Student Satisfaction with Facilities at the Tamale Campus of the University for Development Studies, Ghana

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Abstract— Students' satisfaction with facilities on their campus are very integral to their general academic wellbeing. For this reason, this study pursued the level of satisfaction of student of the Tamale Campus of the University for Development Student (UDS, Tamale). Adopting the descriptive survey as a design, and quantitative research approach, the results are presented in tabular percentage forms. A sample size of 300 were envisaged, however, after administering the questionnaires, only 261 returned their responses. The SPSS version 23 was used for the data preparation; entry, cleaning, and analyses of the data. The study revealed that, majority of the respondents (101) were satisfied with the location of the library and lecture halls. Again, while 129 (51%) of students were fairly satisfied with the general campus facility layout and planning, majority 186 (71.3%) were not satisfied with the number of seats in the lecture halls, culminating to general dissatisfaction with the comfort in the lecture halls. The study therefore recommends that, while University authorities need to take measures to provide large-space lecture halls to contain the large number of students by some departments, they should also not lose sight of the inadequate number of seats and comfort in the existing lecture halls. This would have the ability to attract more students into the University and generally improve their academic wellbeing.

Key words: Students', satisfaction; campus facilities, facility layout and planning.

INTRODUCTION

The growth of the economy and the development of any nation relies heavily on the level of education of the people. Countries have tried to develop stronger institutions of learning to produce the requisite human resource for national development and raise the living standard of the people. Special emphasis has also been placed on higher education through the provision of well-resourced libraries and laboratories to adequately prepare graduates for the job industry. Hemsley-Brown and Oplatka (2006) recognized that, the higher education market is strongly affected by globalization; a development that has heightened competition among Universities and created an international market for educational services. Institutions of higher learning have therefore been compelled to design market-oriented strategies with classified objectives to attract as many students as possible (Butt & Rehman, 2010). The goals of most of these institutions have always been centred on meeting or exceeding the needs of their students (Gruber et al., 2010). The discussion has been led, therefore, to identify factors influencing students' satisfaction in higher learning.

An evaluation of the short-term experience of a student in an institution determines the level of satisfaction with respect to campus facilities (Elliott & Healy, 2001). Student satisfaction indirectly influences the performance of the institution. The alumni are more likely to contribute financially to the school in appreciation of the satisfaction with facilities in the institution (Stutler & Calvario, 1996). Facilities with a low level of satisfaction can be improved with students' feedbacks (Douglas et al., 2006). Athiyaman (1997) found that student satisfaction is associated with the perceived quality of the institution and thus public perception about the quality of a school will improve if students are generally satisfied with campus facilities.

Oliver (1999) perceived satisfaction as a fulfilment of service. The perception of customer satisfaction serves as a key factor in maintaining the loyalty of the customer (Appleton-Knapp & Krentler, 2006). A subjective and positive evaluation of the experiences of students qualifies as a student's satisfaction with facilities at a university campus (R. L. Oliver & DeSARBO, 1989). According to Sweeney and Ingram (2001), student satisfaction generally perceives the enjoyment and accomplishment in the learning environment.

Research on the student satisfaction of campus infrastructure is evaluated regularly by some Universities in order to respond to the changes and improve the quality of the institution (Schuh & Upcraft, 2000). Among other reasons on the need to evaluate student satisfaction with campus facilities, Marozzi (2012) argues that there is an attraction of more students in time and adds that, there is an improvement in the quantity and quality of service rendered to students.

Under the Total Quality Management process, Universities aimed at improving conditions on campuses by obtaining data on the satisfaction level and demands of their students (Beltyukova & Fox, 2002). The satisfaction level of students depends on some variables and is dependent on the services

and facilities that are offered by the University. These facilities include libraries and laboratories, residential accommodation, lecture halls, and recreational facilities. These facilities play an important role in the infrastructure needs of campus for administrative and academic work to flourish.

The article is focused on the facilities at the Tamale Campus of the University for Development Studies (UDS). It is aimed at using empirical evidence from students of the University to determine the student perception about University facilities and the overall satisfaction of students. The research is also aimed at identifying facilities on campus that are considered most important and influential to the academic work of students. Previous research works on student satisfaction, such as Banwet and Datta (2003) and Galloway (1998), used the SERVQUAL framework which has come under some criticism. In view of that, the questionnaire used for the survey was designed on the performance of the range of services received on campus. No data was collected based on expectations. The service-product bundle was used as a concept to design the questionnaire.

PROBLEM STATEMENT

The satisfaction levels of students on campus facilities have been conducted in many Universities across the world. Management of these institutions see the need to run their Universities just like any business. They do not only try to meet the entry and graduating requirements of students but they go beyond this to provide conducive environments for teaching and learning. Universities that have been identified to solely promote teaching and learning are now shifting into other areas by providing competitive facilities on campus to attract and retain students (DeShields et al., 2005).

Oldfield and Baron (2000) classified tertiary education as pure service. Similarly, Hennig-Thurau et al., (2001) posited that these services provide fields for marketing. There is however a focus on quality in the delivery of the service which is normally measured by a comparison of the customer expectation and the services provided (Zeithaml et al., 1990). There are varying definitions of quality of service in the tertiary institutions by participants. Thus, it's difficult to define the quality of service and its measurement in higher learning (Clewes, 2003). There has been a raging debate though in the last 25 years over measuring the quality of service that appears intangible and complicated (Prabha, 2010).

Sohail and Shaikh (2004) found in a survey of 310 all-male students of King Fahd University of Petroleum and Minerals that physical environment and layout influenced the evaluation of service quality by students. It was also found that classrooms, the appearance of buildings, and the landscape were significant in evaluating service quality. Similarly, quality of service satisfaction and performance are used simultaneously (Cornin, 2000; Bitner and Hubert, 1994). Students' satisfaction can be referred to as the evaluation of students on their output in respect of their experiences in the institution (Oliver and Desarb, 1989). Some interesting factors explored by Mamun and Das (1999) in the satisfaction of students in tertiary education include libraries and laboratories. Also, Zahid et al., (2000) took different variables to study student satisfaction in tertiary learning. These variables included the location and size of the campus, facilities such as

auditoriums, restaurants, and student residential accommodation. These were considered as factors for measuring the satisfaction of students.

The loyalty of customers is driven by their satisfaction. Jones and Sasser (1995), in research conducted in five different markets, found that there is a linear correlation between satisfaction and loyalty. The higher the satisfaction, the higher the loyalty. This can be translated into the servicers provided on campus; It is focused on the frequency of usage and availability of facilities such as a library, catering, and IT services and also the willingness to recommend the University to family members and friends. Student satisfaction serves as evidence to measure the effectiveness of an institution in respect to its administration and management system (Zeithaml, 1988). Devinder and Datta (2003) noted that the quality of education is not only limited to tuition and counselling delivered by lecturers but is dependent on the physical infrastructure provided by the University.

Mavondo et al., (2000) indicated that satisfied students recommended prospective students to Universities they were studying. The academic reputation of a University, its quality of lecturers, and the availability of infrastructure are key factors in determining the satisfaction of students. It is therefore on this basis that this study found it necessary to probe the satisfaction of student of UDS Tamale Campus on their satisfaction with campus facilities. This would provide a basis for authorities to reconsider the factors that determine the satisfaction of the students.

STUDY OBJECTIVES

The study pursued the achievement of the following objectives;
[1] To probe students' satisfaction levels with the facilities on campus
[2] To assess the satisfaction with general campus layout and facility planning
[3] To find out whether there is a link between student satisfaction with facilities and their academic achievement/development.

MATERIALS AND METHODS

To achieve the objectives of the study, the researcher adopted the descriptive survey design. The study intended to investigate whether there were any significant relationships between students' satisfaction and academic facilities, sports and recreational facilities, transportation facilities, general campus planning/layout, and finally the satisfaction between Campus Hostels and Private Hostels. The data acquired sought to understand the relationship that existed between students' satisfaction (independent variable) and the dependent variables which included; academic facilities, recreational facilities/entertainment, transportation, general campus planning, and hostel facilities.

The study targeted students from the Tamale campus of the University for Development Studies, Ghana. Hence the adoption of a two-staged sampling procedure was appropriate. First, a stratified sampling technique was adopted to segment the participants into their various Faculties and Schools within the Campus and followed with Simple Random Sampling (SRS). The SRS technique was used obviously to allow all

students of the various faculties and schools an equal chance of participation (Creswell, 2015; Leavy, 2017). A total of 300 questionnaires were sent out to the respondents for data acquisition. However, 261 completed questionnaires were retrieved and were therefore processed (prepared, coded, and cleaned) for the final analyses.

For the sake of emphasis, the participants were chosen from across all the programs offered at the Tamale campus of the UDS. This was done in such a way that students of the different schools and faculties all participated. The reason for this was that, the various schools and faculties had different standards of academic facilities but shared facilities like the library, the mosque, the church, and campus pavements and recreational areas like the football field.

Again, the Simple Random Sampling (SRS) was finally adopted to allow students who resided in Campus-based hostel facilities and private hostel facilities an equal participation capable for providing holistic results. This was important since the respondents were often affected by the same or similar factors because they were all within the same academic environment.

Analytical tools in the Statistical Package and Service Solutions (SPSS) were generally used to carry out the analysis. These were complemented by Microsoft (MS) Excel for further descriptive graphical and tabular generations. Therefore, the data were analysed descriptively. To acquire the right analysis, the questionnaires were coded numerically where numbers such as 1=Male and 2=Female respondents were similarly assigned to each question for all the questions.

Usually, when the sample size is not large enough, and the majority of the questions are Likert type questions, obtaining any statistical validity and reliability using the Pearson's correlation analysis (Bivariate) is often difficult (Ho, 2006), hence, the data were subjected to face validity and Spearman's Correlation analysis. Whereas face validity merely establishes that the tool seems an appropriate way to find what is being measured (Amin, 2005), reliability refers to the ability of study findings to be replicated (Fink & Litwin, 1995). This was to establish that the data collection tool was appropriate to ensure that the objectives were met, and right research questions answered.

In doing this, the questionnaires were first pretested in two stages. First, the questionnaire was shared with colleague researchers to make critical inputs and corrections to the questions asked to ensure that the questions and the objectives were rightly married. After this stage, ten (10) students were conveniently sampled for the pretesting. This allowed the researcher to make the necessary corrections and measures for the right questions capable of answering the study objectives. This ensures validity and reliability of the questions asked vis-à-vis the objectives and the research questions.

RESULTS AND DISCUSSIONS

Descriptive statistics were used to analyse and present the data in tabular and graphical forms.

Demographics of respondents

For every research conducted, the background of the participants is always important to the results obtained. This enhances the general understanding and further acceptability of the results obtained. For that matter, the following constitute the important background information and is therefore narrated to act as the introduction to the study results.

Table 1: Gender of Respondent

Variable	Frequency	Percent
Male	111	42.7
Female	149	57.3
Total	**260**	**100.0**

The results as portrayed in Table 1 above indicates that, male participants were 111 representing 42.7% as against the Female participants who were 149 representing 57.3%. This means that, females students participated more than the male participants though male students outnumbered their female counterparts in UDS. This is supported by the findings of Fiadzawoo, Mohammed, and Stella (2021). According to them, despite the many efforts that are made in the University in terms of allocating quota for the female students with the intention to increase the female student population vis-à-vis the affirmative action, male students still dominated their female counterparts in the University for Development Studies.

Table 2: Age range of respondents

Variable	Frequency	Percent
Under 21	76	29.1
21-25	155	59.4
26-30	23	8.8
31-35	4	1.5
Total	**258**	**98.9**

It is obvious in the table 2 above that, students who fell within the age groups of 21-25 dominated the other students who found themselves within the other categories. Those with age group of under 21 were next with 76 score representing 29.1%. They were followed by those within the category of 26-30 who scored the percentage of 8.8%. The results here simply show that, students of the Tamale campus of UDS largely fall within the ages of 21 and 25.

Table 3: Programs studied by participants

Variable	Frequency	Percent
Nursing	2	.8
Medicine	19	7.3
Doctor of Medicine	6	2.3
Nutrition	49	18.8
Basic Education	35	13.4
Medical Img. Technology	7	2.7
Development Education	24	9.2
Midwifery	46	17.6
Medical lab	11	4.2
Early Childhood Education	48	18.4
Total	**247**	**94.6**

Table 3 indicates that, majority of the respondents pursued programs such as; Nutrition sciences (18.8%), Early Childhood education (18.4%), Midwifery (17.6%), and Basic Education studies (13.4%).

The results presented in the table 4 below contains the satisfaction rates of students of the Tamale campus on key academic facilities of the University. Majority of the respondents believed that, the location of the Library and lecture halls are good. 101 (38.7%) of them responded that, the location of these facilities was good, 98 (39.5%) thought they were fairly placed, while 57 (21.8%) responded that, the location of the library and the lecture halls were poorly placed. The results therefore indicates that, the location of the library and the lecture halls were good since they were close to the

central administration block, the departmental offices, and the campus-based hostels. With their locations, students can easily make use of them easily during day and night. The results are presented below.

Table 4: Location of library and lecture halls

Response	Frequency	Percent
Good	101	38.7
Fair	98	37.5
Poor	57	21.8
Total	256	98.1
Abstained	5	1.9
Total	**261**	**100.0**

Source: Field survey, 2021

Table 5: Adequate number of seats and comfort in lecture halls

Response	Frequency	Percent
Good	19	7.3
Fair	56	21.4
Poor	186	71.3
Total	**261**	**100.0**

Table 5 above reveals the results obtained on the satisfaction of students on the number of seats in the lecture halls. 186 representing 71.3% responded that, there no adequate number of seats in the lecture halls. 56 representing 21.4% felt that the number of seats in the lecture halls are fair. While only 7.3% felt it was good.

Students' satisfaction with general campus

The respondents were asked about their satisfaction with the overall campus facility layout and plan. The table below presents the findings.

Table 6: General facility layout or planning

Response	Frequency	Percent
Good	62	24.5
Fair	129	51.0
Poor	62	24.5
Total	**253**	**100.0**

Table 6 indicates that, majority of students of UDS Tamale campus opined that, general campus layout was fair. This indicates a bit of dissatisfaction with the layout and plan for campus facilities. 62 (24.5%) felt that the layout of campus facilities was good. 129 (51%) were not overly satisfied with the general planning of facilities. Similarly, 62 (24.5%) were totally not satisfied with the planning of facilities. This indicates a dissatisfaction with the general campus facility planning and layout.

Table 7 below explores the extent of influence students' satisfaction with campus facilities has on their academic wellbeing. The alphabetical designations are as follows: (N represents the total number, and SD represents the Standard Deviation).

Table 7: Extent of influence of satisfaction with campus facilities on student academic wellbeing

Statement	N	Mean	SD
Location of library and lecture halls	256	1.83	.768
Adequate number of seats and comfort	259	2.64	.615
Availability of disabled ramp for physically challenged	254	2.38	.717
Cleaning and waste disposal	261	2.28	.767
Ventilation	254	2.28	.779
Places of conveniences	259	2.57	.686
Paved walkways	257	2.05	.756
Location of Facilities	261	1.93	.743
General Landscape designs	255	2.16	.718
Architectural design of buildings on campus	253	1.99	.751

The results presented above indicates that, at a mean value of 1.83 and Standard Deviation of .77, students enjoy improved academic wellbeing when the location of library and lecture halls are satisfactory. Similarly, at 1.93 mean value and Standard Deviation value of .75, students' academic wellbeing improves when the general location of campus facilities is good enough. Finally, on the general architectural designs of buildings on campus, students are generally satisfied with the architectural design of facilities. This is relation to the mean value of 1.99 and standard deviation value of .74. In relation to this finding, the study may conclude that, students were generally satisfied with some aspects of the facilities. On the architectural design of campus facilities, the study reveals that, students were satisfied with the general designs, however, they were not satisfied with some other factors of the design such as the general landscape of the facilities and the campus environment. This is in agreement with the recommendation of Amole (2009) that when designing student facilities, attention should be paid to critical factors of students.

CONCLUSION

The study reveals that, majority of the respondents felt that the location of facilities such as the library building and the lecture halls were fairly good. This is true considering the fact that the library block comprises of the library facility, and a number of lecture halls. The closeness of these facilities could be the influencing factor in the satisfaction of the respondents. Students from every department utilises the lecture halls in the complex which contains the library facility. However, majority of the students felt that, there were no adequate number of seats in only the lecture halls. This was not specific to only the lecture halls situated at only the library block, but for all other lecture halls at the Tamale campus of the University.

It has also been revealed that, different factors come to play when measuring the satisfaction of students on campus facilities. Satisfaction of students is different with regards to the difference in the facility. This means that, as students were generally satisfied with the facility layout, they were not quite satisfied with the number of seats in the lecture halls. One important factor that likely determines the general facility planning was their accessibility to the students. The study can also conclude that the general facility layout and planning was viewed as fairly good by the respondents. This means that, the lecture halls, the library facility, the auditoriums, the sports and recreational centre (sports complex) were all considered by the respondents to be established at right places.

RECOMMENDATIONS

The study recommends that the University authorities must pay key attention to designing facilities that meets the needs of the students. The respondents on the satisfaction of the number of seats in the lecture halls calls for a concern. Though different factors may account for the dissatisfaction with the number of seats in the lecture halls, the study recommends that serious action be taken concerning that phenomenon. This

when not tackled, may affect the interest of the attraction and retention of students into the University.

Furthermore, the design and implementation of landscape plans adds a distinct character to the beauty of a University campus. Hence, the University should set a priority to develop landscape plans to provide a unique, memorable, and a strong sense of place. It well documented that a well-developed landscape in a University campus will attract students to pursue various academic programmes being offered. Academic excellence is manifested in the beauty of a University campus and environment. Therefore, authorities must place consideration on the satisfaction of students in the designing of buildings to be constructed on the campus. This has the ability to attract and retain students on the Tamale campus of the University.

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