*Original Paper*

# Quality Service Provision and Students Satisfaction at Akenten APPIAH-Menka University of Skills Training and Entrepreneurial Development: Implications for University Mnagement

Benedict Osei-Owusu, PhD[1][*]

[1] Department of Educational Studies, Faculty of Education and General Studies, Akenten-Appiah Menka, University of Skills Training and Entrepreneurial Development (Formerly University of Education, Winneba), College of Agriculture Education, Mampong-Ashanti, Ghana-West Africa

[*] Benedict Osei-Owusu, PhD, University of Skills Training and Entrepreneurial Development (Formerly University of Education, Winneba), College of Agriculture Education, Mampong-Ashanti, Ghana-West Africa

*Abstract*

*The aim of this study was to investigate the factors that affect quality service provision and students' satisfaction at Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development. Descriptive survey research was used for the study. Simple random sampling was used to select third and final year undergraduate students in Kumasi and Mampong campuses.The total population of the study was 1642. Parasuram's SERQUAL instrument type of questionnaire was adopted as a research instrument for data collection. The internal consistency of the 32-items yielded a Cronbach Alpha value of 0.91. The data gathered were quantitatively analysed with the use of descriptive and inferential statistics. The results of the study showed a statistically strong and direct relationship between quality in commitment, social and financial bonds, communication, general academic conditions and administrative support and students' satisfaction which in turn influenced institutional image and students' loyalty. This indicates that students had high expectations in the five-dimensional variables that stood as proxy for quality service provisions by the University. It was recommended that university management should appoint competent academic and administrative staffs to positions, provide them with adequate professional development programmes to improve their commitment in teaching and*

*learning, communication and other service provisions. More so, management should be proactive towards adequate infrastructural provision for students in order to improve their academic work in a conducive learning environment. Lastly, the study will benefit other universities in Ghana to identify cost effective ways of improving service quality provision.*

*Keywords*

*service provision, students' satisfaction, SERQUAL, quality, university education*

## 1. Introduction

Education is generally regarded as an essential tool for promoting both economic and sustainable development (Leicht, Heiss, & Byun, 2018). University education has an important role to play in African's development towards the achievement of Millennium Development Goals (MDG). This unique role of university education in Africa's sustainability in political, social and economic development cannot be contested. Although university education has been identified and accepted as an important tool in facilitating African's development process (NEPAD, 2005), it has, however, persistently faced several challenges, particularly with the growing societal demands. The sector has suffered from inadequate funding, weak governance and leadership, low quality of academic programmes and stifled academic freedom. In recent times, university education has undergone a remarkable transformation, including phenomenal expansion of the sector in terms of numbers and diversity of institution academic programmes, rapid growth in enrolments, development of quality assurance frameworks and enhancement of institutional governance, among other things. These transformations are a consequence of many new developments both local and global which have allowed the sector to start regaining its key positions in terms of African's development (Asongu, 2015; Forson et al., 2015, 2017). University education for any society is seen as the final processing stage for graduates to sharpen their skillset and gain more acceptance within the job market. Universities are created to satisfy specific or general educational needs of a nation through teaching of students, conducting of research and dissemination of knowledge together with other community service activities. The contribution of university education to the human capital development process cannot be ignored.

There is a tremendous pressure on the universities in Ghana in the provision of quality teaching, learning and research as a result of government policy of cost sharing which has significantly reduced government financial support to the sixteen (16) public universities. The universities are being encouraged to develop programmes that will meet the demands of the growing industries and generate more revenue towards the provision of quality teaching, learning and conduct of research. In such a context, it is, therefore, important for the universities to actively monitor the provision of service quality that will safeguard the interest of all stakeholders in this sector especially students in an effort to meet their satisfaction. This has created tensed competition amongst the universities as to which university can provide quality service to meet the new generation of students who are becoming more

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aware of the basic necessities universities are expected to provide them. This has influenced the universities to change the way they interact and operate with their customers (students). Delivery of quality service is, therefore, very crucial among universities in order to satisfy their customers and be able to maintain them. Most universities current revenues are enrollment related. Therefore, any university that delivers poor quality services will result into dissatisfaction among its students which will invariably result into poor enrollment of students. On the other hand, satisfied students as a result of quality service delivery by their university will have the perceived tendency to consume, maintain and recommend to other potential consumers to opt for that university which will increase the enrollment rate of the university leading to high revenues for the institution. Quality service delivery should be the main focus for every university as it strides to achieve and be regarded as the facilitator of socio-economic growth and development of a nation. Hence, this study aims to help in filling the research gap and to add to knowledge on quality service provision and students' satisfaction.

*1.1 Statement of the Problem*

Several studies have shown that University's environment effects students' academic achievement and one of the most important elements of University's environment is the conducive atmosphere for effective teaching and learning. It is therefore essential to investigate students' satisfaction in quality of service in Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development (AAMUSTED), Ghana and to provide information and analysis to education policy makers, implementers and development partners involved in tertiary education in Ghana information needed to identify and prioritize capacity building needs for quality improvement.

*1.2 Purpose of the Study*

The purpose of this study was to investigate students' satisfaction on quality of service in terms of commitment to provide fundamental services, quality of communication, provision of social and financial bonds, serene academic conditions, lecture rooms conditions and excellent administrative support in Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development.

*1.3 Objective of the Study*

The objectives of this current study are to:

1) Establish the relationship between the university's commitment to providing fundamental services and students' satisfaction.

2) Establish the relationship between the university's quality of communication and students' satisfaction.

3) Establish the relationship between the university's social and financial bonds and students' satisfaction.

4) Establish the relationship between the university's general academic conditions and students' satisfaction.

5) Establish the relationship between the university's administrative support and students' satisfaction.

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*1.4 Research Questions*

The following research questions were formulated to guide the study:

1) What is the relationship between the university's commitment to providing fundamental services and students' satisfaction?

2) What is the relationship between the university's quality of communication and students' satisfaction?

3) What is the relationship between the university's social and financial bonds and students' satisfaction?

4) What is the relationship between the university's general academic conditions and students' satisfaction?

5) What is the relationship between the university's administrative support and students' satisfaction?

*1.5 Hypothesis*

$H_0$ Students satisfaction is not determined by the quality-of-service provision in terms of the university's commitment to providing fundamental services, quality of communication, provision of social and financial bonds, general academic conditions and excellent administrative support.

*1.2. Review of Related Literature*

1.2.1 Concept of Service Delivery

Despite the fact that the term has been defined by a number of researchers and academics, no widely accepted interpretation has emerged. In general, the term "service" refers to work or experience provided by one party to the other. It is, in essence, intangible and unowned (Abu-Nahel, 2020). As accentuated by Ntoyakhe (2018), it refers to a more or less intangible product that cannot be owned or stored but is created when it is delivered for consumption at a specific time and location. In the context of higher education, services refer to the intangible actions, processes, and results that universities can provide to their stakeholders. In particular, they are intangible activities, benefits, or pleasures that universities provide to customers in exchange for valuable benefits or pleasures. The present study supports authors such as Guilbault (2018) and Ma (2020) who regard students as primary consumers of higher education service. The primary goal of higher education is to provide academic and non-academic services to students. The comfort and satisfaction of students participating in academic activities on campus will be affected by services for new students, such as services in the lecture process, use of facilities, communication, information, health, talents and interests, and other related matters. Service delivery, on the other hand, is the act of providing service to the customer in the most effective and efficient manner possible. Service delivery, according to Alzaydi, Al-Hajla, Nguyen, and Jayawardhena (2018), is a measure of how well a service level has been achieved, or how closely it matches customer expectations. Daugherty, Bolumole and Grawe (2019) agree with this definition, stating that service delivery reflects the customer's opinion of a product's or service's superiority. To manage the transition of students into university successfully, universities need to be proactive in

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working to minimize any potential discrepancies between what students expect of university (and by proxy, of their lecturers) and what, in turn, is expected of them. Given how customer service affects output, satisfaction, and performance in businesses, there have been several calls and commitments to provide and improve service delivery in educational institutions, particularly in Ghana (Nuako, Appiah-Badu, Owusu, & Adusei, 2020). Universities must be proactive in addressing any potential discrepancies between what students expect of university (and, by extension, their lecturers) and what is expected of them in order to successfully manage the transition of students into university. The help, assistance, and services that academic staff must provide to students, parents, university users, and the general public are referred to as service delivery. Service delivery also covers the relationship between policymakers, service providers, and service consumers, as well as the ability and availability of infrastructure to deliver services correctly and consistently in accordance with a set of standards (Arch & Gilman, 2019). As a result, the effectiveness of service delivery is dependent on balancing competing goals and expectations in ways that satisfy stakeholders.

1.2.2 Concept of Quality

The notion of quality is hard to define precisely, especially in the context of tertiary education where institutions have broad autonomy to decide on their own vision and mission (Beerkens & Udam, 2017). According to Klemenčič (2017), the quality of higher education is defined by the learning outcomes of students. Due to an increasingly competitive and dynamic educational environment, as well as numerous challenges, universities are becoming more aware of the importance of student satisfaction (Gregory, 2019). Hence universities do not only focus on student satisfaction to adapt to student needs, but also develops a system for continuously monitoring how effectively they meet or exceed students' needs (Barkley & Major, 2020). There is an increasing importance of tertiary education to competitiveness and economic development (Malik, 2018). Changes brought about by the transition to a knowledge economy have created a demand for higher skill levels in most occupations (Malik, 2018). Thus, countries wishing to move towards the knowledge economy are challenged to undertake reforms to raise the quality of education and training through changes in content and pedagogy (Bold, Filmer, Martin, Molina, Rockmore, Stacy, & Wane, 2017). Recent studies have demonstrated that, for developing countries, higher education can play a key "catch-up" role in accelerating the rate of growth towards a country's productivity potential (Nakayiwa, 2017). Every nation and its tertiary education graduates are competing in an environment shaped by their own local national needs as well as international expectations and standards. With globalization, the impacts of international standards are increasing and public demand for transparency and accountability is on the rise (Hazelkorn, 2018). Education and policymakers are, therefore, challenged to set appropriate standards of their own which draw on and reflect the unique history, needs and expectations of their stakeholders (Hoel & Mason, 2018). Furthermore, they are expected to put in place mechanisms to enforce those standards and to monitor performance of their tertiary education systems with a view to taking appropriate and timely measures to adapt to new realities (Tomlinson, 2017). The main factors that drive the current push to

strengthen quality assurance in higher education in Africa are increased demand for tertiary education and rising private contributions, rapid growth of tertiary enrollment in African without a matching increase in funding and demands for increased transparency and acceptability (Tomlinson, 2017).

Quality assurance within institutions of higher learning in Ghana takes place throughout the teaching and learning process. It includes screening of candidates for admission, staff recruitment and promotion procedures, curriculum reviews, teaching and learning facilities, quality of research, policy development and management mechanism, student evaluation of staff, external examiners for end of semester examinations, tracer studies academic reviews and audits. Though little information is available in the public on the effectiveness of these methods, anecdotal information collected during this study indicates that implementation of source of these processes is weak due to financial constraints.

Service quality is especially important in the field of higher education. Though it is well established that positive perceptions of service quality can have a significant impact on students' satisfaction (Annamdevula & Bellamkonda, 2016), the debate over how to define service quality in the context of higher education continues. As a result, there is no agreement on "the best way to define and measure service quality" (Ro-Rama, de la Cruz, lvarez-Garca, Mun, & Durán-Sánchez, 2021). In this study, service quality in higher education is defined as the gap between what a student expects and his or her perceptions of actual delivery. It is also seen as providing excellent or superior service in comparison to customer expectations.

1.2.3 Concept of Satisfaction

The growing body of literature on customer satisfaction is based on a variety of definitions centered on concepts like service experience, expectations, perceived value, and subsequent service evaluation. The consumer's value judgment regarding pleasure derived from the use of level fulfillment has been defined as satisfaction. Satisfaction is a positive emotional response to a product or service (Domínguez-Quintero, González-Rodríguez, & Paddison, 2020). The view of Domínguez-Quintero, González-Rodríguez and Paddison (2020) suggests that satisfaction is a feeling experienced by someone who has had a performance or an outcome that meets his or her expectations.

In recent years, the concept of satisfaction has been applied to higher education. The quality of the institution's services and the satisfaction of its stakeholders are the foundations of its competitive strength and advantage. Positive service quality perceptions can lead to student satisfaction, and satisfied students may attract new students by engaging in positive word-of-mouth communication with acquaintances and friends, as well as returning to the university to take additional courses and training programs (Guilbault, 2018; Ma, 2020; Weerasinghe & Fernando, 2018). To put it in another way, the level of quality and quality of services provided to customers, which include all quality entities in the form of product quality and service, have a significant impact on a higher institution's ability to meet customer needs. In this context, it is critical for universities to actively monitor service quality in order to protect the interests of all stakeholders in the sector, particularly students, and to ensure their satisfaction.

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As a result, the focus of this study is on students' satisfaction with university services such as teaching quality, curriculum, academic counseling, and physical facility provision in the pursuit of satisfactory academic performance and excellence in the various departments, units, and faculties of our tertiary institutions satisfaction with service delivery in the Akenten Appiah–Menka University of Skills Training and Entrepreneurial Development. Students' satisfaction was measured using Parasuraman's (1985) SERVQUAL method. One of the main reasons is that the SERVQUAL model (see Erban & Stoian, 2019) is the most frequently cited of a number of conceptual frameworks and models that attempt to measure service quality. According to Erbanand Stoian (ibid), developing the SERVQUAL model has become a necessity for determining customer perceived quality. It is an appropriate tool for measuring the service quality of any service organization, according to Kumar and Hundal (2019). SERVQUAL, according to the researcher, also represents the integrated student learning experience.

1.2.4 Elements in Service Delivery (Provision)

If the goal of university education is to be met, quality service delivery must be prioritized in public universities. Improving the delivery of essential services can also help with the long-term process. The contract between academic staff and all university users is based on service delivery, which is an indicator of a society's health. When a service's outcomes or accomplishments are valuable to its customers, it is effective; when the same goals are achieved with available resources, it is efficient.

In the education sector, clients (that is, parents, students, alumni, and staff members), for example, want low-cost, easy-access, safe, high-quality education that will improve their children's life chances. Policymakers and political leaders want to provide social benefits at a low cost while also reaping high propaganda value and political benefits. Brady and Cronin's (2001) three dimensions of significance, namely: physical environment quality, outcome quality, and interactions quality, were considered among other things in this study's conceptualization of elements of service delivery. Environment quality is concerned with the "physical or built" environment in which the service is provided, outcome quality is concerned with "what the customer is left with after the service is rendered," and interaction quality is concerned with "interpersonal interactions that occur during service delivery". The study looked at how satisfied students were with the university's quality elements, such as concrete elements, qualification, attitude, content, presentation, and reliability. The concrete elements looked at equipment and facilities, as well as modern equipment and facilities for teaching, learning, assessment, and research, as well as support services (such as housing, sports, and social services) and adequate academic staff. The research looked into whether the employees have qualifications such as communication skills. The university's ability to understand students' needs, willingness to help, availability for help, and counseling were all evaluated as attitude. The content took into account the programs' relevance to the students' future work, as well as their validity, computer use, communication skills, and teamwork. Consistency, impartiality of exams, and feedback were all important factors in a successful presentation. Finally, the study examined, reliability by focusing on the university's capacity to evaluate complaints, and solve problems. Technique, process, infrastructure,

interaction, and atmosphere are all factors that influence higher education quality. To put it in another way, the current study looked at the students' satisfaction with instructional facilities, lecturers, teaching facilities, and evaluation procedures that are invested in the system and translated into outputs. Given the focus of the study, the next section reviews the quality elements of service delivery (provision) specifically, the university's commitment to providing fundamental services, its social and financial bonds, quality of communication, its general academic conditions, lecture room conditions and administrative support and students satisfaction.

1.2.5 University's Commitment to Providing Fundamental Services

Universities are expected to be dedicated to providing basic services that align with their own goals. Even more important is the need for strong leadership to ensure that the mission's goals are met by channeling the energy and ambition of faculty and staff. Certain factions' attempts to distort an institution's mission into forms that are unsuited to its actual strengths and capabilities must be resisted (Harrill, Lawton, & Fablanke, 2015). Traditional university educational process (lecture, explanation, exercise, and so on) are unquestionably beneficial to students' professional development (Yakovleva & Yakovlev, 2014). Students' independent activity, the organization of self-learning environments, and experimental and practical training, where students have a choice of actions and can use initiative, should be the focus of the university. Equal consideration should be given to lecturers' teaching abilities as well as learning environments that meet students' individual needs (Korhonen, Ruhalahti, & Veermans, 2019; Posselt, 2018; Sanger, 2020).

Another point worth mentioning is how students expect to be taught at the university. Kandinko and Mawer (2013), for example, found that students preferred lecturers who arrived on time and on schedule. It is also expected that, once physical accessibility is assured, lecturers should provide additional support or make reasonable adjustments to accommodate students with disabilities' needs, desires, interests, and motivations in order to facilitate their access to the syllabus. All of these necessitate those institutions should be proactive and make continuous adjustments. As a result, universities would be dynamic environments that would adapt constantly and provide the reasonable adjustments required to meet the needs of each student (Ansell, Boin, & Farjoun, 2015; Sandoval, Morgado, & Doménech, 2021).

1.2.6 University's Social and Financial Bonds

Higher education institutions take on a certain responsibility when they admit students, accept their tuition, and facilitate their financial aid: they should provide a quality education, which includes experiential learning, career exploration, and career readiness preparation. Because most institutional revenues are based on enrollment, poor student recruitment and/or retention in higher education institutions that provide poor quality services and are poorly positioned to recruit students may pose a competitive disadvantage in today's enrollment markets, resulting in high rates of student dissatisfaction and jeopardizing institutional revenues. Stated differently, all stakeholders expect universities to demonstrate positive social and financial ties. This is significant because positive

staff-student interaction and mutual understanding appear to be critical for students' successful university transition (see Hassel & Ridout, 2018). For instance, it has been found that interpersonal relationships with their teachers and lecturers is an indispensable element that determines students' academic success (Trolian, Jach, Hanson, & Pascarella, 2016). Unfortunately, due to the fact that most lecturers lack good interpersonal communication skills to meet the needs of their students, there is an increasing number of confrontations that have hampered a healthy lecturer-student relationship (Fei, & Derakhshan, 2021). Similarly, universities are required to prioritise assistance to brilliant but needy students, particularly in Ghana (see Kuranchie, Amaning, & Anim, 2020). Beside the flagship Cocoa board scholarship, which was established shortly after independence, traditional communities, individuals, institutions, religious bodies, and Non-Governmental Organizations (NGO's) have established a variety of financial aids such as scholarship schemes, endowment funds, and grants to assist individuals and educational institutions in promoting education in the country. Scholarships, grants, and other forms of financial aid have been offered to people in order to help them pursue their educational goals. Sadly enough, Kuranchie, Amaning, and Anim, (ibid) found that, in Ghana, financial aid is given based on different eligibility criteria such as merit, need and memberships which do not work in favour of the poor who are endowed with academic prowess.

1.2.7 The University's Quality of Communication

Universities should maintain procedures and policies that increase transparency so that students' expectations can be managed, and faculty and staff can provide accurate information (Gregory, 2019). Following Gregory (ibid), universities must communicate effectively with their students, paying close attention to them and putting them at the center of the teaching-learning process. Shayganmehr and Montazer (2020) suggest that because the university is regarded as one of the most important centers for the advancement of science and knowledge, it is expected that it will take e-services development more seriously than other organizations and agencies. This strategy enables universities to provide higher-quality online services based on the needs of users (such as students, professors, and staff). Regular website evaluation is critical for leveraging website quality because websites are seen as the preliminary and fundamental infrastructure of e-services. It can be deduced from the views of Shayganmehr and Montazer, that, to meet students' satisfaction, universities should ensure a modest, positive relationship between information seeking and information sharing preferences.

1.2.8 University's General Academic Condition

Academic staff support would improve students' learning outcomes and, as a result, their satisfaction (Pedro, Mendes, & Lourenço, 2018). According to Chika-James (2020), lecturers' ability to select the most appropriate teaching approach is important to students because lecturers can then offer interesting lessons, resulting in students being more observant and paying more attention (attentiveness). In general, academic service factors such as course content, teaching quality, and teaching methods have an impact on students. Incorporating historical building stock, a high-quality indoor environment, and ample supplies of appropriate furniture and equipment with natural elements can help to create stimulating

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learning environments. As a result, these factors should be considered in the design and implementation of learning spaces for academic continuing education in order to provide a conducive learning environment. Tadesse, Eskelä-Haapanen, Posti-Ahokas and Lehesvuori (2021) add that active, collaborative, and interactive approaches that take into account students' own experiences and knowledge about both the content and learning are more appealing to them. Lecturers play a critical role in the educational process. Lecturers have a huge impact on students' attitudes and behaviour, as well as their academic success (Blazar, 2016). Lecturers who prepare learning plans have a higher learning effectiveness than lecturers who do not (Ndungu, Allan, & Bomett, 2015). The use of learning strategies has a positive effect on student achievement. The findings of several studies of lecturer motivation show that lecturer motivation is one of the most important factors influencing student learning motivation and determining learning effectiveness (Han & Yin, 2016). Recent research has shown that appropriate learning environments have a direct impact not only on practical pedagogical work and design, but also on students. Ipser et al. (2021), for example, argue that even minor changes to furniture and equipment in a lecture hall can alter students' perceptions and experiences. Positive learning environments in higher education institutions according to Miranda et al. (2021), result in student satisfaction. This means that universities should be supported by appropriate infrastructures for learning and teaching practices that meet the learning needs of students while also addressing current educational challenges related to teaching and management activities. As a result, they demonstrate how innovative virtual and physical infrastructures can be used to meet current needs and challenges. Studies in pedagogy and psychology (e.g., Ipser et al., 2021; Suprianto, Humaizi, & Nasution, 2020) have shown that, at the classroom level, universities should adequately equip lecture halls with innovative furniture, connected tools, and other educational and didactic resources.

1.2.9 The University's Administrative Support

According to Hayter and Parker (2019), the university's ability to focus on non-academic areas can be advantageous in establishing a successful track record. Management controls should be strengthened to ensure that organizational structures function properly and that procedures are standard. Indeed, anecdotal evidence suggests that administrative support may influence students' perceptions of service quality and, as a result, satisfaction. Pedro, Mendes and Lourenço (2018) propose that administrative efforts be directed toward improving the teaching environment, such as selecting appropriate teaching staff or providing the necessary resources to this staff so that they can act as expected by students, and applying appropriate teaching methods to each specific environment. They specifically state that proper course management, teaching staff, and teaching methods, among other things, are critical because they add value to the university directly or indirectly.

## 2. Method

### 2.1 Research Design

The design of the study is a descriptive survey which attempts to collect data from members of a

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population in order to investigate students' satisfaction on quality-of-service provision in Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development. The dependent variable in the study is the overall students' satisfaction measured by the overall satisfaction of the five-dimensional variables (that is commitment, social and financial bonds, communications, general academic conditions and administrative support) that stood as proxy for quality service provision. The independent variable in this study, is service quality provision in higher education that measures the level of students' satisfaction with service performance. Osuala (2001) indicates that this design does not merely uncover data and interpret, it also synthesizes and integrate these data and points to implications and interrelationships.

2.1.1 Population

A target population refers to that population or group that a researcher intends to make generalization to (Kothari, 2004). Hence, the target population comprised students of the two campuses (Mampong & Kumasi) of Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development. However, the accessible population were third- and four-year students in the university. The population was 8210 as shown in Table 1.

**Table 1. Students' Population by Campus**

| Campuses | Third Year Students | Fourth Year Students | Total |
|---|---|---|---|
| Kumasi | 3240 | 2740 | 5980 |
| Mampong | 1320 | 910 | 2230 |
| **Total** | **4560** | **3650** | **8210** |

*Source*: Field Data, 2021.

2.1.2 Sample and Sampling Procedure

Sampling refers to the process of selecting a portion of a population to represent the entire population (Gall & Borge, 2007). Simple random sampling method was, therefore used to select third and final year students undertaking first degree programmes in Kumasi and Mampong campuses of Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development. Hence, the sample for this study was 1642. It is expected that the sample size will be a good representation of the population so that the results obtained from would be generalizable to it. However, all the respondents completed and returned the questionnaire to a give a hundred percent (100%) response rate. Table 2 shows the breakdown.

**Table 2. Sample Distribution of Students' Population by Campus**

| Campuses | Third Year Students | Fourth Year Students | Total |
|---|---|---|---|
| Kumasi | 648 | 548 | 1196 |

| Mampong | 264 | 182 | 446 |
|---|---|---|---|
| **Total** | **912** | **730** | **1642** |

2.1.3 Data Collection Instrument

This study adopted Parasuram's SERVQUAL instrument type of questionnaire as a research instrument for the collection of needed data. The questionnaire consisted of three parts. Part one is intended to obtain background information of demographic data of respondents. It comprises four questions covering the subject of gender of students, year level, faculty and campus. Part three measures students' perception towards service quality. This part of the questionnaire has 32-items representing the 5 dimensions of modified SERVQUAL, namely; commitment (6 items), social and financial bonds (8 items), communications (5 items), administrative support (3 items) and general academic conditions (10 items). Finally, part three measures the students' satisfaction which only has five (5 items). A five-point liker scale, ranging from "strong disagree" which scored 1 to "strongly agree" which scored 5 was used for this study and all questions were phrased positively. The data analysis for this study was conducted through the use of software called Statistical Package for Social Science (SPSS) version 16. The reliability of the scale was tested using Cronbach alpha. Acoefficient alpha higher than 0.7 is considered to be good (Nunnally, 1994). The value of 0.91wasachieved indicating good internal consistency for the 32-items.

2.1.4 Data analysis and Presentation

The data gathered were quantitatively analysed with the use of descriptive and inferential statistics. The data analysis tools included frequencies, simple percentages, Pearson Correlation Coefficient and multiple regression. Pearson Correlation Coefficient was used to determine the strength and direction of relationship that exists between independent variables and the dependent variable while multiple regression analysis was used to ascertain the factors that account for students' satisfaction. The findings were presented in tables.

## 3. Results and Discussions

### 3.1 Gender of Respondents

Table 3 shows gender of the respondents. The results show that 47.0% (n = 1642) were males while of 53.0% (n = 1642) were females. This may be as a result of feminine dominance in most Ghanaian schools.

**Table 3. Gender of the Respondents**

| Gender | | Frequency | Percent |
|---|---|---|---|
| Kumasi | Male | 538 | 33.0 |
| | Female | 658 | 40.0 |
| Mampong | Male | 232 | 14.0 |

|  | Female | 214 | 13.0 |
|---|---|---|---|
| **Total** |  | **1642** | **100** |

*Source*: Field Data, 2021.

### 3.1.1 Correlation Analysis of the Relationship between the University's Commitment to Providing Fundamental Services and Students' Satisfaction

This study wanted to uncover the relationship between the university's commitment to providing fundamental service and student's satisfaction. In doing so, Pearson zero-order correlation was run. The coefficient between university's commitment to providing fundamental service and student's satisfaction was therefore generated to show the direction and strength of the relationship. The result of the Zero-order correlation coefficients obtained on the university's commitment to providing fundamental service and student's satisfaction were r = -0.431** with significance or p-value = 0.001 which is less than alpha = 0.01. This implies that there is statistically strong and inverse relationship between university's commitment to providing fundamental service and students' satisfaction. This finding is not surprising and aligns with findings reported in other studies (e.g., Edwards & Clinton, 2019; Sloan, Manns, Mellor, & Jeffries, 2020). As Edwards and Clinton (2019) found, lecturers' regular attendance predicted higher attainment. Sloan, Manns, Mellor and Jeffries (2020) also add that these lecturers attract more students and even increase their (students') level of interest in their subjects. The result is presented in Table 4.

**Table 4. Correlation Analysis of the Relationship the between University's Commitment to Providing Fundamental Services and Students' Satisfaction**

|  |  | Students' satisfaction |
|---|---|---|
| University's commitment | Pearson Correlation | -.431 |
|  | Sig. (2-tailed) | .001 |
|  | N | 1642 |

**. Correlation is significant at the 0.01 level (2-tailed).

### 3.1.2 Correlation Analysis of the Relationship between the University's Social and Financial Bonds and Students' Satisfaction

This study sought to find out the relationship between the university's social and financial bond and students' satisfaction. In doing so, Pearson zero-order correlation was run. The coefficient between university's social and financial bonds and student's satisfaction was therefore generated to show the direction and strength of the relationship. The result of the Zero-order correlation coefficients obtained on the university's social and financial bonds and students' satisfaction were r = -0.643** with significance or p-value = 0.001 which is less than alpha = 0.01. This implies that there is statistically

strong and direct relationship between university's social and financial bonds and students' satisfaction. The findings above confirmed what Hassel and Ridout (2018) found in their study that positive staff interaction and mutual understanding is significant for students' successful university transition. However, Fei and Derakhshan (2021) assert that some lecturers lack good interpersonal communication skills to meet the needs of their students leading to a number of confrontations that have hampered a healthy lecturer-student relationship. Kuranchie, Amaning, and Anim (2020) found in their study to confirm the role of government, religious bodies, traditional communities and non-governmental organizations in establishing scholarships schemes, endowment funds and grants to individual to pursue their educational goals and educational institutions in promoting education in the country (financial bonds). The result is presented in Table 5.

**Table 5. Correlation Analysis of the Relationship between the University's Social and Financial Bonds and Students' Satisfaction**

|  |  | Students' satisfaction |
| --- | --- | --- |
| University's' social and financial bonds | Pearson Correlation | .643 |
|  | Sig. (2-tailed) | .001 |
|  | N | 1642 |

**. Correlation is significant at the 0.01 level (2-tailed).

3.1.3 Correlation Analysis of the Relationship between the University's Quality of Communication and Students' Satisfaction

This study tried to establish the relationship between the university's quality of communication and students' satisfaction. In doing so, Pearson zero-order correlation was run. The coefficient between university's quality of communication and students' satisfaction was therefore generated to show the direction and strength of the relationship. The result of the Zero-order correlation coefficients obtained on the university's quality of communication and students' satisfaction were $r = -0.591$** with significance or p-value = 0.001 which is less than alpha = 0.01. This implies that there is statistically strong and direct relationship between university's quality of communication and students' satisfaction. The above result is in agreement with the report made by Gregory (2019) that universities should maintain procedures and policies that increase transparency so that expectation can be managed and faculty and staff can provide accurate information. It also confirms to the views of Shayganmehr and Montazer (2020) that, to meet students' satisfaction, universities should ensure a modest, positive relationship between information seeking and information sharing preferences. The result is presented in Table 6.

**Table 6. Correlation Analysis of the Relationship between the University's Quality of Communication and Students' Satisfaction**

|  |  | Students' satisfaction |
|---|---|---|
| University's' quality of communication | Pearson Correlation | .591 |
|  | Sig. (2-tailed) | .001 |
|  | N | 1642 |

**. Correlation is significant at the 0.01 level (2-tailed).

3.1.4 Correlation Analysis of the Relationship between the University's General Academic Conditions and Students' Satisfaction

This study tried to establish the relationship between the university's general academic conditions and students' satisfaction. In doing so, Pearson zero-order correlation was run. The coefficient between university's general academic conditions and students' satisfaction was therefore generated to show the direction and strength of the relationship. The result of the Zero-order correlation coefficients obtained on the university's general academic conditions and students' satisfaction were r = -0.685** with significance or p-value = 0.001 which is less than alpha = 0.01. This implies that there is statistically strong and direct relationship between university's general academic conditions and students' satisfaction. The findings affirm the view that teaching methods and approaches used by lecturers also had a high impact on students' satisfaction (see Pedro, Mendes, & Lourenço, 2018). The results obtained above also confirm the report made by Miranda et al. (2021) that positive learning environments in higher education institutions result in student satisfaction. Ipser et al. (2021) for example argue that even minor changes to furniture and equipment in a lecture hall can alter students' perception and satisfaction. The result is presented in Table 7.

**Table 7. Correlation Analysis of the Relationship between the University's General Academic Conditions and Students' Satisfaction**

|  |  | Students' satisfaction |
|---|---|---|
| University's' general academic conditions | Pearson Correlation | .685 |
|  | Sig. (2-tailed) | .001 |
|  | N | 1642 |

**. Correlation is significant at the 0.01 level (2-tailed).

3.1.5 Correlation Analysis of the Relationship between the University's Administrative Support and Students' Satisfaction

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This study wanted to establish the relationship between the university's administrative support and students' satisfaction. In doing so, Pearson zero-order correlation was run. The coefficient between university's administrative support and students' satisfaction was therefore generated to show the direction and strength of the relationship. The result of the Zero-order correlation coefficients obtained on the university's administrative support and students' satisfaction were r = -739** with significance or p-value = 0.001 which is less than alpha = 0.01. This implies that there is statistically strong and direct relationship between university's administrative support and students' satisfaction. The results above confirm the views of Hayter and Parker (2019) that university's ability to focus on non-academic areas can be advantageous in establishing a successful track record. To them, there is much evidence to suggest that administrative support may influence students' perception of service quality and result in satisfaction. The result is presented in Table 8.

**Table 8. Correlation Analysis of the Relationship between the University's Administrative Support Conditions and Students' Satisfaction**

|  |  | Students' satisfaction |
|---|---|---|
| University's' administrative support | Pearson Correlation | .739 |
|  | Sig. (2-tailed) | .001 |
|  | N | 1642 |

**. Correlation is significant at the 0.01 level (2-tailed).

3.1.6 Multiple Regression Analysis of the Factors That Account for Students' Satisfaction

An attempt is made to test the hypothesis that guided the study. In view of this, multiple regression analysis was run to test the hypothesis. The null hypothesis therefore states that…

$H_0$ Students' satisfaction is not determined by the quality-of-service provision in terms of the university's commitment to provide fundamental services, quality of communication, provision of social and financial bonds, serene lecture rooms, general academic conditions and excellent administrative support.

The analysis of the multiple regression of the dependent variable on the predictor variables gives the coefficients of the predictor variables, the standard error, the level of significance, the correlation (R), the $R^2$ and the adjusted $R^2$. In the analysis, when the students' satisfaction was regressed on the predictor variables, that is, commitment to provide fundamental services, quality of communication, provision of social and financial bonds, general academic conditions and excellent administrative support. All of the predictors were found to be significant predictors of students' satisfaction. This revelation tends to establish that each of the predictor has the potency to affect students' satisfaction. In essence, it can, therefore, be theorized that when universities make efforts in providing and making essential services accessible to students, their perceived satisfaction is greatly enhanced. The above

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findings are of numerous benefits to the university under study. This will provide the institution the urgent information about the need to provide quality service delivery in order to achieve students' satisfaction. It will benefit other universities in Ghana to identify cost effective ways of improving service quality provision. The results of the regression of the dependent variable on the predictor variables are shown in Table 10.

**Table 9. Multiple Regression of the Students' Satisfaction and Independent Variables**

| Predictors | Students' Satisfaction |
|---|---|
| Commitment to provide fundamental services | .492 (.014) * |
| Quality of communication | .632 (.049) * |
| Provision of social and financial bonds | .394 (.017) * |
| General academic condition | .524 (.010) * |
| Administrative support | .321 (.010) * |
| Constant | -1.347 |
| R | .874 |
| $R^2$ | .689 |
| $AR^2$ | .670 |

*$p < 0.05$.

## 4. Conclusion

Several evidences in terms of research have shown the growing need for quality service provision in our tertiary institutions in Ghana and the worldwide. This study concludes that a statistically strong and direct relationship between quality in commitment, social and financial bonds, communication, general academic conditions and administrative support on one hand and students' satisfaction on the other hand which in turn influences institutional image and students' loyalty. In essence, it can, therefore, be theorized that when universities make effort in providing and making essential services accessible to students, their perceived satisfaction is greatly enhanced.

## 5. Recommendations for University Management

Based on the findings of the study, the following recommendations were made:

1) University management should appoint competent academic and administrative staffs to positions, provide them with adequate professional development programmes to improve their commitment in teaching and learning, communication and other service provisions.

2) Management should be proactive towards adequate infrastructural provision for students in order to improve their academic work in a conducive learning environment.

3) Make findings of the study public in order to benefit other universities in Ghana to identify

cost effective ways of improving service quality provision.

4) Further studies should be performed using similar data collection and analysis method in order to allow generalization, establish comparison of results and demonstrate that the findings are beyond specific research contexts.

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## Declaration of Conflicting Interest

The author declared no potential conflict of interest and restrictions with regards to the research work, authorship and/or publication of the article.

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