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FRESHERS' EXPERIENCES OF ONLINE LEARNING AT A ZAMBIAN PUBLIC UNIVERSITY: BENEFITS, CHALLENGES AND SUGGESTIONS FOR IMPROVEMENT

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Abstract
This paper reports on the experiences of online learning by first year students (freshers) at a public university in Zambia. Particularly, it focusses on students' perceptions regarding the benefits and challenges of online learning as well as suggestions for improvement. The paper is based on empirical data derived from an online questionnaire completed by 293 first year students from all the university faculties who volunteered to respond to the questionnaire. The collected data was analysed using descriptive statistics. Findings indicated that first year students found online learning valuable in a number of ways, although it was marred by numerous challenges. The paper concludes with suggestions on how online learning for first year students could be improved.

Keywords
Benefits, challenges, experiences, first year students, online learning

INTRODUCTION
Globally, online education (online teaching and learning, online instruction or eLearning) has become a significant mode of instruction in higher institutions of learning (Queiros & de Villiers, 2016; Dhawan, 2020). The increase in this mode of instruction has largely been generated by a surge in internet and technological advancement (Aristovnik, et al., 2017; Maphalala, & Adigun, 2020).

Online education can take either the form of blended learning (incorporating face-to-face and online components) or entirely delivered through online means (Allen & Seaman, 2013). In this study, online instruction shall refer to education that is entirely online and thus defined as teaching and learning that uses the "internet as the sole medium of instructional communication between" the instructor and the student (Boston & Ice, 2011, p. 2).

Like other countries across the world (Basilaia & Kvavadze, 2020; Dhawan, 2020), the Zambian education system has predominately been based on traditional schooling that requires learners to attend classes in person on a daily basis (Mulenga & Marbán, 2020; Sintema, 2020a). This situation generally applies to the education system from elementary to higher levels of education. However, in the past few years, institutions of learning in Zambia, particularly higher education have rapidly embraced the non-traditional modes of instruction - online education (Sintema, 2020a; Mulenga & Marbán, 2020).

It is necessary to mention that the outbreak of the coronavirus which led to the indefinite closure of

learning institutions in March 2020 inevitably compelled the country to adopt online teaching and learning modalities. For example, in response to the closure of learning institutions, the Zambian government introduced an eLearning and smart revision portal where primary and secondary school learners could access educational resources using cell phones and other internet tools (Cabinet Office Circular Minute of 2020-CO 7/6/2; Ministry of Education, 2020; Mulenga & Marbán, 2020; Sintema, 2020a).

As Sintema (2020a, p.1) argues, Zambia's unexpected shift from face-to-face to eLearning, as a result of the coronavirus, can be regarded as a "gateway to digital learning". The transition offers the country an opportunity to attest to the appealing side of online instruction documented in literature. One of the most appealing gains of online education lies in its flexibility (Daniel, 2016; Dennis, 2020). For example, it has been established that online education provides students with the flexibility and convenience to fit their education into their private schedules.

Other frequently recognised benefits of online learning include easy access to instructional resources; convenient communication between students and instructors; and enhanced computer and internet skills (Bharuthram & Kies, 2012; Mbati, 2012; Naciri et al., 2020; Sintema, 2020a). Online learning is also stated to be cost effectiveness in comparison to the traditional modes of instruction. This is because it lessens physical presence thereby reducing logistical requirements (Andersson a& Grönlund, 2009; Jones, 2017). The cost effectiveness associated with online education is a gain which higher learning institutions could harness. This is in cognisance of the funding cuts that public institutions continue to suffer in many countries (Mitchell et al., 2019; Parker, & Gemino, n.d.).

Aside the benefits, online learning has a number of challenges with technological barriers standing as a recurring theme in literature (Jones, 2017). Technical challenges encompass lack or inadequate technical skills on the part of students and instructors, power outages, lack of access/connectivity to electricity especially in remote areas; absence of appropriate eLearning tools and software malfunctions. The other noted challenge is the mismatch between mobile devices with existing university online management systems (Gillett-Swan, 2017; Kapasia, 2020; Jones, 2017; Tekane, Louw & Potgieter, 2018).

Technical challenges are particularly prevalent in developing countries because they are largely characterised by lack of vital online facilities such as reliable internet, appropriate technical devices, and electricity (Andersson and Grönlund, 2009; Sintema, 2020a; Sintema, 2020b).

Concerns have also been expressed over the quality of online instruction and instructor/student relationships. High drop-out rates from online education compared to traditional classroom-based teaching also stand as a challenge in many countries (Jones, 2017; Levy, 2007). Other identified barriers of online learning in literature are associated with the absence of human support, lack of interactivity between the student and instructor, poor attitudes among students and lecturers towards online learning, learner demotivation and increased anxiety among students (Bharuthram & Kies, 2012; Jones, 2017; Mbati, 2012:).

It is apparent that a number of studies have been conducted on online education in Zambia (Chipembele & Bwalya, 2016; Chitumbo, 2012; Mulenga & Marban, 2020; Mwalimu, Mulauzi & Mwiinga, 2017; Schurgers et al., 2009), Africa (Mathew & Ebelelloanya, 2016; Okereke, 2020; Osoti, et. Al., 2017) and other parts of the world (Cleveland-Innes et al., 2019; Daniel, 2016; Dennis, 2020; Dhawan, 2020; Erdem & Gumus,, 2016). However, more research needs to be conducted especially in developing countries where the take off for online education has been slow (Andersson & Grönlund, 2009; Dhawan, 2020; Mulenga & Marbán, 2020).

As online education continues to have its way into developing countries and particularly Zambia and becoming a 'new normal' (Dhawan, 2020; Sintema, 2020a), it is imperative that educational institutions design and implement successful online learning programmes. To achieve this, it is important to conduct studies that will provide empirical evidence for effective decision making (Alqurashi, 2019).

Therefore, the aim of this study was to examine freshers' experiences of online learning at a public university in Zambia focussing on their perceptions regarding the benefits and challenges of online learning as well as suggestions for improvement.

It is necessary to mention that the current study is unique because it was conducted among first year students (freshers) with little or no exposure to online learning, given that face-to-face instruction is what is more prevalent in most secondary schools in Zambia (Mulenga & Marbán, 2020; Sintema, 2020a). It was therefore hypothesised that these students encountered challenges adapting to online education. As some scholars (Bharuthram and Kies, 2012; Lund & Volet, 1998) have observed, first users to online education encounter a variety of barriers including uncertainty on how to study through the new mode of instruction, inadequate access to online materials, and the discomfort of spending long hours at the computer. The experiences of these freshers are therefore worth examining and reporting.

In addition, the sampled students were originally enrolled to receive instruction through face-to-face modalities. However, due to the coronavirus

pandemic, they were subjected to what might be termed as 'emergency online teaching'. As Hodges (2020, p.1) argues, 'well-planned online learning experiences are meaningfully different from courses offered online in response to a crisis or disaster'. Therefore, the sampled students' perceptions of the benefits of online education and the barriers encountered are worth documenting. This is because their experiences are likely to be different from students in other semesters.

Furthermore, unforeseen circumstances such as infectious diseases (e.g. coronavirus), war and other natural disasters can hamper face-to-face teaching and learning. An immediate example is the coronavirus pandemic which led to the unforeseen closure of educational institutions across the globe. In this instance, online instruction proved to be a reliable panacea that ensured continued teaching and learning (Dhawan, 2020). It is therefore important for the education sector to adequately prepare for remote education in case of such disasters. In this vein, research is likely to play an important role in terms of establishing ways of continuously improving the delivery of online learning (Bozkurt& Sharma, 2020; Mulenga and Marban, 2020).

CONCEPTUAL FRAMEWORK

This study is grounded in the Community of Inquiry (CoI) theoretical framework developed by Garrison, Anderson, and Archer (2000). The framework is one of the most widely utilised when it comes to online education because it is simple, useful and provides a lens for undertaking such studies (Anderson, 2016; Swan et al., 2008). The CoI framework puts emphasis on the development of a sense of community to encourage critical thinking and effective learning. The fundamental assumption of the framework is that critical thinking and effective learning is experienced in a community or group of inquiry (Garrison, Anderson & Archer, 2000).

A community of inquiry is defined as a "group of individuals who collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding" (Garrison 2011, p. 2). The framework comprises three independent yet interrelated elements including social presence, cognitive presence, and teaching presence (Garrison, Anderson & Archer, 2000; Swan et al., 2008).

Social presence is defined as the "ability of participants to identify with the group, communicate purposefully in a trusting environment, and develop personal and affective relationships progressively by way of projecting their individual personalities" (Garrison & Akyol, 2013, p. 107). It entails the sense of belonging students feel in the online classroom and encompasses students' ability to work in partnership, communicate, inquire, express, question, and contribute to the learning community (Ice et al., 2011; Swan et al., 2008).

Cognitive presence involves the ability of the students to "construct and confirm meaning through sustained reflection and discourse" (Ice et al., 2011, p. 47). CoI assumes that for effective learning to take place, there is need for profound logical or scientific inquiry (Swan et al., 2008).

Teaching presence entails "the design, facilitation, and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes" (Anderson et al., 2001, p. 5). Teaching presence demands that the instructor is actively engaged and takes the role of a guide in the teaching and learning process. Teaching presence is a major factor associated with successful online education (Law, Geng & Li, 2019) as research has established that it influences perceived student satisfaction and motivation in online learning (Garrison & Akyol, 2013).

While the study is founded on CoI, it is also informed by a variety of research established variables or factors that influence and predict effective delivery of online education. Some important variables include course design, institutional factors, student motivation, instructor presence, student satisfaction, and different student characteristics (Jones, 2017).

Course design studies point to the manner in which the course is designed as an important influence for effective delivery of online education (Zheng, Lin, & Kwon, 2020; Jones, 2017). Institutional factors that influence successful online education include the provision of orientation to online learning, organizational support, clear expectations and guidelines for the online student and capacity building for instructors and students. Other institutional factors include technological problems and frustration with administration (Sorensen & Donovan, 2017).

In terms of motivation (Sorensen & Donovan, 2017; Jones, 2017) research has established that the level of student's motivation influences the success of online learning. Tied to the CoI, Garrison (2011) posits that motivation for online students is increased when there is a strong social, cognitive, and teaching presence (instructor presence) (Baker,2010; Stark, 2019). Student characteristics that influence online education include demographics such as age, gender, race and ethnicity and financial status (Andres et al., 2016).

Andersson and Grönlund (2009) also provide a useful conceptual lens for the challenges for online education through their critical review of research on challenges for online education. The study is particularly important as it focusses on examining factors that impact effective online education in developing countries. The study identified 30 challenges grouped

into four major themes as follows: course, individual characteristics, technology, and contextual challenges.

Course challenges include issues related to the content of the course, the activities undertaken during the course, the support functions provided, and the delivery mode of the course. The characteristics of the individual encompass among others student age, gender, and academic confidence. The motivation of the student and their socioeconomic status is also identified as a factor influencing the success of online education. Technological challenges include the different Learning Management Systems (LMS) and technologies used, their costs, accessibility, reliability and adaptability to local needs and context. Contextual factors encompass the delivering organisation which typically has to do with the institutional setting and the context of the society in which online education is delivered such as culture, traditions, rules and regulations (Andersson & Grönlund, 2009).

For successful online education to be delivered, it is important that the three components of the CoI framework (social presence, cognitive presence, and teaching presence) are taken into consideration. This is because the stated components are interdependent. This implies that if any of the components are overlooked, students may not realise the benefits of online education but encounter challenges identified in literature (Jones, 2017). It is in this regard that the CoI is considered a relevant framework to the current research because it sought to examine freshers' experiences of online learning focussing on the benefits, challenges, and suggestions for improvement.

RESEARCH METHODOLOGY

This research is a descriptive quantitative study anchored on a cross sectional survey design. The chosen method focuses on quantifying and analysing numerical data using descriptive statistics (Creswell, 2017).

The study targeted all the first-year students at the sampled public university in Zambia. The institution was purposively sampled as it commenced the academic year with online learning to first year students who later reported to the university for face-to-face learning. This move followed the Zambian government's directive after the coronavirus lockdown to reopen higher learning institutions in phases beginning with examination classes (Cabinet Office Circular Minute of 2020-CO).

Voluntary sampling was used to draw the study sample from the population. In a voluntary sampling method, interested people are asked to get involved in a voluntary survey (Murairwa, 2015).

An online questionnaire created using 'Google form' was sent via WhatsApp to about 2,000 freshers in all schools within the sampled university. The questionnaire was successfully completed by 293 respondents. Researchers perceived an online questionnaire to be an appropriate mode of data collection in the sense that it is cheaper, quicker, and can connect with a wide range of audiences. Besides, web-based surveys are preferred by the researchers in that analysis is automatically done. In addition, a web-based questionnaire provides flexibility to respondents, as they are free to take the survey in their free and convenient time using available gadgets.

The questionnaire contained closed-ended questions that were used to collect quantifiable data which was automatically analysed into descriptive statistics presented in figures, graphs, and pie charts. The collected data was analysed, presented and interpreted in line with the objectives of the study, linked to the literature reviewed, and the theory that guided the study.

As a way of ensuring the validity and reliability of research findings, the questionnaire was peer reviewed and piloted. Adjustments to the questionnaire were made based on the suggested changes. Overall, validity and reliability was guaranteed through careful, systematic and consistency in the formulation of questions contained in the questionnaire.

Ethical Considerations

Ethical values were observed by obtaining permission to carry out the research from the sampled university. Consent was also obtained from the participants and were informed of their voluntary participation and right to withdraw from the study. Confidentiality was guaranteed by not revealing details of any participant and the sampled university throughout the study. In addition, no financial benefits were attached as a way of enticing respondents to participate in the research (Creswell, 2017).

RESULTS AND DISCUSSION

The subsequent sections present, analyse, and discuss the results of this study. The discussion commences with biographical data of the respondents followed by the major findings of the study - freshers' experiences of online learning focussing on the benefits, challenges, and suggestions for improvement.

Biographical Data of Respondents

From the total of 293 respondents that took part in the survey, 55.6 percent (n = 163) were female, while 44.4 percent (n = 130) were male. The respondents were drawn from all the six schools/faculties of the university. They were between the age range of 18-21.

Freshers Experiences of Online Learning

To place the study in context, students' previous involvement in online learning before admission into university and during the period of online learning (i.e.

before they reported for their face-to-face learning at the sampled university), platforms, and gadgets used to access online learning are presented and discussed.

Freshers' involvement in online learning before and during the period of online learning

Most respondents representing 65.5 percent (n =192) indicated that they were never involved in online learning before the commencement of their studies, while 34.7% (n = 101) indicated being involved. This finding confirms the researchers' assumptions and indeed literature (Mulenga & Marbán, 2020; Sintema, 2020a) which indicates that many Zambian primary and secondary school graduates have little or no exposure to online education. This is because most pre-university educational institutions in Zambia are presently based solely on the conventional face-to-face mode of instruction.

The finding that pre-university education is largely based on face-to-face instruction is not unique to Zambia. For example, in a study conducted by Queiros and de Villiers (2016) in South Africa to investigate South African students' opinions regarding online learning, findings revealed that most participants had no prior experience with online learning. As higher education continues to incorporate blended learning, it is imperative that secondary school leavers are adequately grounded in online education.

Majority of the respondents representing 72 percent (n = 211) indicated that they were involved in online learning arranged by the institution before they reported for face-to-face learning. However, 28 percent (n = 82) were never involved due to various reasons discussed in subsequent sections.

For students that were involved in online learning, their level of involvement differed. On a scale of 1-5 provided for participants to indicate their level of involvement in online learning, as represented on figure 1, results show that only 31 percent (n = 90) were 'very involved' in online learning. The majority 69 percent (n = 203) fell in the range of 'relatively' to 'rarely' involved.

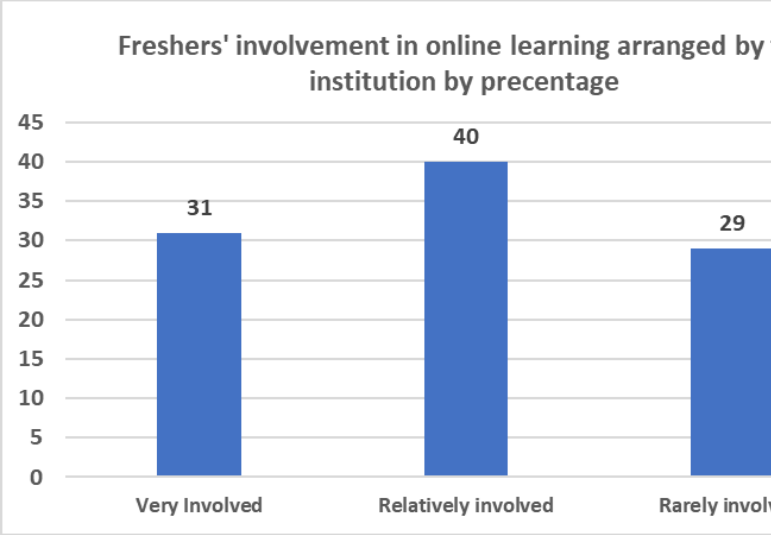

Figure 1: *Freshers' involvement in online learning arranged by the institution*

Platforms used for Online learning

Respondents indicated a number of platforms which were used during their online learning. The most frequently used platforms were; Moodle (official institutional online learning platform) 62 percent (n = 182), Zoom Application 51.5 percent (n = 151), WhatsApp 42 percent (n = 125), You Tube 38.6 percent (n = 113), and Google Meet 35.2 percent (n = 103).

Findings on platforms used for online learning by freshers are comparatively similar to studies conducted in Zambia on online learning by Chola et al. (2020) and Mulenga and Marbán (2020). These scholars documented the most frequently utilised platforms for accessing online learning as follows: Google classroom, Moodle, Zoom, Facebook and WhatsApp. Worth noting is that respondents of the current study did not identify Facebook as one of the most frequently used platforms for accessing online learning. This is because it is expected that students may have preferred using Facebook as the respondents fell within the category of millennials who mostly use this platform.

Gadgets used for accessing online learning

Respondents were asked to indicate the electronic devices they used to access online learning. Results showed that the majority 89.4 percent (n = 262) frequently used smart phones, with the least 3.1 percent (n = 9) using desktops. However, a few 2 percent (n = 7) indicated that they had no gadgets to access online learning.

The finding on smart phones being the most frequently used is in conformity with Chola et al., (2020) who conducted a related study on online learning at a private university in Zambia. Their findings showed that the majority (89%) of students accessed online learning using smart phones. Findings suggest that students found it easy to access or borrow a smart

phone as opposed to devices such as laptops, tablets and desktops. In addition, smart phones were reported to be portable and user friendly.

Notably, some students indicated that they did not take part in online learning due to lack of gadgets. This confirms the presence of under-resourced students among freshers. According to literature, under-resourced students usually have limited access to educational necessities which consequently disrupt their education (Krodel et al., 2008; Pawloski, 2020; Payne, 2008). The presence of under-resourced students in Zambia and other developing countries is echoed by various scholars (Upoalkpajor, 2020; Chola et al., 2020; Kapasia et al., 2020; Mulenga & Marbán, 2020; Sintema, 2020b). The aforesaid scholars confirm that the under-resourced students, especially in times of emergencies undergo serious challenges which destabilise their involvement in educational activities.

Benefits of online learning experience

With or without proper gadgets for online learning, freshers who participated in the study pointed out a number of benefits experienced during online learning. The majority of respondents representing 29.7% (n = 87) indicated that online learning was a cheaper mode of learning. This echoes Piskurich's (2006) assertion that it saved on travel time and costs and that it was an easier process to use for both facilitators and learners.

Another category of respondents 23.2% (n = 68) indicated that they appreciated online learning because it was a self-paced mode of learning. However, Lee and Mendlinger (2011) add two dimensions to this: that perceived self-efficacy was important to online learning and that perceived usefulness of online learning systems influenced positively online learning acceptance and student satisfaction.

Some respondents 18.4% (n = 54) stated that online learning improved their computer literacy while 16.4% (n = 48) indicated that this mode of learning gave them an opportunity to learn from a comfortable learning environment. This is in line with Piskurich's (2006) observation that most learners these days were quite comfortable posting to discussion boards or interacting in a chat room. The scholar adds that for many learning tasks that were not too complex, they would be accomplished better via e-learning and with more people getting more training in a convenient manner than before. However, another 9.2% (n = 27) stated that online learning was a flexible mode of learning. This view is also held by Liang and Chen (2012) who reported flexibility as one of the potentials of online learning.

Amazingly some participants 3.1 percent did not point out on any benefit of online learning. Could it be that these learners did not just want to admit the benefits they had accrued from online learning? Hesrcu-Kluska's (2019) study on the interaction between learners and learner facilitator in an online learning environment revealed that learning in an online environment is not self-evident, and that there was need to thoroughly consider how online courses should be built and whether they could fully replace traditional learning. Hesrcu-Kluska's also argued that facilitators and instructors often attended to a more technical point of view without much focus on collaboration between instructors and learners nor encouraging collaboration among learners. Hesrcu-Kluska concluded that collaboration with all the stakeholders was necessary and that its absence could lead to frustration, feeling of abandonment and other.

The overall position on the benefits respondents derived from online learning is that it is a valuable mode of instruction, in conformity with available literature (Bharuthram & Kies, 2012; Daniel, 2016; Dennis, 2020). However, more elaborative responses could have yielded more detailed reasons for the respondents' choices if the study was qualitatively conducted. It is therefore suggested that further investigation be conducted on the similar topic but using qualitative or mixed methods approach. The next section shifts the attention of the study to freshers' challenges in the online learning experience.

Challenges of online learning faced by freshers

Findings from this current study revealed that, by ranking, most freshers, 50.9 percent faced technological challenges such as power outages, inaccessibility to electricity, poor internet, as well as poor sound and lighting. The category "technological challenges "was closely followed by students who cited individual challenges, at 48.9 percent. The individual challenges cited included: unfavourable environment (e,g, family and friends' demands on student's attention and time), unexpected run out of bundles, short attention span, loneliness, high cost of bundles, isolated learning, lack of adaptability, stress, time management, technophobia, socio economic status, computer literacy, motivation, failure to access Moodle, and no face-to-face interaction.

Of interest about the findings on technological and individual challenges is the fact that these two appear to work hand in hand for the most part: some students who appear to have a number of technological challenges also seem to lack the skills for collaborative learning in an online learning situation. This is also confirmed by Butson and Thomson (2014) in their study about "Challenges of Effective Collaboration in a Virtual Learning Environment among Undergraduate Students". According to these two scholars, the study revealed that although the students in the study were provided with collaborative tools, they did not work collaboratively and struggled to use the web based tools to advance their learning.

And contrary to the findings of this present study where some respondents reported loneliness and isolated learning, Butson and Thomson's study further revealed that in fact, students preferred individual offline approaches to the more demanding processes required in a collaborative online environment (Butson & Thomson 2014). However, it is not clear whether illiteracy in the use of computer or media skills could be interpreted as a preference for individual offline approaches.

After Technological and Individual challenges, Institutional challenges ranked third with 38.5 per cent of respondents citing learning system problems, missed lessons because of poor timetabling, poor communication/lack of feedback, and lack of practical work. Lecturer challenges ranked fourth with 11.3 per cent of respondents reporting: lecturer being too fast, poor feedback, ambiguous questions, lessons not clear, and poor lecturer guidance. The findings about Institutional and Lecturer challenges confirm Pimpa's (2020) research findings that the nature of the course, technical aspects from the institution, and the roles of key stakeholders such as lecturers, technicians and policy makers contributed to the level of online engagement among students.

These findings about freshers' challenges in an online learning experience appear to be pointing to the fact that the level of preparedness for online learning, between tertiary institutions of learning and individual learners, are unmatched with the former being at an advanced level for which the learner is not well equipped. This claim is also held by Liang and Chen (2012) when they reported a 'one sided emphasis on technology' as one of the online learning trends.

Steps taken by the freshers to mitigate the challenges

Upon facing various challenges of online learning, students took various steps. Participants representing 43 percent (n = 126) contacted the institution for help, 30 percent (n = 88) sought external help from family and friends, 21.8 percent (n = 64) did not take any step. Regrettably, the remaining few 5.2 percent (n = 15) contemplated on withdrawing from their studies. It is also unfortunate to note that the majority 36.4 percent (n = 107) that sought assistance from the institution did not receive any help while the rest received help 63.6 percent; (n = 186). However, the majority who received help indicated that it was not to their satisfaction.

It is expected and justifiable that many freshers sought help. Their concerns were genuine in that online learning for most of them was their first experience, as the findings indicated. Most freshers have a background of coming directly from secondary school. This is in line with the current literature which provides information that online learning in Zambian secondary school before the outbreak of coronavirus was close to non-existence as instruction was largely based on the face-to-face mode of learning (Mulenga & Marbán, 2020; Sintema, 2020b).

Students satisfaction towards online learning

On a scale of 1-5 provided for participants to describe their overall experience regarding online learning, results showed that the majority were generally dissatisfied with 59.7 percent (n = 175) being in the range of 'very dissatisfied' to 'dissatisfied'. Only a few, 12.9 percent (n = 38) described their experience as 'very satisfied' and 'satisfied'. The rest of the respondents 27.3 percent (n = 80) took a neutral position. This data corroborates with other findings which indicate that students who face various challenges to online learning are generally dissatisfied and have challenges adapting to the new mode of instruction (Bharuthram and Kies, 2012; Jones, 2017; Lund & Volet, 1998).

It is also apparent from the findings of the current study that in the absence of the CoI's elements of social presence, cognitive presence, and teaching presence (Garrison, Anderson & Archer, 2000), students are likely to face various challenges that could breed dissatisfaction. Therefore, the researchers of this current study strongly propose that universities should ensure that the stated three elements of CoI are applied in the development and delivery of online learning.

From the respondents' challenges, it appears that a lot needs to be done to improve online learning before it can be adopted as a fully fledged mode of instruction. Although some of the challenges have to do with individual users of the technologies, bigger challenges appear to be institutional and systemic. Greenagel (2002) concludes that e-learning has not kept pace with the development of increasingly rich IP-based delivery platforms because the e-learning experience is far too often puerile, boring, and of unknown or doubtful effectiveness. The researchers of the current study therefore recommends for improvement, better learning models, matching the instructional strategy with the right platforms appropriate to the learning needs of learners.

Students suggestions for improving online learning

Participants pointed out some ways on how online learning could be improved. The key suggestions are grouped under the following recurring sub themes: institutional, technological and lecturer/instructor related. Suggested solution for institutional challenges include: Provision of reliable Learning Management system, use of eLearning platforms that accommodate more students, prior orientation, institutional support, offering gadgets to students who cannot afford, putting in place a fixed timetable, facilitating provision of free to concessional rates on bundles, provision of

technical support, and training lecturers and students in eLearning. Solutions for technical related challenges include reduced load shedding and improved internet by services. For lecturer/instructor related challenges, respondents proposed more interactive instruction, improved communication, more engaging learning tasks, virtual practical activities and varying teaching and learning methodologies.

From the findings, it is apparent that most of the suggestions regarding the improvement of online learning were institutional related. In this regard, higher learning institutions are called upon to consider the voices of the end users in order to improve the delivery of online learning.

CONCLUSION AND RECOMMENDATIONS

The study examined the experiences of online learning by freshers at a public university in Zambia, focussing on students' perceptions regarding the benefits and challenges of online learning and suggestions for improvement.

This study concludes that a number of students found online learning valuable in a number of ways with the majority appreciating it as a 'cheaper mode of instruction'. This is because they did not have to spend on boarding fees, transportation, food, and other logistical requirements needed had they reported for face-to-face learning. Aside its cost effectiveness, some students found online beneficial because it was a self paced mode of learning; improved their computer literacy; and was flexible in terms of place and timing.

Interestingly, a few respondents 3.1 percent (n = 9) students stated that they did not find online learning beneficial at all. This could be attributed to the many challenges they encountered during the delivery of online learning. While students identified various barriers to online learning, remarkably, many challenges were associated with technology (e.g. unreliable Learning Management System, poor internet connectivity and power outages). Individual related challenges included unfavourable environment (family and friends' demands on student's attention and time), unexpected run out of bundles, short attention span and loneliness. Institutional challenges ranked third with with respondents citing learning system problems, missed lessons due to poor timetabling, poor communication/lack of feedback, and lack of practical work.

In terms of their overall experience to online learning, the majority of the students indicated that they did not like this mode of instruction (were generally dissatisfied). This could be attributed to the fact that for the many , it was their first encounter and therefore had challenges adapting to it. In addition, the online learning delivered to this cohort of students may be termed as 'unplanned' because it was delivered during the coronavirus crisis.

Arising from the findings of the study, an overall recommendation is that higher learning institutions should endeavour to spend ample time in developing online learning by taking into consideration the three important elements of the CoI theory - the social presence, cognitive presence, and teaching presence. The absence of any of the three 'presences' has the potential to comprise the development and delivery of online education. It is also important that online learning is designed creatively, interactively and centres on students' voices, who are the end users.

Other specific recommendations include the development of effective orientation programmes for freshers on online learning; training of instructors in online education; putting in place a robust support system for student concerns; instituting a reliable Learning Management System; and taking into consideration the needs of under-resourced students to ensure that no one remains behind.

Suggestions for future research: A study of similar nature using a qualitative approach could be conducted in order to gain more insight into the topic.

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