

## Institutional Service Quality and Students' Satisfaction: Perceptions from the University for Development Studies

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### Abstract:

**Background:** Due to the increasing importance and investment in the management and administration of Higher Educational Institutions (HEIs), the evaluation of Service Quality (SQ), especially by students, in the provision of educational services is no longer an option but has become a requirement for institutional survival.

**Materials and Methods:** The study was a cross-sectional survey that employed the use of an adapted SERVQUAL questionnaire to collect and analyze primary data from a sample of 384 students of the University for Development Studies (UDS), in Ghana.

**Results:** The results were that most of the students were very satisfied with the quality of services provided to them by the University; as such, they were willing to recommend the University to others. Our study also found the University to be doing well in terms of its services that are related to the tangibility construct than it is doing in the other dimensions, especially the assurance.

**Conclusion:** The University is doing well in its tangible services, followed by the reliability, responsiveness, empathy and then the assurance services. The University should work on improving its service delivery that are related to the empathy and assurance dimensions since these two constructs were rated low, and that each SQ dimension should not be treated in isolation, as all the dimensions have a cumulative effect on the perception and overall SS in relation to the services offered by the University.

**KeyWords:** Customer Satisfaction, Higher Education, Service Quality, Service Quality Dimension, UDS.

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### I. Introduction

In systems where intrinsic quality is emphasized, the mechanisms for verifying and monitoring quality tend to be implicit and systemic rather than explicitly indicated and measured. This has largely been the case with Higher Educational Institutions (HEIs) until a few decades ago. The emphasis on the need to employ explicit and systematic measures to verify and monitor quality is a relatively new phenomenon and is a manifestation of a shift in emphasis in the perception of the purpose of higher education, resulting in massive policy changes in recent decades (Onditi & Wechuli, 2017; Altbach et al. 2019).

Therefore, HEIs should assess the quality of their services as exceptional that can provide them with a competitive advantage (Altbach et al. 2019). If these institutions offer a quality service that meets or exceeds students' expectations, their services will be evaluated as of high-quality, and if not, their services will be considered as inferior (Green, 2014; Pedro et al. 2018). Quality, regardless of the industry in which it is viewed, is a universally accepted norm in every successful institution, and widely understood as the totality of features and characteristics of a service or object that bear on its ability to satisfy the stated or implied needs; which should eventually lead to, in our study context, Students' Satisfaction (SS). SS is a crucial challenge for universities and as Onditi & Wechuli (2017) infer, it is also the primary source of competitive advantage and promotes students' attraction, retention as well as the spread of positive word of mouth communication by gratified students.

Higher educational institutions, as specified by Chandra et al. (2019), have to integrate the concept of SS as an essential element of the management of universities along with their core business of teaching and research. Hence, students are not viewed as participants in the process of education but as patrons of the process. Again, in this contemporary competitive academic environment where students have several options available to them, factors that permit educational institutions to entice and retain students must be thoroughly explored (Pucciarelli & Kaplan, 2016). Universities that want to gain a competitive edge may have to commence probing and searching for active as well as creative ways to entice, retain and foster stronger relationships with students (Myers et al. 2016; Brint, 2019); which must start with educational Service Quality (SQ).

However, addressing quality in higher education institutions is a complex phenomenon and is generally seen from two perspectives, namely academic quality and service quality (Ali et al. 2016; Onditi & Wechuli, 2017; Sokoli et al. 2018; Chandra et al. 2019; Suyanto et al. 2019; Nugroho, 2020). Whilst academic quality accentuates learning outcomes, which is, the acquisition of knowledge and abilities in subject areas (Paradeise, 2016), SQ commonly highlights general institutional services (Teeroovengadum et al. 2016; Silva et al. 2017). The service aspect embodies both tangible and non-tangible characteristics of an institution's service delivery. Inadequate appreciation of the concept of service delivery in educational institutions has led the leadership of educational institutions to focus more on quantifiable components such as equipment, physical environment, assets, and so on. HEIs are service-oriented and they play a very critical role in the development of any country since they train the man-power needs of any economy.

So, due to the increasing importance and investment in the management and administration of HEIs, as reiterated above, the evaluation of SQ, especially by students, in the provision of educational services is no longer an option but – has become – a requirement for institutional survival. In Ghana, the government has established the National Accreditation Board (NAB), following the passage of the Provisional National Defense Council Law 317, 1993 (PNDC Law 317, 1993) to ensure that quality assurance is rooted in the tertiary education sector in order to ensure the provision of quality services in HEIs. Besides NAB, the National Council for Tertiary Education (NCTE) also considers the relevance and quality of educational services and programmes for national development in granting tertiary educational institutions accreditation (Ibrahim, Sowley, Yakubu, & Kassim, 2018. p. 15).

Being aware of this stance by the government and other stakeholders, the University for Development Studies (UDS) in 2008, established a Directorate of Academic Planning and Quality Assurance (DAPQA), whose mandate, among others, is to facilitate the enhancement of the image of the University as a centre of excellence, through rigorous quality assurance processes which should reflect in the quality of graduates and research output (University for Development Studies, 2015).

Within the African subregion, SQ and SS in higher education are lately becoming issues of interest. However, so far, limited studies have been conducted in developing countries on SS and the level of students' perception of SQ (Kimani et al. 2011). Besides, not much scholarly effort has been documented regarding the use of SQ models and dimensions to evaluate SS, especially in the context of Ghanaian HEIs. In addition, studies conducted in developing countries on students' perception of SQ and satisfaction have generally focused on students at private universities, but not at public universities (Kimani et al., 2011; Bernard & Mawuli, 2014; Goh et al. 2017).

In view of this, this study was conducted, using the SERVQUAL model, mainly to assess the extent to which students are satisfied with the quality of the services provided by the UDS. Secondly, the study seeks to determine the University's performance in each of the SERVQUAL dimensions so as to recommend appropriate measures to management for implementation for purposes of levelling-up between perceived SQ and the actual; from the standpoint of students, should the findings of the study suggest so.

## **II. Literature Review**

### ***Defining Quality***

The definition of quality is contingent on the occupation and/or the role of the person defining it. Most consumers find it problematic defining quality; nonetheless, they recognize it when they see it. The struggle in describing quality exists irrespective of product, and this is true for both manufacturing and service organisations. Further complicating the problem is the fact that the connotation of quality has changed over time (Carr et al. 2001). At present, there is no single universal description of quality. Some perceive quality as performance to standards. Others understand it as satisfying the needs of customers or satisfying the customer. Anderson et al. (1994), infer that quality is a philosophical concept that lacks a general theory in literature. For instance, Mortimore & Stone (1991) identified four (4) uses of the term quality. According to them, quality is an attribute; a degree or relative value; a description of anything good or excellent. Ellis (1993) equated quality to standards that must be met to realize a particular purpose to the satisfaction of customers.

There is also an emerging debate in the literature on the view of quality as a culture (Harvey & Stensaker 2008). This view appreciates the value of the organisational stance of quality as a process of change, where each entity is concerned with and recognizes the significance of quality. This way of conceptualization is related to the intrinsic traits of businesses in which quality is considered as a driving force behind what everybody does in an organisation. Harvey & Stensaker (2008) explain that quality-culture is not likely to be constructed irrespective of the context in which it is located. From the above, it can be noted that quality is a construct, and its meaning is contextual. The various opinions on what constitutes quality are rooted in the values and assumptions of the different authors about nature, purpose and the fundamental processes involved.

### **Service and Service Quality**

Typical dialogue regarding services began from Smith's (1776), book the "Wealth of Nations" and remains until today. Consequently, there has been the emergence of varied characterizations of services and many different conceptions of essential service characteristics. Any service description, as well as conception, is to some extent, problematic. Discovering an ideal description and a corresponding list of its features is very challenging, if not impossible. Again, each service is distinctive and unique to a specific service provider, making service extremely difficult to define. Services are usually regarded as something intangible. Nonetheless, no service is absolutely intangible. Even the most intangible services, like educational services (Ganguli & Roy, 2010), are made more physical through its tangible services and various written documents.

In view of this, Lehtinen & Lehtinen (1991), defined service as a service-like marketed entity, a benefit providing an object of contract that is a more or less an abstract activity or process of events created, promoted and consumed in a concurrent interaction. Service is described as a valued activity, action, or effort carried out to meet a requirement or to satisfy a specific demand (Cronin & Taylor, 1994). According to Roy et al. (2019), services are included in the economic activities that generate benefits for the consumers in a specific time and a specific place creating desirable changes in the consumer. Ganesh & Haslinda (2014) define service as any intangible action or performance that one party offers to another that does not bring about the ownership of anything. Services are intangible since they are used instantly and cannot be cached for later use.

Zeithaml et al. (1990) identified tangibles, including physical facilities, equipment, personnel and communications, necessary scopes of service quality. Nevertheless, any interaction between consumers (students) and providers (management) is most appreciated during the service encounter. Some service experts have embraced this interactive nature in their descriptions. For instance, Grönroos (2006) emphasizes the interaction between clientele and service providers. Likewise, Liljander & Strandvik (1995) asserted that some services could be termed relational as a result of the interactive nature of services. Conventionally, personal interaction is viewed as a vital component of all services; however, in this era of technological advancement, personal interaction during service is limited or somehow obliterated.

Other features that can be employed to categorize services comprise the time and place of service delivery, the degree of customization as against standardization, the application of technology in the service delivery, durability as well as the complexity of the assets required. Service description by Lehtinen & Lehtinen (1991) comprises four (4) fundamental features generally linked to services. This includes the fact that it is abstract (intangibility); it has a process-like nature; simultaneousness of creation, promotion and consumption (inseparability) and its interactive nature. Gorina (2016), opined that quality is the fundamental prerequisite of any educational service and that all institutions must endeavour to provide the maximum quality of service required. The central subject which must be interrogated includes the requirements of educational SQ. A review of the literature suggests that there has been an evolution in the definition of the SQ concept. Quality service is one that completely meets the anticipations as well as the needs of the users.

Educational institutions, hitherto, measure SQ based on quantitative processes (Clewes, 2003; Khodayari & Khodayari 2011); nonetheless, the literature has demonstrated that SQ has changed its focus for delivering distinction from product specifications towards the creation of relationships with students. This suggests that scholars have shifted from measuring quantitative outputs, including circulation statistics to measuring outcomes such as quality and satisfaction.

As a result of some forms of universities' service encounters, students may assess their level of satisfaction or otherwise and may employ this testimony to inform their subsequent perceptions of SQ. Students need to experience a service before they can be satisfied or dissatisfied with the result. Views regarding quality do not necessarily mirror personal experience as individuals frequently make quality assumptions concerning services that were never used, basing these evaluations on commentaries by friends or on advertising information (Halvorsrud et al. 2016; Ramanathan et al. 2018).

### **The University Customer**

According to Khoo et al. (2017), educational institutions have many customers: students, faculty members, alumni, donors, and others. Hill (1995), suggests students as the primary consumers in higher education. Madu & Kuei (1993), claimed that the University views students as their prime customers who acquire the educational services, parents as clients who pay for their wards' education, businesses as clients who hire graduated students and faculty members as clients who impart learners with the knowledge required to accomplish the job. Du Plooy & De Jager (2006), alternatively, advises that the effort to measure quality, in general terms, must take into consideration all stakeholders' perspectives, which include students, parents, staff, employers, business and legislators since they are customers of the University. To improve quality services to these customers, we must first of all understand their needs and to understand their needs, we must, in turn, understand the quality attributes embraced by the customers because people perceive quality differently (Annamdevula & Bellamkonda, 2016).

### **Customer (student) Satisfaction**

Annamdevula & Bellamkonda (2016) infer that customers constantly have the feeling of being desired and valued without having to make such a request; thus, their perceptions on SQ are critical and becoming essential to the service industry. The perception of patrons on SQ is vital because it could provide the management with valuable information about the improvement of customer satisfaction (Ng & Priyono, 2018). Students are the patrons for educational institutions, hence, identifying their satisfaction level is a substantial factor to survive in this environment of a competitive marketplace. In contrast, the improved level of students' discontent will lead to drop-out from the institution.

Customer satisfaction is a vague concept as satisfaction varies from one consumer to the other and from one service to another (Salo, 2017). An assortment of characterizations regarding customer satisfaction abound; however, the most famous description is the comparison between client expectations and perceptions vis-à-vis the actual service encounter (Pahang-Malaysia, 2011). Onditi & Wechuli (2017) infer that satisfaction is the post-purchase consumer evaluation of products or services equated to the expectations before the acquisition. Suyanto et al. (2019) defined customer satisfaction as an output that results from the client's pre-purchase comparison of expected performance with the perceived actual performance and cost of purchasing.

Furthermore, customer satisfaction is outlined as a positive emotional response that results from a subjective individual's evaluation of their situation (Rychalski & Hudson, 2017). According to Zeithaml et al., (1993) comparing consumer expectations and perceptions is based on what marketers denote as the expectancy disconfirmation. Thus, if consumers' perceptions meet their expectations, they may eventually become fulfilled, and their expectations are confirmed. Besides, patrons evaluate SQ positively when the gap between their perceptions of establishing performance and the anticipated expectations is negligible or does not exist, where higher consumer satisfaction will arise if the consumer found that the perceived performance exceeds their expectations (Khodayari & Khodayari, 2011).

Salo (2017) infer that measuring customer satisfaction can offer a pointer for organisations regarding how efficacious they are in providing services to the market, where that, the satisfaction of the customer is a significant differentiator of marketing strategy and is mainly contingent on the extent to which a service supplied by an organisation fulfils or exceeds customer expectation. Satisfaction is becoming a vital key factor for the survival of educational institutions, including universities (Afzal et al. 2010). Pedro et al., (2018) suggested that SS leads to student's intent to return to the University, and support them to increase its student-base. Comparable to perceived SQ, customer satisfaction is a multifaceted and multi-dimensional concept, in which the overall consumer satisfaction characteristics can be relevant to the case of university service (Ali et al. 2016; Nugroho, 2020).

### **Service Quality in Higher Education**

Equated to the commercial sector, studies on SQ in the higher education landscape are still a new-fangled endeavour (Sultan & Wong, 2019). Some previous studies concluded that the SERVQUAL model is suitable for assessing higher educations' performance (Abdullah, 2006; Rowley, 1996; Brochado, 2009; Ahmed & Masud, 2014). Other studies discovered a relationship between factors of SERVQUAL and satisfaction. For instance, Chatterjee et al. (2009) observed that institutions of higher learning, until recently, placed insignificant emphasis on evaluating customer satisfaction, viewing the same as a reserve of commercial enterprises only.

According to Kelsey & Bond (2001), the measurement of customer satisfaction has become a concern of academic institutions and this observation led them to identify seven factors that explained variations in customer satisfaction in universities and this includes customer's positive experience, the commitment of staff, availability of staff, recommendation of alternative processes, alternative sources of information by staff, approachability of management and assistance provided by the centre staff to customers. Behari-Leak (2017), pointed out that contemporary universities are confronted with the challenge of the appearance of professionals who seek to update their knowledge and who, for these institutions, represent a student with unique needs. Using factor analysis, the study discovered three significant components as comprising the teaching staff, organisation and enrolment. Despite identifying the three, they failed to recognize them as SQ dimensions. Ramseook-Munhurrin et al. (2010), evaluated SQ in universities and resolved that the application of SERVQUAL in the public sector can produce different results from those found in private sector services. Still, they, however, did not examine the strength of the relationship between SQ and customer satisfaction.

Becket & Brookes (2008), determined that several universities rely heavily on industrial quality models including Total Quality Management (TQM), European Framework for Quality Management (EFQM), Balanced Score Card, ISO 9000 and SERVQUAL which they observed had proved beneficial in addressing quality assurance in administrative functions rather than in technical service delivery. Nonetheless, they questioned the ability of current management and leadership in universities to apply the industrial models effectively. Bekhet & Al-Allak (2011) found that there is a significant positive relationship between assurance,

reliability and SS, and those two (2) dimensions were the most significant dimensions of SQ. Ahmed et al., (2011) found that tangibles, assurance and empathy are significantly related to SS, whereas tangible, responsiveness and assurance factors are meaningfully associated with students' motivation. Tahar (2008) employed information resources with SERVQUAL measure to evaluate students' expectation and perception regarding SQ delivered by School of Graduate Studies and discovered that the responsiveness dimension of SQ viewed by the students was the most significant dimension out of the six (6) dimension of SQ. Arambewela & Hall (2006) discovered that the tangible construct has the highest impact on the overall SS.

Sultan & Wong (2019) studied SERVQUAL and SERVPERF in the higher education sector related to dimensionalities and scale of SQ and discovered that it is essential to direct much consideration to this sector. Salvador-Ferrer (2010) considered SERVQUAL vs ESQS in the university services context and discovered that ESQS offered a more precise analysis of SQ in the University and possibly can acclimatize better in the context of higher education services. Helgesen&Neset (2011) explored whether LibQUAL+TM can be a justification for students' loyalty to the library of a university or not. They resolved that the three (3) of LibQUAL dimensions precisely, information control, effect of service and library as a place, explained 85% of the variation in students' loyalty in a University's context.

### ***Conceptual Framework and Research Variables***

This study was developed primarily based on Parasuraman et al., (1985) model that measured SQ based on five dimensions of SQ: reliability, assurance, tangibles, empathy and responsiveness. All of these five (5) constructs were adapted to the conceptual framework. After reviewing various literature on SQ and SS in the context of HEIs, two items were included, "SS with educational services" and "students' willingness to recommend the University to others." This dimension – with two items – was adopted from the study "Ibrahim, et al. (2018)", in which they investigated graduate satisfaction and experiences with educational services in higher education.

### ***Service Quality Dimensions***

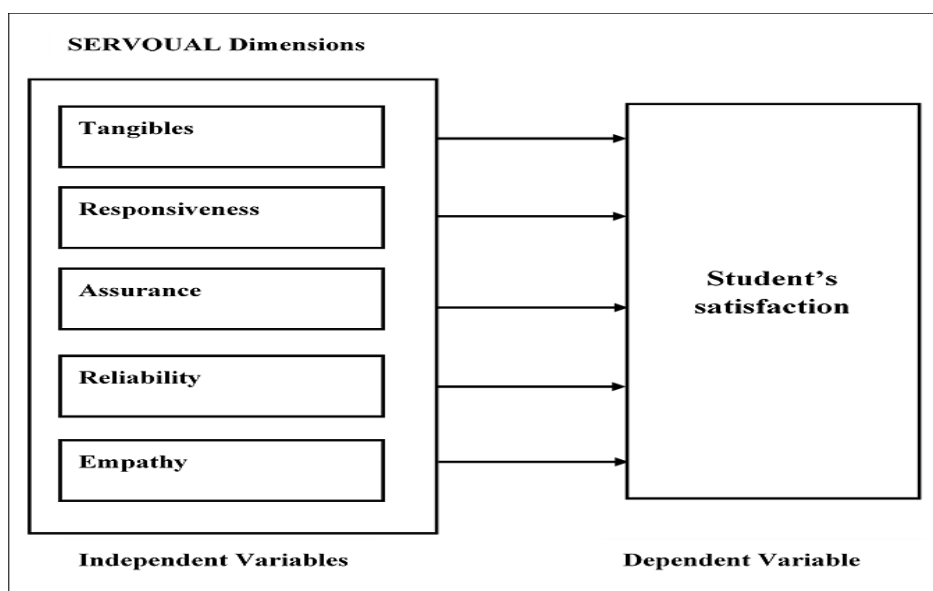
Service quality conceptualization encompasses both the service delivery process and its outcome. The result of the service is a customer evaluation of the result of the service (Lehtinen & Järvinen, 2015). Previous studies may agree that SQ forms a multidimensional construction, but there is no firm agreement regarding generic dimensions. For example, LeBlanc & Nguyen (1988) identified three (3) dimensions of SQ, which include physical, corporate, and interactive. Nevertheless, the measure presented by Parasuraman et al. (1985, 1988) referred to as SERVQUAL comprises of five (5) dimensions. These include tangibles, reliability, empathy, assurance and responsiveness.

Regarding *Tangibility*, since services are perceptible, consumers develop their opinion of service quality by equating the tangibles linked with the services offered which comprises the appearance of concrete facilities, equipment, employees as well as communication provisions. *Reliability*, on the other hand, is the capacity to accomplish the assured service reliably and precisely. *Reliability* indicates that the establishment delivers on its promises regarding the service delivery, resolution of concerns as well as pricing. *Responsiveness* is the preparedness to assist consumers and deliver swift service. This dimension underscores alertness as well as swiftness in handling clients' demands, queries, as well as grievances. Customers determine responsiveness by the length of time they have to wait for help, responses to queries or responsiveness to their complaints (Parasuraman et al. 1988).

*Assurance* denotes inspiration, trust and confidence. Assurance is described as workers' understanding of politeness and the ability of the institution and its staff to stimulate trust and confidence. *Empathy* signifies the provision of compassionate customized devotion the establishment affords its patrons (Parasuraman et al. 1988). Several studies have embraced the SERVQUAL model in measuring SQ in various situations, including academic institutions. In this regard, the SERVQUAL was used because it considers customers' (students) expectation of academic service as well as perceptions of the service which is the best way to measure SQ in the service sector.

**Customer Satisfaction Model**

The theoretical framework of correlation between the SERVQUAL dimensions and students' satisfaction



**Figure 1:** Student Satisfaction using the SERVQUAL model

**Table no 1** Description of variables

Dimension	Description	Description as per the study context
<b>Tangible</b>	Bodily facilities, tools, and staff outer shell	The physical facilities (e.g. lecture halls, hostels, etc) and the appearance of the University's staff would be appealing
<b>Reliability</b>	The ability to carry out the promised service suitably and precisely	The University would carry out the expected standard of services timely, precisely and suitably.
<b>Responsiveness</b>	The willingness to help customers and to provide prompt service.	Ready to help students and provide prompt service.
<b>Assurance</b>	The knowledge as well as courteousness of staffs and their ability to promote confidence and trust.	The staff of the University are courteous and promote confidence and trust in students.
<b>Empathy</b>	Care and attention provided by an institution to its customers	The University and its staff would always look at issues from the viewpoint of students so as provide them with the needed attention and care.
<b>Satisfaction</b>	state of fulfilment of human need and want after using a product or service	Students would feel fulfilled and will advocate for repeat after consuming the University services.

**III. Materials and Methods**

**Population, Sample and Sample Composition**

The study was conducted at the University for Development Studies (UDS), Ghana. The target population was undergraduate students at levels 200, 300 and 400 of the University. The choice of this category of students for this study was for apparent reasons. This group of students has more experience, in terms of consumption of academic and administrative services at the University, to be able to make a valid and sincere evaluation of their experiences at the University than first years. Additionally, because this study is grounded on the perception paradigm (Sultan & Wong, 2019), it was considered vital to target students who had more than one-year exposure to the University's services.

Using the Yamane's formula ( $n = \frac{N}{1+N(e)^2}$ ) where 'N' is the total population, and 'e' is the margin of error (0.05), a sample size of 391 was proportionately drawn from the four campuses (and from a total population of 17,135 students) of the University. Therefore, a total of 391 students were sampled for the study. The sample was predominantly male (69%) and quite juvenile ("20-25 years " = 77.1%) with more than two-thirds (89.8%) of them under the sponsorship of their parents. The study sampled more (47.5%) Wa Campus

students and more (51.5%) level 300 students than the rest of the campuses and levels respectively. Almost all (92%) the students were in the regular mode and were Ghanaians (99.5%).

**Instrumentation**

Service quality was measured using the SERVQUAL instrument developed by Parasuraman et al, (1985). The instrument is a 22-itemized scale developed for service and retail businesses and its objective is to know how customers of a business rate the services offered to them (Parasuraman et al., 1988). The instrument is an easy-to-use, multidimensional, and comprehensive instrument which can be used to evaluate the subjective feelings of an organisation's customers (Chao-Hua & Chin-Mei, 2020). It has acceptable general validity, and since its development, myriad service industries have employed it. Furthermore, it is widely accepted for its conceptualization and assessment of SQ (Ferreira & J. 2009; Chao-Hua & Chin-Mei, 2020).

Consequently, developing an instrument to assess SQ in higher education is a complex issue due to the problem of identifying quality dimensions. Although there are different approaches to resolving this issue, the SERVQUAL model is the most commonly used for assessing the quality of service in higher education. It has been used worldwide by researchers as a tool to measure SQ in higher education (Sabina & Samira, 2015. p.45). Thus, based on the advice of Sabina & Samira, (2015), the SERVQUAL instrument was used; as used by many studies (Hill, 1995; Fereira, & J. 2009; Zafiroopoulos, 2008; Beaumont, 2012) in assessing SQ in the higher education context.

In this study, the adopted scale was modified based on feedback obtained from a pre-test of the instrument, and for purposes of fitting the instrument into our research context. Eventually, the customized instrument had five dimensions with 23 items (Table 2). The scale was subsequently formatted on a five-point Likert scale, with anchors ranging from (1) Strongly Disagree to (5) Strongly Agree. SS scale was constructed with two items. One was to measure overall satisfaction and the other, the willingness of students to recommend the University to others.

**Data Collection Procedure and Analysis Strategy**

Data for the survey was collected using a modelled-after structured questionnaire, as reiterated earlier. The instrument consisted of sections 'A' and 'B'. Section 'A' seeks information on the demographic characteristics of respondents, while Section 'B' was structured to assess students' views on the University's services that relate to the dimensions of tangibility, reliability, responsiveness, assurance and empathy. In other words, the section was designed based on the objectives of the study. To ensure high response rate, faculty officers on the various campuses were tasked to facilitate the administration and retrieval of the questionnaires during the first trimester of the 2019/2020 academic year. Eventually, almost all (384, 98.2%) the questionnaires were retrieved and analyzed using Statistical Package for Social Sciences (SPSS) version 23.0 for windows. SS with the University's academic and administrative services was analyzed using percentages, and based on the students' degree of agreement or disagreement with the various statements of each of the five SERVQUAL dimensions (Table 2).

**IV. Findings and Discussions**

**Table no 2** Students' Assessment of Service Quality in the University for Development Studies

Items	Responses in				
	Degree of Agreement or Disagreement				
	SD	D	U	A	SA
<b>Tangibles</b>					
University has visually appealing facilities.	37(9.6%)	11(2.9%)	62(16.1%)	143(37.2%)	131(34.1%)
University has up-to-date teaching aids, ICT tools, functional library, etc.	15(3.9%)	27(7.0%)	45(11.7%)	151(39.3%)	146(38.0%)
Staff appear well-dressed and neat.	28(7.3%)	31(8.1%)	60(15.6%)	179(46.6%)	86(22.4%)
Physical facilities at the University are neat and very appealing.	19(4.9%)	51(13.3%)	70(18.2%)	119(31.0%)	125(32.6%)
<b>Reliability</b>					
When I have a problem, the staff show a sincere interest in solving it.	62(16.1%)	32(3.3%)	75(19.5%)	96(25.0%)	119(31.0%)
Services are delivered suitably and timely by the University's staff.	18(4.7%)	23(6.0%)	105(27.3%)	162(42.2%)	76(19.8%)
Quality Academic services are delivered on time by lecturers.	43(11.2%)	26(6.8%)	115(29.9%)	115(29.9%)	85(22.1%)
Students' academic records are accurate.	65(16.9)	22(5.7%)	113(29.4%)	85(22.1%)	99(25.8%)
Staff are competent in handling questions relating to my consultations.	34(8.9%)	44(11.5%)	65(16.9%)	182(47.4%)	59(15.4%)
Staff communicate well in and outside the classroom.	32(8.3%)	39(10.2%)	93(24.2%)	163(42.4%)	50(14.8%)
<b>Responsiveness</b>					

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Students are adequately informed by staff when an academic activity is to be delivered.	36(9.4%)	62(16.1%)	87(22.7%)	152(39.6%)	45(12.2%)
Academic services are delivered promptly by lecturers.	32(8.3%)	74(19.3%)	111(28.9%)	127(33.1%)	40(10.4%)
Staff are always willing to provide quality services.	25(6.5%)	46(12.0%)	114(29.7)	159(41.4%)	35(10.4%)
Staff are never too busy to respond to students' requests.	44(11.5%)	90(23.4%)	93(24.2%)	125(32.6%)	27(8.3%)
<b>Assurance</b>					
Staff behaviour instils confidence and trust in students.	54(14.1%)	107(27.9%)	124(32.3%)	56(14.6%)	43(11.2%)
Students feel safe in their dealings with staff.	100(26.0%)	86(22.4)	107(27.9%)	62(16.1%)	29(7.6%)
Staff are consistently courteous to students.	102(26.6%)	75(19.5%)	141(36.7%)	37(9.6%)	29(7.6%)
<b>Empathy</b>					
Staff give students individual attention.	57(14.8%)	69(18.0%)	109(28.4%)	107(27.9%)	42(10.9%)
Staff operating hours are convenient for students.	54(14.1%)	87(22.7%)	96(25.0%)	114(29.7%)	27(8.6%)
The University and its staff have the best interest of students at heart.	56(14.6%)	66(17.2%)	24(6.3%)	93(24.2%)	145(37.8%)
Staff understand the needs of students.	50(13.0%)	85(22.1%)	112(29.2%)	105(27.3%)	28(8.3%)
Staff provide personal attention or support to students.	67(17.4%)	69(18.0%)	118(30.7%)	99(25.9%)	31(8.1%)

SD= Strongly Disagree, D = Disagree, U= Undecided, A = Agree, SA = Strongly Agree.

**Note:** Percentages in brackets

Table 2.0 presents the stance of the students of UDS to the statements of SERVQUAL items. The results, as explained below, indicate varied views on the part of students to the various services provided by the University.

***Students evaluation of Tangible dimension of service quality in the University***

On the tangible dimension, the findings indicated that majority (71.3% = 32.2% + 34.1%) of students were satisfied with the physical facilities. They were also satisfied (77.3%) with Information Communication Technology (ICT) tools and other teaching aids in the University. Whilst some of them were, however, dissatisfied (15.4%) with the fact that staff of the University are neatly and well-dressed, most (63.6%) of them held an opposing view. This finding suggests that students are sensitive to the tangible dimension of the SQ scale and that it is significant, per our study, in determining SS. This finding is not dissimilar from that of Arambewela & Hall, (2006) when they found the tangible construct to have the greatest impact on SS. Similarly, elsewhere in Pakistan, Ahmed, et al., (2010), in their study to investigate the effect of SQ on students' performance, established a significant relationship between the tangible dimension and SS. However, other studies have reported a contrary view. For example, Khan et al. (2011) reported an insignificant relationship between the tangible dimension and SS when they surveyed the views of students on the relationship between the SERVQUAL dimensions and their satisfaction.

***Students evaluation of the Reliability dimension of service quality in the University***

Similarly, students' reactions to the reliability dimension indicated an overall positive response. For example, more than half (56%) of them indicated that they were satisfied with the way the University's staff had always shown interest in solving their problems and because of this, majority (62%) of them felt that the services provided by the staff were accurate and timely. In addition, about half (52%) of the students believe that the University's academic services are delivered on time. Perhaps, this has goaded the majority (47.9%) of them to suggest that students' academic records (e.g. transcripts) at the University are accurately provided. Many (62.8%) of them also gave a satisfactory response to the statement that "the University's staff are competent in handling their consultations." In other assessments of this dimension, although some (24.2%) of them appeared to be indifferent and others (18.5%) were not satisfied with the level of communication of the University's staff both in and out of the classroom, the majority (57.2%) of them provided a favourable evaluation. This finding found favour in other studies (Ahmed, et al., 2010; Arambewela & Hall, 2006; Khan, Ishfaq, & Muhammed, 2011) in which the reliability dimension was found to have an impact on SS.

***Students evaluation of the Responsive dimension of service quality in the University***

In their evaluation of the "responsiveness" dimension, many (51.8%) of the students indicated that they were adequately informed when an academic activity was to take place. Again, 43.5 per cent agreed that academic services were provided promptly. About half (51.8%) of the students also agreed that lecturers are always willing to provide quality academic services. This connotes that UDS is more responsive to SS. This finding is consistent with that of Jalal, Haim, & Ari, (2011) in which all the five dimensions of the SERVQUAL model were significant contributors to SS. Other studies have published different reports on the performance of the "responsiveness" dimension. For example, Ahmed, et al., (2010), and Mohsan, et al., (2011) respectively



report that the responsiveness dimension does not influence SS but rather motivate them, and was, therefore, not significant in terms of SS.

**Students evaluation of the Assurance dimension of service quality in the University**

Regarding the assurance dimension, the findings indicated that students were generally dissatisfied. While 28% of them were indifferent when asked to indicate their degree of agreement or disagreement with the statement that "staff behaviour instils trust and confidence in students," the majority (42%) expressed dissatisfaction. A similar trend of responses was recorded when many (48.4%) of the students provided dissatisfied rating to the statement that "students feel safe in their dealings with staff" of the University. In addition, more (46.6%) of the students were dissatisfied with how courteous the University's staff were to them than (17.2%) they were satisfied; although some (36.7%) of them were indifferent to the courtesy-trait of the staff. The assurance dimension was discovered as being an important construct in influencing SS in several studies (Arambewela & Hall, 2006; Ahmed, et al., 2010; Jalal, Haim, & Ari, 2011). In this study, however, it was rated low by the students, which means that the University is not performing well in terms of that construct.

**Students evaluation of the Empathy dimension of service quality in the University**

The empathy dimension of the SERVQUAL is another variable that was evaluated by the students in terms of their degree of satisfaction. The finding in this dimension indicates a positive rating for most of its items. For example, a reasonable number (38.8%) of the students believe that the staff gave them individualized attention. Perhaps, this has resulted in the majority (62%) of them agreeing with the statement that "the University and its staff have the best interest of them in the heart". Some (29.2%) of the students were undecided when asked to assess their degree of agreement or disagreement with the statement that "staff understand students' needs." The percentage (35.1) of those who rated this statement as disagreed and those (35.6) who rated it as agreed were almost the same. Like the assurance dimension, empathy, although received a favourable rating than the assurance construction, was also rated low.

**Table no 3** Students overall level of satisfaction with the Services of the UDS

Items	Responses in				
	Degree of Agreement or Disagreement				
	SA	D	U	A	SA
I am satisfied with the services of the University	9.6%	11.7%	20.6%	<b>18.5%</b>	<b>39.6%</b>
I would recommend the university to others	8.1%	11.2%	10.7%	<b>40.6%</b>	<b>29.4%</b>

*SD= Strongly Disagree, D = Disagree, U= Undecided, A = Agree, SA = Strongly Agree*

One of the objectives of the study was to determine the overall level of SS with the services provided by the University. Therefore, we analyzed the overall level of SS and their willingness to recommend the University to others, if indeed, they were satisfied with the services provided by the University. The results indicated that the majority (58.1%) of them were satisfied with the services provided by the University and, as a result, the majority (70%) of them were willing to recommend the University to others (Table 3). The willingness of students to "identify themselves with the University and, therefore, recommend it to others" has been found in similar studies conducted at the same university – UDS. For example, in their survey to assess the satisfaction and experience of graduates with the services provided to them while being trained at UDS, Ibrahim, et al., (2018), found about 70% of graduates expressed their willingness to recommend the University to friends and family.

Similarly, in their study to explore the cynicism and engagement relationship of students at UDS, Kahar & Ibrahim, (2020), reported that 81.8% of students said they were proud to be identified as UDS students, and 70.8% of them were willing to recommend the University to others. It is worth mentioning that the students of the University, both past and present, are generally satisfied with the services provided by the University since this finding has been consistent in three different studies at different times conducted in the University with different cohorts of students as subjects.

**V. Conclusion**

The study achieved its objective of assessing the level of SS with the services provided by the UDS, using the SERVQUAL model. Therefore, according to the results of the study, students were generally satisfied with the quality of services provided by the University, as most of them said they were satisfied with the quality of services provided by the University and, thus, were willing to recommend the University to others. Again, the study found that students were more satisfied with the University's services that relate to the tangibility construct, as students provided high ratings to the elements under this construct. The reliability dimension was ranked second, followed by responsiveness, then empathy and then the assurance construct. In other words, in

terms of its quality service delivery, the University is doing well in its tangible services, followed by reliability services, responsiveness, empathy and then the dimension of assurance in that order.

## **VI. Managerial Implication and Recommendations**

The provision of quality tertiary education services is a major challenge today due to the pressure of inadequate resources in the midst of cost control. Providing services that are inferior in quality to what students expect or anticipate is a safe path leading to student dissatisfaction. In our study, students identified several factors that affect their level of satisfaction. The management implication is that SQ dimensions should not be treated in isolation, as they have a cumulative effect on perception and overall SS in relation to the services offered by the University. Therefore, focusing on refining one factor and ignoring other factors can result in poor service delivery, hence the need to pay attention to all dimensions of SQ.

Consequently, the five dimensions of SQ have their importance in the education sector and play their respective vital roles in informing students' perception about SQ. If there is a deficit in any of the SQ dimensions, it will ultimately negatively affect the SS.

More importantly, the University's staff members must be aware of their mannerism, speech, and behaviour both in the classroom and in administrative offices so that students feel safe and confident in dealing with them. Personal interactions between staff and students are also crucial with regard to the provision of quality services at the University. Teaching staff, in particular, should scale-up their interaction and support to students to instill confidence in them.

## **VII. Limitation and Direction for Future Research**

Overall, quality may vary among students depending on their demographic composition, such as age, income level, family background, gender, attitude and overall orientation. Our study was unable to explore these variables and their impact on SQ. Therefore, we suggest that future research should explore these students' demographic variables and how they can impact students' perception of SQ.

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