Faculty of Social Sciences Student Satisfaction with Emergency Remote Teaching at The UWI during the COVID-19 Pandemic

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Abstract

The study utilised the Expectation Confirmation Theory as the basis for addressing students' satisfaction with Emergency Remote Teaching (ERT) in the Faculty of Social Sciences (FSS) of The University of the West Indies (The UWI), during the COVID-19 pandemic. The work was prompted by Hodges et al. (2020) who indicated that online/remote learning carries a stigma of being lower in quality than face-to-face and these hurried moves to do remote teaching may confirm this negative perception. Utilising survey design and factor analysis with descriptives and a final sample of 115 students, the study found that student engagement, student access, connectivity, and communication, along with recorded materials and online examinations were the satisfaction areas to be focused on in the ERT environment. Recommendations were offered in each of the identified areas with focus on student engagement, connectivity, and communication where there were high levels of dissatisfaction. This study provides pedagogical guidance to lecturers who are challenged in the ERT environment.

Keywords: Emergency Remote Teaching (ERT), student satisfaction, online learning, university

Introduction

In the competitive marketplace of higher education and decreasing educational subventions from governments, student satisfaction has become a desired outcome of the modern university. Student satisfaction is important if universities are to sustain their student intake and grow their numbers (Elliott and Shin 2002).

The COVID-19 pandemic has created a global crisis in the delivery of higher education (Aguilera-Hermida 2020). This problem has led to the onset of Emergency Remote Teaching (ERT) methods in universities across the globe. Emergency Remote Teaching involves the fully remote teaching solutions for instructional delivery and represents an alternate delivery mode due to crisis circumstances (Hodges et al., 2020). ERT may be done synchronously, that is, live delivery of lectures, or asynchronously, that is, recording of lectures for later viewing. These emergency measures due to COVID-19 may continue longer than expected and it is not clear whether things will go back to normal at the end of the pandemic (Rahiem 2020a). Notwithstanding the disruption from COVID-19, student satisfaction remains important in higher education as global trends are indicating a reduction in students' registration (de Wit and Altbach 2020).

The University of the West Indies (The UWI) was rated by Times Higher Education among the top 5 per cent of the best universities in the world in 2019. As such, maintaining quality assurance, including student satisfaction, has become a heightened priority of the university. In its teaching response to COVID-19, The UWI suspended classes, both face-to-face and online deliveries, and embarked upon this ERT alternative as a temporary measure.

This study assesses the Faculty of Social Sciences (FSS) student satisfaction with ERT at The UWI during the COVID-19 pandemic. The study tests the Expectation Confirmation Theory in determining students' satisfaction as a function of expectations, perceived performance and disconfirmation of beliefs (Oliver 1977). The study uses the survey method to ascertain students' attitudes and responses to each of the satisfiers/dissatisfiers of remote teaching. In this study, ERT is associated with the crisis of the COVID-19 pandemic during which all universities opted to move their courses online instead of continuing face-to-face delivery in order to safeguard the public health of their students and lecturers from the deadly virus. Although ERT resembles online teaching on the surface, educational instructional specialists have made a sharp distinction between the two modalities (Aguilera-Hermida 2020). In effect, online teaching refers to

careful instructional design and planning using systematic model designs and development. Such a systematic process positively impacts on the quality of the instruction. In contrast, ERT involves quickly moving courses online without taking this systematic process into account.

Purpose

The purpose of this study is to identify the satisfiers and dissatisfiers of the FSS students with ERT during the COVID-19 pandemic, as well as to determine the extent of the satisfaction and dissatisfaction of these students during this period. The research on the critical matter of delivering higher education amid the COVID-19 pandemic is quite timely as it seeks to address a current situation and provides pedagogical guidance to lecturers who are challenged in presenting their lectures using ERT. It is expected that the FSS will benefit from the insights generated from this study on teaching and learning in an emergency remote environment.

Related Literature

The Expectation Confirmation Theory for grounding this study is discussed in the first section of this review. This is followed by the literature on the satisfiers/dissatisfiers in the ERT environment which depict the themes of online student access, connectivity, communication, student engagement, recorded materials, and online examinations.

Expectation Confirmation Theory

The Expectation Confirmation Theory posits that satisfaction is a function of expectation and perceived performance. Oliver (1980) developed the Expectation Confirmation Theory, which originated in marketing and is widely used in consumer behaviour and service marketing. It is also used to explain satisfaction expressed by users of information systems (Bhattacherjee 2001; Bhattacherjee and PremKumar 2004; Thong, Hong and Tam 2006).

Five constructs are identified within the literature as forming part of the Expectation Confirmation Theory. These are expectation, performance, confirmation, satisfaction, and re-purchase intention (Oliver 1980). According to the Expectation Confirmation Theory, post-purchase satisfaction is achieved when expectation

meets perceived performance. However, if a product exceeds expectations – a process known as positive confirmation – then there will be post-purchase satisfaction. On the other hand, if a product falls short of expectation – a process known as negative confirmation – then consumers will be dissatisfied with that product.

An important aspect of Expectation Confirmation Theory concerns the issue of re-purchase intention formed by satisfied consumers. For a satisfied consumer to decide on a re-purchase intention there are at least four factors that must precede such an intention (Oliver 1980; Bhattacherjee 2001). First, an expectation of a product prior to purchase is formed by the consumer. Second, consumers experience the product or service by using it. Third, consumers weigh their original expectation with the perceived performance of the product to confirm or refute their expectations. Fourth, consumer satisfaction is therefore formed based on their confirmation level and expectation.

Expectation Confirmation Theory focuses on the customer's attitude towards a product or service and the customer's perception of the performance of the product or service. These constructs in combination shape the customer's repurchase intention. However, there are limitations to the Expectation Confirmation Theory that must be highlighted. One such limitation is the fact that consumers may not have any specific or defined expectations but may still intend to or even purchase a product or service. Further, even in cases where consumers have expectations, these expectations may vary significantly among customers.

Expectation Confirmation Theory provides a good foundation for explicating student satisfaction/dissatisfaction with ERT, as the theory purports that satisfaction, (that is, the students' satisfaction), is a function of expectation (the students' preconceived belief in the course offering) and perceived performance (the effective delivery of courses on offer by the FSS).

Student access

The literature on online learning has noted wider student access as a key benefit of online learning. Access through online teaching provides flexibility and accessibility of educational opportunities for learners from various geographical spaces and backgrounds (Delaney and Fox 2013; Roll, Russell, and Gašević 2018). Online access also provides opportunities to adult learners who are unable to attend traditional face-to-face classes (Dumford and Miller 2018). Access to learning

through the online modality is associated with lower student completion rates than the traditional alternative (Woodley and Simpson 2014). Lower completion rates in the online environment can be attributed to poor time management on the part of students, unrealistic expectations, a feeling of isolation and a view that the institutional culture values online students less than their traditional counterparts (Brown et al. 2015; Mallman and Lee 2016; Nichols 2011; O'Shea, Stone, and Delahunty 2015).

Student engagement in the online environment is driven by the quality of student-lecturer relationships (Long, Ibrahim, and Kowang 2014). When using the online modality, a strong teacher presence is central to students' motivation and to the feeling that they are cared for as well as to maintain their sustained curiosity. For this engagement, Anderson et al. (2001) argue that the lecturer is required to review the student's work, provide feedback, stimulate discussions and encourage participation. Moreover, even with the online modality, the lecturer can engage the student in meaningful participation as students do not view online delivery as a barrier to their engagement (Dumford and Miller 2018).

Connectivity and communication

An effective internet infrastructure is critical to the successful delivery of online/remote lectures. In addition to internet access, sufficient bandwidth is required to fully utilise the available features on the remote platforms. Some rural areas in developing countries lack broadband networks and affordable internet service. Lack of internet access is also a problem for some students from lower socioeconomic backgrounds. Those who cannot afford to pay for or access the technology may have to temporarily withdraw from their studies and hence the university could eventually lose these students. As internet access is usually provided at a cost, some students may not be able to afford access or have weak internet connectivity and therefore their ability to participate in the remote learning environment may be hampered. This is certainly the case in many institutions of higher education for some students (Senior 2010).

At a minimum, lecturers and students need to be functional users of computers in order to operate in a remote teaching-learning environment. Moreover, they must be able to use the online platform at their institutions, be able to search the World Wide Web and use email technology. Expectations concerning the turn-around time that lecturers have to answer students' queries in online teaching

remain high. Students may have expectations that lecturers should respond immediately but lecturers may view this as unrealistic with the myriad issues that are present in the ERT environment. In this context, a communication guide within the lecturer's course outline could be used to manage expectations by specifying how students should communicate to the lecturer and the timeframe in which they can expect to receive a response. For example, if students are communicating via email, they should always indicate their course code and, depending on the nature of their email, they should include their identification numbers (IDs). Petillion and McNeil (2020) state that clear communication along with flexible teaching methods are important to reduce the problems faced by students in the ERT environment. This communication may take place through online chats, discussion forums and inbox messaging.

Student engagement

Student engagement practices have been central to the teaching and learning environment in many higher educational institutions (Robinson 2012). This involves the inclusion of the students' feedback in plans and programmes (Robinson 2012). Student engagement is essential for learning, particularly in the online mode of delivery where teaching takes place outside the traditional classroom (Malan 2020). Lu et al. (2013) found that students' academic engagement correlates with their satisfaction with university learning, intellectual skills development, social communication, and self-cognition. Hence, student engagement is far-reaching in the ERT environment.

There are four paradigms of student engagement in the existing literature (Kahu 2013). These are the behavioural, psychological, sociocultural, and the holistic perspectives. The behavioural perspective addresses the students' conduct and the institutional practices in higher education. The psychological perspective discusses engagement in the context of the students' psychosocial processes. The sociopolitical dimension addresses the sociocultural issues and the holistic perspective embodies the other three perspectives on student engagement.

Student engagement encompasses the student voice, student participation and the student's role as an agent of change. Robinson and Taylor (2007) have stated that student voice refers to a situation in which students are allowed to voice their opinions on the aspects of their school lives that affect them. Cheminais (2008) notes that this voice gives the student an opportunity to participate in the

decision making process within their schools. As such, students are encouraged by institutions to be active partners in the ERT teaching learning process. This is done through students' evaluation of courses and lecturers, their participation on faculty boards and the general input they provide in teaching and learning through a suggestion drop-box.

Rudduck and Flutter (2004) argue that student participation involves student membership on university administrative committees at their institutions and that they must be respected as contributors. They must be given active and direct involvement in their institution's matters at some level. Hence, the idea of students as participants requires them to be represented on committees within the institution's system.

Students as change agents involve students' active engagement with change processes and management in their institutions. This, according to Dunne and Zandstra (2011), requires more student-driven agendas and less institutionally focused activities. Kay et al. (2010) argue that this engagement requires more proactive rather than reactive roles on the part of students.

Recorded materials and online examinations

Recorded Materials

Recorded materials that are stored on remote teaching platforms are necessary for asynchronous learning. In the asynchronous mode, course materials are prepared so that students can access them at any time they choose. Recorded materials used in this way provide flexibility and increase accessibility to students. It allows students to access past course/class materials. It may also increase students' knowledge and performance as they may have more time to engage with and listen to the recordings. However, with recorded materials, students may misunderstand the content and when listening to the recordings they will not be able to probe by asking questions. Notably, recorded materials will provide the course content but it is highly impersonal and not as engaging as synchronous delivery (Mnih et al. 2016).

Online Examinations

Online examination refers to examinations carried out digitally to test students' knowledge of a given subject area. This allows students to undertake their online

examination in their own space, with their own device and at a convenient time. For online examinations, a browser and internet connectivity are required for students taking the examination (Jacob and Radhai 2016). This is problematic for those students who are challenged with connectivity issues.

Online examination, which is carried out digitally with fewer controls, contrasts with the traditional assessment method, which involves students' using pen and paper to answer examination questions that are administered by invigilators. Online examination has a conservation benefit by safeguarding the environment, since physical paper is not required in the administration of these examinations. This also supports a faster evaluation process and is more cost effective as it eliminates labour, such as invigilators and reduces the time required to administer and oversee the online examination when compared with the traditional process of examination (Jacob and Radhai 2016).

Despite these advantages, online examination also has limitations. In the digital format, online examinations are similar to open-book examinations, as the setting is not usually controlled and students can access external material to help with their online examinations. Another limitation is that online examinations in the ERT environment will result in disruption in the method of taking examinations and require a transition process for students to become familiar with these examinations (Jacob and Radhai 2016). Infrastructure limitations also affect online examinations. These include internet connectivity and power outages which affect students. In addition, other technical problems as well as cheating are some of the challenges that impact online examinations.

Closing comment on literature

The selected review of literature provided the theoretical frame and related themes for guiding this study. Some of the salient matters in remote teaching and learning that were found to be relevant in the context of the pandemic were discussed.

Methodology

This study utilised a descriptive survey design and qualitative brainstorming sessions for undertaking the research. Two research questions were addressed:

1. What are the satisfiers and dissatisfiers of the Faculty of Social Sciences (FSS) students with ERT during the COVID-19 pandemic?

2. What is the extent of the satisfiers and dissatisfiers among the FSS students with the ERT during the pandemic?

Method

The method utilised for addressing this matter of student satisfaction with ERT in the FSS consisted of six steps. First, two online brainstorming sessions were held to identify students' satisfiers/dissatisfiers with the ERT offering in the Faculty. There were seven students in the first brainstorming session and six in the second – both groups consisted of different sets of students. The participants selected for these sessions were FSS students who had taken their first set of remote courses during the April to August 2020 period and were currently taking remote classes in the semester of September to December 2020. The decision to use brainstorming sessions in this preliminary assessment to identify satisfiers/dissatisfiers was based on the dramatic impact of the COVID-19 pandemic on the teaching and learning experience, so it was felt that primary research was required as the secondary literature would not have been adequate for addressing this novel situation.

Second, a Microsoft Word transcript was produced from the recorded brainstorming sessions. This transcript was analyzed using a basic thematic approach and twenty-nine satisfiers/dissatisfiers were identified. After the narrative data was assessed on the popular sentiments expressed by the students and the data cleaned, twenty-six satisfiers/dissatisfiers resulted from the qualitative analysis.

Third, a cross-sectional designed survey instrument was developed from the list of twenty-six items. This instrument was piloted with a small sample of approximately thirty students and two of the items were dropped as they did not meet the face validity standard. The final instrument therefore consisted of twenty-four items. These items were each anchored on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. Examples of these satisfiers/dissatisfiers are as follows: "I am disengaged in remote teaching sessions," "The internet connections are not reliable," "Some lecturers do not demonstrate effectively online," and "Remote sessions eliminate the hassle of getting to classes." A filter question was added to the survey instrument for ensuring that only students who had taken remote classes in FSS in the previous semester and were currently taking classes in the Faculty were eligible to respond to the survey. Questions on demographics were also added to the instrument for describing the sample to be studied.

Fourth, an electronic mode of administration was used for carrying out the survey. In doing so, the survey was posted on the online learning platform, and a convenience sample of students completed the survey and returned it via email to the survey administrator. These students were advised that their participation was voluntary and were also assured of anonymity and confidentially. The final sample consisted of 115 respondents, 83 per cent female and 17 per cent male. The distribution across the departments was Mona School of Business and Management – 55 per cent, Department of Government – 30 per cent, Department of Sociology, Psychology and Social Work – 14 per cent, and Department of Economics – approximately 2 per cent. Ninety per cent of these respondents were undergraduate students and 10 per cent graduate students. Eighty-five per cent of them were registered part-time and the other 15 per cent full-time. Eighty-seven per cent of these students were between ages 18 and 25 years, 11 per cent between ages 26 and 40 years and the remaining 2 per cent were over 40 years old. (*See* table 1 for description of sample with demographics.)

Fifth, Factor Analysis using SPSS version 20 was the statistical technique employed for grouping the twenty-four variables of interest. This technique is suited for analysing inter-relationships between variables and grouping them into fewer factors. In conducting this analysis, the primary assumptions advanced by Hair et al. (1998) for using the Factor Analysis technique were checked:

i. Sample size ≥ 100
ii. Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy > 0.50
iii. Bartlett's Test of Sphericity with significance α <.05

The principal component analysis with the varimax rotation was then applied to the items of interest to determine the underlying items that were associated with each factor.

Results

The results are discussed in two sections – findings from the factor analysis and findings from the descriptive analysis.

Findings from factor analysis

The findings from the factor analysis supported the use of this technique vis-à-vis

Table 1. Description of sample

	Frequency	Per cent	*Cumulative Per cent
Gender			
Male	20	17.5	17.5
Female	94	82.5	**100.0**
Total	**114**	**100.0**	
Department			
Mona School of Business and Management	63	54.8	54.8
Department of Government	34	29.6	84.3
Department of Economics	2	1.7	86.1
Department of Sociology, Psychology and Social Work	16	13.9	**100.0**
Total	**115**	**100.0**	
Level of Study			
Undergraduate	104	90.4	90.4
Graduate	11	9.6	**100.0**
Total	**115**	**100.0**	
Registration Status			
Part-time	17	14.9	14.9
Full-time	97	85.1	**100.0**
Total	**114**	**100.0**	
Age			
18–21	68	59.1	59.1
22–25	32	27.8	87.0
26–30	8	7.0	93.9
31–40	5	4.3	98.3
41–50	2	1.7	**100.0**
Total	**115**	**100.0**	

**Note:* Cumulative per cent represents the running totals

sample size of 115, which is greater than the 100 required, KMO of .827 – which is greater than the minimum .50 required, and Bartlett's Test for Sphericity with chi square of 863.964 and significant α =.000 – which satisfies the required level of significance of α <.05.

On the analysis of the twenty-four items, five items with factor loadings of <.50

were dropped to generate a more robust model, and a four-factor solution with nineteen items was extracted. These factors are:

i. Student Engagement,
ii. Student Access,
iii. Connectivity and Communication, and
iv. Online Exams and Recorded Materials.

Notably, only factors with eigenvalue >1 were extracted (Hair et al., 1998) and 60 per cent of the total variance was explained by the four factor model (*see* table 2.)

Table 2. Satisfaction factors and underlying items

Variables	Factor Loading	Eigenvalue	% of Variance	Cumulative Variance
Student Engagement				
Students disengaged in sessions	715	5.592	29.431	29.431
Students longing for physical interactions	.579			
Students not able to focus as much as face to face	.704			
Class discussions are not engaging as face to face	.767			
Students are learning less with remote teaching	.613			
Some lecturers not presenting well with remote	.642			
Students not participating much with remote	.764			
Some lecturers do not demonstrate well online	.554			
Student Access				
Remote makes attending classes easier (R)	.658	3.125	16.446	45.877
Remote makes me have more energy in class (R)	.650			
Remote allows more opportunities for multitasking (R)	.690			
Remote eliminates hassle of getting to class (R)	.784			
Connectivity and Communication				
Internet connection not reliable	.592	1.495	7.870	53.747
Slow feedback from UWI admin staff	.777			
Lecturers do not answer questions online	.520			
Frustrating when staff do not respond to email	.666			
Lecturers need to use online chat more often	.590			
Recorded Materials and Online Exams				
Recorded sessions are useful feature of remote (R)	.696	1.259	6.624	60.371
Students happy for the 2-day access to exams (R)	.766			

Findings from descriptive analysis

Descriptive statistics were generated on each of the four factors and the results are presented per factor.

Student Engagement

The analysis on student engagement has indicated that there were high levels of dissatisfaction on this factor, ranging from a low of 41 to a high of 67 per cent. The top four dissatisfiers were that students were longing for physical interaction (67% of the students), students felt that they were not as focused as they were in face-to-face classes (62%), students felt that were not engaged enough to participate in the remote setting (58%) and students felt that some lecturers were not presenting effectively in the remote environment (57%) (*see* table 3).

Table 3. Student engagement

	Student Engagement	Physical Interaction	Student Focus	Discussions Engaging	Learning	Lecturer Presentation	Student Participation	Lecturer Demonstration
Dissatisfied	40.9	67.0	61.7	49.6	47.4	57.4	58.3	56.5
Neutral	27.0	13.0	13.9	16.5	22.8	23.5	14.8	20.9
Satisfied	32.2	20.0	24.3	33.9	29.8	19.1	27.0	22.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

The combined total of students who were either dissatisfied or neutral ranged between approximately 7 per cent and 80 per cent across all attributes of student engagement (*see* dashboard in figure 1).

Student Access

The findings on student access have indicated relatively high levels of student satisfaction with three of the four items. In this case, students were satisfied with having no hassle in getting to class afforded by the remote setting (68% of students), students were satisfied with the ease of attending classes (67% of students) and these students were also satisfied with the opportunity that remote teaching allows for multitasking (51%). The students, however, were not quite satisfied

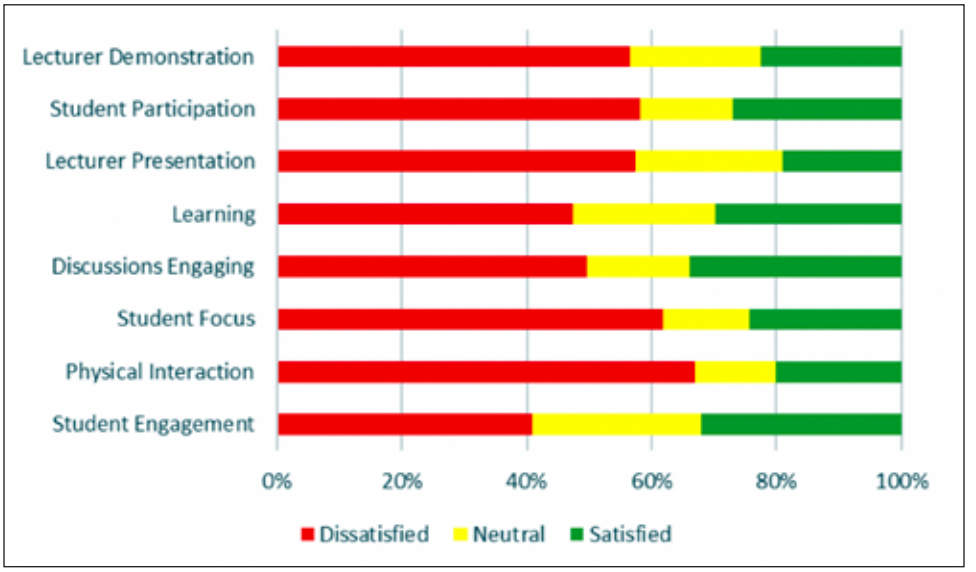

Figure 1. Student engagement dashboard

with their own energy levels when sitting in remote classes – only 28 per cent of students were satisfied (*see* table 4).

Table 4. Student access

	Ease of Attending Classes	Student Energy Level	Opportunity for Multitasking	No Hassle Getting to Classes
Dissatisfied	19.1	44.3	26.3	18.3
Neutral	13.9	27.8	22.8	13.9
Satisfied	67.0	27.8	50.9	67.8
Total	**100.0**	**100.0**	**100.0**	**100.0**

At a glance, the overall findings indicated that students were generally satisfied with the levels of access they have with remote teaching (figure 2).

Connectivity and Communication

The findings in the area of connectivity and communication have indicated high levels of student dissatisfaction on at least four of the five attributes. The main dissatisfiers were that The UWI faculty and staff, including lecturers and administration, were not responding to students' emails (81% student dissatisfaction),

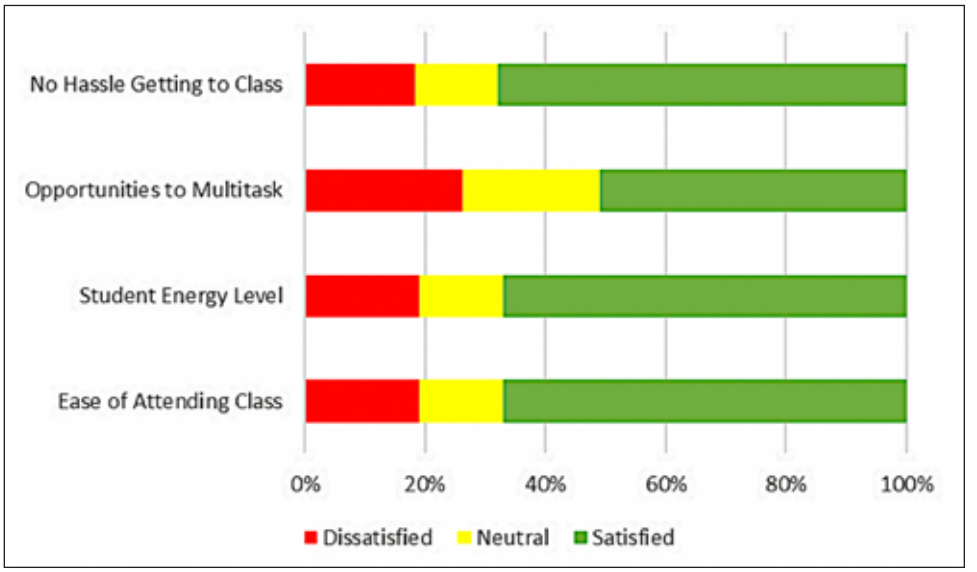

Figure 2. Student access dashboard

feedback that students received from administration (68% student dissatisfaction), unreliable internet connection (64% student dissatisfaction) and lecturers use of online chat (62% student dissatisfaction). However, only 32% of students were dissatisfied with lecturers' response to students' questions online (*see* table 5).

Table 5. Connectivity and communication

	Internet Connection	Feedback from Admin	Lecturer Answer Questions Online	Staff Response to Email	Lecturer Online Chat
Dissatisfied	64.0	67.8	31.9	80.9	61.7
Neutral	7.9	13.9	30.1	13.0	25.2
Satisfied	28.1	18.3	38.1	6.1	13.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

The results, at a glance, have indicated that there were relatively low levels of student satisfaction on all attributes of connectivity and communication (figure 3).

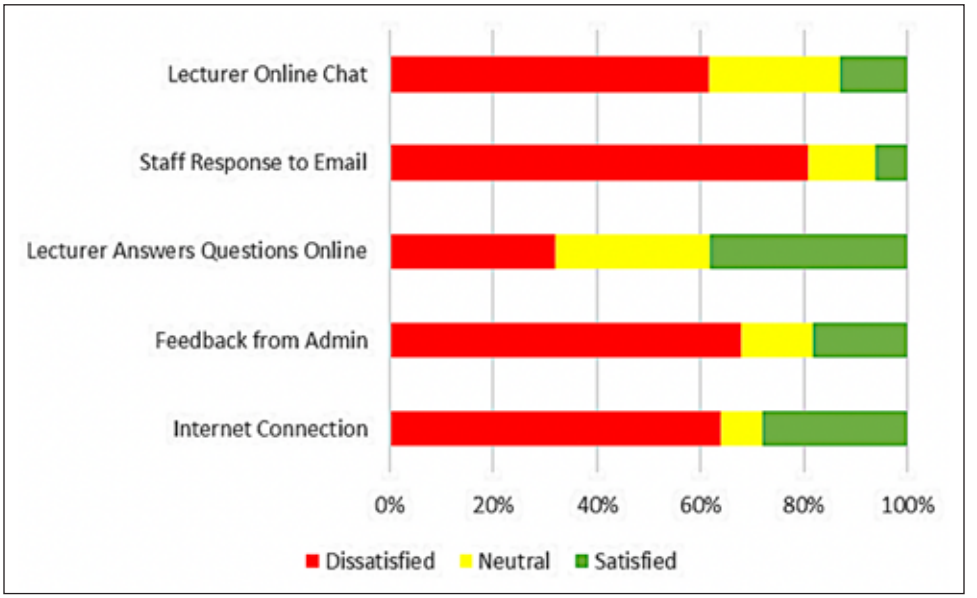

Figure 3. Connectivity and communication dashboard

Online Exams and Recorded Materials

The results on online examinations and recorded materials have indicated that there were high levels of student satisfaction on the two reported measures of recorded sessions (90% student satisfaction) and two-day access to exam (87% student satisfaction) (*see* table 6).

Table 6. Recorded sessions and 2-day access to exam

	Recorded Sessions	2-Day Access to Exam
Dissatisfied	7.0	6.1
Neutral	3.5	7.0
Satisfied	89.6	87.0
Total	**100.0**	**6.1**

These high levels of satisfaction are displayed graphically in figure 4.

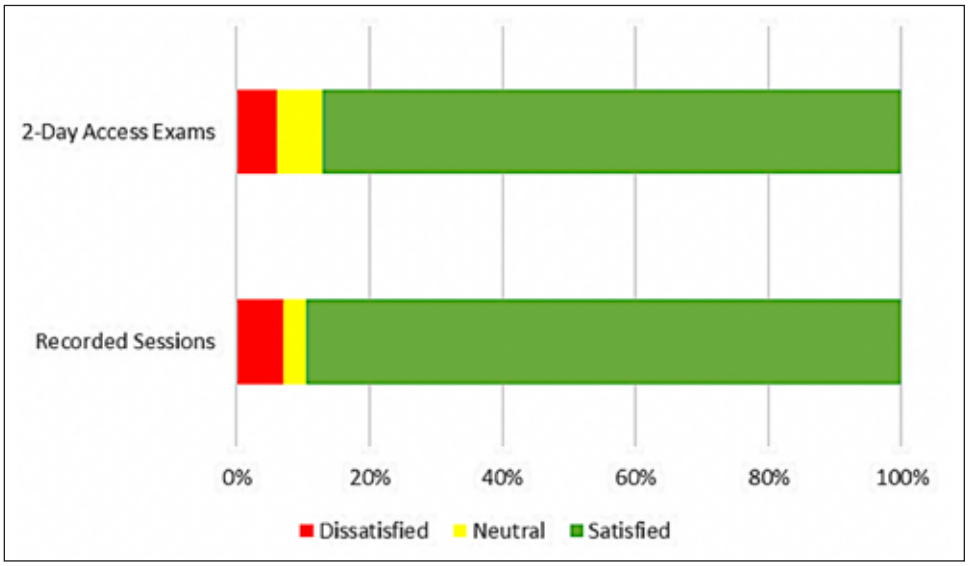

Figure 4. Recorded materials and 2-day access to exam

Discussion

The study sought to determine the student satisfiers/dissatisfiers with the emergency remote teaching environment in the Faculty of Social Sciences (FSS) at The UWI. The work was prompted by the prior research of Hodges et al. (2020) who indicated that online learning carries a stigma of being lower in quality than face-to-face, albeit not supported by research, and these hurried moves to do remote teaching will confirm this negative perception if students become dissatisfied due to unmet expectations. The FSS at The UWI was therefore singled out as a good place for this study as expectations were very high in 2019, before the pandemic, when The UWI was rated among the top 5 per cent of the best universities in the world.

The Expectation Confirmation Theory was utilised for explicating the findings of this study which addressed students' satisfaction with ERT and the theory presents an epistemological view of satisfaction in the context of expectation. The theory therefore aligns with the study on students' satisfaction and deemed applicable to the situational context. Further, tertiary education is seen as a traded service of which student satisfaction is one of the measures of performance. Expectations are also contingent on past experience and past experience may

or may not be similar to the current experience. In accordance with the theory, therefore, expectations are inextricably linked to satisfaction and consequently students or customers will invariably have expectations that are usually associated with past experience or even no experience at all.

In this study, students were satisfied as their expectations were met in the areas of access, recorded materials, and online examinations. However, where students' expectations were not met in the areas of student engagement, connectivity, and communication, they were dissatisfied.

The intention to purchase a product, which is highlighted in the theory, may be likened to the intention to continue registering for courses or to continue with the services at a later point in time. Like the repurchasing of the product, therefore, the student may be dissatisfied but still continues with the service because of limited options or choices. This, again, supports the argument of the similarity between service in commerce and service in tertiary education.

High levels of dissatisfaction were experienced around student engagement. Most of these students felt that some lecturers were not effective with online presentations and so these students yearned for the physical interaction to which they had grown accustomed in face-to-face delivery. The students also felt that they, themselves, were not as focused as they used to be, class discussions were not as engaging, and so they were not inclined to participate in online discussions. These findings accord with both Robinson and Taylor (2007) and Cheminais (2008) who found that students in the classroom will not be engaged if they themselves do not participate and are not focused. Moreover, class engagement requires that the student be proactive (Kay et al. 2010) and for the lecturer to provide class activities for these students (Dunne and Zandstra 2011). With lecturers being challenged to manoeuvre in the remote teaching environment, class activities are kept at a minimum and student engagement is not unsurprisingly low.

High levels of satisfaction were expressed by students in the area of access. These students were generally upbeat with their energy levels in class, with opportunities for multitasking and with the "no-hassle" in attending classes. These findings on students being positive about access vis-à-vis multitasking and no hassle to attend classes are consistent with expectations. However, students' energy levels were not expected to be high as the remote classes often resulted in a bit of fatigue, with students having to sit in front of computer screens for long hours – unless, of course, students are multitasking at their homes and not so engaged in the remote classes. It was also somewhat contradictory that students were satisfied

with the ease of attending classes yet some lecturers are reporting that undergraduate students (90% of sample in this study) are not attending many of their classes despite such ease of access.

The areas of connectivity and communication recorded high levels of dissatisfaction with internet connection, lecturers' participation in online chat, slow feedback and non-response of faculty and staff to students. Many students at the university level are challenged with both quality and affordability of internet services (Senior 2010). This has certainly been the case among students in the FSS. Raheim (2020b) has argued that digital inequality due to COVID-19 has widened the learning gap between students, placing those with internet problems at a disadvantage. The FSS itself has also had internet problems, along with other technical issues with the BlackBoard Collaborate (such as inability to use some videos, multimedia platforms and connecting with other application software) that is used to facilitate the remote classes. In addition, some of the lecturers are doing remote teaching for the first time and have not grown accustomed to online chats and break-out rooms that are necessary for engaging students. With the emergency measures, also, the teaching environment has become chaotic. This was particularly so in the previous semester when the pandemic just started. This chaotic environment could partially be responsible for lecturers' slow feedback and non-response to students.

High levels of satisfaction were reported by students in the areas of recorded materials and online examinations. The large majority of students were pleased that the university had introduced the mandatory asynchronous option during the pandemic when all synchronous lectures had to be recorded for further access to students. These students were also pleased that the online examinations that were usually proctored over two or three hours were now extended for at least two days, non-proctored, with modified methods of assessment, and affording students more time to complete these examinations. These findings on online examinations with two-day access clearly conform to expectations as most of these examinations were done via take-home/open-book and gave students the opportunity to collaborate with their colleagues thus leading to grade inflation in some instances. Similarly, the findings on recorded materials were expected as many students, particularly at the undergraduate level, do not take notes and do not attend classes with regularity and therefore these backed-up lectures are much to their liking. In addition, there were high levels of dissatisfaction identified with students' engagement, connectivity and communication suggesting

that expectations were not met in these fundamental areas of remote teaching and learning.

Conclusions and Recommendations

Tertiary education is a market of services and, consequently, student satisfaction is essential for the sustainability of the entities that deliver these services. A satisfied student is essential in times of ERT. With remote delivery, students may become less loyal to their institution and may, therefore, not be willing to recommend the institution to other students or may opt not to undertake further studies after leaving the institution. At a minimum and concomitant with the Expectation Confirmation Theory, students' satisfaction is usually driven by their expectations of the programme on offer and perceptions on the performance of the educational provider in the delivery of these programmes.

The study found that with the hurried move to go remote by the FSS there are at least four constructs of students' satisfaction that must be taken into account by the faculty and staff: (1) Student engagement, (2) Student access, (3) Connectivity and communication, and (4) Recorded materials and online examinations. High levels of dissatisfaction were expressed by students in the areas of student engagement, and connectivity and communication. Conversely, high levels of satisfaction were found in the areas of student access to remote teaching, recorded materials, and online examinations.

This study has no doubt yielded a useful outcome in the identification of satisfaction factors and items that underlie these factors in ERT in the FSS, yet there are at least two limitations that must be highlighted for completeness. First, the survey-based data collection is prone to under- and over-reporting that may be heightened with ERT when students are expected to be more stressed. Second, the reasons for satisfaction or dissatisfaction with the performance on the ERT were not captured through the survey and, consequently, a more complete assessment on ERT could be better captured through the survey triangulated by qualitative inquiry. Further research should therefore utilise mixed or qualitative methodologies to assess student satisfaction in the ERT environment, paying attention to the reasons for satisfaction/dissatisfaction for a more comprehensive understanding of the issues.

Recommendations

The following provides a list of recommendations on each of the four identified dimensions of ERT.

1. **Student engagement**
   - — Lecturers should give students short breaks during the sessions to mitigate the high levels of fatigue associated with sitting for long periods in front of a computer screen.
   - — Breakout groups are required to facilitate group dynamics, increased student participation and more engaging discussions.
   - — Lecturers' instructional techniques should incorporate videos to aid in presenting the course content to students as a way of better engaging students as the typical PowerPoint utilised by most lecturers could get monotonous when students have to sit for long hours.

2. **Connectivity and communication**
   - — On-going training sessions should be held for lecturers, students and administrators for improved communication on the remote platform.
   - — With the void created through the absence of the face-to-face interaction, lecturers and administrators should improve email response rates in answering students' queries.
   - — The FSS should offer a laptop and internet package (included in the students' tuition cost) in order to *level the playing field* among students for improved teaching and learning in the remote environment,
   - — The FSS should lobby the university to improve the online technology support provided to students, particularly during the teaching hours.

3. **Recorded materials and online examinations**
   - — In the short term, the FSS should continue with the posting of recorded lectures and extended time for students to sit online examinations.
   - — In the longer term, the FSS should acquire the resources for conducting proctored online examinations.

4. **Student access**
   - — The FSS needs to continue to maintain the high levels of student access, as students seemed to be pleased with having class without the hassle of getting there and the opportunity afforded for multitasking.

The researchers are recommending that a lecturer guide should be included to indicate how, by what means, and over what timeframe communication will be given to students' queries. This is important as the student-lecturer relationship affects students' satisfaction and their ability to succeed within this new reality. This guide could also assist in managing students' expectations on communication response times. The matter of connectivity requires greater national intervention to promote equity in remote teaching for rural and socioeconomically disadvantaged students. Intervention among service providers to offer more stable internet connectivity is a far-reaching problem that goes beyond the scope of the Faculty of Social Sciences.

Conclusion

COVID-19 has no doubt disrupted the teaching and learning operations at the FSS and has led to a new paradigm in ERT. Fundamental to the lessons learnt is that readiness to deliver remote courses must be ascertained at the levels of the department, lecturer, and student if the ERT operations are to be effective (Policy on Quality Assurance of Online and Blended Courses and Programmes, The UWI, 2020). Moreover, all attempts at improving effectiveness in the ERT environment in the FSS must focus on student engagement, student access, connectivity, communication, recorded materials, and online examinations as these are fundamental to performance in this challenging environment. After all, remote teaching and learning may be more prominent in the future of the FSS as, from all indications, traditional methods of delivering tertiary education are not likely to return to their former glory.

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