant difference between perceived academic performance of the respondents from and low socio-economic status group. The finding revealed that there was a significant difference found between the perceived academic performances of high and low socio-economic status groups. The finding showed that respondents from high socio-economic status group were found to have performed higher academically than those from the low socio-economic status groups. The finding of the study
implies that respondents were influenced by their parental socio-economic background. The finding corroborates Eniola (2002), Olaniyi (2003) and Gesinde (1996) who reported that students from high socio-economic status group were found to have performed better than students from low socioeconomic status group.

The implication of the study is that attainment of high quality of education, coupled with students' success and persistence is a function of teachers; school and student factors. In essence, for student's improved academic performance to be achieved, the teacher must be educated, qualified, competent, commitment and adopt appropriate method of instruction. Also, the schools should provide adequate facilities in order to sustain the interest and positive attitude of learner in vocational education course.

**Recommendations and Conclusion**

The study established that both the teachers, school and students factors had significantly influenced students' perceived academic performance in vocational education courses. However, the age, sex and marital status of both teachers and students did not significantly impacted academic performance of the students as perceived by the respondents. The study however revealed that the quality of education could be possibly achieved if the quality of instruction is attenuated by quality of teachers, availability of learning facilities in school and students' positive attitude and interest toward vocational education courses.

Based on the findings of the study, it is recommended that the teachers should be more motivated by ensuring their participation in continuous training programmes, improvement in the conditions of service, and recruitment of more competent teachers. These would definitely influence their commitment and virtually lead to improvement in students' academic performance. Also, the government should endeavour to provide adequate learning facilities like computer, laboratory equipment, audio-visual materials and other learning facilities in order to sustain the interest of the students with
corresponding effect on their academic performance in vocational education courses. The students’ posture, attitude and interest in vocational education courses need be sustained through career counselling and provision of conducive learning environment. The parents need to monitor their children academic performance and ensure that the home is made conducive to independent and persistent study.

References


