Academic Status of Science Graduates: Correlates of Employment Using Selected Schools and Industries in Port Harcourt Metropolis

Akunne Deborah Bara
Rivers State University of Science and Technology, Port-Harcourt

Abstract
Using the Survey design, the researcher investigated the extent to which different organizations and institutions employed graduates with different academic status. Two research instruments called Science Teachers Academic Status Inventory (STASI) and Science Workers Academic Status Inventory (SWASI) were used to collect the data from 2 secondary schools (1 public and 1 private) and 2 industries in Port Harcourt metropolis. Using purposive sampling technique a sample size of 218 graduates (95 teachers and 123 company workers) was drawn from the graduates employed in 2014 and 2015 with academic status between 3rd class and 1st class. Simple percentage was used for the descriptive statistics while the multiple correlation of predictability was used for the inferential statistics at 0.05 significant levels. From the findings, a significant positive correlation was obtained for 1st, 2nd lower and 3rd class ($r=0.45$ and 0.20). The predictor variables jointly accounted for 20% of the variance with better employment for 1st class. The null hypothesis tested at 0.05 was rejected since there is significant relationship between employment and graduates academic status. The researcher recommended that graduates with high academic status should be given automatic employment in their areas of discipline immediately after their graduation.

Keywords: Academic status, Employment, Academic institutions and Industry

Introduction
Academic Status refers to the specific position of a graduate in his or her academic achievement in a specific area of specialization such as Science, engineering, medicine, agriculture and business in any given academic institution. This status is centered on the achievement obtained from the cognitive domain of educational behavioral objectives comprising of five basic categories as, 1st, 2nd upper, 2nd lower, 3rd and pass class of academic status. All over the world, graduates with pass or 3rd class have low self esteem; they cannot boldly present their certificate because it does not have prestige except for people who are privilege to have connections that ignores their academic position to give them employment. That is why it is very important for any student who desires to be employed to strive to attain high academic status that can earn them their dream job. Although our Nigerian constitution did not state the specific academic status for employment, different organizations have made
different employment policies that serve as criteria for which academic status is eligible for which employment. Employment of Science graduates as reported by researchers like Nwagbo (2000), Abbas (2012) and Federal Republic of Nigeria (2013), in the National policy on Education said that education is a platform for technological and scientific development for national economic growth. This means that employers in any organization will be looking out for science graduates who possess a minimum academic status of 2nd class lower and scientific knowledge that can provide an appreciable standard of living. For instance, a graduate with 1st class would anticipate for a job in an oil company or industry. Likewise, an academic institution would want to employ graduates with 1st class or 2nd class upper because they feel that such graduates have knowledge to offer that is qualitative enough to reproduce quality performance.

No Industry, Institution, Ministry, Establishment or Organization will want to employ graduates with academic status like third class or pass, even some places don’t employ 2nd class lower; this calls for seriousness on the student part to ensure high academic status. In a study by Khan, Nawaz, Chaudhry & Butt (2012) out of 265 students who studied agriculture in Faisalabad, less than 50% male graduated with 2nd class lower while almost 60% female graduated with 2nd class lower. Again, Okwilagwe (2001) stated that most of the students dropped out of school because their academic status at the final grade fell below 3rd class. This was also similar to the findings of Felder, Mohr, Dietz & Baker-Ward (2002) who said that the problem is that most of these graduates will end up not having good employment. A study of such will serve as an indicator to unravel the association between Student Academic Status and Employments whether in institution, industry, ministry or organization. Before now, in the 70s and 80s student graduates with academic status such as 1st class are already attached to a company or oversees scholarship but today the situation is different in some places. The academic status of a graduate should serve as a tool for employment opportunity. Okoro & Kayode (2008) reviewed that lack of high academic status is an obstacle to employment, promotion and appointment into certain position in most occupation.

Academic Status:
Academic Status is a phenomenon that refers to the position of a graduate academically after completing his or her programme of study. It shows a perception that a given student has mastered the basic skills and competence in a particular field of study. A report on comparative evaluation of undergraduate achievement in employment shows that some students who had a CGPA of 3.00 did not significantly correlate with student employment, Khan, Chaudhry, Nawaz & Butt (2012) and Wantanabe (2009). Academic status is categorized as 1st, 2nd (upper & lower), 3rd and pass class. Graduates with 1st and 2nd class upper are most likely to be employed easily in any institution or organization but Felder (2002) reported that students with academic status below 3.00 were getting fat-salary jobs than those with higher academic status which is likely to be possible in this study. For over a decade now, there has been a public cry on the poor academic status recorded by many students, Alamina (1991), Offontah (1995) and Oginni (2010). This implies that such students are likely to face problem in getting fat-salary or jobs associated with high academic status peg.

Biased Employment Policies
Since the Nigerian Constitution on employment policy did not stipulate the Academic status for employment, it would be proper for employers of labor to revisit their employment
guidelines especially in most companies and industries. In a study by Okoro & Kayode (2008) on gender disparity in employment, female gender have been consciously deprived of certain employment opportunities even though they possess better academic status than their male counterpart. Similarly, graduates who possess second class lower and third class academic status have been deprived of employment in most companies because they do not have equal opportunity. Section 42:1-3 of the Constitution states that no citizen of Nigeria (FRN, 1999) “shall be subjected to any form of discrimination or deprivation”. Blau (1998) observed in his research that males are always over-represented in fat-salaried positions and industries than females who even have better academic status. This implies that employers of labor especially in the companies and industries should give equal opportunity to graduates down to at least second class lower and less gender preferment even though, there are cases where graduates with certain academic status like first class could not defend their academic status as reported in the company report on employment. Some other employers also discovered that there are graduates with third class performing far better than those with first class which are issues that can be discussed on later. This affirmed the report of Conger & Long (2010) where some graduates had about 0.43 less credits but exhibited self-confidence in their skills and abilities.

**Constrains in Academic Status Development**

Academic status is synonymous to career development. As a student begins his or her education from the primary school to the University, he possesses a status that qualifies him to move from one level to another. The development of his career is dependent on how well he performs in the previous level which makes his development progressive. This is revealed by his academic status. Academic Status, does not only predict employment, certain status can also serve as inhibitors or constrains to career development. For example, in virtually all Nigerian Universities, a graduate with second class lower or third class will have to take a PGD course to qualify for further studies. Some graduates who would have loved to develop in their area of specialization have fallen behind because of lack of higher academic status. With the 6, 3, 3, 6 system of education in Nigeria, it is believed that students should progress from first school leaving certificate to PhD but a fail status in any of this phase will constrain the progression and development into more higher career. For instance in a report on students employment status by Wantanabe (2009) it is seen that the development of career is a progressive venture where a loophole in one level can hinder the development of the next level. Learning is progressive, from primary school to junior secondary to senior secondary to undergraduate to postgraduate and then to professor in ones area of specialty. It implies therefore that a lack in the possession of higher academic status starting from the primary school will cause constrain to career development.

**Science Graduates and Employment**

Science graduates can be employed into different organizations or institutions of learning. For example they can be employed as teachers in primary, secondary or higher institutions to teach subjects such as chemistry, physics, agriculture or integrated science. They can also be employed as Science workers in industries and companies. The employment of these graduates depends on the opportunities given to them by the various employers with regards to academic status requirement. However, as reported by Wantanabe (2009) it is expected that these graduates should be able to produce services that is a true representation of what they possess or better than their academic status. Before now in Nigeria, Students with good academic status gain employment into different companies and academic institutions before they even graduate but it is no longer common now except for few persons who are
privileged. Science teaching is like mentoring an individual to become better learned but a graduate with poor academic status may find it difficult to mentor a student because it is assumed that he is not a master of the subject. Mentoring is a supportive relationship that gives people the opportunity to share their professional and personal skills and experiences as well as grow and develop in the process, Ubulom (2008). By implication it means you can only teach what you know and have. Their academic status is a measure of both practical and theoretical knowledge. No science graduate employed is expected to only work by talking, they must also work by doing. In fact; it should be that science teachers should possess skills that can make them employers. However if a graduate possesses low academic status, mentoring becomes a little difficult making them unable to standout in the society. Whether employed as a teacher or in the industry, no institution or industry would want to employ persons with academic status like third class or pass because even those with second class lower have difficulty getting certain jobs with high academic status tags.

Statement of the Problem
Although employment into various offices in the Nigerian employment policy did not stipulate the academic status for employment, different organizations and institutions have laid down employment guidelines to help them streamline the categories of graduates eligible for employment. Sometimes graduates who have high academic status are unable to get employment whether in the academic or industrial institutions. To be more concise, the questions arising from such problem are; what are the observed academic status of the graduates employed in the schools and industries? To what extent does the observed academic status predict employment in the schools and industries?

Purpose of the Study
The purpose of this study is to investigate the relationship between academic status and employment. Specifically, the objectives are to;
1. Find out the level of observed academic status employed in the selected schools and industries.
2. Establish the extent of the relationship between academic status of the graduates and employment in the schools and industries.

Research Questions
1. What are the observed academic status of the graduates employed in the schools and industries?
2. To what extent is the relationship between the academic statuses of graduates and employment in the schools and industries?

Hypothesis
There is no significant relationship in the extent of employment with different academic status of the graduates in the schools and industries.

Methodology
The study adopted the ex-post facto research type with a survey design. The researcher studied them retrospectively in terms of their relationship with the dependent variable. The variables in the study include the independent variable Academic status (1st, 2nd upper, 2nd lower and 3rd class) while the dependent variable is employment (schools and industries). The
population of this study comprised of all the Science teachers and workers in the 1 public secondary school, 1 private secondary school and 2 industries in Port Harcourt metropolis. Using purposive sampling technique, 218 graduate employees in the 2014 and 2015 batch of employment was selected (95 schools and 123 industries) to constitute the sample size. Two research instruments called the Science teachers academic status inventory (STASI) and the Science workers academic status inventory (SWASI) were used. The STASI was used to collect data for the science teachers in the schools while the SWASI was used to collect data in the industries.

The inventory of the graduates employed in the 2014 and 2015 staff employment the schools and industries were collected from the principal, Ministry of Education and human resource office using the STASI and SWASI instrument with the assistant of their clerks to ensure that only graduates with the required academic status where recorded. Simple percentage was used to answer the research questions while multiple regression correlation of predictability was used to test the hypotheses at 0.05 significant levels for both the science teachers and workers in the study.

Results

Research Question 1: What are the observed academic status of the graduates employed in the Schools and Industries?

Table 1. Academic Status of graduates employed in secondary schools and industries

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>School A</td>
<td>10</td>
<td>15</td>
<td>12</td>
<td>10</td>
<td>47</td>
</tr>
<tr>
<td>% Within</td>
<td>21.3%</td>
<td>31.9%</td>
<td>25.5%</td>
<td>21.3%</td>
<td>100%</td>
</tr>
<tr>
<td>School B</td>
<td>2</td>
<td>11</td>
<td>15</td>
<td>20</td>
<td>48</td>
</tr>
<tr>
<td>% Within</td>
<td>4.1%</td>
<td>22.9%</td>
<td>31.3%</td>
<td>41.7%</td>
<td>100%</td>
</tr>
<tr>
<td>Industry C</td>
<td>15</td>
<td>20</td>
<td>6</td>
<td>25</td>
<td>66</td>
</tr>
<tr>
<td>% Within</td>
<td>22.7%</td>
<td>30.3%</td>
<td>9.1%</td>
<td>37.9%</td>
<td>100%</td>
</tr>
<tr>
<td>Industry D</td>
<td>18</td>
<td>14</td>
<td>20</td>
<td>5</td>
<td>57</td>
</tr>
<tr>
<td>% Within</td>
<td>31.6%</td>
<td>24.6%</td>
<td>35.1%</td>
<td>8.8%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>60</td>
<td>53</td>
<td>60</td>
<td>218</td>
</tr>
</tbody>
</table>

From the result table 1 it was observed that, out of the total 95 graduates’ employees in the secondary schools, 6.3% accounted for third class status, 13.7% for 2nd class lower, 14.2% for 2nd class upper and 15.8% for 1st class. In the same vein, 13.4%, 13.8%, 21.1% and 24.4% accounted for 3rd, 2nd class lower, 2nd class upper and 1st class in the industries respectively. This indicates that the employment of science graduates into both teaching and industries were more of 2nd class upper and 1st class with an overall employment of 9.95%, 13.8%, 17.65% and 20.1% in the categories respectively.
Hypothesis: There is no significant relationship between academic status and employment.

Table 2: Analysis of multiple regressions on academic status and employment

<table>
<thead>
<tr>
<th>R</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.450</td>
<td>0.203</td>
<td>0.123</td>
<td>1.1007</td>
</tr>
</tbody>
</table>

From table 2: the R-value of 0.45 and R-square value of 0.20 shows that the four categories of academic status are capable of predicting employment. It also shows that 20% of the total variance in employment is due to academic status while the remaining per cent could be as a result of other factors not investigated in the study. In order to test the significance of the R square value, the F-value was calculated at 0.05 levels.

Table 3: Analysis of variance regression on academic status and employment

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>309.2</td>
<td>3</td>
<td>103.1</td>
<td>7.606</td>
<td>0.054</td>
</tr>
<tr>
<td>Residual</td>
<td>167742.3</td>
<td>215</td>
<td>780.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168051.5</td>
<td>218</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at p<0.05

Table 3, shows that the R-value of 0.45 is significant at F-value of 7.606; p<0.05. Thus, the R-value reveals that there is significant relationship between academic status and employment whether in school or industry.

Research Question 2: What is the extent of the relationship between academic status and employment?

Table 4: Relative Effect of Academic Status on Employment in Schools and Industries

<table>
<thead>
<tr>
<th>Academic Status</th>
<th>B</th>
<th>Standard Error</th>
<th>Beta</th>
<th>Rank</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-6.150</td>
<td>4.241</td>
<td></td>
<td></td>
<td>-1.450</td>
<td>0.155</td>
</tr>
<tr>
<td>Third Class</td>
<td>0.649</td>
<td>0.705</td>
<td>0.131</td>
<td>2ND</td>
<td>0.921</td>
<td>0.363</td>
</tr>
<tr>
<td>Second Class Lower</td>
<td>-0.533</td>
<td>0.663</td>
<td>-0.115</td>
<td>3RD</td>
<td>-0.803</td>
<td>0.427</td>
</tr>
<tr>
<td>Second Class Upper</td>
<td>-0.014</td>
<td>0.538</td>
<td>-0.004</td>
<td>4TH</td>
<td>-0.027</td>
<td>0.979</td>
</tr>
<tr>
<td>First Class</td>
<td>1.811</td>
<td>0.602</td>
<td>0.434</td>
<td>1ST</td>
<td>3.010</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Significant at p<0.05

From table 4, 1st class made the highest contributions to employment (beta=0.434;p<0.05). The second is 3rd class(beta=0.131;p<0.05) while 2nd class lower made the third in the order of magnitude of contribution(beta=0.115;p<0.05). This means that 43.4% was 1st class, 13.1% was 3rd class and 11.5% was 2nd class lower. Also, the table shows that 2nd class upper made the lowest contributions to employment (beta 0.004; p<0.05) and is not significant. This implies that the remaining 31.6% was not just on some other factor alone but was significantly due to academic status also. Hence the order of decreasing magnitude is presented as 1st class > 3rd class > 2nd class lower > 2nd class upper with the 1st class as best correlate of academic status and employment.
Discussion of Findings
This finding lend credence to those with 3rd class and 1st class which is in line with Khan, Chaudhry, Hyder & Butt (2012) on academic performance as a predictor to certain job opportunity not only in science but in agric economics, engineering and veterinary sciences. The position of 3rd class was actually significant showing that some graduates with such status could actually be good but were faced with unforeseen circumstances. However, they noted that some male graduates who performed below the 3.00 approved grades were getting fat-salary jobs on the basis of their malefactor criteria. Alamina (1991), Offintah (1995) & Oginni (2010) affirmed that every year the academic status of science graduates are getting worse and is a proof of low employment and unscientific thought pattern in approaching and solving problems.

From table 2, a multiple regression of 45% of the variance in the employment was found with 1st class topping the list which is an indication that graduates with 1st were mostly employed. However, Wantaheb (2009) in student employment status affirmed that employment into any reputable job is in good academic status. Nwagbo (2000) emphasized that science graduates who should teach science subject must have performed highly to inculcate scientific literacy. Also Abbas (2007) reported that national economic empowerment and development is achieved through strategic academic status that will generate into goods and services which is seen in this study by the more employment of 1st class graduates. Findings on table 3 showed that with a F-value greater than the p-value, there is significant relationship between academic status and employment which is in line with the findings of the above researchers.

This study sought to determine the extent of relationship between academic status and employment in schools and industries. Two research questions were raised and answered based on the data collected through the research instruments designed for the study. Data were analyzed using Multiple Regression analysis and the findings summarized below:
The academic status of 1st class, 3rd class and 2nd class correlates positively with employment with 20.1% to the variance.
1st class best predicted employment when considered alone while 2nd class upper was not significant.

Conclusions
Significantly from the study is the fact that employment is predicted by the academic status of the graduates who gained employment during the 2014 and 2015 employment in the 2 schools and 2 industries in Port Harcourt metropolis in science related subjects. Academic status was a predictor of employment. However, 1st class was a better predictor with beta value of 0.434 (43.3%) of the variance in the academic status. In the general employment out of the total 218 graduates employed 45 were third class as the list employed and 60 graduates with 1st and 2nd class lower, 3rd class graduates positively correlated with employment and ranked 2nd position. This study shows that employment is jointly predicted by the different academic status as observed in the selected secondary schools and industries employment. It is concluded that three out of the four independent variables could predict the dependent variable.

Recommendations
The following recommendations are hitherto made based on the findings of the study
-Employment examination of science graduates should be done at the final year and base on merit across the various academic statuses.
Better academic status campaign should be priority from the entry point
Graduates with good academic status should be given better employment as graduation package by industries, companies and other institutions.
Employment policies should be specified by the Government.

References