A Comparative Study of Residential and Non-Residential Students Academic Performance at the University Of Education, Winneba

Anthony Afful-Broni
Patricia Hogrey

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INTRODUCTION

Background

The government’s funding of tertiary education started in 1948 when the University College of Gold Coast, now the University of Ghana; Legon was established to produce the manpower requirements of the country (Gye Nyame Concord, 2005). During the era, students at the university were treated as first born babies and were provided with almost everything, including pocket money by the government, to ensure that the needed comfort was obtained for smooth scholarly work. It should be noted that all these while, students were resident in the halls provided by the university. With time, the population increase of students did not correspond with increase in the number of residential facilities.

Although, the government acknowledged the role of university education and the acquisition of critical skills needed for the nation’s socio-economic development, it clearly stated its inability to act as the sole financier of tertiary education due to economic constraints coupled with the fact that there are equally important sectors of the economy that need to be catered for. For this reason, the government came out with a white paper on tertiary education in 1992 which stated that government alone could not continue to bear the increasing cost of higher education and therefore there was the need for cost sharing by all stakeholders.

As a result of the low level of funding of tertiary education, many universities in Ghana lack a lot of academic facilities. Also, the steady increase in enrolment of students over the years has created a much larger non-resident student population than ever anticipated. In almost all the public universities in Ghana, students have increased to the extent that the in-out-out-out policy has been introduced. This policy is a system in which freshmen and women are given accommodation for a year in the halls of residence after which they are no longer eligible for campus accommodation. This policy has been established to enable all interested students experience campus residential life and have a fair usage of the institution’s facilities.

Statement of the Problem

Despite the fact that measures are being taken to help both residential and non-residential students live happily and improve their academic performance, the problem of provision of adequate residential and academic facilities for both residential and non-residential students still exists. A search through related literature reveals that not much study has been done on the comparison of residential and non-residential students, especially in areas concerning their academic performance.

However, a study by Burtner and Tincher (1979) on problems experienced by non-resident students at Auburn University in the U.S.A and areas in which they were receiving fewer opportunities for personal development compared with residential students, showed that the grade point average of non-resident
and resident students were almost identical. Another study revealed that residential students performed better than non-residential students due to the fact that the former had greater access to learning facilities as compared to the latter. Also, according to Earthman (2002), poor school facilities have influence on teaching performance and later influencing academic performance. These findings have raised concern in the tertiary institutions as to why in some cases residential students do better than non-residential students or sometimes the two groups seem to have similar grade point averages.

It is as a result of this that the researchers would like to compare the academic performance of residential and non-residential students and to investigate whether problems they face in their accommodations have a bearing on their academic performance.

**Research Questions**

Based on the statement of the problem, the following research questions are raised:

1. Will the facilities used by resident and non-resident students have a significant relationship with their academic performance?

2. Will the residential students perform better than non-residential students?

3. What will be the relative importance of the facilities to the academic performance of the students?

**Research Hypotheses**

1. There will be a significant relationship between facilities of residential and non-residential students and their academic performance.

2. Residential students’ academic performance will significantly be better than that of non-residential students.

3. There will be a relative importance of the facilities used by residential and non-residential students on their academic performance.

**Significance of the Study**

1. The findings of this study will assist the university authorities to have a deeper appreciation of the relationship between students’ accommodation and their academic performance.

2. The findings will also enable the counselling centre of the university develop orientation strategies that will assist both residential and non-residential students to make suitable adjustments on campus.

3. They will again enable management to develop strategies to assist students in their accommodation facility issues, whether resident or non resident.

**LITERATURE REVIEW**

**Physical facilities of schools that directly or indirectly affect learning**

Resident students are those who live on campus, and non-resident students do not live on campus.
Irrespective of their residential status, Young, Green, Roehrich-Patrick, Joseph & Gibson (2003) reported that the physical facilities of schools that directly or indirectly influence learning include: building foundation and structure, exterior walls, roof, windows, age of building, maintenance, school grounds, doors, floors, interior walls, ceiling, electrical and plumbing, lighting, maintenance, lockers, storage space, security guards, weapons screening, fire control/alarms/resistance, emergency lighting, school order and discipline, air circulation/ventilation, indoor air quality, radon, asbestos and lead paint, cleanliness and material safety (lab chemicals, cleaning supplies). The others are lighting, acoustical quality, internal/external noise, temperature control, design/arrangement, colour schemes, graffiti, peeling paint, crumbling plaster, condition of restrooms, broken windows, privacy, size of school, sense of emotional wellbeing, teacher, principal, science lab, computers, access to library, curriculum, class size and time in learning.

Similarly, Higgins (2007) reported that some of the facilities of the university may include recreation and sporting facilities, bookshops, medical services, career, social and academic counselling services, halls of residence, cafeterias, libraries, clubs and societies and university media and publications. Study skills training and other academic support are also readily available at most campuses which can also directly or indirectly affect academic performance.

The effect of facilities on academic performance

The inadequacy of such physical resources like lecture halls, halls of residence, laboratories, libraries and other academic resources translates to poor results because it breeds overcrowdedness (Adedipe, 2007 cited by Fabiyi & Uzoka, 2009). Again, Fabiyi and Uzoka (2009) have observed that the planning and design of educational facilities for schools, colleges and universities have impact on educational outcomes.

According to Earthman (2002) and Schneider (2002) school building design features and components have been proven to have a measurable influence on student’s learning. Among the influential features and components are those impacting temperature, lighting, acoustics and age. Researchers have found a negative impact upon student performance in buildings where deficiencies in any of these features exist. In addition, overcrowded school buildings and classrooms have been found to be a negative influence on student’s performance. The overall impact a school building has on students can be either positive or negative, depending on the condition of the building. In cases where students attend school in substandard buildings they are definitely handicapped in their academic achievement. A correlational study showed a strong and positive relationship between overall building conditions and students’ achievement. Researchers have repeatedly found a difference of between 5-17 percentile points between achievement of students in poor buildings and those students in standard buildings (Earthman, 2002).

Ethnographic and perception studies indicated that poor school facilities negatively impact teacher effectiveness and performance, and therefore have a negative impact on student performance (Jago & Tanner, 2009). Jago & Tanner (2009) in their research concluded that lighting, colour choices and windows play a significant role in the achievement of students.

In the comparison of resident and non-resident students’ academic performance, Burtner and Tincher (1979) noted that the grade points average of non-resident and resident students were almost identical. This implied that there was no significant difference in their academic performance. Also,
non-resident students were less likely to form close friendships with students they did not know before coming to the university and that they dated less frequently than resident students. The authors further noted that it appeared that non-resident students were less satisfied than resident students with their social lives at the university and also they do not participate much in campus activities as compared to resident students.

**METHODOLOGY**

**Research Design**

A cross-sectional survey design was used for the study. This design is a form of quantitative approach. The quantitative approach is the use of statistical methods for data analysis to study random samples in order for the findings to be generalized beyond the samples to the population (Fraenkel and Wallen, 2003).

**Sample and Sampling Procedure**

The study covered resident and non-resident level 200 students of the Faculty of Social Science, University of Education; Winneba. One hundred and twenty nine (129) students were randomly selected from the Faculty. This group was chosen because it was from them that we were able to access a population about half of which were only in the previous academic year on campus and the other half non resident outside the campus.

**Instrumentation**

Questionnaire for the intended study were self-report questionnaire with sub-scales of the factors to be investigated. For the psychometric properties, factor analytic technique was adopted using the SPSS version 17 to assess the construct validity of the questionnaire. Cronbach alpha coefficient of 0.64 and 0.70 were respectively obtained for the residential and academic facilities constructs.

**Data Analysis**

Data analysis and entry were done by the use of statistical package for social sciences (SPSS) version 17. The data were analyzed in two sections. The first section entailed the demography of the respondents. The second section of the analysis was made up of bivariate correlations to answer hypothesis one, t-test to answer hypothesis two and multiple regression to answer hypothesis three.

**RESULTS**

**Demography**

Table 1, 2 and 3 below present the distribution of the samples drawn from the population. Table 1 displays the sex distribution, table 2 displays the age distribution and table 3 shows the distribution of residential status of the students.

**Test of Hypotheses**

**Hypothesis 1:** There will be a significant relationship between

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
<th>Percent</th>
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</tbody>
</table>
facilities of residential and non-residential students and their academic performance.

The table 4 below shows a one-tailed hypothesis of the relationship between academic facilities, residential facilities and academic performance. This was tested using the Pearson’s correlational method. As shown in the table, academic performance significantly correlated with academic facilities ($r = .163, p < 0.05$) and residential facilities ($r = .189, p < 0.05$). The positive significance suggests that increase or improvement in academic facilities and residential facilities may result in improvement of students’ academic performance (GPA). Therefore, the hypothesis that there will be a significant relationship between facilities of residential and non-residential students and their academic performance was accepted. On the same table is the non-significant positive relationship of residential and academic facilities. This also suggests that improvement in residential facilities may also improve academic facilities but then, there was no relationship between them; suggesting that students may depend on any of the two to survive academically in the university.

**Hypothesis 2:** Residential students’ academic performance will significantly be better than that of non-residential students.

Table 5 below presents the results of the independent-samples t-test performed on the academic performance of two independent groups of randomly selected students i.e. residential and non-residential

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-23</td>
<td>21</td>
<td>16.3</td>
</tr>
<tr>
<td>24-29</td>
<td>75</td>
<td>58.1</td>
</tr>
<tr>
<td>30-35</td>
<td>27</td>
<td>20.9</td>
</tr>
<tr>
<td>36-41</td>
<td>2</td>
<td>1.6</td>
</tr>
<tr>
<td>42-47</td>
<td>4</td>
<td>3.1</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 2: Age distribution of respondents**

<table>
<thead>
<tr>
<th>Residential Status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
<td>64</td>
<td>49.6</td>
</tr>
<tr>
<td>Non-Resident</td>
<td>65</td>
<td>50.4</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 3: Residential status distribution of respondents**

<table>
<thead>
<tr>
<th>Academic Facilities</th>
<th>Residential Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Performance</td>
<td>0.163*</td>
</tr>
<tr>
<td>Residential Facilities</td>
<td>0.189*</td>
</tr>
<tr>
<td></td>
<td>0.076</td>
</tr>
</tbody>
</table>

**Table 4: Correlation matrix of the variables (n = 129)**
students. As can be seen in this table, comparison of the mean academic performance from the two independent groups would suggest that residential students academic performance was similar or almost identical (mean = 2.4375) to non-residential students (mean = 2.4711). To test whether the difference in mean academic performance between the two groups was statistically significant, independent-samples t-test was performed. The results of this test revealed that there was no statistically significant difference in the mean academic performance between the two groups (t = -.491, df = 127, p = 0.31 one-tailed). Therefore the hypothesis that the academic performance of residential students will be significantly better than that of non-residential students is rejected and the null-hypothesis that the academic performance of residential students will not be significantly better than that of non-residential students is accepted.

Table 5: Summary statistics and independent samples t-test on academic performance

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
<th>t</th>
<th>df</th>
<th>Sig (1-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident</td>
<td>2.4375</td>
<td>.37335</td>
<td>64</td>
<td>-.491</td>
<td>1.27</td>
<td>0.31</td>
</tr>
<tr>
<td>Non-Resident</td>
<td>2.4711</td>
<td>.40317</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 3: There will be a relative importance of the facilities used by residential and non-residential students on their academic performance.

Regression analysis using the forced entry method was performed to assess the relative importance of academic facilities and residential facilities in the prediction of the extent to which students perform academically. Table 6 displays unstandardized (b) and standardized (β), regression coefficients (R), adjusted and the value of t and its associated p-value for each variable that entered into the equation. As shown in table 6, academic facilities and residential facilities collectively explained 4.3% (adjusted = .043) of the variance in academic performance. This suggests that other factors may also contribute to the prediction of academic performance of the students. From the table, it appeared that residential facilities which was significant explained the bulk of the variance in academic performance (β = -.177, t = 2.044, p < 0.043) and was a better predictor of academic performance than academic facilities (β = .149, t = 1.722, p > 0.087) which was also not significant.
Therefore a student who rates academic facilities 4 and residential facilities 5, his academic performance will be expected to be:

\[ y = b + (0.063 \times 5) + (0.084 \times 4) \]

\[ = 1.985 + (0.315) + (0.336) \]

\[ = 2.64 \]

Academic Performance = 2.64

This therefore indicated that the model was not a bad predictor of academic performance since averagely a student academic performance was 2.5

**Discussions**

On the question of the relationship between facilities and academic performance of residential and non-residential students, the results obtained showed that there was a significant relationship between the facilities used by residential and non-residential students and their academic performance. This may be due to the fact that as students are on campus and some staying around campus, academic facilities such as library, lecture halls, computer laboratories may be of utmost need to them since it is there that they seek for information and have group teachings and discussions. Also, the facilities in the halls and hostels, if they are not in appropriate shape will not be of help to them. Facilities such as the beds, toilet, bathroom, chair etc in the residents bring some comfort to them so whether they are in good shape or not may influence how students learn in improving their academic performance. This finding is therefore consistent with Fabiyi and Uzoka (2009), Adedipe (2007) and Earthman (2002).

Regarding the question of residential students performing better than non-residential students, the result obtained showed that there was no significant difference in the academic performance of residential and non-residential students. Meaning, residential students did not perform better than non-residential students. This result was in conformity with Burtner and Tincher (1979) who noted that the

<table>
<thead>
<tr>
<th>Variable</th>
<th>b</th>
<th>Beta(β)</th>
<th>R</th>
<th>R²</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.985</td>
<td></td>
<td>11.219</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential facility</td>
<td>0.063</td>
<td>.18</td>
<td>2.044</td>
<td>.043</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Facility</td>
<td>0.084</td>
<td>.15</td>
<td>1.722</td>
<td>.087</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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\[ = 1.985 + (0.063\times5) + (0.084\times4) \]

\[ = 1.985 + (0.315) + (0.336) \]

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grade points averages of non-resident and resident students were almost identical which showed that there was no significant difference. This may be because as stated in the beginning, government funds for tertiary institutions have decreased (Gye Nyame Concord, 2005). As a result of that the amount of funds needed for the upkeep of halls for residential students was not enough so a lot of facilities were in bad shape making their use difficult. Again, the university was also finding it difficult to raise enough funds to cater for the halls of residence and academic facilities since companies and other institutions are not in the position to invest in public utilities such as tertiary institutions. Nevertheless, they invest in the private hostels for students where they believe more proceeds will be generated. In view of that, most of the hostels are furnished with quality residential facilities which even include academic facilities such as library and computer laboratories.

Again, on the issue of the relative importance of the facilities to the academic performance of the students, the results showed that residential facilities emerged as a better predictor of academic performance. The reason may be that students depend mostly on the facilities produced in the halls and hostels to study especially in the evenings. Also, most of the students formed discussion groups in the halls and hostels since most of their colleagues are with them. This finding was consistent with Zimmerman (2003) who found that when students are concentrated in a single building or area, they may find it more likely to form study groups with each other, or share ideas with each other, which may have positive benefits for their learning in the classroom. The results also showed that use of residential and academic facilities explained 4.3% of the variance in academic performance. This then implied that there may be a myriad of factors which contribute to students’ academic performance. As seen in the demography, age may be a major factor as there seem to be a larger part of the students to be above 23 years. It may be reasonable to suggest that above 23 years one may have married, have children and so there may be a lot of responsibilities on him or her which may have an impact on his or her academic performance. Peer and issues bothering students both at school and at home may also have some impact on their academic performance.

Conclusion and Recommendations

A sample of 129 students made up of residential and non-residential students academic performance was compared. The results showed that availability of facilities had a relationship with their academic performance and that residential students do not perform better than non-residential students. Finally, regression analysis revealed that residential facilities predicted student academic performance than academic facilities.

It is recommended that as academic facilities and residential facilities relate to academic performance of students, the government and other stakeholders should come to the aid of universities by reviewing and increasing the funds allocated to tertiary institutions. Similarly, companies and institutions who benefit from the end product of tertiary institutions, should invest in their education especially, facilities pertaining to students on campus.

Also, since residential facilities was a better predictor of academic performance than academic facilities, management should provide more incentives in the halls of residence and also refurbish and provide more incentives in the lecture halls, libraries and the computer centres to boost learning.

REFERENCES


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