

# Students Satisfaction and Academic Performance in Federal Polytechnic Bauchi

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## Abstract.

This study addresses parameters that assess academic performances among Federal Polytechnic Bauchi's Quantity Surveying students and examines the relationship between student satisfaction and academic performance. Students enrolled in the Quantity Surveying program make up the study population. There were 155 students in the population overall, and each one of them received a questionnaire to fill out. The statistical analysis on the data received was performed using SPSS (v23) for the Pearson coefficient and mean ranking factor. The response rate was 92%. The study discovered a significant correlation between student satisfaction and academic performance; additionally, among Federal Polytechnic Bauchi's Quantity Surveying students, the three most important indicators of academic performance were a good overall grade point average, the graduation rate, and minimal or no carryover/ course arrears. According to the study's findings, it was concluded that student satisfaction encourages retention and academic accomplishment. The study concluded that activities that enable educational institutions to attract and hold on to students should be given careful consideration in these competitive atmosphere of today, where students have many choices available to them.

**Keywords:** Student satisfaction, Academic performance and Federal Polytechnic Bauchi

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## Introduction

Education sector is expanding very rapidly all over the world in recent years and competition among higher education institutions is intensifying and as such institutions are increasingly directing efforts towards improving their ranking. However, increased costs and greater competition among institutions require that they should adopt a market orientation strategy to differentiate their services from the competitors in order to increase enrolments and attract students. But, increasing enrolments is not the only answer to survival, they also have to properly manage and retain these students. Under this condition, only those institutions that are which are providing quality education and constructive environment to their students will survive, since these factors can influence their choice of admission. Such factors can satisfy students and can influence their decisions to attend. It has been recognized and reported in earlier studies that long term survival and success of the universities depending upon the quality of services and the effort made by them to achieve that distinguishes one university from other universities (Asaduzzaman<sup>1</sup>, Hossain, & Rahman, 2013). In Nigeria, the subject of student satisfaction has not been explored much. Therefore, this paper (i) investigate the relationship between satisfaction of students and academic performance in quantity surveying student, Federal Polytechnic, Bauchi and (ii) to identify determinants of academic performance of quantity surveying student, Federal Polytechnic, Bauchi

## Literature Review

### Students Satisfaction

Polytechnics have no value without student. Students are the most important asset for any educational institute. The social and economic progress of the country is directly linked with student academic

performance. The students' performance academic achievement plays significant role in producing the best quality graduates who will become great leader and manpower for the country thus responsible for the country's economic and social development (Ali et.al, 2009). Students' academic performance in higher education is affected by various socioeconomic, psychological, personal factors and environmental factors (Hijazi & Naqvi, 2006). These factors strongly influence on the student performance, but these factors vary from person to person and country to country (Mushtaq & Nawaz Khan, 2012). It is always in the best interest of educators to measure students' academic performance. This allows them to evaluate not only students' knowledge levels but also the effectiveness of their own teaching processes, and perhaps, provide a gauge of student satisfaction (Martirosyan, et al., 2014). Student satisfaction means a mental state of enjoyment when a student perceived outcome fulfils her/his expectations (Weerasinghe and Fernando, 2017). According to Elliott and Shin, (2002), student satisfaction is the favourability of a student's subjective evaluation of the various outcomes and experiences associated with education. However, Student satisfaction is being shaped continually by repeated experiences in campus life (Gruber, et al., 2010).

Numerous variables have been found to have the ability to impact how satisfied students are with the various educational services that colleges offer. Decisions about withdrawal or persistence were consistently correlated with students' informal interactions with faculty members (Terenzini and Pascarella, 1980). According to Druzdzel and Glymour (1995), retention of students was frequently seen as a sign of their contentment with their academic program and, in turn, as a proxy for the calibre of their university education. Furthermore, faculty mentorship programs were found by Campbell and Campbell (1997) to be favourably connected with improved academic achievement and a decrease in dropout rates.

Aldemir and Gulcan (2004) investigated the contentment of Turkish students in tertiary education. The study's findings demonstrated that for a subset of Turkish university students, characteristics such as gender status and prior knowledge were significant predictors of satisfaction, as well as the calibre of instructors, curriculum, and texts. Navarro et al. (2005) conducted a study to find out how satisfied Spanish university students were with the educational opportunities provided by the institutions. The study's findings demonstrated that obtaining student satisfaction and their ensuing loyalty required effective teaching staff, instructional strategies, and course administration.

Similarly, Mai (2005) conducted research on the elements that influence student satisfaction in higher education. The most significant predictors of students' satisfaction were found to be the general perception of the school, the overall perception of the quality of the education, the subject matter expertise and interest of the teachers, the quality and accessibility of IT facilities, and the likelihood that the degree will advance the careers of the graduates.

### **Determinants of Academic Performance**

Academic performance is described by Narad and Abdullah (2016) as the knowledge that is evaluated by a lecturer through grades or learning goals that are set by students and lecturers and must be met within a certain time frame.

### **Grade Point Average**

High schools, polytechnics, and universities use the grade point average system to assess a student's performance and academic achievement. According to Aitman and Wilson (2017), grade point average (GPA) is the most widely used metric in research that evaluate undergraduate academic achievement.

### **Graduation Rate**

Graduation rate refers to the percentage of students that are able to successfully complete a particular school or polytechnic course within a define time frame. White (2017) analysed the graduation rate of 6135 school districts nationwide using a spline regression approach, controlling for financial and demographic variables. The study discovered a positive correlation between graduation rate and economical and demographic parameters.

**Carry Over/ Course Arears**

Course carry over mean a student not meeting the required scores /grade to pass the course; while course arears mean any course in a semester which a student fails to register for. Tan et al. (2019) looked at a few course-level factors that influence adult learners in Singapore's academic performance. The results show that there isn't a single best course design that will boost students' academic achievement in every subject. Instead, in order to meet the needs of different students, lecturers should be prepared to take into account the nature, level, discipline, and coursework component of each course.

**Discipline**

Discipline referral refers to a situation where a classroom lecturer reports to the head of department describing a student’s misconduct that has violated classroom or school rule with a request by the lecturer for disciplinary action. Academic discipline is all about having the ability to control yourself and focus on your work. Disciplined people are able to delay satisfaction in the present so they can reap future rewards; also the are happier because they feel a sense of mastery over their lives. Stanley (2014) studied some selected schools in Lagos State and establish that school with high student discipline referral rates had more negative rating than schools with low student discipline referral rate; also the study showed a positive relationship between school discipline and student’s academic performance.

**Class Attendance Rate**

Attendance rate means the number of instructional days a student is present divided by the number of instructional days provided by the school during a specific period. Ancheta et al. (2021) investigated the correlation between class attendance and academic achievement among L3 Omani undergraduate students enrolled in English courses during the first semester of the 2022–2021 academic year. The findings showed a strong correlation between student performance and attendance in class. In Uganda, Seikwu et al., (2020), examining the connection between academic performance and attendance at school, the study found that students who attend classes regularly outperform those who miss them frequently. It also found a positive correlation between academic performance and attendance (R=0.365); however, attendance at school only accounts for 11.8% of the variation in academic performance, with the remaining 88.2% being explained by other factors.

**Methodology**

The study was conducted among 155 students of department of Quantity Surveying, Federal Polytechnic Bauchi. To boost the quality of the study; Cronbach’s coefficient alpha was checked it was 0.801, which is greater than the 0.70 needed for internal consistency reliability (Hair et al.,2019). Pearson correlation was utilized to determine the relationship between variables being investigated. A five point Likert scale was used to rate the factors that measure academic performance

**Findings**

Table 1 displays demographic information of the respondents 80.4% of the study respondents were male and 19.6 % were female.

**Table 1: Gender**

<b>Gender</b>	<b>Frequenc y</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Male	115	80.4	80.4
Female	28	19.6	100.0
Total	143	100.0	

From Table 2; 68.5% of the respondents aged between 18 -25 years.

**Table 2: Age Grouping**

Age Group	Frequency	Percent	Cumulative Percent
Under 18	12	8.4	8.4
18-25	98	68.5	76.9
26-34	33	23.1	100.0
Total	143	100.0	

From Table 3 15.4% were final year student with the remaining respondents being in year 1 -3

**Table 3: Current Classes**

Class	Frequency	Percent	Cumulative Percent
ND1	52	36.4	36.4
ND II	37	25.9	62.2
HND I	32	22.4	84.6
HND II	22	15.4	100.0
TOTAL	143	100.0	

Table 4 is the Pearson correlation utilized to determine the relationship between students' satisfaction and academic performance of Quantity Surveying students of federal polytechnic Bauchi

**Table 4: Correlations**

		Dependent Variable	Academic Performance
Spearman's rho	Dependent Variable	Correlation Coefficient	1.000
		Sig. (1-tailed)	.508**
		N	.000
		143	143
	Academic Performance	Correlation Coefficient	.508**
		Sig. (1-tailed)	1.000
		N	.000
		143	143

\*\* . Correlation is significant at the 0.01 level (1-tailed).

Table 5 presents the ranking mean scores and standard deviation of the important rating of measures of academic performance

**Table 5: Measures for Academic Performance**

Determinants of Academic Performance	Rank	Mean	Std. Deviation	Interpretation
Good overall Grade Point Average(GPA)	1	4.37	.95444	High
Rate of Graduation in the Polytechnic	2	4.25	.91520	High
Minimal /no carry over or course arrears	3	3.90	1.05025	High
Less discipline referral	5	3.58	1.07738	High
High class attendance rate	4	3.71	1.11855	High
<b>Grand mean</b>		<b>3.96</b>	<b>1.02316</b>	<b>High</b>

**Discussion**

The study focused on two main objectives including the relationship between students' satisfaction and academic performance and exploring factors that measure academic performance. The first objective is to

investigate the relationship between student experience and academic performance in the Quantity Surveying Programme, Federal Polytechnic Bauchi. Table 4 shows a strong relationship between student satisfaction and academic performance with  $r = 0.508$ ,  $p$  (one tailed)  $< 0.10$

The second objective was to explore factors that determine academic performance; from Table 5 it can be seen that the overall mean score range from 3.71 – 4.37 with the three most significant determinants being good overall grade point average (4.37), Rate of Graduation in the Polytechnic (4.25) and Minimal /no carry over or course arrears (3.90). It's interesting to note that students are connected to all three primary causes. This conclusion can stem from the perception that a strong academic record increases one's chances of landing a job. Nonetheless, research indicates that job opportunities in Nigeria are contingent upon luck; academic achievement holds little weight in the country's labour market (Ugwu & Ohagwu, 2023)

### **Conclusion**

The main objectives of the study were to investigate the relationship between student satisfaction and academic performance; as well as look at factors that determine academic performance of Quantity Surveying student, Federal Polytechnic Bauchi. The study found that the relationship between student satisfaction and academic performance is significant and determinants of academic performance are more student associated.

### **Recommendation and Limitation**

Based on the finding it is recommended that effort should be to retrain lecturer to promote the quality of education. Conducive and favourable learning environment should be provided in the polytechnic and classroom facilities should be upgraded to promote quality learning.

The use of a single polytechnic is the study's only drawback; in light of this, the study suggests using a bigger sample size.

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