

## Online learning during Covid-19: Readiness of Communication and Academic Literacy Skills Students at the University of Botswana

**Joel M. Magogwe**

*University of Botswana*

<https://orcid.org/0000-0002-5792-0620>

[magogwej@gmail.com](mailto:magogwej@gmail.com)

**Eureka B. Mokibelo**

*University of Botswana*

<https://orcid.org/0000-0002-9102-4985>

[mokibeloeb@ub.ac.bw](mailto:mokibeloeb@ub.ac.bw)

**Lillian Karabo**

*Botswana University of Agriculture and Natural*

[lkarabo@buan.ac.bw](mailto:lkarabo@buan.ac.bw)

<https://orcid.org/0000-0002-8932-3900>

### Abstract

Covid-19 is wreaking havoc and accelerating the use of online learning in institutions of learning across the globe. Online learning or e-learning refers to education or learning that takes place over the internet. This study investigated the online learning readiness of the University of Botswana (UB) students enrolled in the Communication and Academic Literacy course. The study adopted a non-experimental quantitative research design using the questionnaire method to collect data from 180 students who completed in class the Online Learning Readiness Scale (OLRS). The SPSS Independent-samples t-test was used to compare the online learning readiness means of two gender groups. Furthermore, the Pearson Correlation (2-tailed) test was used to calculate the relationship between gender and the online learning readiness dimensions. The open-ended questions in the questionnaire were used to ask the participants to write challenges they faced when studying the COM course online. The findings of this study suggest that the respondents used computer or internet more for researching information than for holding discussions and sharing ideas online; and they used online platforms to post questions and seek assistance. Male and female students had similar levels of online learning readiness. More research is recommended using the OLRS to unearth more online learning problems.

**Keywords:** Online, Learning, Readiness, Covid-19, Academic, Literacy, Skills, ESL, University, Students

### Introduction

Covid-19 has accelerated the use of online and/or blended learning in institutions of learning around the world. It has been recorded that across the world more than 7.1 million students enrolled for at least one online course in 2013 (Van Rooij & Zirkle, 2017). Online learning, sometimes called e-learning refers to education or learning that takes place over the internet. Like in other countries, the government of Botswana has encouraged institutions to conduct teaching and learning activities online in order to reduce the spread of the Covid-19 pandemic. Although this has appeared like the best solution to ensure continuity of learning amid the pandemic, it seems that in Botswana online learning has been beset by a number of problems such as lack of availability of technological facilities such as smart phones; lack of technical knowhow and creativity to use facilities such as Google Classroom and Zoom; lack of connectivity; as well as lack of bundles or airtime. It also seems that online learning in Botswana has been affected by lack of interest among the students - sometimes attributed to what Chung, Subramaniam and Dass (2020:47) called “lack of human touch such as sensing students’ comprehension via facial expressions, cracking small jokes, as well as student engagement and interaction.” Conducting this study will certainly provide insight into which of the above challenges primarily affect online learning in Botswana.

It has also been found that online learning across the world has also been hampered by student and teacher readiness and hence there has been much interest in investigating the readiness of university students towards this mode of learning (Atkinson & Chung et al, 2020; Hung, Chou, Chen & Own, 2010). Hence, this study will add onto the number of studies that have contributed knowledge about online learning readiness. To start with, readiness refers to being “prepared mentally or physical for some experience or action (Webster’s New Collegiate Dictionary). Online or e-learning readiness in particular refers to the mental or physical preparedness of students to learn using any tools supported by the internet (Borotis and Poulymenakou, 2008).

### **Literature Review and Theoretical Underpinnings**

The examination of online learning readiness has been measured using the following five dimensions: self-directed learning, learner control, computer and internet efficacy, online communication self-efficacy, and motivation for learning (Hung et al (2010). These dimensions have been used in this study to examine online learning readiness among University of Botswana (UB) First Year Faculty of Social Sciences enrolled in the communication and academic Literacy course. More information about these dimensions will be provided later on this paper. It should be noted, however, that the Botswana students referred to above do not do online learning full-time but precisely do blended learning which is a mixture of online learning and face-to-face learning.

The concept of online or e-learning readiness has been discussed in several studies as already indicated (Akaslan and Law, 2010; Atkinson and Blenakenship, 2009, Bonanno, 2011; Coates, 2006; Chung et al, 2020; Hung, Chou, Chen & Own, 2010; McVay, 2000; Soydal, Alir, and Ünal, 2011). The studies showed that results related to the different aspects of online learning readiness can vary over time, among institutions or instruments that were used for the assessment. Therefore, it would be interesting to compare the results generated by this study with those from other parts of the world. The proponents of the online learning readiness concept, Warner, Christie, and Choy (1998), operationalised it into three categories: (1) students' preferences for the method of delivery other than face-to-face classroom instruction; (2) student confidence in using electronic communication for learning, as well as competence and confidence in using the Internet and the computer for communication; and (3) ability to engage in autonomous learning.

Online learner readiness has been addressed in terms of factors such as technical computer-use skills, internet navigation skills, learner control over the sequence and selection of materials, attitudes towards online learning, as well as online learning self-efficacy and anxiety. In terms of readiness and acceptance of online training, one of the studies that has been acknowledged to have comprehensively dealt with online learning readiness is that of Akaslan and Law (2010). The study conducted on students studying electricity related subjects in a university in Turkey used a 78-item questionnaire and found that students were “sufficiently ready” for e-learning. Akaslan found that in spite of the fact that the students' readiness seemed to be sufficient, their attitudes towards e-learning needed to be strengthened in order to facilitate effective adoption of e-learning.

In a related study Ouma, Awuor and Kyambo (2013) investigated E-learning readiness in public secondary schools in Kenya in order to ascertain their level of preparedness. The study investigated the preparedness and level of technical competency and computer literacy among teachers and students, their attitude and perception towards the use of e-learning. The findings of this study showed that teachers and students were ready to embrace e-learning technology, but there was need to enhance their technical capacity through training for successful e-learning adoption. The study however found that the students lacked basic computer skills required for them to effectively use the e-learning platform.

Other studies that investigated attitude and self-efficacy beliefs of students towards online learning readiness include that of Lee, Yeung and Ip (2016) in Hong Kong who found that students' computer technology skills, attitudes towards using computer technology, learning styles, as well as peer and teacher support influenced the degree to which the students used technology for learning. In a study that compared self-management, desire for learning, and self-control, computer technology use and personal factors such as age, gender, language learning anxiety and language learning style at a university, Lee, Yeung and Ip (2016) found that three SDL factors positively correlated with the use of computers and individual learning but revealed an opposite relationship to language learning anxiety, with the desire for learning having the strongest association to computer use.

### **Further Justification and Rationale for Conducting this Study**

Conducting this study was important for several reasons. First, the findings of this study will provide guidance and clear understanding of how online education should be implemented particularly in the communication and academic literacy course at university level of education. Second, the students were the main focus of this study because as Hung, Chou, Chen and Own (2010) indicate, it continues to be necessary to explore students' readiness in educational institutions in order to guide their successful online learning. Yurdagül Ünal, Gülten Alir, and İrem Soydal (2014) indicate that students are the key elements during the implementation of solid e-learning systems within universities. According to Akaslan and Law (2010), students together with technology are the main components of e-learning implementation and therefore understanding how the two interact is fundamental in learning. Third, the views provided by the students will inform the academic staff in general about how online or blended learning can be implemented to supplement the traditional face-to-face course and enhance the students' learning experience. In particular the communication and literacy lecturers at UB will also be informed about the preparedness of offering this course in terms of students' online experience, skills, knowledge and attitudes towards learning this particular subject online and the conditions under which they are learning it. Voogt and Knezek (2008)

indicate that successful implementation of e-learning can be realised by understanding the level of readiness of e-learning environments. Furthermore, Broadley (2012) argues that in order to achieve successful implementation of e-learning students should not only be equipped with technical skills but they should also have the desire to use technology. Fourth, it was important to conduct this study because in the author’s knowledge it is the first of its kind in the country. Finally, the findings of this study will increase the existing number of studies and augment the theoretical and practical understanding of online readiness and provide more evidence on the importance of readiness in online and/or blended learning.

The overall goal of the current study therefore was to investigate online learning readiness of UB Faculty of Social Science First Year students enrolled in the communication and academic literacy course or to measure their intention to continue using online learning. In that regard the current study adapted the Online Readiness Scale (OLRS) (Hung, Chou, Chen and Own, 2010) and used it collected information that answered the following specific research questions:

1. What are the UB First Year students’ perceptions about their readiness for online learning with specific focus on the main components of the OLRS viz. computer self-efficacy, self-directed learning, learner control, motivation for learning, online communication self-efficacy and behavioural intention?
2. Does gender make a difference in the students’ readiness for online learning?
3. What are the online learning challenges faced by the university students?

The data that answered the above questions were obtained using the non-experimental quantitative research design described in the next section.

### Methodology

To collect data for this study the online learning readiness questionnaire described below was completed by 180 students in class. The students were enrolled for Bachelor of Arts degree in the Faculty of Social Sciences consisting of different departments such as Economics, Statistics, Sociology and Political Science to mention a few. At the time of the study they were taking two compulsory Academic and Professional Communication courses respectively offered in Semester one and Semester two. These courses are offered to strengthen the students’ academic and professional backgrounds and/or reading, writing, speaking and listening skills to help them to effectively function in and outside the university environment. 19.6% (N=35) of these students were male while 80.4% (N=144) were female. All these students 100% (N=180) were First Year students some of whom resided in Gaborone, the capital city of Botswana, where the UB is located, and others commuted from villages surrounding the city in a radius of 80 km. Majority (84.8%, N=150) of them indicated that they stayed on campus or in Gaborone. See Table 1.

Table 1. Respondents’ demographic background

Demographic background	Variable	N	%
Gender	Male	35	19.6
	Female	144	80.4
Level of study	Diploma	4	2.3
	Degree	172	97.7
Area of residence	UB campus	89	50.3
	Gaborone	61	34.5
	Outside Gaborone	27	15.3

### Instrument

The Online Learning Readiness Scale (OLRS) used in this study was adapted from Chung, Subramaniam and Dass (2020) who with permission had adapted it from Hung et al (2010). The instrument used in the current study was adapted by simply adding in brackets synonyms of some of the words used in the scale to help the English as a second language (ESL) learners completing it to understand what the words meant. Otherwise the scale was the same. Overall this questionnaire contained 19 questions respectively classified under the following six dimensions: ‘Computer/internet Self-efficacy’, ‘Self-directed learning’, ‘Learner Control’, ‘Motivation for Learning’, ‘Online Communication Self-efficacy’ and ‘Behavioural Intention’. The items were measured with a Four-point Likert scale comprising: i) Strongly Disagree ii) Disagree iii) Agree and iv) Strongly Agree. Also included in the instrument were demographic information questions comprising gender, level of study and area of residence; items that required the students to indicate their preferred online teaching method between google classroom, Youtube, Zoom, Webex, Whatsapp, Telegram, Microsoft Teams and others. Open-ended questions were also included to further explore challenges the students experienced when studying the communication and academic literacy course online.

**Reliability and validity of the instrument**

The validity of the original OLRs was found to be between 0.727 and 0.871 (Hung et al., 2010), and between 0.841 and 0.911 by Chung et al (2020). For that reason, the validity and reliability of the OLRs used in the current study were not measured because it was not changed save for the provision of few synonyms in brackets that explained unfamiliar words.

**Findings and Discussion**

As previously indicated this study investigated the online learning readiness of the UB Faculty of Social Science First Year students enrolled in the communication and academic literacy course. It was also indicated that the instrument used to measure their learning readiness with a Four-point Likert scale comprising: i) Strongly Disagree ii) Disagree iii) Agree and iv) Strongly Agree. The findings of this study will be discussed in the context of the research questions that sought to explore the students’ perceptions about their readiness, and to relate this readiness with gender. The questions also sought to unearth the challenges the students faced as they learnt the course online. It was also explained that the term online has been used in this study to refer to blended learning or a combination of online and traditional face-to-face learning.

**Overall online learning readiness**

Overall online learning readiness was measured by calculating the average of the dimensions indicated in the OLRs used in this study. As already indicated, the dimensions comprised computer/ internet self-efficacy, self-directed learning, learner control, motivation for learning, online communication self-efficacy and behavioural intention. The findings showed that the overall online learning readiness mean score was 2.65 (SD, .517) representing a slightly above average level of the respondents’ readiness for online learning. These findings are consonant with Chung et al (2020) and Hung et al (2010) which found that the students’ overall learner readiness scores were above average.

**Online learning readiness dimensions**

The findings of this study show that computer/internet self-efficacy had the highest mean (M=2.93, SD=.627); followed by motivation for learning (M=2.74, SD=.663); and then learner control (M=2.69, SD=.578); online communication self-efficacy (M=2.61, SD=.865); self-directed learning (M=2.60, SD=.485); and behavioural intention (M=2.32, SD=1.10). See Table 2. It is observable that the computer self-efficacy dimension was much higher than the rest (M=2.93, SD=.627) and much lower for Behavioural intention (M=2.32, SD=1.10). These findings suggest that the students who participated in this study were generally confident and motivated to use the computer or internet for learning online.

Table 2. Mean for OLRs dimensions

Item	N	M	SD
Computer Self-efficacy	177	2.93	.627
Motivation for Learning	177	2.74	.663
Learner Control	177	2.69	.578
Online Communication Self-efficacy	177	2.61	.865
Self-directed learning	177	2.60	.485
Behavioural intention	177	2.32	1.10

Interestingly, Table 3 shows that the students could confidently use the computer/internet to find information (M=3.42, SD=.657) than for other purposes such as performing basic functions of Microsoft Office programmes (e.g. MSWord and Excel) and managing online learning. In terms of motivation for learning the students were more open to learning new ideas when learning online (M=3.09, SD=.821) and comparatively least motivated to share ideas with friends while learning online. These findings suggest that the students were willing to improve their use of online learning so that they could use it beyond just searching for information. As far as learner control is concerned, the students were more inclined towards repeatedly using online learning materials based on their needs (M=2.94, SD=.720). However, they confessed that they were distracted by online social activities such as Facebook while learning. The specific challenges encountered by the students while learning online will be discussed later on. In terms of online communication self-efficacy the students felt more confident in expressing their thoughts through online text messages/posting comments in WhatsApp, Google Classroom etc. (M=2.75, SD=1.014) and least confident in communicating with their lecturers. Insofar as self-directed learning is concerned, the students were more inclined towards asking lecturers and friends to help the resolve online learning problems (M=2.83, SD=.838). Interestingly the students confessed that they did not manage their time well when learning online and that they did not set their personal goals for each lesson.

The above findings suggest that the students who participated in this study used computer or internet more for researching information than for holding discussions and sharing ideas online. However, informally they interacted with friends and others on social media such as Facebook and WhatsApp. They were not even confident in communicating with their lecturers although they did use online platforms to post questions and seek assistance. Unfortunately the students to a large extent were not able to manage their online learning time well and to the same extent did not even set personal goals for online lessons.

Table 3: Online learning readiness for individual items

Item	No.	Variable	N	M	SD
<b>Computer Self-efficacy</b>	1	I feel confident in performing basic functions of Microsoft Office programs (e.g. MSWord, Excel).	175	2.73	.812
	2	I feel confident in my knowledge and skills of how to manage online learning.	176	2.66	.827
	3	I feel confident in using the Internet to find information.	172	3.42	.657
<b>Self-directed learning</b>	4.	I am able to <i>follow or</i> carry out my own study plan while learning online.	174	2.69	.809
	5.	I seek assistance when facing <i>online</i> learning problems from lecturers and friends.	176	2.83	.838
	6.	I manage my time well while learning online.	173	2.52	.782
	7.	I set up my personal online learning goals for each lesson.	176	2.38	.768
	8.	I have a high expectation for my <i>online</i> learning performance.	174	2.59	.925
<b>Learner Control</b>	9.	I can manage my own learning progress while learning online	176	2.61	.799
	10.	I am not distracted by other online social activities (e.g. Facebook) while learning	176	2.52	1.008
	11.	I <i>repeatedly use</i> the online learning materials based on my needs	175	2.94	.720
<b>Motivation for Learning</b>	12.	I am open to new ideas when learning online	171	3.09	.821
	13.	I am motivated to do online learning	161	2.60	.944
	14.	While learning online, I learn to improve from my previous mistakes.	175	2.79	.907
	15.	I like to share my ideas with my friends while learning online	176	2.50	.821
<b>Online Communication Self-efficacy</b>	16.	I feel confident in using online tools to communicate with my lecturer	174	2.49	.978
	17.	I feel confident in expressing my thoughts through online text messages/ posting comments in WhatsApp/ Google Classroom etc.	175	2.75	1.014
	18.	I feel confident in posting questions in online discussions	173	2.60	.981
<b>Behavioural intention</b>	19.	If given a choice, I will continue to use online learning next semester	177	2.32	1.098

#### Correlations between the online learning dimensions

Correlation and regression analyses were conducted to find out if the dimensions influenced each other and Table 4 shows the relationship between them. The SPSS Pearson Correlation (2-tailed) analysis showed that all the dimensions were positively and significantly related to each other:  $p$  value < 0.01. However, only the behavioural intention had a stronger correlation above .60 with other dimensions.

Table 4: Correlation between the ORLS dimensions

Dimensions	1	2	3	4	5	6
Computer Self-efficacy	1					
Motivation for Learning	.397**	1				
Learner Control	.321**	.437**	1			
Online Communication Self-efficacy	.338**	.551**	.441**	1		

Self-directed learning	.433**	.479**	.282**	.520**	1
Behavioural intention	.631**	.707**	.635**	.782**	.732**

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

**Preferred learning online learning/teaching method**

The findings below show that all the listed learning/teaching methods were not preferred by the students except Microsoft Teams which garnered 70% (N=126) affirmations. The rest were far below the 50% mark. WhatsApp was the next preferred online tool with 23.3% (N=42) affirmations. See Table 5. It is possible that the students’ preferences were more influenced by their familiarity with the Teams and WhatsApp platforms than by other factors. Most of these students came from public schools in different parts of the country where online learning and teaching did not take place and therefore they probably were not familiar with other online learning teaching methods or platforms.

Table 5: Preferred online learning/teaching method

Preferred Online Method	Yes		No	
	%	N	%	N
Google classroom	8.3	15	91.7	165
YouTube	12.8	23	87.2	156
Zoom	8.9	16	91.1	164
Webex	0.6	1	99.4	179
WhatsApp	23.3	42	76.7	138
Telegram	0	0	100	180
Microsoft Teams	70	126	30	54
Other(s)	0.6	1	99.4	179

**Gender differences in online learning readiness**

The Independent-samples t-test parametric test was used to compare the online learning readiness means of two gender groups in order to determine whether they were significantly different. The findings showed that the mean for the male students (M=2.76, SD=.526) was higher than that of the female students (M=2.66, SD=.461). However, the Independent-samples t-test or the Levene’s Test for Equality of Variances showed that the two means were not significantly different  $t(174) = -1.058, p = .291$ . These findings suggest that male and female students had similar levels of online learning readiness. The above findings are generally similar to those of Bunz, Curry, and Voon (2007) who did not find any difference between males and females insofar as online learning dimensions are concerned. Insofar as the difference between the means of the online learning dimensions is concerned, the findings showed that the mean for computer self-efficacy dimension was higher for the male students (M=3.14, SD=.610) than for the female students (M=2.87, SD=.623). The mean was also higher for male students (M=2.83, SD=.149) than female students (M=2.56, SD=.072) for the online communication self-efficacy. It could therefore be concluded that male students were more confident in using the internet for communication purposes than female students. Interestingly the means of the rest of the dimensions as Table 6 shows did not show much gender differences among themselves. In terms of significance, the Independent Samples Test or the Levene’s Test for Equality of Variances showed that the mean of the Computer Self-efficacy dimension was significantly different  $t(174) = -2.287, p = .023$  compared to other dimensions; and so was the Online Communication Self-efficacy  $t(174) = -1.668, p = .097$ . The findings suggest that gender plays an important role in computer and/or online communication self-efficacy compare to other online learning dimensions.

Table 6: Correlation between ORLS dimensions and gender

Demographic background	Variable	M	SD
Computer Self-efficacy	Female	2.87	.623
	Male	3.14	.611
Motivation for Learning	Female	2.74	.642
	Male	2.75	.753
Learner Control	Female	2.70	.567
	Male	2.67	.608
Online Communication Self-efficacy	Female	2.56	.860
	Male	2.83	.880
Self-directed learning	Female	2.60	.481
	Male	2.61	.514
Behavioural intention	Female		
	Male		

### Challenges faced in online learning in COM

An open-ended question was used to ask the participants to share challenges they faced when studying the COM course online. Information emerging from the challenges was expected to triangulate or clarify that coming from the questionnaire. The challenges were analyzed and classified thematically, and then ranked in percentages from most to least mentioned. Table 7 shows that internet connectivity, slow internet, lack of sim-cards and power cuts constituted majority of the challenges that were mentioned by all the participants. A total of 102 comments were about poor connectivity (100%, N=102). This was followed by poor audibility of the online lesson caused by the echo in the system as well as external noise and use of Facebook during the lesson (14.7, N=15). The same frequency was reported for lack of attending the COM. Another noticeable challenge (10.8%, N=11) was lack of technical online experience. Other challenges included lack of confidence in sharing thoughts and asking questions online; lack of headsets, laptops, desktops and smart phones; lack of physical touch and time to explain concepts; poor time management and concentration; lack of motivation to join the online lesson and lack of comprehension of online materials. See Table 7. Almost all the above challenges were reported in other studies such as Shafie, Abd Majid and Ismail (2019) and Chung et al. (2020).

Table 7. Challenges faced by the students studying online

Rank	Challenges	N	%
1.	Connectivity problems; Slow internet; No sim cards; Power cut.	102	100
2.	Poor audibility and Destructions from echo, external noise, Facebook etc.	15	14.7
3.	Haven't studied or attended online in Com yet.	15	14.7
4.	Lack of technical or online experience	11	10.8
5.	No challenges	8	7.8
6.	No confidence in sharing thoughts and asking questions in online class.	6	5.9
7.	I don't have headsets. No laptop and smartphone. Shortage of computers	3	2.9
8.	Lack of physical touch, and enough time to explain concepts.	3	2.9
9.	Time management and poor scheduling my learning; Poor concentration.	2	2
10.	Lack of motivation to join	1	1
11.	. . . difficult to comprehend most of the concepts when studying online.	1	1

The following examples of comments from the participants testify the communication of the above challenges faced when learning COM online:

- Lack of connectivity:
- *“Sometimes due to poor Wifi connection in school I can't access online learning platforms”; “Internet connection problems and destruction from either apps or people in my surrounding”.*
- Lack of attendance of the COM online course:
- *“I haven't studied online in Com yet”; “First time learning COM online was a flop. Nobody as in the students attended and no progress was made”.*
- Lack of confidence in sharing thoughts and asking questions in online class:
- *“I don't feel confident in expressing my thoughts in online class”.*
- Lack of equipment such as headsets, laptop, desktop and smart phones:
- *“I don't have smartphone, no laptop, totally difficult for me. I am unable to attend online class due to lack of technical knowledge and this makes me lose hope”.*
- Lack of physical touch and time to explain concepts:
- *“I feel comfortable with the lecturer teaching in front of me”; “Explanation of concepts is no explained to the level of satisfaction and not much content is covered”; “Lack of physical touch”.*
- Poor time management and concentration:
- *“Loss of concentration; unlike a physical class interaction is a bit limited hence during class my mind would easily go astray.*
- Lack of motivation to join the online class:
- *“I feel demotivated to join online classes usually because 90% of the class has not joined”.*
- Difficulty to comprehend online materials:
- *“I find it very different and difficult to comprehend most of the concepts while studying online. I am also unfamiliar with most things online hence creating a challenge for me”.*

In summary, it seems that challenges such as lack of physical touch and time to explain concepts; poor time management and concentration; lack of motivation to join the online lesson and lack of comprehension of online materials were second rated by the students compared to the technical challenges because their frequency of occurrence is lower as shown in Table 7. These findings suggest that social and metacognitive aspects of online learning readiness are not adequately emphasised and prioritised as they should be by the students and probably

their lecturers. The author of the current study therefore concurs with Broadley (2012) that in order to achieve successful implementation of e-learning students should not only be equipped with technical skills but they should also have the desire to use technology.

### **Implications, limitations and conclusion**

Several implications of this study have emerged. First, the findings of this study showed that the Social Science students who participated in this study were relatively confident and motivated to use the computer/internet for learning. However, more training opportunities should be provided to help them to become more versatile in the use of online learning platforms particularly for more communication and sharing of ideas than for searching information. Another implication is that there should be more monitoring of the use of the online platforms because the students indicated that they used the internet more for chatting with friends on Facebook. The students showed willingness to change because they confessed that Facebook or online social activities distracted their online learning. Furthermore, the students' should be encouraged to use metacognitive strategies of time management and goal setting so that they can avoid wasting time on social issues during the online lesson. The fourth implication of this study is that the lecturers should increase their online communication with the students via different platforms, as already indicated, to help the students to become more familiar with them and to increase their interpersonal relations with the lecturers. The findings showed that the students were least confident in communicating with their lecturers online. The lecturers should take advantage of the fact the students are willing to ask for assistance from them particularly when facing online learning problems as the findings show. The use of a variety of online learning methods will also complement different online learning needs or preferences of the students. The findings in fact show that female students needed to develop more online communication self-efficacy compared to their male counterparts although the difference was not that much. Last but not least, the online infrastructure and connectivity should be improved to facilitate online learning of the communication and academic literacy course. This should be done by improving the speed, quality and reliability of the UB internet connection, as well as by providing more gadgets for the students and lecturers.

One major limitation of this study is that data was collected from a single faculty in the University using only one instrument, the OLRs. Future studies on this important topic should broaden the size and range of data collection methods and sources. Another limitation is that the study focused only on learners as if they are the only important stakeholders in online learning. Future research should cover a broad spectrum of stakeholders and factors that affect online learning in the country.

Despite the above limitations, conducting this study on students' online readiness at the time of Covid-19 was still timely because the pandemic is still wreaking havoc across the globe. It was important to explore the First Year students' familiarity and comfort with online learning, particularly in the Communication and Academic Literacy course at the University of Botswana. Examining the online learning preferences by gender was expected to shed more light particularly with a view to diversifying and synchronizing the methods of online teaching and ensuring that they suit different types of students. In line with all the above arguments, the findings of this study generally showed that the online learning infrastructure and internet connectivity at UB were wanting. The students complained about unreliable and problematic internet connectivity, lack of equipment, and lack of concentration to mention a few. Furthermore, the findings showed that the students were ready to receive training that would improve their online learning skills and technical capacity, as well as metacognitive strategies that would enable them to monitor their online learning. The findings also revealed that the students' online learning readiness and motivation were moderate and therefore needing to be revamped. In a nutshell, the findings indicated the need to increase the students' online learning readiness by providing a more conducive online environment. With a view to the above findings, this study recommends that the Government of Botswana should invest in the students' online learning by providing efficient and durable internet or technical infrastructure that would handle the capacity and population of institutions across all levels of education in different parts of the country. In particular, the University of Botswana should not only provide more synchronized online learning platforms, but also training that would equip both students and lecturers with the skills to improve their online learning and teaching. Furthermore, future research should be extended to investigate the influence of online readiness on performance in the University of Botswana in particular and across a wide spectrum of institutions in the country. This study has provided more evidence on the validity and reliability of the OLRs and this instrument should therefore be used to predict different variables that affect online learning.

### **References**

- Akaslan, D., Law, E.L.-C. (2010) Measuring Teachers' Readiness for E-learning in Higher Education Institutions Associated with the Subject of Electricity in Turkey. In: Proceedings of 2011 IEEE Global Engineering Education Conference (EDUCON)-Learning Environments and Ecosystems in Engineering Education, pp. 481--490. Amman, Jordan (2010).

- Atkinson, J., & Blankenship, R. (2009). Online learning readiness of undergraduate college students: A comparison between male and female students. *The Journal of Learning in Higher Education*, 5, 49-56.
- Bonanno, P. (2011). Developing an Instrument to Assess Teachers' Readiness for Technology- Enhanced Learning. 14th International Conference on Interactive Collaborative Learning (ICL2011), 21–23 September 2011, Piešťany, Slovakia (2011).
- Borotis, S. A., & Poulymenakou, A. (2004). E-learning readiness componenents. Proceedings of World Conference on E-learnin in Cooperate, Government, Healthcare, and Higher Education 2004, (pp.1622-1629). Washington DC.
- Broadley, T. (2012). Enhancing Professional Learning for Rural Educators by Rethinking Connectedness. In *Australian and International Journal of Rural Education*, 22(1), (pp.85-105).
- Bunz, U., Curry, C., & Voon, W. (2007). Perceived versus actual computer-email-web fluency. *Computers in Human Behavior*, 23(5), 2321–2344.
- Chung, E., Subramaniam, G., & Dass, L. C. (2020). Online Learning Readiness Among University Students in Malaysia Amidst Covid 19. *Asian Journal of University Education*, 16 (2), 45. doi:10.24191/ajue.v16i2.10294.
- Hacettepe University Faculty of Letters. Information Services & Use 31, 281--291 (2011).
- Hew, K. F., & Cheung, W. S. (2008). Attracting student participation in asynchronous online discussion: a case study of peer facilitation. *Computers & Education*, 51(3), 1112–1124.
- Hung M.L., Chou C., Chen C.H. & Own Z.Y. (2010) Learner readiness for online learning: scale development and student perceptions. *Computers & Education* 55, 1080– 1090.
- Lee, C., Yeung, A. S., & Ip, T. (2016). Use of computer technology for English language Learning: Do learning styles, gender, and age matter? *Computer Assisted Language Learning*, 29(5), 1033e1049.
- Ouma, G. O., Awuor, F. M., & Kyambo, B. (2013). E-learning readiness in public secondary schools in Kenya. *European Journal of Open-Distance and e-Learning*, 16(2), 56–73.
- Roper, A. R. (2007). How students develop online learning skills. *Educause Quarterly*, 30(1), 62–64.
- Shafie, H., Abd Majid, F., Ismail, I.S. (2019) Technological Pedagogical Content Knowledge (TPACK) in Teaching 21st Century Skills in the 21st Century Classroom. *Asian Journal of University Education*, 15(3), 24-33
- Soydal, İ., Alır, G., Ünal, Y. (2011). Are Turkish Universities Ready for E-learning: A Case of ...
- Van Rooij, S. W. & Zirkle, K. (2017). Balancing pedagogy, student readiness and accessibility: A case study in collaborative online course development. *Internet and Higher Education*, 28(1- 7).
- Voogt, J. and Knezek, G. (2008). *International Handbook of Information Technology in Primary and Secondary Education*. NewYork: Springer. Voogt, J. and Knezek, G. (2008). *International Handbook of Information Technology in Primary and Secondary Education*. NewYork: Springer.
- Ünal Y., Alır G., Soydal İ. (2014) Students Readiness for E-Learning: An Assessment on Hacettepe University Department of Information Management. In: Gathegi J.N., Tonta Y., Kurbanoglu S., Al U., Taşkın Z. (eds) Challenges of Information Management Beyond the Cloud. IMCW 2013. Communications in Computer and Information Science, vol 423. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-662-44412-2\\_13](https://doi.org/10.1007/978-3-662-44412-2_13).