



Exploring deepened anxiety during the COVID-19 transition to online teaching and learning: Coping strategies within and beyond communities of practice in rural universities of South Africa and Uganda

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ABSTRACT

The rapid increase in anxiety among teaching professionals before and after the COVID-19 pandemic has given university lecturers and students around the globe the motivation to explore ways to deal with anxiety as a key mental health issue, which has caused increased psychological and affective discomfort among both categories of population. In this study, the researchers explored how lecturers and students responded to the increased anxiety caused by a sudden, unexpected transition from traditional teaching and learning strategies to online delivery modes. Seventy participants, drawn from one Ugandan and one South African rural university, were purposively selected, and data were collected through in-depth interviews and focus group discussions. Thematic analysis of data, together with verbatim narratives, was used. The findings of this study reveal that communities of practice were the most widely adopted strategy to reduce and subsequently alleviate anxiety, in addition to physical activities, seeking mental health services, strengthening relationships among faculty, support staff and students, and training in online pedagogies. The recommendations highlight the need to frequently train students and lecturers on Learning Management Systems. This study highlights how community of practice (COP) systems and emerging support mechanisms can ease anxiety during online learning in rural universities, offering insights to guide policy and improve lecturer and student well-being and success in South Africa, Uganda, and similar contexts.

Keywords: Anxiety, Teaching, Learning, Online, COVID-19.

INTRODUCTION

Anxiety has become a buzzword that both young and old talk about, and to some, it is a lived experience. People are anxious about many things in life, especially when faced with uncertainties that could negatively impact their lives. A study carried out in 2017 by the American Federation of Teachers

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and the Badass Teachers Association revealed that anxiety is more prevalent among teaching professionals than in any other profession.¹ If teachers were anxious before the COVID-19 pandemic, how much more anxious were they during the pandemic? Our view is that it is highly probable that both the professors' and students' anxiety levels increased significantly due to the sudden transition of teaching and learning from traditional face-to-face contact with students to online delivery modes.

According to different authors, anxiety is not an easy term to define.² Anxiety is often associated with stress, unpleasant emotions, fear of the unknown, and worry.³ Anxiety may also be defined as “an unpleasant emotional state or condition characterised by subjective feelings of tension, apprehension, and worry, and by activation or arousal of the autonomic nervous system.”⁴ On the other hand, Paredes et al. perceive anxiety as worrying about the future.⁵ The two definitions above share a common characteristic of worry triggered by disturbance. Saade et al. also view anxiety as an emotion of fearfulness, apprehension, and uneasiness. For this paper, anxiety will be defined as worrying about something that threatens and destabilises one's mental well-being.⁶ To be more specific, it is the worry caused by online teaching and learning, which many lecturers and students were not prepared for. In their study, Saade et al. viewed anxiety in online learning as a fear of misusing information technology caused by incompetent performance.⁷

Clearly, the sudden change in pedagogical strategies could have significantly increased the anxiety levels of both university lecturers and students. This online teaching and learning is seen as an involuntary transition, propelled by the COVID-19 pandemic. Strauss argues that for those who were apprehensive before the outbreak of COVID-19, the sense and feeling of anxiety deepened.⁸ The closure of institutions of higher learning, colleges, and schools was traumatic, and the shift to online teaching and learning was more traumatic. Johnson and Albano state that parents, teachers, and learners usually experience a certain degree of anxiety, but there has never been anything like the anxiety that comes with the start of the 2020-21 school year.⁹ Most of the research done to date has focused more on the causes of anxiety, the effects of COVID-19 on teaching and learning, and the challenges of online teaching and learning. Very few and scanty studies have looked at how lecturers and students in universities dealt with the deepened online teaching and learning-related anxiety,¹⁰ which is the gap this paper intends to cover and contribute to the existing body of knowledge.

The goal of the study was to explore strategies implemented to effectively address the deepened anxiety experienced by lecturers and students regarding online teaching and learning during the

¹ Kary Zarate, Daniel M. Maggin, and Amanda Passmore, “Meta-analysis of Mindfulness Training on Teacher Well-being,” *Psychology in the Schools* 56, no. 10 (December 4, 2019): 1700–1715, <https://doi.org/10.1002/pits.22308>.

² Allan V. Horwitz, *Anxiety: A Short History*. (JHU Press, 2013); Neil McNaughton, “What Do You Mean ‘Anxiety’? Developing the First Anxiety Syndrome Biomarker,” *Journal of the Royal Society of New Zealand* 48, no. 2–3 (June 7, 2018): 177–90, <https://doi.org/10.1080/03036758.2017.1358184>; Peter J. Lang, “The Cognitive Psychophysiology of Emotion: Fear and Anxiety,” in *Anxiety and the Anxiety Disorders* (Routledge, 2019), 131–70; Anthony R. Artino, Eric S. Holmboe, and Steven J. Durning, “Control-value Theory: Using Achievement Emotions to Improve Understanding of Motivation, Learning, and Performance in Medical Education: AMEE Guide No. 64,” *Medical Teacher* 34, no. 3 (March 25, 2012): e148–60, <https://doi.org/10.3109/0142159X.2012.651515>.

³ John R Vanin, “Overview of Anxiety and the Anxiety Disorders,” in *Anxiety Disorders: A Pocket Guide for Primary Care* (Springer, 2008), 1–18; Mahnaz Shiri, S Akhavan, and N Geramian, “Anxiety Disorder and Its Types,” *Essential Notes in Psychiatry*, 2012, 87–116; McNaughton, “What Do You Mean ‘Anxiety’? Developing the First Anxiety Syndrome Biomarker”; Lang, “The Cognitive Psychophysiology of Emotion: Fear and Anxiety.”; Giulio Perrotta, “Anxiety Disorders: Definitions, Contexts, Neural Correlates and Strategic Therapy,” *J Neur Neurosci* 6, no. 1 (2019): 042.

⁴ Charles D Spielberger, “Anxiety as an Emotional State,” *Anxiety: Current Trends in Theory and Research* 1 (1970):23–29.

⁵ Maribel Paredes-Saavedra et al., “Work Team Effectiveness: Importance of Organizational Culture, Work Climate, Leadership, Creative Synergy, and Emotional Intelligence in University Employees,” *Administrative Sciences* 14, no. 11 (November 1, 2024): 280, <https://doi.org/10.3390/admsci14110280>.

⁶ Raafat George Saadé et al., “Anxiety & Performance in Online Learning,” in *In SITE 2017: Informing Science+ IT Education Conferences: Vietnam*, 2017, 147–57.

⁷ Saadé et al., “Anxiety & Performance in Online Learning.”

⁸ V. Strauss, “A Trauma-Informed Approach to Teaching through Coronavirus—for Students Everywhere, Online or Not,” *The Washington Post*, 2020.

⁹ E. P. Johnson and D. Albano, *Anxiety, Excitement Builds for More Online Education*, 2020.

¹⁰ Mariacarla Martí-González et al., “Emptiness in the Study of Emotions in the Teaching-Learning Process of Reading-Writing during the COVID-19 Pandemic,” *Frontiers in Psychology* 13 (December 21, 2022), <https://doi.org/10.3389/fpsyg.2022.991574>.

COVID-19 pandemic in rural universities in Uganda and South Africa, to ensure their meaningful participation in academic activities.

LITERATURE REVIEW

In South Africa, schools, colleges, and universities closed their doors in response to President Cyril Ramaphosa's call for a nationwide lockdown following the outbreak of the COVID-19 pandemic across the nation and beyond.¹¹ This was also the case with universities in Uganda, as a control measure against the spread of the pandemic and to achieve social distancing. This compelled many learning institutions to transition to online teaching and learning.¹² In some parts of South Africa, schools offered live classes that were attended virtually, while other students received messages from educators assigned tasks to complete at home.¹³ This prompted some states, such as California, to order schools to conduct learning online-only for academic purposes.¹⁴ The same was experienced in South Africa and Uganda, where many institutions of higher learning have adopted online education. Some South African institutions had already transitioned to Blended Learning (BL).

The transition from traditional classes to the online delivery mode was a challenge for some lecturers and students.¹⁵ From what we observed, most lecturers and students at historically disadvantaged universities in South Africa and Uganda were not prepared for online teaching and learning, as some universities had little or no technology. Some home environments were not conducive and had no access to the internet, while others had slow/poor or no internet connectivity, especially in Ugandan homes.¹⁶ In some cases, some lecturers and students did not know how to navigate online facilities due to a lack of proper technical training skills.¹⁷ Scholars who have collectively studied cases in both South Africa and Uganda state that some lecturers and students had technophobia, that is, they feared using technology due to the risk of ridicule for mistakes.¹⁸ The above scenarios can cause instructors and students to panic and become upset and anxious about online education. Saade et al. also contend that as online courses became popular and grew rapidly, computer-related fears persisted, evolving around online learning anxieties.¹⁹

Hilliard et al. note that traditional methods of teaching and learning, such as one-way transmission of knowledge from teacher to student, were substituted with active learning through online interaction among students.²⁰ Hilliard et al. further hold that online changes were meant to improve the

¹¹ Mondli Hlatshwayo, "Online Learning during the South African Covid-19 Lockdown: University Students Left to Their Own Devices," *Education as Change* 26 (November 22, 2022), <https://doi.org/10.25159/1947-9417/11155>; Alana Genevève. Daries, *School Leadership Response to Teaching and Learning during the COVID-19 Pandemic in Western Cape Public-Partnership High Schools*. (South Africa: University of Johannesburg, 2023); Lehlohonolo Gibson. Mokoena, "Pandemic E-Learning and the Interruption of Higher Education's Social Justice Goals: Narratives from the Central University of Technology (CUT) in the Free State (FS).," 2023.

¹² Strauss, "A Trauma-Informed Approach to Teaching through Coronavirus—for Students Everywhere, Online or Not." Loyce Kiiza Kobusingye and Tom Luswata, "The COVID-19-Related Schools' Closure and the Ugandan Teacher: Exploring the Psychological and Non-Psychological Threats and Opportunities.," *Journal of Education* 4, no. 8 (November 26, 2021): 32–45, <https://doi.org/10.53819/81018102t5035>.

¹³ Strauss, "A Trauma-Informed Approach to Teaching through Coronavirus—for Students Everywhere, Online or Not."

¹⁴ Johnson and Albano, *Anxiety, Excitement Builds for More Online Education*.

¹⁵ Johnson and Albano, *Anxiety, Excitement Builds for More Online Education*.

¹⁶ Betty Akullu Ezati and Leah N Sikoyo, "Strengthening Homes as Sites of Learning during Emergency: Lessons from COVID-19 Lockdown in Uganda," in *COVID-19 and Education in Africa* (Routledge, 2022), 3–22; Polycarp. Omara, "Learning at Home during Covid-19 Pandemic in Abim District, Uganda: Learners' Perspectives.," 2020; Ezati and Sikoyo, "Strengthening Homes as Sites of Learning during Emergency: Lessons from COVID-19 Lockdown in Uganda."

¹⁷ Rushiella N Songca, Clever Ndebele, and Munieng Mbodila, "Mitigating the Implications of COVID-19 on the Academic Project at Walter Sisulu University in South Africa: A Proposed Framework for Emergency Remote Teaching and Learning.," *Journal of Student Affairs in Africa* 9, no. 1 (2021): 41–60.

¹⁸ Spelman Khululwa and Marongwe Newlin, "Technophobia: Understanding Computer Anxiety for Teaching and Learning of Computer Studies," *Journal of Communication* 9, no. 1 (2018): 2; Marongwe Newlin and Kobusingye Loyce Kiiza, "A Comparative Analysis Of The Impact Of The Covid-19 Pandemic On Rural University Students In South Africa And Uganda," *E-Bangi Journal of Social Science and Humanities* 19, no. 3 (April 20, 2022), <https://doi.org/10.17576/ebangi.2022.1903.01>.

¹⁹ Saadé et al., "Anxiety & Performance in Online Learning."

²⁰ Jake Hilliard et al., "Students' Experiences of Anxiety in an Assessed, Online, Collaborative Project," *Computers & Education* 143 (January 2020): 103675, <https://doi.org/10.1016/j.compedu.2019.103675>.

quality of teaching and learning in higher education in the United Kingdom.²¹ This would equip students with skills employers look for, indispensable for working in the 21st-century's 'knowledge age'.²² The Malaysian government also imposed a Movement Control Order (MCO) for people to stay at home to prevent the virus from spreading fast.²³ The MCO by the government affected undergraduate students who were told to resort to online education. According to Allam et al., the online teaching and learning mode was expected to develop the academic performance of students by improving computer/internet literacy competency, self-directed learning, and motivation for learning levels.²⁴ The move triggered anxiety and panic among some students.²⁵

Fernandez and Matt opine that online learning, propelled by COVID-19, caused students to be in a crisis, thus needing support from all fronts.²⁶ Universities are viewed as places where students forge relationships, not just as centres of learning. The prevalence of COVID-19 broke those norms and caused uncertainty.²⁷ Fernandez and Matt also state that many students felt a sense of loss, grief, depression, and anxiety during online learning due to the time of insecurity and disruption.²⁸ It is evident from Fernandez's observations that students were likely to be anxious; therefore, if such anxiety was not addressed and dealt with, it could hinder students' academic performance.²⁹ Hence, the purpose of this paper was to explore how lecturers and students dealt with online anxiety impelled by the COVID-19 pandemic. Not only did students feel anxious about online learning, but lecturers also felt anxious since online teaching was relatively new in some rural institutions of higher learning. The abrupt termination of physical contact between students and lecturers sparked anxiety in some students and lecturers. Schaffhauser conducted a study with American K-12 teachers and asked them how they felt about the transition to online education.³⁰ Schaffhauser's findings showed mixed feelings, but many teachers reported feeling anxious to be outside their comfort zone, while others felt frustrated and exhausted.³¹ Furthermore, others felt that they did not have adequate transitional time to test out methods; subsequently, they felt unsupported and unappreciated due to the pressure they were getting from educational officials.³²

Some scholars concur that technophobia can be a source of online anxiety.³³ The 21st century has been marked as a digital age characterised by technological advancement, but technophobia is evident in online teaching and learning.³⁴ Literature indicates that lecturers and students who experience technophobia or have online anxieties experience teaching and learning difficulties, postpone taking online courses or examinations, delay assignments, and show overall lower academic

²¹ Hilliard et al., "Students' Experiences of Anxiety in an Assessed, Online, Collaborative Project."

²² Päivi Häkkinen et al., "Preparing Teacher-Students for Twenty-First-Century Learning Practices (PREP 21): A Framework for Enhancing Collaborative Problem-Solving and Strategic Learning Skills," *Teachers and Teaching* 23, no. 1 (January 2, 2017): 25–41, <https://doi.org/10.1080/13540602.2016.1203772>; Linda. Harasim, *Learning Theory and Online Technologies* (Routledge, 2017).

²³ Siti Nurshahidah Sah Allam et al., "Online Distance Learning Readiness during Covid-19 Outbreak among Undergraduate Students," *International Journal of Academic Research in Business and Social Sciences* 10, no. 5 (2020): 642–57.

²⁴ Allam et al., "Online Distance Learning Readiness during Covid-19 Outbreak among Undergraduate Students."

²⁵ Sarah Maria Najjuka et al., "Depression, Anxiety, and Stress among Ugandan University Students during the COVID-19 Lockdown: An Online Survey," *African Health Sciences* 21, no. 4 (2021): 1533–43; Deanna Fanelli et al., "Effect of COVID-19 on the Educational Sector in Uganda," 2020;

²⁶ Luke Fernandez and Susan J. Matt., "Bored, Lonely, Angry, Stupid: Changing Feelings about Technology, from the Telegraph to Twitter" (Harvard University Press, 2020).

²⁷ Polycarp Omara and Betty Akwongo., "Learning to Teach in the Era of Uncertainties: Challenges and Lessons Learnt by Student Teachers during COVID-19 Pandemic in Uganda," 2022; Cadreen Barungi. Kabahizi, "Impacts of the COVID-19 Disruptions on Institutions of Higher Education in Ugand.," 2020.

²⁸ Fernandez and Susan J. Matt., "Bored, Lonely, Angry, Stupid: Changing Feelings about Technology, from the Telegraph to Twitter."

²⁹ Saadé et al., "Anxiety & Performance in Online Learning."

³⁰ Dian Schaffhauser, "Educators Feeling Stressed, Anxious, Overwhelmed and Capable," *The Journal*, 2020.

³¹ Schaffhauser, "Educators Feeling Stressed, Anxious, Overwhelmed and Capable."

³² Schaffhauser, "Educators Feeling Stressed, Anxious, Overwhelmed and Capable."

³³ Saadé et al., "Anxiety & Performance in Online Learning"; Khululwa and Newlin, "Technophobia: Understanding Computer Anxiety for Teaching and Learning of Computer Studies."

³⁴ Kamariah Yunus et al., "Computer Phobia among Adult University Students," *International Journal of Applied Linguistics & English Literature* 5, no. 6 (2016): 209.

achievements.³⁵ Students worry about assessments, how to navigate online, and online assignment plagiarism checks, while lecturers worry about setting authentic assessments to upload online,³⁶ online navigation, and how to make teaching and learning more engaging and exciting. Strauss contends that moving to remote learning and having fewer direct interactions can make assignments feel more devastating and frightening.³⁷ Such thoughts spark anxiety in students and lecturers, causing them to be hesitant and experience sleepless nights,³⁸ thus leading to underperformance. Such revelations make this current study worthy of investigating online anxiety coping strategies. Johnson and Albano argue that the sudden transition to online learning created new challenges for some teachers, though others viewed it as creating new opportunities. They also believe that catching up with online teaching and the various platforms used during the COVID-19 pandemic became one of the biggest challenges for educators.³⁹ Strauss agrees that the change to online learning could be a challenge for educators and students, leading to traumatic experiences.⁴⁰ Hilliard et al. gave an example in which a student who was to make a presentation using synchronous video communication as part of an assessment could experience high anxiety levels.⁴¹ This may cause subjective anxiety, worry about not performing well, a desire to escape the situation, increased heart rate and sweating, and anxious facial expressions.

There is also a dearth of literature on how lecturers and students dealt with online teaching and learning anxiety triggered by the COVID-19 pandemic. Eulberg states that teachers (including students) can deal with online anxiety by seeking companionship and inspiration.⁴² Eulberg's point of view is based on the view that teacher anxiety was something many educators kept to themselves despite several studies showing that most teachers were in the same boat when it came to stress.⁴³ Teachers and students are encouraged to reach out to co-workers and fellow students with whom they can discuss their feelings to ease their anxiety. Strauss shares the above view that students should be encouraged to connect with others, their teachers, other trusted adults, or counsellors to talk about their anxiety.⁴⁴ Schools must be patient with teachers and students regarding online or hybrid learning, as patience is the key to reducing anxiety.⁴⁵

³⁵ Daniel Macher et al., "Statistics Anxiety, Trait Anxiety, Learning Behavior, and Academic Performance," *European Journal of Psychology of Education* 27, no. 4 (December 16, 2012): 483–98, <https://doi.org/10.1007/s10212-011-0090-5>; Analyn S. Clarin and Esther L. Baluyos, "Challenges Encountered in the Implementation of Online Distance Learning," *EduLine: Journal of Education and Learning Innovation* 2, no. 1 (February 8, 2022): 33–46, <https://doi.org/10.35877/454RI.eduline591>; Fezile Ozdamli and Damla Karagozlu, "Online Education during the Pandemic: A Systematic Literature Review," *International Journal of Emerging Technologies in Learning (IJET)* 17, no. 16 (2022): 167–93; Gladys G Amerson, *Nurse Educators: The Relationship Between Online Proctoring During COVID-19 and Technostress, Age, and Years of Experience Using Computer Technology* (The University of Alabama, 2023).

³⁶ Dennis Kira, Fassil Nebebe, and Raafat George Saadé, "The Persistence of Anxiety Experienced by New Generation in Online Learning," in *Informing Science+ IT Education Conferences: La Verne California* (SITE 2018:, 2018), 079–088, <https://doi.org/10.28945/4040>; Abdullah Al-Bargi, "Exploring Online Writing Assessment amid Covid-19: Challenges and Opportunities from Teachers' Perspectives," *Arab World English Journal (AWEJ) 2nd Special Issue on Covid 19* (2022); Viriyaporn Tapsuri and Titiworada Polyiem, "Factors Affecting Preadolescence Student Online Learning Anxiety during the COVID-19 Pandemic," *Journal of Educational Issues* 8, no. 2 (2022): 732–40; Sukardi Weda et al., "Anxiety and Associated Factors with Online Learning in the COVID-19 Pandemic among the EFL Students at Higher Institution in Indonesia," *International Journal of Scientific and Management Research* 5, no. 02 (2022): 223–35; Ence Surahman and Tzu-Hua Wang, "Academic Dishonesty and Trustworthy Assessment in Online Learning: A Systematic Literature Review," *Journal of Computer Assisted Learning* 38, no. 6 (2022): 1535–53.

³⁷ Strauss, "A Trauma-Informed Approach to Teaching through Coronavirus—for Students Everywhere, Online or Not."

³⁸ Saadé et al., "Anxiety & Performance in Online Learning."

³⁹ Johnson and Albano, *Anxiety, Excitement Builds for More Online Education*.

⁴⁰ Strauss, "A Trauma-Informed Approach to Teaching through Coronavirus—for Students Everywhere, Online or Not."

⁴¹ Hilliard et al., "Students' Experiences of Anxiety in an Assessed, Online, Collaborative Project."

⁴² Jill Eulberg, "Follow These Steps to Ease Student Anxiety in Your Classroom," WGU, September 13, 2018, <https://www.wgu.edu/blog/follow-these-steps-ease-student-anxiety-your-classroom1809.html>.

⁴³ Eulberg, "Follow These Steps to Ease Student Anxiety in Your Classroom."

⁴⁴ Strauss, "A Trauma-Informed Approach to Teaching through Coronavirus—for Students Everywhere, Online or Not."

⁴⁵ Aloysius Rukundo and David Ayebare Santson, "COVID-19 Anxiety and Associated Factors among Finalist Undergraduate Science Teachers," *Interdisciplinary Journal of Social Studies* 1 (2021): 37–46; Alice Peace Tuyizere, "COVID 19 Pandemic And Lockdown: Examining The Challenges And Opportunities Of Online Teaching Of Religious Education In Institutions Of Higher Education In Uganda," *Interdisciplinary Journal of Virtual Learning in Medical Sciences* 11, no. 2 (2021): 1–3; Kobusingye and Luswata, "The COVID-19-Related Schools' Closure and the Ugandan Teacher: Exploring the Psychological and Non-Psychological Threats and Opportunities."

METHODOLOGY

The study used a qualitative approach to explore how lecturers and students dealt with deepened online anxiety. This approach allows researchers to gain a deep and rich understanding of the phenomenon under investigation. Anxiety involves emotional, psychological, mental, and perceptual experiences that can best be captured using a qualitative approach. It is difficult to quantify feelings and emotions, which is why qualitative research is necessary. Therefore, using a qualitative approach helped researchers unearth and discover the complexities of how lecturers and students at under-resourced rural universities dealt with the deepening online anxiety during the COVID-19 pandemic, which could have been overlooked if researchers had used another approach. The study findings are confined to one South African university and one Ugandan University that participated. However, the results of our study can be transferred and generalised to situations of a comparable nature.

A case study was adopted to investigate the phenomenon at two selected South African and Ugandan universities. A case study design allows a researcher to focus on a small-scale study primarily for rigour and an in-depth understanding of online anxiety experienced by lecturers and students.

The population for this study was drawn from lecturers and students from one university in South Africa and one in Uganda, and it targeted only the faculties of education. The two universities, two faculties, and the participants were all selected through purposive sampling. The purposive sampling technique was preferred for this study because it targets participants with rich information that provides researchers with the relevant data they seek. Five lecturers and thirty students per university were purposively selected. Thus, the study used a total of ten lecturers and sixty students, which equalled seventy participants. For a case study design, this number of seventy might seem small, but it is adequate to gather credible results. Patton argues that there are no strict rules regarding sample size in qualitative research.⁴⁶

The paper adopted in-depth interviews and focus group discussions as the main data collection methods. In-depth interviews were used to solicit data from lecturers. Focus group discussions were also used to collect data, basically from the students. Students were grouped into three groups per faculty per university to discuss their anxiety and how they dealt with online anxiety. The researchers gave the groups ample time to discuss their feelings and how the anxiety could be handled. Consent was sought for audio recording participant responses. This allowed the researchers to probe further to gain deep insights.

Data were thematically analysed. Starting with content analysis, the researchers sought to draw themes that organised and made sense of the data gathered. Responses were classified based on meaning. Participants' verbatim quotations were used without alteration, and thick descriptions were used to guard against bias and confusion.

Ethical Considerations

The researchers observed the expected norms of academic research since human participants were data sources. The researchers explained to the participants the importance of ethics in research. The researchers further clarified the purpose of the study to the participants before the consent forms were signed. Two consent forms were signed by all the participants: a consent form to participate voluntarily in the study and another consent form to be audio-recorded. Permission was also sought from the two faculties of education of each university participating in the study.

PRESENTATION OF FINDINGS

The themes that emerged from the findings related to the purpose of the study were identified. These themes are discussed below and illustrated using quotations from the interview text and focus group discussions. Codes were used to represent the universities and participants for anonymity. The quotations are presented verbatim.

⁴⁶ M.Q. Patton, *Qualitative Research and Evaluation Methods*, 3rd ed. (Thousand Oaks, CA: Sage Publications, 2002).

Coping Strategies Suggested by Participants

Having a Community of Practice

The interviews revealed the importance and pivotal role of the community of practice among lecturers and students, who may search for companionship and peer support. Many lecturers, such as LSA4, LSA3, LU2, LU3, and others, concurred on the importance of forming groups that helped to relieve anxiety as a shared ordeal. Members of the group could talk about their fears and challenges and provide solutions to the common problems encountered, as **LU3** asserted:

I found refuge in being in touch with my fellow lecturers. What I had perceived as a unique challenge to only me, and what almost culminated in panic attacks, things I had only read about from my educational psychology lecture preparations, had now become reality during online teaching. Through being in touch with my colleagues, the issues that almost sent me to tears became things to laugh and giggle about. I now value keeping in touch with those with whom I do the same job. This practice has been helpful in other challenges, too.

LSA4 thus mentioned:

Engaging with other colleagues in the department and different faculties, discussing topics of interest, working practices, and talking about our feelings that affect teaching and learning created a sense of companionship and aspiration.

The data collected through focus group discussions also pointed out the issue of forming support groups that helped students cope with online learning anxiety. A student from FGSA3 stated:

Online learning amid the COVID-19 pandemic drove me crazy; I was not thinking straight, confused, and very much afraid of my tomorrow. However, the social group we formed as students sustained me this far. Sometimes, we could make a group WhatsApp call or arrange to meet in an open space where we could maintain social distance and other COVID-19 regulations to talk and laugh out loud.

Another **FGU3** student also asserted,

I learned about group counselling and group therapy in the PSE 3201 course on Guidance and Counselling. Little did I know that as a common challenge among novice online learners, I would need this technique to deal with anxiety and other related psychological problems that emanated from online learning. We formed a WhatsApp group, and it became our community. This group and its shared challenges made us feel that a shared problem is a problem solved.

This also indicated that lecturers and students must talk about their feelings to ease anxiety. It enabled members to participate in coordinated meetings to discuss topics of interest and share working practices and resources in more innovative and collaborative ways. However, there were emerging submissions that lay beyond the community of practice as a coping strategy, including physical exercises, health care services, collaboration with support staff and students, and training, as discussed below.

Activities that involve physical activity and relaxation

Participants in the interviews and focus groups indicated that they used physical exercise and relaxation as strategies to reduce anxiety. Exercises such as walking, playing soccer, rugby, golf, and tennis were mentioned as strategies that helped students with anxiety manage their negative emotions. Some students joined sports clubs, which improved their overall happiness and positivity. Physical activity can help students reduce negative psychological effects on their bodies and moods, lessen mental challenges, and improve their overall health. Other participants addressed their anxiety by reading literature on mental health and anxiety to learn how to manage their symptoms. For relaxation, some participants may read books and publications. These views were raised by an **FGSA1 student** who said:

With this anxiety affecting our studies, we sometimes advocate for physical activities and relaxation, which include going out to sports clubs to get involved in sporting activities such as soccer, rugby, and tennis. However, the university does not have good facilities, and we urge the university authorities to improve such facilities.

This was also echoed by an **FGU2** student who added a unique dimension to the location of these physical exercises as remedies for anxiety:

Please note that this anxiety was at its highest peak during lockdown, and so my siblings and I could not go outside the home. Exercising outside our apartment block meant mixing with our neighbours, which would put us in more danger of contracting COVID-19. So, I exercised by doing sit-ups in my bedroom. In whatever way, this helped me to find relief in the rate at which I felt anxious before I could embark on my next online lecture. These exercises were done between lectures.

From the above, there is a need for physical activities that lead to a reduction of anxiety; universities lack such facilities. The use of physical activities and relaxation was also echoed by lecturer **LSA1**, who said:

The anxiety of setting up authentic online assessments, posting online, lecturing online, online navigation, and having fairer direct interaction makes me more devastated and frightened. To this end, sometimes I feel like I need physical exercise, like going to the gym or doing any sporting activity, to reduce the emotions that go with this online teaching and learning.

An almost similar sentiment emerged from an **LU1** lecturer who asserted,

It was frustrating for me to have very limited physical contact with my students; some guidelines for them were unclear due to this challenge. The pressure of trying out online pedagogical strategies made me anxious, and usually, when I develop anxiety about new stuff, I indulge in physical stretches. So I used to run about in my compound to sweat it off, and this gave me some relief until the next online lecture.

The utilisation of mental healthcare services

The use of mental healthcare services was echoed by both the students and lecturers and mainly emanated from **LSA4** in the following statement:

Institutions hired workers who specialised in psychology and counselling to provide efficient mental health services to students and lecturers. The strategy helped both students and lecturers to learn effective anxiety-reduction techniques.

LU5 also shared similar sentiments:

Our university provides psychological services. At one point, I needed the services urgently due to the trauma I was experiencing with the newly adopted learning and teaching approach. COVID-19 had adversely affected my teaching as I couldn't cope; I had lost three of my family members within a short period, and every time I had a cough, headache, or any disorder, my mind thought of COVID-19, and I couldn't concentrate. This was devastating, I tell you.

Expressing the same sentiments as above, a student from **FGSA2** went further to state that:

The mental health professionals were always available to meet with us students and lecturers on campus and, most importantly, provided a trusted and secure environment that enhanced our self-confidence when seeking treatment.

This same sentiment emerged in **FGU1** when one student asserted:

The university hospital, which has a counselling unit, was open about the availability of therapeutic services for both staff and students. Although I know some went for these services

to ease tension and other psychological services related to COVID-19, I am not sure if these challenges were confined to online teaching and learning. We all feared hospital settings because of the fear of infection and re-infection. But I know a colleague who accessed these services for the same reasons, and she asserted that she thinks she would have lost her mind if she had not done so.

A sensitive issue was expressed by an **FGSA2** student who talked about students and lecturers living with disabilities and comorbidities. Therefore, she indicated:

My heart went out to students with disabilities. As a member of the Students' Representative Council (SRC), I have interacted with some students living with disabilities and learnt that psychological services were provided. It was a relief to hear that. Students and lecturers with different impairments should be given a socialized environment to help them feel less isolated and fearful.

From all these sentiments, it can be deduced that psychological services should not be downplayed. They assist students and lecturers in adjusting to challenges and managing social integration and emotional well-being by calming down their emotions, temper, and fears.

Strengthening relationships between faculty members, support staff, and students

The importance of communication between these organisations in reducing student anxiety was highlighted in the responses to the interviews. Two focus groups, **FGSA3** and **FGU1**, identified the need for faculty and support staff to inquire if students needed help understanding the modules, completing assessments, academic writing or writing reports. The two groups mentioned the need for academics to ensure students grasped the subject by planning the activities connected to the curriculum. In this regard, a student from **FGU1** indicated that:

For example, when teaching a language, our professor encouraged group work in class to encourage students to participate in conversation to improve their speaking skills and relationships with their peers, which helped them feel less anxious. Additionally, online video games improved student communication, confidence, and anxiety.

This response indicates that students were encouraged to adopt the learning strategies that they enjoyed; thus, collaborative work helped reduce their anxiety. On the other hand, the data collected through interviews also showed that lecturers needed support to cope with the work pressures worsened by the COVID-19 pandemic and were given that support. Some lecturers indicated that just hearing words like 'you are doing well' eased their tension and acted as an assurance that all was well.

LSA4 had this to say:

Even if I was not doing very well and if the little I was doing was appreciated, it would encourage me in those challenging times; all that I wanted to hear were sweet melodies of words in my ears.

LU1 also expressed that:

All I wanted at that time was maximum support from the support staff and the management. How we relate to each other to serve our students mattered to me.

The students and lecturers agreed that communication and interpersonal interaction among different stakeholders were important factors in dealing with anxiety. This could imply that people were tired of hearing negative news daily and were, therefore, longing to hear something positive. This sentiment was not present in the interviews and FGDs among the Ugandan respondents.

Frequent training of lecturers and students on online learning and teaching

The lack of frequent refresher workshops and training of both lecturers and students emerged from the interviews that were done with the lecturers and focus groups as another cause of anxiety among lecturers and students; hence the need to have frequent training on the use of the learning management systems (LMS) by both students and lecturers. **FGSA1**'s views were that the frequent training of lecturers and students proved to be a better way of dealing with anxiety, especially with online teaching and learning. This sentiment was highlighted by an

FGSA1 student during the focus group discussions when she explained that:

We felt that the provision of frequent training in the use of LMS for both students and lecturers helped in dealing with anxiety in teaching and learning, as this helped in easy navigation, uploading material, and writing assessments online. However, this must be supported by continued connectivity, which is sometimes disrupted because of inadequate data being provided by the university. Some of us, as students, come from backgrounds/schools that never exposed us to technology; hence, we asked for more training to fully empower us and ease our tension. The problem was that we were grappling with online learning, which was strange to us, and then the content, because there were many modules.

The above strategy was also found to be common among most of the lecturers who were interviewed, as **stated by LU5**:

I used to dislike using LMS, which created much anxiety when this became more mandatory because of COVID-19; my greatest concern was especially around the setting of authentic assessments, posting online, online navigation, and how to make learning and teaching engaging and exciting. The frequent training on using LMS and the 360-degree availability of e-learning specialists helped greatly in this regard. Now, I can say I am more comfortable than before using LMS.

LSA3's views were similar to **LU5**, who stated that:

I have never been trained in using LMS, as I joined the university at the beginning of the year, and my induction did not include this. I am still unable to use the LMS for learning and teaching. I have resorted to using things like emails and WhatsApp for my teaching and learning, as the department in which I am working has not provided me with the required training, although I made several requests that fell on deaf ears. To me, this has created fear, frustration, and devastation.

LU4 said in affirmation:

I am lucky that I had enrolled and graduated from the University of Cape Town the previous year with a postgraduate Diploma in Educational Technology. That course was a lifesaver when the emergence of COVID-19 dictated that we teach using technology. I have enough knowledge of using different educational technology tools and their respective affordances, and I encourage all lecturers to ensure they acquire such skills. Even after COVID, I still enjoy teaching online, and such training should be extended to students, too. I was privileged to study in South Africa.

It can be seen from the above that there was a need for both students and lecturers to receive training in the use of LMS and online pedagogy, as the untrained felt strained and full of anxiety, which led to improper performance of their responsibilities as lecturers and students.

DISCUSSION

The main strategies for dealing with anxiety that emerged from the study included having physical activities and relaxation, using communities of practice, using mental health facilities, and strengthening relationships among faculty members and student and staff support.

Theme 1: Having a Community of Practice (CoP)

The study found that coming together and forming support groups as students and lecturers helped alleviate anxiety about online teaching and learning. This shows that humans thrive in community, socialising, sharing problems, and collaborative problem-solving. There is an adage that says, '*a problem shared is a problem solved*'. According to the findings of this study, this is exactly what the CoPs did for both students and lecturers. The implication of forming such practices was that teaching and learning were enhanced because students and lecturers were helping each other and solving online problems together. Psychologically, it helps one to feel good knowing that s/he is not the only one who does not know how to navigate online systems. This viewpoint corroborates the findings of Eulberg, who established that teachers and students could seek companionship and aspiration, talk about their feelings, and alleviate anxiety.⁴⁷ Regarding having COPs as a strategy for coping with anxiety, the results of the study show a generally positive inclination to the sharing of common practices, as it shows the need to engage with other colleagues, the formation of support groups, discussion of topics of interest, and even to talk and laugh, as expressed by participants in the study. Using COPs allowed lecturers and students to share their experiences, challenges, and ways of dealing with anxiety.

Theme 2: Strategies that involve physical activity and relaxation

The study findings revealed that relaxation and sporting activities could be used as one form of strategy in dealing with anxiety. Online anxiety, fatigue, exhaustion, and fear were common in students and lecturers who participated in this study. Therefore, this study suggests that relaxation and sporting activities matter more to students and lecturers during such times as pandemics than before the pandemic outbreak that pushed some universities to transition to 100% online teaching and learning. Lecturers and students were expected to use e-learning platforms, but did not appreciate the need for change. Despite living in the twenty-first century, characterised by the wonders of technology and teaching techno-savvy students, some universities moved slowly and failed to keep pace with technology. This could be attributed to the fact that the universities that participated in the study had inadequate information and technology infrastructure, as historically disadvantaged universities. This aligns with Songca et al.'s findings that historically disadvantaged universities did not have adequate resources to transition online.⁴⁸ Therefore, the students and lecturers who participated in this current study felt significant anxiety, forced to turn to sports activities to relax their minds and ease tension. This is in line with what Baloran established, who purports that 22.45 % of the participants indicated the use of relaxation, sporting activities, and music as a strategy to reduce online teaching and learning anxiety among lecturers and students.⁴⁹ The need to participate in physical activities and relaxation can be deduced from the results of this study, as the participants indicated that joining sports clubs helped to improve their overall happiness and positivism, reducing negative psychological health effects and lessening mental health challenges. However, it is important to note that the absence of suitable sporting facilities at some institutions of higher learning still poses a threat to this strategy. The restrictions on sporting facilities in some jurisdictions, including South Africa and Uganda, also worsened this. The lack of sporting activities resulted in increased anxiety and boredom.

Theme 3: The use of mental healthcare services

The existing literature indicates that psychological or health services must be taken seriously and made available or accessible to both students and lecturers. Literature also attests that the modern way of life is marked by stress, and some people do not cope with the pressures. The study participants revealed that they were traumatised due to the COVID-19 pandemic and the abrupt transition to online learning and teaching. People were afraid of the uncertainty surrounding their future. The implication is that

⁴⁷ Eulberg, "Follow These Steps to Ease Student Anxiety in Your Classroom."

⁴⁸ Songca, Ndebele, and Mbodila, "Mitigating the Implications of COVID-19 on the Academic Project at Walter Sisulu University in South Africa: A Proposed Framework for Emergency Remote Teaching and Learning."

⁴⁹ Erick T. Baloran, "Knowledge, Attitudes, Anxiety, and Coping Strategies of Students during COVID-19 Pandemic.," in *Loss and Trauma in the COVID-19 Era* (Routledge, 2024), 134-141.

fear of the unknown disorganises some people and can affect their ability to think straight, resulting in them losing concentration and focus. This can lead to some mental and physical health complications that would require the attention of a psychologist or counsellor. This is seen as one of the mechanisms or strategies for dealing with anxiety and hence the call by study participants to make psychological services accessible to them. This confirms Keshvardoost, Bahaadinbeigy, and Fateli's findings in China.⁵⁰ Keshvardoost et al. postulate that the role of telehealth services has been revealed as an ideal coping strategy recently during the outbreak of the COVID-19 pandemic across the globe.⁵¹ Many students and lecturers who suffered from anxiety had to opt for mental health care services. Lecturers in the study supported this when they mentioned the need for workers specialising in psychology and counselling to provide efficient health care to students and lecturers.

Theme 4: Strengthening relationships between faculty members, support staff, and students

Related to the issue of having COPs, the findings revealed that strengthening relationships between faculty, support staff, and students through enhanced communication can reduce anxiety considerably. The results of the focus groups alluded to this and were echoed by the lecturers who participated in the study. The focus groups highlighted the need for faculty members and lecturers to enquire if students required assistance in comprehending the modules, completing assessments, or writing reports. The study also showed that students should be given time to brainstorm, write down their ideas and create their mind maps online, choosing to work individually or collaborate in small groups, keeping in mind that each student's learning journey will be unique; therefore, students should have the freedom to choose the level of collaboration that will allow them to be most successful. Next, students should complete a formative peer review in pairs or small groups, explaining their mind map, comparing interpretations, exploring the concepts employed, establishing explicit or implicit connections, and finding or suggesting improvements to each other's work.

Theme 5: Frequent training of lecturers and students on online learning and teaching

The increased use of technology in online learning and teaching before and during COVID-19 has brought about anxiety through technophobia.⁵² Strauss alludes to lecturers who worry about setting authentic assessments, posting online, and online navigation, as well as how to make learning and teaching more engaging and exciting.⁵³ From the results of the study, these issues were highlighted by the participants, and hence, some of the interviewees pointed out the need for lecturers and students to have frequent training on online learning and teaching and the use of online pedagogy. The anxiety described here is corroborated by Baloran's study, which found that 22.45% of the participants found online classes and modules challenging. This included navigating the Learning Management System, uploading the learning material, and the online courses.⁵⁴

This lack of training impacts the quality of teaching and learning, ultimately affecting students' academic and job performance as they might lack the 21st-century skills required by the job market. With the teachers, the challenges may come from the inability to effectively align educational technologies with desired learning outcomes in each learning environment. The need for training is supported by Coronado, who states that providing thorough training for educators is essential to ensure that they are prepared and feel confident with the ease of use and usefulness of each adopted technology before using it for students' learning in their classrooms.⁵⁵ Thus, "For success in school, work, and life,

⁵⁰ Sareh Keshvardoost, Kambiz Bahaadinbeigy, and Farhad Fatehi, "Role of Telehealth in the Management of COVID-19: Lessons Learned from Previous SARS, MERS, and Ebola Outbreaks," *Telemedicine and E-Health* 26, no. 7 (July 1, 2020): 850–52, <https://doi.org/10.1089/tmj.2020.0105>.

⁵¹ Keshvardoost, Bahaadinbeigy, and Fatehi, "Role of Telehealth in the Management of COVID-19: Lessons Learned from Previous SARS, MERS, and Ebola Outbreaks."

⁵² Saadé et al., "Anxiety & Performance in Online Learning"; Khululwa and Newlin, "Technophobia: Understanding Computer Anxiety for Teaching and Learning of Computer Studies."

⁵³ Strauss, "A Trauma-Informed Approach to Teaching through Coronavirus—for Students Everywhere, Online or Not."

⁵⁴ Baloran, "Knowledge, Attitudes, Anxiety, and Coping Strategies of Students during COVID-19 Pandemic. ."

⁵⁵ Samuel Coronado, *Technology Adoption and Connectivism* (Press Books, 2018).

people must be able to use creativity to adapt, and generate new ideas, theories, products, and knowledge.”⁵⁶

RECOMMENDATIONS

Deepened anxiety experienced during online teaching and learning in South African and Ugandan rural universities underscores the urgent need for effective mitigation strategies to support both lecturers and students. In these contexts, limited access to resources such as stable internet connectivity, digital devices, and conducive learning environments exacerbates feelings of anxiety and isolation. To address these challenges, targeted interventions must be implemented. Universities should prioritise providing reliable internet connectivity and access to appropriate digital devices, especially in remote areas. Mental health support services should be readily accessible, offering counselling, mindfulness exercises, and peer support groups to help alleviate anxiety. Incorporating flexible learning approaches that accommodate individual circumstances and reduce academic workload can also mitigate stress levels. Finally, fostering community and belonging through regular communication, feedback mechanisms, and collaborative activities can help build resilience and promote well-being among educators and students.

Against this backdrop, the following recommendations are proposed at both policy and practical levels to foster a more inclusive and equitable educational experience in South African and Ugandan rural universities.

Policy Recommendations

1. **Institutional Mental Health Policy:** Rural universities should embed mental health provisions into institutional policy, ensuring structured access to counselling, peer support, and stress management programmes tailored to online learning contexts.
2. **Formalisation of CoP:** Communities of practice should be recognised as official institutional support mechanisms, with clear mandates, funding, and integration into governance frameworks.
3. **Digital Access Equity:** National and institutional policies must prioritise affordable internet, subsidised devices, and infrastructure development to reduce digital exclusion in rural higher education.
4. **Regional Collaboration:** South African and Ugandan higher education authorities should establish cross-country platforms to share best practices, co-develop rural-focused mental health strategies, and harmonise digital learning policies.

Practical Recommendations

1. **Capacity Development for Lecturers:** Provide structured training in digital pedagogy, resilience-building, and stress management to reduce anxiety during online transitions.
2. **Strengthening Peer Support Systems:** Expand mentoring and collaborative teaching models within CoP to normalise shared coping strategies and reduce isolation.
3. **Accessible Counselling Services:** Implement tele-counselling and peer-led initiatives adapted to rural contexts, ensuring both lecturers and students can access timely support.
4. **Flexible Learning Modalities:** Introduce blended approaches such as offline materials, radio, and community-based learning hubs to mitigate connectivity challenges.
5. **Continuous Monitoring and Feedback:** Establish structured feedback loops between students, lecturers, and administrators to identify stress triggers and adapt interventions dynamically.

⁵⁶ C21 Canada, *Shifting Minds: A 21st Century Vision of Public Education for Canada*, 2012, 10.

CONCLUSION

The study results show that lecturers and students have adopted different strategies to alleviate anxiety during these trying times. The rushed transition to an online delivery mode of teaching and learning created much anxiety for lecturers and students. The study concludes that physical sporting activities, communities of practice, use of mental health care services, strengthening relationships between students and university staff, and frequent training of lecturers and students on online learning and teaching can greatly reduce anxiety among lecturers and students. Lecturers need more training in teaching and learning with technology. Lecturers should enrol in short online courses in teaching with technology, which will help them to upgrade their skills.

The study concludes that a community-of-practice system is important to mitigate anxiety during online teaching and learning in rural universities in South Africa and Uganda. Through the exploration of peer support networks, mentorship programs, and community engagement initiatives, valuable insights have been gained on their efficacy in alleviating anxiety, promoting mental health and well-being, and improving academic resilience among lecturers and students. The findings highlight the significance of fostering social connectedness, providing emotional support, and facilitating academic adaptation in under-resourced educational contexts. By recognizing the pivotal role of the community-of-practice system, policymakers and lecturers can develop targeted interventions to better support the mental health and academic success of individuals in rural higher education settings. This study stresses the need for collaborative efforts and actions to build resilient communities and promote inclusive, equitable, and sustainable approaches to online teaching and learning in the face of adversity.

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