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PERCEIVED QUALITY OF CAMPUS SHUTTLE BUS SERVICE IN GHANA

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Abstract

The study assessed the quality of campus shuttle bus service in three Ghanaian public universities, namely University of Cape Coast (UCC), University of Ghana (UG) and Kwame Nkrumah University of Science Technology (KNUST). This was ascertained by a cross sectional study through the administration of 891 copies of pretested SERVQUAL questionnaire at designated bus stops for campus shuttle bus service. The study revealed perceived poor quality bus service for UCC and UG but perceived good quality shuttle bus service for KNUST. In general, there was perceived poor quality bus service for all the attributes and dimensions when the three public universities were considered as a whole. Recommendations were proffered for better service delivery and perception.

Keywords: *campus bus service, SERVQUAL, expectation, perceived quality service*

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Introduction

Toor and Havlick (2004, p. 1-3) noted that many universities are now taking the lead to identify and develop strategies that help sustain the quality of campus life in terms of students commuting. By integrating alternative forms of transportation, the university can influence the current travel patterns of students and their future travel practices. As evident in the growth of cities in developing countries so will the universities continue to experience growth in student population which will invariably cause increase in the usage of automobile. The direct effects of this will be vehicle congestion, parking space shortages and increased pollution (Juarez, 2011).

Bus services should become one key solution for sustainable transport in future on university campuses (Krizek, 2012). For instance in almost all university campuses in Malaysia, students rely heavily on public transport (Hassim et al., 2013). Hassim, et al, 2013), noted that poor quality services of the campus bus transport tend to cause students to miss classes, waste precious time and discourage them from riding shuttle buses. Moreover, other discomforts such as untardiness of buses, unpleasant rides as well as issues on safety, unsupportive bus personnel, give rise to the bus users' negative perception on campus-provided transport.

Studies conducted by Aidoo, et al (2013), Agyemang (2013), Kwabena, Brew, and Addae-Boateng (2013), Nutsogbodo (2013) and Baah-Mintah & Adams (2012) on public transport's service quality focused only on selected inter-urban routes such as Kumasi- Accra and Accra-Cape Coast and then on some major corridors in the cities of Kumasi, Koforidua and Accra in Ghana. No such major study has been conducted on campus shuttle service in Ghana. It has become imperative to assess students' perceived quality of campus shuttle service in the three foremost universities. Incidentally, they are the only institutions offering campus shuttle services which are either managed by the university through their Transport sections or in collaboration with private individuals.

The general objective is to assess the quality of campus shuttle bus service in Ghana. The following specific objectives were also set to achieve the general objectives:

1. Ascertain perceived quality of bus services in the three universities
2. Compare the SERVQUAL dimensions of the three universities
3. Identify the difference in the expectation and perception of quality of campus bus service in Ghana; and

Hypotheses

The following hypotheses were put forth to guide the study:

1. There is no statistically significant difference in the expectation and perception of campus shuttle bus service.
2. *There is a significant difference in the expectation and perception mean scores for SERVQUAL dimensions*

This research would offer transport managers, policy makers, transport experts, researchers, road transport students and the general public a useful guide to service quality from campus shuttle perspective in time, quality, comfort, cost and functionality. Moreover, the transport sections of the universities and those given the concession to operate campus bus services would have first-hand information on perceived functional quality of their services, thereby enabling them to improve the attributes having negative gap scores.

LITERATURE REVIEW

Campus shuttle bus

A University campus may be defined as a small “city” because it commonly has its own communities, which are characterized by typical daily activities such as working, studying, and business. It even possesses its own independent infrastructural facilities such as roadway, water supply, electrical supply, sewerage system etc. (Norzalwi & Ismail, 2011). Nonetheless, university campuses are not immune to the challenges bedeviling major cities. For example, shuttle bus service is one of the sustainable means of transportation which has eluded most university campuses.

Shuttle bus service as a “public transport service” uses small buses or vans for public mobility (Rohani et al., 2013) for shorter trips. According to Juarez (2011) campus shuttle bus service is necessitated by a couple of important factors. One of such is off-campus housing based on student density. Another reason is the location of halls of residence or hostels and lecture rooms as is currently the case for all the three universities in this study. It has been established that increased frequency and direct routes serving the campus (Bond & Steiner, 2006) will attract new riders and shift students from personal vehicles and increase students’ access (Brown et al., 2001).

Expectations

Parasuraman, et al.(1988) cautioned about the various interpretations of the definition of expectations as used by the service quality and the consumer satisfaction literature. Expectations in service quality are based on what a consumer feels a service provider should offer (desires or wants) and can be construed (Botsch, 2009). To Zeithaml, et al. (2006), customers' expectations are beliefs about service delivery that serve as standards or reference points against performance. Various factors influence consumer expectations. Some of the factors may be based, in part or in total, on past relevant experiences, including those gathered indirectly; someone's verbal information, commercial advertisement, and personal needs.

Perceptions

Perception is a general term used to describe the whole process that takes place when we sense/observe factors in our environment. Perception consists of a multi-dimensional, interactive system where several different part-processes collaborate and form our experience of the environment. Zeithaml, et al. (2006) described customer perceptions as: "the subjective assessments of actual service experiences". It also refers to how customer perceived service; how they assess the quality of service received; whether they are satisfied; and whether the service they have received is value for money. Consumers' perceptions are the means by which customers look at something based on their experience.

Perceived quality

There are four practical ideal models in assessing university transit best practices in the US (Juarez, 2011). These are (1) operations model, (2) funding model, (3) scope of service model, and (4) environmental responsiveness model. Operations model influences the mobility alternatives that the universities can adopt in managing a shuttle service and there are three common types: (1) a privately operated program which is operated and managed solely by the university, (2) a regional or municipal program operated and managed solely by the shuttle service provider with no input from the university, and (3) a combination of the two where the transit agency operates the service but the university manages it (Miller, 2001,p.14).

Funding model involves the financial resources required to operate a shuttle service. These can come from a variety of different sources. However, there are three funding sources: (1) opt- in which the student has to pay into the system: (2) opt -out which is when the student has the

choice not to pay for the service and (3) universal coverage which is when a mandatory fee is required from all students (Block-Schachter & Attaanucci, 2008, p.54).

Scope of service model is based on the mandate of the shuttle service provider to connect students to campus by providing economical and reliable transportation (Juarez, 2011). The ability to provide transportation options with certain level of service quality such as safety and security, low fares, reliable services, distance to stations, long operation hours (see Poninstte & Toor, 1999, p.35; Williams & Petrait, 2008, p.79; Nutsogbodo, 2013; Ojo et al., 2014; Sam et al., 2014).

Environmental responsiveness model includes the utilization of green fuels and the reduction of emissions (Juarez, 2011). Campus transportation services offer opportunities for reducing pollutants and Green House Gas (GHS) emissions as well as reducing energy consumption.

This study adopts for the third category to assess student's perceived quality of campus shuttle service with the use of modified SERVQUAL model. SERVQUAL is based on the "GAP model" of service quality which facilitates quantification of the gap between customers' expectations of a service and their perceptions of the actual service delivered. These three or five numbered attributes (21 items) on the modified SERVQUAL scale are used to measure each dimension based on expectations and perceptions of services rendered. To achieve these measurements the respondents are asked to indicate their degree of agreement with certain statements bordering on each of the 21 items on a 5-point Likert-type scale (1 = strongly disagree and 5= strongly agree). There are three ways to arrive at the gap score- viv-a-vis the averages of either for each of the attributes (Perception(P)- Expectation(E) divided by one), dimension by dimension analysis $[(P1+P2+P3+P4)-(E1+E2+E3+E4)/4]$, where P1 to P4, and E1 to E4, represent the four perception and expectation statements relating to a single dimension and all the 22-item attributes $((P1+P2+P3+P4...+P21)-(E1+E2+E3+E...+E21))/22$, the so-called SERVQUAL gap. The greater and positive the "gap score" (calculated as $G = P-E$) the higher the score for perceived service quality (see Parasuraman et al., 1985, 1988).

There are a number of criticisms leveled against the SERVQUAL scale. Notably is the number of dimensions and attributes constituting the SERVQUAL scale. For instance Mercangöz et al. (2012) used a 28-item SERVQUAL questionnaire in Turkey. In an attempt to jettison the use of expectation, Cronin and Taylor (1992) conducted a study on service quality by only measuring the perception of quality (SERVPERF). Perez et al. (2011) merged SERVPERF and

SERVQUAL to arrive at the QUALBUS scale to measure quality of bus service. Asubonteng et al. (1996) submitted that until a better alternative evolves SERVQUAL will continue to dominate in service quality literature.

This study adopts the positivist views of epistemology. This is achieved to address quality of campus shuttle bus service using the modified SERVQUAL model. The modified SERVQUAL uses 21 attributes instead of 22 attributes by the SERVQUAL procedure. This knowledge is developed through objective and subjective measurements. Research approaches that involve the relationship between theory and data are deductive and inductive approaches (Bryman & Bell, 2007, p. 11). In this study, the researchers carried out a deductive study which represents the commonest view of the nature of the relationship between theory and research. Hypotheses deduced are identified from concepts and then translated into operational terms implying how data can be collected in relation to the concepts that make up the hypothesis (Bryman & Bell, 2007, p.11).

Study area

Three public universities fall under the purview of this study. The University of Cape Coast (UCC) was established in 1962 out of a dire need for highly qualified and skilled manpower in education. It was established to train graduate teachers for second cycle institutions such as training colleges and technical institutions, a mission that University of Ghana, Legon and Kwame Nkrumah University of Science & Technology, Kumasi, were unequipped to fulfill. As a result of the introduction of new programs UCC now trains educational planners, administrators, agriculturalists, regional planners and health care professionals. The university is located five kilometres west of Cape Coast on a hill overlooking the Atlantic Ocean. It operates on two campuses” the Southern Campus (Old site) and the Northern Campus (New site/science).

The University of Ghana (UG), Legon, is the oldest and largest of all the universities in Ghana and it was founded in 1948 as the University College of the Gold Coast. It has nearly 40,000 students. Legon is the main site of the University which is about twelve kilometers northeast of the centre of Accra. The medical school is in Korle Bu with a teaching hospital and secondary campus in the city of Accra. The Kwame Nkrumah University of Science and Technology (KNUST) was established in 1951 and is located in Kumasi, the Ashanti Regional capital. It is Ghana’s foremost institution for Science and Technology education. The University has a student capacity of nearly 50,000 offering undergraduate and post graduate courses. The main

University campus is about seven square miles in area and located about eight miles to the east of Kumasi city centre.

Field challenges

It was difficult to get some students taking part in the study due to general distrust of researchers (Binge, 2003). Interviewing students at the bus stop was a challenge because of the short out-of-vehicle waiting time and in-vehicle boarding time. Besides, some of the accosted passengers just alighted from the shuttle bus and were in haste. However, with persistence the exercise was carried out with the selected categories of passengers.

Data and methods

The study was carried out from December, 2013 till February, 2014. Before the study was done in each of the universities, two research assistants were recruited and trained for one day on the instruments to be administered for the study. The study purposively started at the University of Cape Coast in December, 2013 followed by that of Kwame Nkrumah University of Science of Technology in January, 2014 and University of Ghana, Legon, in February, 2014. The respondent students were accosted at the designated bus stops between 8am and 4pm during the time of the study. A pilot survey carried out in the University of Cape Coast indicated that students make use of the campus shuttle mostly at 8-10am, 10am-12pm and 2-4pm. These were noted to be when most of the students went for lectures. As a result of that, the questionnaire was very brief and filled within 5 minutes. The unavailability of seats at some of the bus stations/bus stops (such as UCC old site and new site) necessitated the respondents to stand while filling the questionnaires.

Results and discussion

The relationship between “perception” and expectation” can be expressed mathematically to arrive at the gap score to assess functional quality.

$$SQ = P - E \dots\dots\dots(1)$$

Where SQ = Gap score, P = Perceptions, E = Expectations,

- i. Mean P score of less than 2.5= below average, 2.5-3.5 = moderate, 3.6-4.5=very good and above 4.5=excellent
- ii. A P mean score greater than 3.5 is perceived to be a good service quality
- iii. Gap score, SQ: less than 0= poor perception, 0-0.45= good perception, > 0.46-0.70=better perception, >0.70=best perception

Table 1: Frequency distribution of perceived quality shuttle bus service in UCC, UG and KNUST

Attributes Dimension	UCC				UG				KNUST			
	Below average	Moderate	Very Good	Excellent	Below average	Moderate	Very Good	Excellent	Below average	Moderate	Very Good	Excellent
Reliability	1	4	0	0	0	5	0	0	0	1	4	0
Assurance	0	3	0	0	0	3	0	0	0	0	3	0
Tangibility	0	5	0	0	0	5	0	0	0	2	3	0
Empathy	0	2	1	0	0	3	0	0	0	2	1	0
Responsiveness	0	5	0	0	0	5	0	0	0	5	0	0
Total	1	19	1	0	0	21	0	0	0	10	11	0

Frequency distribution of perceived bus service

From Table 1, it is observed that only KNUST students perceived aspects of the performance of the shuttle bus as very good compared with UG and UCC where all or most of the users perceived the service to be moderate. None of the service attributes in any of the campuses was perceived excellent meaning there is more room for improvement in all the attributes in order to achieve an excellent service.

At KNUST, reliability, assurance, tangibility and empathy were perceived between moderate to very good. In UG, all the attributes were perceived to be moderate (100%) whilst in UCC slightly over 90% perceived the shuttle operation to be moderate.

Comparative analysis of the three universities

According to Table 2, all the attributes revealed negative gap scores for UCC and UG. Meanwhile, only four attributes, namely “behavior of drivers instills confidence in the passengers (-0.50), shuttle buses have adequate shed for passengers obtaining tickets (-0.03), campus shuttle buses have spacious seats for passengers on board (-0.12) and communication with customers is clear and helpful (-0.12)” revealed negative gap scores. It could be observed that UCC and UG, all the attributes revealed perceived poor quality bus services, but only four attributes revealed perceived poor quality for KNUST.

Consequently, all the dimensions for UCC and UG revealed negative gap scores, indicating perceived poor quality. But for KNUST, all the dimensions were between 0 and 0.45 indicating perceived good quality. Generally, students revealed perceived good quality shuttle bus service for KNUST compared to the perceived poor quality shuttle bus service for UCC and UG.

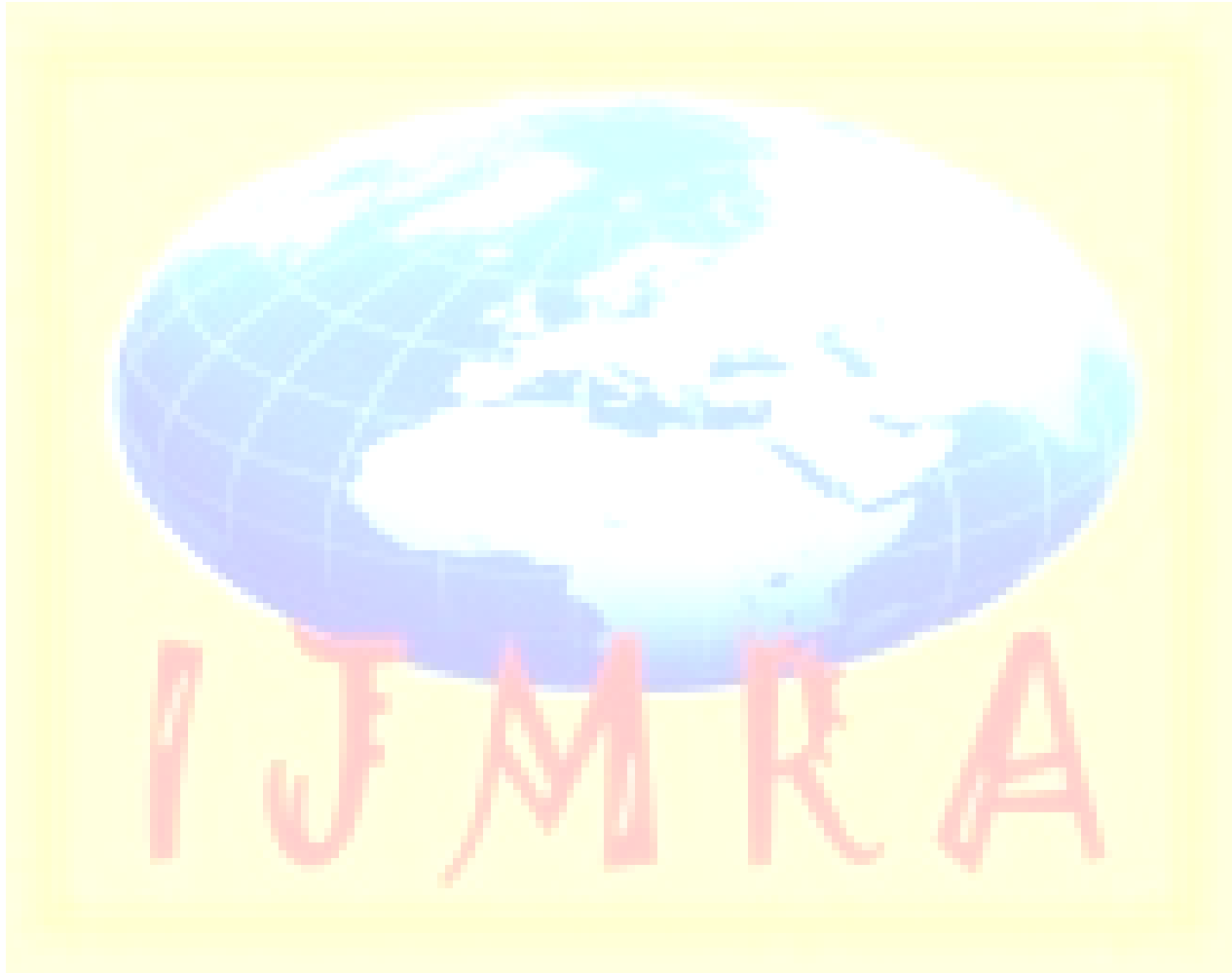


TABLE 2: GAPS SCORES FOR UCC, UG, KNUST SERVQUAL SCALE

SERVQUAL	UCC			UG			KNUST		
	E	P	P-E	E	P	P-E	E	P	P-E
1.The shuttle bus always arrives at the destination on time	3.43	2.95	-0.48	3.60	3.18	-0.42	3.16	3.31	0.15
2.The bus never breaks down on the road	3.58	3.42	-0.16	4.03	3.49	-0.54	3.74	3.88	0.14
3.Customers don't queue to buy fuel	2.40	2.28	-0.12	3.70	3.28	-0.42	3.64	3.81	0.17
4.The shuttle buses have regular schedules	3.42	2.94	-0.48	3.66	3.09	-0.57	3.38	3.55	0.17
5.Drivers are always polite	3.59	3.16	-0.37	3.76	3.31	-0.45	3.61	3.70	0.07
Reliability	3.28	2.95	-0.33	3.75	3.27	-0.48	3.48	3.64	0.20
6.Customers feel safe in their transactions with staff	3.66	3.37	-0.29	3.65	3.30	-0.35	3.42	3.54	0.08
7.Drivers have in-depth occupational knowledge of their jobs	3.70	3.38	-0.32	3.78	3.33	-0.45	3.70	3.71	0.01
8.Behaviour of driver instills confidence in the passengers	3.52	3.15	-0.37	3.96	3.32	-0.64	4.08	3.58	-0.50
Assurance	3.63	3.30	-0.33	3.80	3.32	-0.48	3.73	3.61	0.12
9.Drivers are neatly dressed and smart	3.57	3.12	-0.45	3.78	3.38	-0.40	3.48	3.53	0.05
10.Shuttle buses have adequate shed for passengers obtaining tickets	3.29	2.78	-0.51	3.48	3.11	-0.37	3.17	3.14	-0.03
11.Shuttle bus companies have spacious seats for passengers on board	3.72	3.40	-0.32	3.87	3.32	-0.55	3.53	3.41	-0.12
12.Buses are well maintained and neat	3.59	3.22	-0.37	3.95	3.36	-0.59	3.57	3.61	0.04
13.Buses have ample legroom and foot space	3.56	3.15	-0.39	3.72	3.19	-0.53	3.47	3.54	0.07
Tangibility	3.55	3.14	-0.41	3.76	3.27	-0.49	3.43	3.45	0.02
14.Transport section always look after the best interest of their customers	3.41	3.01	-0.40	3.71	3.12	-0.59	3.37	3.47	0.10
15.Transport section have operating hours convenient to all their customers	3.35	2.93	-0.42	3.67	3.08	-0.59	3.32	3.41	0.09
16.It is easy to find and access the ticket office/station	3.81	3.72	-0.09	3.80	3.31	-0.49	3.63	3.71	0.08

Empathy	3.52	3.22	-0.30	3.73	3.17	-0.56	3.43	3.53	0.10
17. Drivers provide individualized attention to help customers	3.52	2.97	-0.55	3.37	3.04	-0.27	3.07	3.32	0.23
18. Transport section always inform people of availability of services and changes in prices in advance	3.18	2.82	-0.36	3.50	2.98	-0.52	3.22	3.25	0.05
19. Transport section can provide timely and efficient services	3.58	3.22	-0.36	3.56	3.12	-0.44	3.43	3.49	0.06
20. Communication with customers is clear and helpful	3.50	3.20	-0.30	3.59	3.25	-0.34	3.40	3.38	-0.02
21. Drivers are always willing to help passengers	3.58	3.10	-0.48	3.61	3.24	-0.37	3.43	3.43	0
Responsiveness	3.47	3.06	-0.41	3.53	3.13	-0.40	3.31	3.37	0.08
Overall gap score	3.47	3.11	-0.36	3.70	3.22	-0.48	3.46	3.50	0.04

Source: Fieldwork, 2014.

Difference between expectation and perception of SERVQUAL attributes

In Table 3, all the 21 attributes revealed moderate expectation and perception mean scores ranging from 3.07 to 3.85. Similarly, Hashim, Haron, Mohamad, and Hassan (2013) observed that overall bus service of 10 universities in Malaysia with a mean score of 3.24 was commendable. However, the moderate expectation mean scores were higher than the perception mean scores indicating poor perceived quality.

Hypothesis 1

There is no statistically significant difference in the expectation and perception of campus shuttle bus service. Pair-sample t-test was used to find out the significant differences in expectations and perceptions mean scores for each of the attributes at $p < 0.05$. The analysis in Table 3 further revealed that there is no significant difference in total expectation ($M=3.55$, $SD=.74$) and perception ($M=3.27$, $SD=.65$) mean scores ($p=0.000$). The eta squared statistics (0.09) revealed a small effect (Cohen, 1988, p. 284-287). Similarly, Nutsogbodo (2013) in a study in Ghana confirmed the hypothesis of this study that there is no significant difference in expectation and perception of service quality. Muthuoandian & kumar (2012) similarly used pair sampled t-test to ascertain if there is a significant difference in passenger's expectation and perception of State Road Transport Undertakings (SRTUs) in Tamil Nadu. The results demonstrate insignificant differences in passengers perceived service quality with $p < 0.005$. In essence, respondents found no gap between expectations and perceptions of all the 25 service quality attributes of SRTUs.

Table 3: Overall gap scores with pair sample t-test of SERVQUAL Scale

SERVQUAL Dimensions	Expectation(E)		Perception(P)		Gap score P-E	Pair wise t-test	
	Mean	Standard deviation	Mean	Standard deviation		t-value	P-value
1. The shuttle bus always arrives at the destination on time	3.42	1.18	3.14	1.13	-0.28	5.77	0.000
2. The bus never breaks down on the road	3.79	1.152	3.58	1.19	-0.21	4.94	0.000
3. Customers don't queue to buy fuel	3.22	1.43	3.07	1.37	-0.15	2.89	0.004
4. The shuttle buses have regular schedules	3.50	1.18	3.17	1.17	-0.33	6.41	0.000
5. Drivers are always polite	3.67	1.07	3.37	1.09	-0.30	6.52	0.000
Reliability	3.51	0.81	3.27	0.80	-0.24	6.98	0.000
6. Customers feel safe in their transactions with staff	3.59	1.03	3.40	1.05	-0.19	4.70	0.000
7. Drivers have in-depth occupational knowledge of their jobs	3.74	1.162	3.46	1.03	-0.28	6.17	0.000
8. Behaviour of driver instills confidence in the passengers	3.85	2.87	3.34	1.03	-0.51	4.89	0.000
Assurance	3.72	1.27	3.41	0.85	-0.31	6.58	0.000
9. Drivers are neatly dressed and smart	3.63	1.05	3.33	1.05	-0.30	6.55	0.000
10. Shuttle buses have adequate shed for passengers obtaining tickets	3.32	1.22	3.00	1.22	-0.32	5.91	0.000
11. Shuttle bus companies have spacious seats for passengers on board	3.74	2.10	3.37	1.09	-0.37	4.84	0.000
12. Buses are well maintained and neat	3.71	1.10	3.39	1.08	-0.32	7.09	0.000
13. Buses have ample legroom and foot space	3.60	1.10	3.28	1.06	-0.32	7.27	0.000
Tangibility	3.59	.93	3.28	.78	-0.31	8.25	0.000

14. Transport section always look after the best interest of their customers	3.51	1.28	3.19	1.47	-0.32	4.93	0.000
15. Transport section have operating hours convenient to all their customers	3.46	1.16	3.13	1.10	-0.33	6.68	0.000
16. It is easy to find and access the ticket office/station	3.76	1.10	3.58	1.12	-0.18	4.38	0.000
Empathy	3.57	.93	3.31	.91	-0.26	6.77	0.000
17. Drivers provide individualized attention to help customers	3.35	2.06	3.09	1.09	-0.26	3.48	0.001
18. Transport section always inform people of availability of services and changes in prices in advance	3.30	1.19	3.00	1.16	-0.30	5.69	0.000
19. Transport section can provide timely and efficient services	3.53	1.07	3.26	1.08	-0.27	5.72	0.000
20. Communication with customers is clear and helpful	3.51	1.02	3.27	1.00	-0.24	5.20	0.000
21. Drivers are always willing to help passengers	3.55	1.08	3.25	1.09	-0.30	6.44	0.000
Responsiveness	3.44	.95	3.18	.84	-0.26	6.74	0.000
Overall gap score	3.55	.74	3.27	.65	-0.28	9.15	0.000

Source: Fieldwork, 2014

Difference between expectation and perceptions of SERVQUAL dimensions

The highest expectation and perception mean scores (3.71, 3.41) applied to assurance dimension whereas the least expectation and perception mean scores (3.44, 3.18) applied to responsiveness dimension. In Randheer et al (2011), comparison of dimensions' mean scores indicates that responsiveness, assurance, reliability, culture and empathy form the order. In Muthupandian & Kumar (2012), expectations for the SRTUs are highest for "assurance dimension –that covers the issues of competence, courtesy, credibility and security. Expectation for SRTUs is lowest for "tangibility" dimension. Perception for SRTUs is highest for "responsiveness". Nutsogbodo (2013) in assessing tourists' perceptions of public transportation in Accra noted that tourists' expectations with respect to tangibility, reliability, empathy, responsiveness and assurance far exceeded their perceptions. Hence, tourists perceived service quality to be poor.

Hypothesis 2:

There is a significant difference in the expectation and perception mean scores for SERVQUAL dimensions. The paired sample t-tests of the SERVQUAL dimensions as indicated in Table 3 revealed that for reliability dimension there is no significant difference in expectation (M=3.51, SD=.81) compared to the perception (M=3.25, .80) at p=0.000 with eta squared statistics (0.05) indicating a small effect (Cohen, 1988, p. 284-287). In the case of assurance dimension there is no significant difference in expectation (M=3.71, SD=1.27) and perception mean scores (M=3.41,SD=.85) at p=0.000 with eta squared statistics (0.005) indicating a small effect (Cohen, 1988).

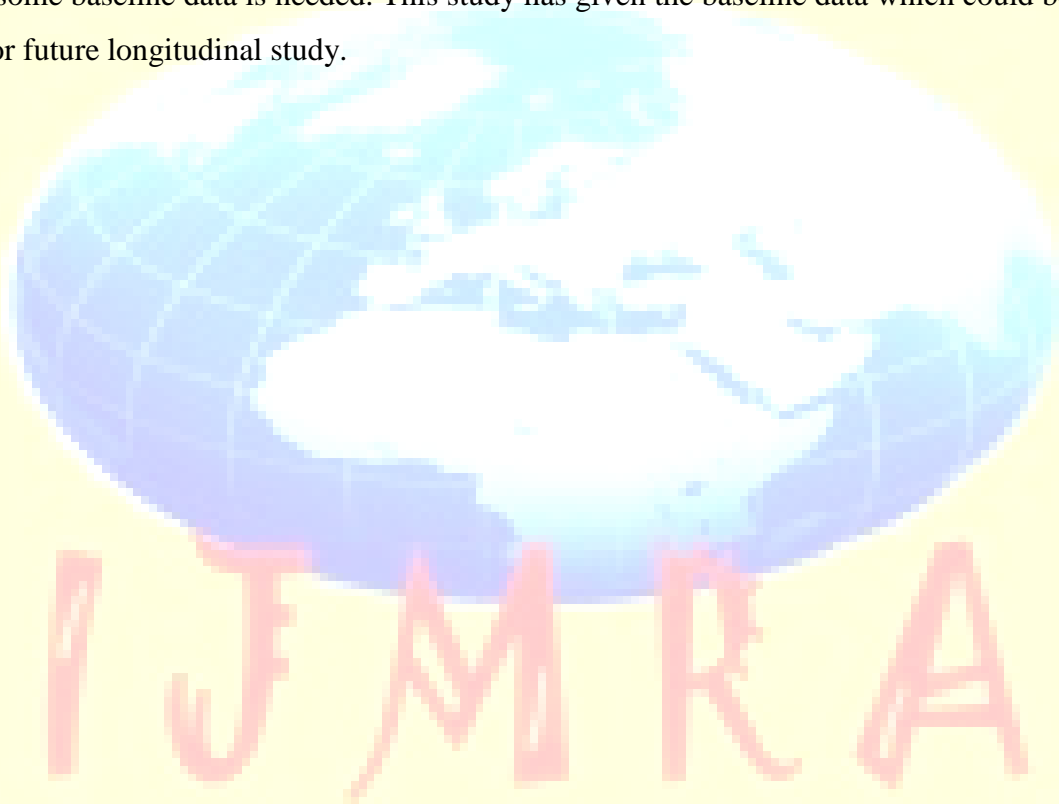
Furthermore, there is no significant difference in expectation (M=3.59, SD=.97) and perception mean scores (M=3.28, SD=.78) at p=0.00 with eta squared statistics (0.007) indicating a small effect (Cohen, 1988, p. 284-287) in tangibility dimension. On empathy dimension, there is no significant difference in the expectation (M=3.57, SD=.93) and perception mean scores (M=3.31,SD=.91) at p=0.000 with eta squared statistics (0.05) indicating small effect (Cohen, 1988, p. 284-287). Lastly, for responsiveness dimension there is no significant difference in expectation (M=3.44, SD=.95) and perception mean scores (M=3.18, SD=.84) at p=0.00 with eta squared statistics (0.05) indicating a small effect (Cohen, 1988, p. 284-287).

Conclusion and recommendations

Respondents from the UCC and UG perceived poor quality bus service operations on campus whereas those from KNUST perceived good quality shuttle bus service operations on campus.

The difference in expectation mean scores was not significant from the perception mean scores for all the attributes and dimensions. The transport sections of these institutions can work on the attributes that revealed poor perceived quality. Moreover, the transport section should endeavor to maintain and improve attributes with good perceived quality. Trying to exceed expectations of consumers may not be easy but adequate service should be provided.

This study can serve as springboard for longitudinal analyses of service quality of these companies. There may as well be the need to monitor the progress being made to work on perceived quality as exposed in the current study. In order to justifiably predict future trends and needs, some baseline data is needed. This study has given the baseline data which could be fallen upon for future longitudinal study.



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