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# Postgraduate Distance Education in University of Cape Coast, Ghana: Students' Perspectives

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## Abstract

The study explored perceptions of postgraduate distance education students of University of Cape Coast (UCC). Specifically, associations between UCC postgraduate distance students' characteristics and satisfaction, as well as students' perceptions of physical facilities, staff-students relationship, facilitator quality, and student support services were examined. Determinants of students' satisfaction regarding physical facilities, staff-students relationship, facilitator quality, and student support services were also investigated. A census was used for the study, whereby a questionnaire was used to collect data from 125 students. It was revealed that satisfaction was not dependent on age, gender, or programme of study but was significantly related to study centre location and semester of study. The students were generally satisfied with physical facilities, staff-students relationship, and facilitator quality but were unimpressed with student support services. The three domains that students were impressed with were deemed to be determinants of their satisfaction. It was recommended that those aspects of the programme that received satisfactory responses should be maintained but improved on with time. Those aspects with unfavourable responses, on the other hand, were to be critically considered for immediate improvement.

*Keywords:* student satisfaction, distance learning, service quality, higher education

## Introduction

Education is considered one of the surest ingredients for developing the human resources of any society. Until recently, conventional education was the *modus operandi* when developing human resources. This form of education, despite its increasing importance and continuous increases in enrolment worldwide (Allen & Seaman, 2017; Seaman, Allen & Seaman, 2018) has been saddled with many challenges. They include problems of space, infrastructure, widening access, and enhancing access to participation in education. Other challenges include promoting equality and democratisation, and providing cost-effective and affordable education (Aggor, Kinyanjui, Pecku, & Yerbury, 1992; Chawinga & Zozie, 2016). Distance education has come to be seen as a solution to the challenges of conventional education (Bozkurt et al., 2015; Kwapong, 2010). Regardless of the barrier, distance education creates opportunities for many persons who could not or may not have access to enrol in conventional, regular higher education programmes (Panda & Santosh, 2017; Stoessel, Ihme, Barbarino, Fisseler, & Stürmer, 2015). Distance education programmes and institutions are increasing because of ease of accessibility (Afolabi, 2017; Özcan & Yildirim, 2018). According to Stewart (1993) and Krishnan (2012), the provision of support services is an important remedy to the limitations of distance education, making it akin to conventional education.

Competition for students among the many higher educational institutions has made customer satisfaction a paramount concept in the field of education (Osman & Saputra, 2019), and customer satisfaction is said to be a strategic tool towards achieving customer retention and loyalty (Agyei & Kilika, 2013; Zhen, Cao, & Tang, 2018). Kaur and Bhalla (2018) argued that students are the internal customers of educational institutions and as such, policymakers should yearn to satisfy their students since dissatisfaction ranks among the causes for high attrition rate among distance students (Jan, 2015). Sustainability and competitive edge are issues for institutions because “dissatisfied students can decide to discontinue schooling, complain to the university or to other higher institutions or engage in negative word-of-mouth” (Fosu & Poku, 2014, p. 211). This, according to Kaur and Bhalla (2018) pushes educational administrators to bring about service quality reforms in the higher education sector. Service quality has, therefore, become a major strategy for improving competitiveness in educational institutions (Chandra, Hafni, Chandra, Purwai, & Chandra, 2019).

Dimensions of educational service quality include quality of academic resources, teaching quality, administrative service quality, and quality of student support services (Kaur & Bhalla, 2018; Voss & Gruber, 2006). In searching for service quality in distance education, student satisfaction is of the essence due to its unique characteristics (Stoessel et al., 2015; United Nations Educational, Scientific and Cultural Organization, 2009). Oluwunmi, Durodola and Ajayi (2015) argued that strong competition among universities makes student satisfaction surveys essential tools in measuring institutional performance.

Despite the foregoing, student satisfaction studies seem to be skewed toward undergraduate students. Again, most of the currently available studies that centre on postgraduate studies are mainly focused on developed economies (Bright & Graham, 2016; Poon, 2019). Hofstede's theory suggested that there are differences in economies due to differences in culture which affect the value of their institutional culture and strategy (Hofstede, 1983). Findings from such studies cannot, therefore, be applied in whole in other economies such as sub-Saharan Africa which has varied economic, socio-cultural, and political differences.

Student satisfaction studies in Ghana are no different; they are skewed towards undergraduate studies. For instance, the study by Gonu and Agyepong (2016) focused on undergraduate students in one region out of the then ten regions in Ghana. While Ghansah, Segbenya, Gonu, and Peniana (2015) considered students from 45 of the 49 study centres in Ghana at the time, the participants were first-year diploma and post-diploma students. Apam and Alija (2017) also concentrated on higher national diploma students in their study. At UCC, postgraduate distance education is relatively new; it was introduced in the 2013/2014 academic year. As indicated, very little research has examined distance students' perspectives on postgraduate distance education. At a time when student satisfaction drives enrolment and retention, it is imperative to discover what satisfies the students and what does not. This study, therefore, aimed to ascertain how satisfied students were with their experience of UCC postgraduate distance education.

The objectives of this study were to investigate the association between UCC postgraduate distance students' characteristics and satisfaction, as well as their perceptions of physical facilities, staff-students relationship, facilitator quality, and student support services. This study also sought to examine which of these four domains determine students' satisfaction. The study contributes to Herzberg's two-factor theory of motivation (Herzberg, Mausner & Snyderman, 1959) by investigating its applicability to distance education. It also bridged the gap in the area of distance education and student satisfaction at the postgraduate level. It was expected that the outcome of this study would help management of UCC's postgraduate distance programme sustain and improve students' experiences.

UCC runs dual-mode distance education in which programmes run on campus are also run at a distance. UCC has yet to commence online distance learning, hence, uses face-to-face tutorials throughout the delivery of distance education (Fung & Carr, 2000; Su, 2004). Face-to-face tutorials are held fortnightly on Saturdays and Sundays with students and facilitators at designated study centres close to students' home regions. Print materials distributed at the beginning of each semester are the mainstay of the tutorials (see Osuji, 2005). During face-to-face tutorials at the study centres, students are expected to be physically present. This means that UCC distance students at Bono Region attend face-to-face tutorials at Sunyani study centre every two weekends, without having to travel to the UCC campus in Cape Coast which is about 353 kilometres away. This affords students the opportunity to access university education despite the limited facilities on campus, and also pursue other business during weekdays. Each study centre has a coordinator who is responsible for creating a conducive teaching and learning environment during face-to-face tutorials (e.g., tidy rooms, clean toilet facilities, well-arranged tables and chairs).

## Literature Review

This study drew on Herzberg's two-factor theory of motivation (Herzberg et al., 1959). The scale items of the study were developed based on Herzberg's motivation and hygiene elements. Herzberg's two-factor approach, considered an accepted theory for explaining motivation and satisfaction, has been applied in disciplines such as human resource management, marketing, management, nursing, and education (DeShields, Kara, & Kaynak, 2005). The theory has two set of factors, namely satisfiers or motivators that result in satisfaction when effectively fulfilled, and dissatisfiers or hygiene factors which cause dissatisfaction when not present (Alshmemri, Shahwan-Akl, & Maude, 2017; Herzberg et al., 1959). In the current study, issues about facilitators, staff, and support services are directly related to

student outcomes and are regarded as satisfiers; issues of physical environment and its related variables are classified as hygiene factors.

There has been a proliferation of student satisfaction studies. For example, Illias, Hassan, Rahman, and bin Yaso' (2008) conducted a study to determine if differences in demographic factors were related to student satisfaction and service quality. It was revealed, among others, that there were no significant differences between males and females in terms of their satisfaction. As well, age was not a factor in student satisfaction. Similarly, Oluwunmi, Emeghe, Oni, and Ajayi (2016) found that with the exception of the college a student was enrolled in, neither gender, age, level of study, nor religion affected satisfaction.

Malik, Danish, and Usman (2010) in their analysis of responses from 240 students to determine the impact of service quality on students' satisfaction in higher education institutions in Punjab, Pakistan, revealed that service quality significantly impacted students' satisfaction levels. They noted that there was an association between student satisfaction and factors related to administrative staff, including administrative staff being kind. The respondents were also satisfied with the institution's responsiveness. Students were, however, not satisfied with parking facilities, computer laboratories, and the complaint handling system. Azarcon, Gallardo, Anacin, and Velesco (2014) used conjoint analysis and multi-stage sampling to seek responses from 395 students. Their study revealed that quality of education and faculty, as well as level of fees, ranked among the most important preferences of students leading to their retention. Thematic analysis of students' consideration of quality of faculty was based on the professors' mastery and delivery of subject matter. Faculties' understanding of students and spending time outside the classroom with them in order to facilitate their understanding of lessons and going beyond the lessons were also important to students.

Farahmandian, Minavand, and Afshardost (2013) investigated the levels of student satisfaction with the quality of service provided at the International Business School Universiti Teknologi Malaysia in Kuala Lumpur. They established that students were satisfied with facilities, financial assistance, teaching quality, curriculum, and advising. Vidalakis, Sun, and Papa (2013) explored the relationship between quality and value of higher educational facilities and concluded that students believed quality of school buildings determined institutional performance and vice versa. Keelson (2011), using both descriptive and inferential statistics, studied the perceptions of 516 students regarding teaching quality in business studies programmes in Ghanaian polytechnics. Among others, the following were found to indicate high quality teaching and learning: (a) stimulating students' thinking, (b) willingness to help students, and (c) lecturers' use of quality teaching methodology.

According to Ghansah et al. (2015), support services and convenience of accessing study centres were among factors important to 1,014 undergraduate UCC students in 45 study centres. Abbasi, Malik, Chaudry, and Imdadullah (2011) found that students were dissatisfied with teaching, administrative support, library and accommodation services, among others. However, Deuren and Lhaden (2017) found that, among other things, administrative staff who were approachable, friendly, and responded to the needs of students significantly contributed to students' satisfaction.

Mansor, Hasanordin, Rashid, and Rashid (2012) also studied the importance of hierarchical service quality models and student satisfaction. They collected data from 179 respondents through questionnaires. Their study proved that several factors, namely (a) interactional quality (i.e., employees' attitude, behaviour, and expertise in attending to students' inquiries and problems); (b) maintaining a

good physical environment; and (c) outcome quality, in terms of timeliness of service provision were positive and significantly related to student satisfaction. Padlee and Yaakop (2013) also identified that satisfaction with academic services, conveniently accessing services in a university, administrative services, augmented services, relevance of courses offered to the aspirations of students, and aesthetics and cleanliness of facilities determined international students' overall satisfaction with Malaysian universities.

Kara, Tanui, and Kalai (2016) investigated the relationship between educational service quality and students' satisfaction in public universities in Kenya. Using a cross-sectional study design, responses of 1,062 undergraduate students selected through proportionate stratified random sampling were analysed using regression analysis. Quality of teaching facilities, availability of textbooks and Internet services, quality of students' welfare services, and administrative service quality were all found to be significantly related to students' satisfaction. However, quality of library service and library environment, lecturer quality, and quality of instructional practices were not important factors in student satisfaction. Fosu and Poku (2014) randomly surveyed and interviewed 400 students from Kwame Nkrumah University of Science and Technology and Christian Service University College to explore factors that influenced students' choice of higher education in Ghana. They found that high calibre lecturers, well-stocked library and availability of internet facilities, students-staff relationship, and university environment were sources of satisfaction for students; unresponsiveness from the university however was a cause of dissatisfaction.

## Methodology

This study adopted a descriptive research design and post-positivist philosophical orientation (Holden & Lynch, 2004; Kothari, 2004; Van de Ven, 2007). This choice was premised on the nature of the study's objectives and our philosophical stance (Holden & Lynch, 2004). The study was delimited to students in Tamale, Sunyani, and Takoradi (a study centre each in Ghana's northern, central, and southern zones, respectively) who were in the second and third semesters of their programme. These students had completed all their courses, written end-of-semester examinations, and had received their results. Having completed a full cycle of the distance education programme, they were in a position to provide a fair assessment. Students in the first semester had yet to participate in the full extent of the distance education experience. Students who had finished the third semester had completed three full cycles with the institution but were not available at the study centres because they were writing their dissertation or thesis.

The population of the study comprised 186 students enrolled during the 2016/2017 academic year; of these, 112 were from Tamale, 50 from Takoradi, and 24 from Sunyani postgraduate study centres (University of Cape Coast [UCC], 2017). Due to the relatively small population, a census was conducted. Respondents were made aware of the purpose of the study and their voluntary participation. The principles of anonymity and confidentiality were assured and upheld. The right to discontinue as participants was also made clear and upheld. A total of 125 questionnaires were returned, representing a response rate of 67.2%.

Primary data was collected using a closed-ended questionnaire. The items were adapted from Abbasi et al. (2011), Azarcon et al. (2014), Deuren and Lhaden (2017), Farahmandian et al., (2013), Fosu and Poku (2014), Gonu and Agyapong (2016), Helgesen and Nettet (2007), Illias et al. (2008), Keelson

(2011), Malik et al. (2010), Oluwunmi et al. (2015), Padlee and Yaakop (2013), and Vidalakis et al. (2013). Postgraduate students' satisfaction with physical facilities, staff-students relationship, facilitator quality, and student support services were measured by a 5-point Likert scale on a continuum from strongly disagree to strongly agree.

The data was analysed using SPSS version 21.0. The study employed Cronbach's alpha to test the internal consistency and reliability of the questionnaire for each domain. The Cronbach's alpha values were as follows: (a) physical facilities (.78); (b) staff-students relationship (.908); (c) facilitator quality (.761); (d) student support services (.826); and (e) student satisfaction (.861). These values indicated practical, reliable, and valid use of the instrument (Cohen, Manion, & Morrison, 2007). The characteristics of the study respondents were presented using frequency (*n*) and percentages (%); chi-square test of analysis was used to investigate the association between postgraduate distance students' characteristics and satisfaction. Mean and standard deviation were used to ascertain students' perception of physical facilities, staff-students relationship, facilitator quality, and student support services. Ordinal regression analysis was conducted to obtain the domains that determined students' satisfaction. The overall rating of satisfaction with the four domains was determined using binary responses (i.e., 1 = poor, 2 = good).

## Results

### Association Between Respondents' Characteristics and Overall Satisfaction

Table 1 summarises the relationship between the respondents' characteristics and overall satisfaction. A total of 125 postgraduate students participated in the survey, with the majority (67.2 %) being 31 to 40 years of age, followed by 21.6% of respondents in the over 40 years of age bracket. Few were 30 years of age or less (11.2%). Male respondents dominated the postgraduate student population representing 68.0% and females, 32.0%. Respondents were sampled from the following programmes of study: (a) MBA Finance (29.6%); (b) MBA Accounting (23.2%); (c) MBA Human Resource Management (23.2%); (d) MEd Administration in Higher Education (15.2%); and (e) MBA Marketing (8.8%). Most of the respondents (63.2%) were in the second semester of the programme and 36.8% were in their third semester.

Table 1

*Association Between Respondent's Characteristics and Satisfaction*

Student characteristics		<i>n</i> (N=125)	%	$\chi^2$	<i>p</i> -value
Age	30 years or less	14	11.2	6.72	0.57
	31–40 years	84	67.2		
	over 40 years	27	21.6		
Gender	Male	85	68	0.98	0.91
	Female	40	32		
Programme of study	MBA Finance	37	29.6	12.7	0.69
	MBA Accounting	29	23.2		
	MBA Human Resource Management	29	23.2		
	MBA Marketing	11	8.8		
	MEd Administration in Higher Education	19	15.2		
Study centre	Tamale	81	64.8	28.2	0.03
	Takoradi	27	21.6		
	Sunyani	17	13.6		
Semester of study	Second semester	79	63.2	29.5	<0.001
	Third semester	46	36.8		

With regard to respondents' characteristics and satisfaction with postgraduate studies, Table 1 shows that satisfaction was not dependent on age ( $p = 0.57$ ), gender ( $p = 0.91$ ) nor programme of study ( $p = 0.69$ ), but significantly related to study centre ( $p = 0.03$ ) and semester of study ( $p = <0.001$ ).

### Respondents' Perceptions Regarding Physical Facilities

Table 2 summarises respondents' perceptions regarding the quality of physical facilities. The location of study area was rated highest with mean score of  $4.12 \pm 0.77$ , followed by the perception that the building's structure is not dangerous to the health and safety of students with a mean of  $4.03 \pm 0.81$ . Other variables related to physical facilities that were affirmed to be of good quality were (a) lighting in the lecture rooms ensured good visibility ( $3.71 \pm 1.04$ ); (b) availability of necessary equipment such as a projector ( $3.68 \pm 1.17$ ); (c) study centre free from excessive noise ( $3.64 \pm 1.1$ ); and (d) lecture room floors were appealing ( $3.56 \pm 1.03$ ). In contrast, aspects of the physical facilities that did not receive favourable responses included toilet facilities were in good condition (mean scores of  $2.74 \pm 1.25$ ) and walls of the lecture rooms were pleasant ( $2.78 \pm 1.28$ ).

Table 2

*Respondents' Perceptions Regarding Physical Facilities*

Statement	SD %	D %	U %	A %	SA %	<i>M ± SD</i>
Location of study area is satisfactory.	0.8	5.6	2.4	63.2	28.0	4.12 ± 0.77
Building structure is not dangerous to the health and safety of students.	1.6	6.4	2.4	66.4	23.2	4.03 ± 0.81
Study centre is free from excessive noise.	6.4	12.8	7.2	57.6	16.0	3.64 ± 1.1
Ventilation in the lecture rooms is good.	12.0	17.6	6.4	53.6	10.4	3.33 ± 1.23
The study chairs and tables are comfortable.	3.6	25.6	5.6	48.0	11.2	3.26 ± 1.23
Necessary equipment (e.g., projector) available in the lecture rooms.	9.6	8.8	4.8	57.6	19.2	3.68 ± 1.17
Walls of the lecture rooms are pleasant.	18.4	33.6	5.6	36.8	5.6	2.78 ± 1.28
Floor of the lecture rooms are appealing.	4.8	15.2	9.6	60.0	10.4	3.56 ± 1.03
Lighting in the lecture rooms ensures good visibility.	4.8	12.8	4.8	61.6	16.0	3.71 ± 1.04
Toilet facilities are in good condition.	20.8	27.2	13.6	34.4	4.0	2.74 ± 1.25

Note. SD=Strongly Disagree; D=Disagree; U=Uncertain; A=Agree; SA=Strongly Agree.

**Respondents' Perceptions Regarding Staff-Students Relationship**

Staff relationships with students were measured and the descriptive results are presented in Table 3. The responses were affirmative, indicating good relationships. The attributes with their respective outputs were (a) staff are polite (4.07 ± 0.67); (b) staff are friendly (4.06 ± 0.7); (c) staff are approachable (4.0 ± 0.75); (d) staff are patient in resolving students' problems (3.87 ± 0.83); (e) staff are always willing to help students (3.86 ± 0.85); and (f) staff are easy to contact (3.66 ± 1.09).

Table 3

*Respondents' Perceptions Regarding Staff-Students Relationship*

Statement	SD %	D %	U %	A %	SA %	<i>M ± SD</i>
Staff are friendly.	0.8	3.2	4.8	72.0	19.2	4.06 ± 0.7
Staff are always willing to help students.	3.2	4.0	12.0	64.8	16.0	3.86 ± 0.85
Staff are approachable.	3.2	0.8	6.4	72.0	17.6	4.0 ± 0.75
Staff are patient in resolving students' problems.	1.6	7.2	10.4	64.0	16.8	3.87 ± 0.83
Staff are polite.	0.8	2.4	7.2	68.0	21.6	4.07 ± 0.67
Staff are easy to contact.	6.4	9.6	15.2	49.6	19.2	3.66 ± 1.09

Note. SD=Strongly Disagree; D=Disagree; U=Uncertain; A=Agree; SA=Strongly Agree.

**Respondents' Perceptions Regarding Facilitator Quality**

Responses regarding facilitators' knowledge, teaching methods, and other professional attributes are presented in Table 4. The results show that facilitators always being present for lectures was rated highest (4.22 ± 0.71). Respondents were also of the view that facilitators promote critical thinking (4.04 ± 0.69) and show mastery of the course content (4.02 ± 0.86). That facilitators also deal with students' concerns relating to the course and promote creativity were rated 3.97 ± 0.83 and 3.97 ± 0.78, respectively. Other variables that had good scores were that facilitators (a) complete courses for the



semester ( $3.89 \pm 0.92$ ); (b) are accessible to students ( $3.87 \pm 0.85$ ); and (c) always conclude classes at the allotted time ( $3.86 \pm 1.19$ ).

Table 4

*Respondents' Perceptions Regarding Facilitator Quality*

Statement	SD %	D %	U %	A %	SA %	<i>M</i> ± <i>SD</i>
Facilitators are well versed in the course they handle (show mastery of the course content).	0.8	8.0	6.4	57.6	27.2	$4.02 \pm 0.86$
Facilitators always deal with student concerns relating to the course.	0.8	8.8	4.8	64.0	21.6	$3.97 \pm 0.83$
Facilitators are always present for lectures/face-to-face.	0.0	4.8	2.4	59.2	33.6	$4.22 \pm 0.71$
Facilitators always close at the allotted time.	25.6	40.8	10.4	18.4	4.8	$3.86 \pm 1.19$
Facilitators promote critical thinking.	0.8	4.0	4.8	71.2	19.2	$4.04 \pm 0.69$
Facilitators are accessible to students.	2.4	7.2	7.2	67.4	16.0	$3.87 \pm 0.85$
Facilitators complete courses for the semester.	2.4	8.0	9.6	58.4	21.6	$3.89 \pm 0.92$
Facilitators promote creativity.	2.4	2.4	10.4	65.6	19.2	$3.97 \pm 0.78$

Note. SD=Strongly Disagree; D=Disagree; U=Uncertain; A=Agree; SA=Strongly Agree.

**Respondents' Perceptions of Student Support Services**

Perceptions regarding student support services (Table 5) largely espoused negative responses. The mean scores ranged between  $2.05 \pm 1.00$  and  $3.25 \pm 1.24$ . Availability of library facilities ( $2.05 \pm 1.00$ ) scored least. Other services that had a mean score less than 3.0 were (a) fee payment is flexible ( $2.87 \pm 1.28$ ); (b) study rooms are available for use by students ( $2.64 \pm 1.31$ ); and (c) guidance and counselling services are available ( $2.30 \pm 1.12$ ). Postgraduate students were, however, somewhat satisfied with (a) access to results ( $3.20 \pm 1.02$ ); (b) knowledge of where to access information ( $3.13 \pm 1.21$ ); and (c) tackling registration challenges ( $3.25 \pm 1.24$ ).

Table 5

*Respondents' Perceptions Regarding Student Support Services*

Statement	SD %	D %	U %	A %	SA %	<i>M</i> ± <i>SD</i>
Students' needs/problems are promptly addressed.	11.2	24.4	19.2	36.8	6.4	$3.01 \pm 1.16$
Fee payment is flexible.	16.8	28.8	13.6	32.0	8.8	$2.87 \pm 1.28$
Guidance and counselling services are available.	28.8	30.4	27.2	8.8	4.8	$2.30 \pm 1.12$
Students know where to obtain a service/access information.	9.6	26.4	17.6	34.4	12.0	$3.13 \pm 1.21$
Library facilities are available.	33.6	40.0	16.8	7.2	2.4	$2.05 \pm 1.00$
Study rooms are available for use by students.	25.6	25.6	15.2	26.4	7.2	$2.64 \pm 1.31$
Registration challenges are promptly attended to.	11.2	20.8	12.8	42.4	12.8	$3.25 \pm 1.24$
Results are accessible to students.	9.6	8.8	39.2	36.8	5.6	$3.20 \pm 1.02$

Note. SD=Strongly Disagree; D=Disagree; U=Uncertain; A=Agree; SA=Strongly Agree.

## Logistic Regression Results of the Determinants of Postgraduate Students' Satisfaction

As shown in Table 6 below, the results of this study indicates that physical facilities, staff-students relationship, and facilitator quality were significant in determining students' overall satisfaction with the postgraduate programme. However, student support services were not significantly associated with students' satisfaction.

Table 6

*Logistic Regression Results of the Determinants of Postgraduate Students' Satisfaction*

Explanatory variable	Odds ratios	p-value	SE	95% CI for B
Facilitator quality (poor)				
Good	8.9586	0.002**	6.3139	(2.2507, 35.6584)
Physical facilities (poor)				
Good	0.0663	0.033*	0.0843	(0.0055, 0.8015)
Staff-Students relationship (poor)				
Good	0.1328	0.081***	0.1538	(0.0137, 1.2842)
Student support services (poor)				
Good	2.3020	0.106	1.1878	(0.8374, 6.328)
_cons	24.8042	0.083	45.9201	(0.6587, 934.019)

*Note.* Reference category in parentheses; *SE*=Standard error; *CI*=Confidence Interval; *B*=Boundaries.  
\*  $p < 0.05$  (5%). \*\* $p < 0.01$  (1%). \*\*\*  $p < 0.1$  (10%).

## Discussion

In line with the six objectives of this study, in this section we discuss the association between students' characteristics and satisfaction, followed by their perceptions of each of the four domains examined in this study. We conclude by discussing determinants of postgraduate students' satisfaction.

### Association Between Students' Characteristics and Satisfaction

The first objective sought to investigate the association between students' characteristics and their satisfaction with the postgraduate distance programme. Chi-square tests indicated that students' age, gender, and programme of study did not relate significantly with overall satisfaction, whereas their semester of study and location of study area were significantly associated with overall satisfaction. This is consistent with the findings reported by Illias et al. (2008) and Oluwunmi et al. (2016). This finding should not be taken lightly, even though it has been corroborated by other researchers; due to globalization and technological advancements, the demographic profile of students is changing at a pace faster than before, hence the demography of students should regularly be monitored by management of educational institutions to detect changes in the association between demography of students and satisfaction when they occur and address them.

### Students' Perceptions of Physical Facilities

Objective two sought to ascertain postgraduate students' perceptions about physical facilities. With the exception of online modes of education, physical facilities are crucial to whether learners' educational

experience is positive or not. The educational experience of UCC distance education students depends on their study centres where face-to-face sessions are held. It is prudent to ensure that facilities at study centres mirror, as close as possible, facilities on university campuses. The most highly rated parameter in this regard was the location of the study area, followed by the structure of the building not being detrimental to the health and safety of students. Students were also concerned that the centre be free from excessive noise. The affirmation given to the location of the centre could be attributed to the primary benefit distance learning provides in terms of flexibility of time, convenience, and proximity to study location. Then again, the rating could be ascribed to the programme helping to address the challenges students face in trying to remain full-time workers while also pursuing higher education studies full-time on campus as the location of study centres are favourable. A noisy environment does not promote effective teaching and learning because it distracts the intelligibility of lecturers' presentation as well as the attention of students. It is therefore positive that this study found students perceived the study centres as not noisy.

The lighting in lecture rooms was affirmed to be in good condition, thereby promoting good visibility; students also found the floors of the lecture halls to be appealing. This indicated that adequate effort has been made to improve and maintain the internal lighting systems in the study centres. This is in line with Vidalakis et al. (2013) who stated that development of academic facilities is a key area that needs attention and requires universities to adequately invest in it. Lecture rooms fulfil a vital component of the academic training of the postgraduate student. As Farahmandian et al. (2013) explained, and consistent with the findings of our study, students care that lecture halls include adequate and efficient lighting, are attractively designed, and have adequate and efficient lecturing aids such as projectors.

### **Students' Perceptions of Staff-Students Relationship**

Students reported positive perceptions regarding objective three, staff-students relationship. They indicated that administrative/support staff were polite, friendly, approachable, easy to contact, and patient in resolving students' problems. Positive relationships could prove to be a valuable resource for effective academic work in the College of Distance Education, UCC. They could also support the notion that the better the quality of the relationships, the more connected the students are to the University. Without these positive relationships, the University should expect a high student attrition rate. These findings confirm the results of the studies by Malik et al. (2010) and Deuren and Lhaden (2017) in which respondents rated the attitude of administrative staff highly.

### **Students' Perceptions of Facilitator Quality**

Concerning students' perceptions of facilitator quality, the fourth objective, most students espoused good perceptions regarding facilitators' knowledge, teaching methods, and professionalism. Students responded positively regarding (a) punctuality, (b) promotion of critical thinking, (c) mastery of the course content, (d) assisting with student concerns relating to the course, (e) promotion of creativity through their teaching, and (f) their ability to complete courses for the semester even while always concluding classes at the allotted time. The findings are in tandem with that of Azarcon et al. (2014), Farahmandian et al. (2013), and Keelson (2011). In these studies, examples of things students were generally satisfied with included (a) lecturers' mastery and delivery of content, (b) teaching methods, (c) stimulation of students' thinking, and (d) willingness to help student. The findings in this study were to the benefit of the UCC distance learning programme since overall educational effectiveness depend on facilitators' quality and competence. The inability of the tutor to effectively master course content

results in failure to deliver curricula and consequently, the quality of teaching is compromised, and the syllabus may not be covered within the allotted time.

### **Students' Perceptions of Support Services**

Perception of student support services, one of the most important components of distance education programmes, was the fifth objective of the study. Without student support services, distance education is not likely to be successful or closely mirror conventional education (Krishnan, 2012; Stewart, 1993). Responses relating to student support services were not favourable. Students reported that library facilities, study rooms, and guidance and counselling facilities were unavailable. They were also not impressed with the fee payment regime. These findings could prove to be costly to UCC's image, as students are likely to engage in negative word-of-mouth. When the image of the institution is affected, its survival is threatened because patronage and recruitment will be lowered. These results were inconsistent with the findings of Ghansah et al. (2015) in which support services were highly rated by students. However, they corroborated the findings of Abbasi et al. (2011) who revealed that students were dissatisfied with the support services.

### **Determinants of Postgraduate Students' Satisfaction**

The sixth objective investigated which of the four domains determined students' satisfaction. It was revealed that physical facilities, staff-students relationship, and facilitator quality determined students' satisfaction with the postgraduate programme. Student support services however, were not significantly associated with students' satisfaction. This is consistent with the findings of Fosu and Poku (2014) that high calibre lecturers, staff-students relationship, and university environment were sources of satisfaction for university students. The theoretical framework proposed by Padlee and Yaakop (2013) on the determinants of overall students' satisfaction was also supported, as was that of Mansor et al. (2012). However, our findings were inconsistent with those of Kara et al. (2016). Above all, the study supports the thrust of Herzberg's two-factor motivation theory.

## **Conclusions and Implications**

Evaluation of the postgraduate distance learning by students is useful in helping to improve teaching, learning, the general development of UCC and, most importantly, to keep the attrition rate of students to the barest minimum. Aspects of the programme that received satisfactory responses in this study should be maintained in the interim but improved upon with time. Unfavourable responses, on the other hand, especially concerning student support services and the condition of toilet facilities, should be critically looked at by management with the view to improving them. The favourable responses with respect to physical facilities, staff-students relationship, and facilitator quality notwithstanding, failure to correct the negatives revealed in the study may not auger well for the continuing existence of the postgraduate distance programme.

Since UCC distance education is such that students interact heavily with facilitators, support staff, and physical facilities from commencement to completion of their programme of study, the aforementioned will improve students' overall experience. This will leave them with little or no reason to be unimpressed, thus fueling positive perceptions about the institution. Whilst a positive image of UCC will form the basis of a stronger relationship between the students and their institution, and help lead to an almost perfect completion rate, students and alumni will be naturally persuaded to engage in

positive word-of-mouth to attract new students. This study adds to the literature on service quality, customer satisfaction, and higher educational quality delivery. It advances knowledge on tangibility aspect of the service quality dimensions (Parasuraman, Zeithaml, & Berry, 1988).

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