

RESEARCH

Open Access



Lived experiences of vulnerable social work students during the COVID-19 pandemic engaged in emergency remote learning in Johannesburg

Rito Maluleke¹ and Roshini Pillay^{1*}

*Correspondence:

Roshini Pillay
roshini.pillay@wits.ac.za

¹The University of the
Witwatersrand, Johannesburg,
South Africa

Abstract

While the COVID-19 pandemic had a profound impact worldwide, it created challenges for a group of South African higher education students who relied on bursaries to fund their studies. This article highlights the experiences of these students, especially the difficulties they faced in adapting to emergency remote online learning during lockdown. Confronted with various new stressors, students were compelled to develop coping strategies to navigate this “new normal”. This article presents findings from a qualitative study conducted post-pandemic. Data were gathered from two focus groups, consisting of nine third- and fourth-year social work students funded by the National Student Financial Aid Scheme (NSFAS) and other bursaries. The study considered the lived experiences of these students from low socioeconomic backgrounds, examining the obstacles they encountered and the strategies they employed to manage these challenges. The theoretical framework used was the ecological system theory. Thematic content analysis was used to interpret the data. The findings indicate that participants had both positive and negative experiences with online learning; however, students from economically disadvantaged backgrounds faced challenges, such as a lack of access to the technological resources necessary for engaging in online learning, including computers, laptops, or data. The data collected provides valuable insights into how these students learned during this period. The results of the study have the potential to influence policymaking and can be utilised to plan for future disasters.

Keywords COVID-19, Experience, NSFAS, Online learning

1 Introduction

The COVID-19 pandemic impacted students worldwide, affecting them socially, economically, emotionally, and academically, with the most vulnerable students from poorer backgrounds bearing the brunt. In South Africa, structural challenges such as poverty, food insecurity, and gender-based violence became more pronounced. For students from low-income backgrounds, managing the lockdown posed unique difficulties



© The Author(s) 2025. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

as campuses closed and all learning shifted online on 18 March 2020 [1]. The key challenge of online learning stems from the readiness of contact educational institutions across South Africa to transition to emergency remote online learning (EROL) [2]. Factors that shaped the perspectives and experiences of students regarding EROL included differences in infrastructure at individuals' homes, the ability of individuals to work independently, access to devices, and internet connectivity. Despite these challenges, some participants found learning from home to be a pleasant experience, as they were emotionally supported by their families during a period of global stress.

The University of the Witwatersrand (Wits) implemented various measures to support students during online learning. These initiatives included lending devices to facilitate online engagement, providing data packages, and granting free access to Wits sites for the duration of the pandemic. Some students who lived on campus benefited from 24-hour Wi-Fi access, dedicated study spaces, and no responsibilities related to food preparation, allowing them to focus more on their studies. Although this study took place three years after the pandemic, when most higher education institutions had reopened, the education ecosystem continues to recover and adapt to post-pandemic challenges. This paper focuses on some of the advantages of online learning, as well as the economic and gender inequality challenges faced by university students when engaging in online learning, and the mental and emotional challenges encountered.

2 Literature review

The shift to online learning was essential for enabling students to continue their academic work throughout the COVID-19 pandemic while helping to limit the spread of the virus [3]. Students were required to actively participate, collaborate, and interact with university lecturers through online learning platforms, utilising technological resources such as computers and smartphones [4]. However, online learning presented numerous disadvantages and could be considered an ineffective learning method for many students due to the challenges it brought. Beyond ongoing technical issues, students experienced reduced interaction with lecturers, which significantly impacted their academic performance. This review considers the economic realities in South Africa and examines why this sample of students was regarded as a vulnerable population.

2.1 Economic inequality

The World Bank (2018) identified South Africa as a country with extreme inequality and high unemployment [5]. Since the African National Congress (ANC) came into power, significant strides have been made in providing essential services such as water, health-care, and electricity [6]. However, inequalities remain deeply entrenched. In August 2021, amid the COVID-19 pandemic, South Africa recorded an unemployment rate of 34.4%, setting a new high. The participants in this study were primarily recipients of the National Student Financial Aid Scheme (NSFAS), a programme that assists academically qualified students from disadvantaged backgrounds to access higher education after completing high school.

2.2 Vulnerable populations

A vulnerable population refers to a group of individuals at a disadvantage or at risk due to an inherent quality or social status they hold [7]. In this study, the term “vulnerable

population” specifically refers to a group of nine students from resource-scarce backgrounds who relied on NSFAS and other bursaries for financial support. These students shared their experiences and perceptions of online learning, revealing a range of knowledge and attitudes toward the challenges and opportunities it presented.

2.3 Knowledge, attitudes and coping mechanisms

The pandemic presented enormous mental health challenges, such as worry and uncertainty. Students had to adapt to new coping strategies to manage the anxiety associated with online learning. Some students experienced a loss of security, while others faced a loss of routine [8]. Different students had varying experiences and perceptions regarding online learning. Some research indicates that more students held a positive attitude and had favourable experiences with online learning, particularly those who possessed knowledge and experience with computers and technology [9]. Conversely, students with a negative attitude towards online learning often lacked knowledge and ICT skills, which made them resistant to changes in their learning environment. They also feared adapting to new technology and were concerned about exposing their ignorance. Various factors affected the experiences of vulnerable populations during the COVID-19 pandemic.

Other mental health challenges were that some students experienced post-COVID conditions, which include symptoms such as sleep problems, depression, anxiety, and difficulty thinking or concentrating [10]. The social isolation and distance may affect students’ participation during lectures or classes due to the long period of online learning. The impact of the pandemic has affected students, and now, post-pandemic, more resources are needed to combat pandemic-related stress, adapt instructional plans, enact safety measures, and compensate for the lack of in-person schooling [11].

Some students report ongoing anxiety and post-traumatic stress disorder (PTSD) resulting from the pandemic’s impact [10], which may negatively affect their academic performance. This lingering stress can lead to a decline in motivation and school engagement, impacting academic success. Research indicates that the pivot to online learning may result in increased stress levels, especially for students from economically disadvantaged backgrounds [12]. In the post-pandemic context, students are less likely to face renewed lockdowns due to the development of effective COVID-19 treatments.

2.4 The impact of socio-economic factors on students

The socio-economic status was a determining factor for students’ access to stable Wi-Fi and the resources needed to engage in their academic work. Therefore, the pandemic had a more detrimental impact on students from low socio-economic backgrounds than on those from high socio-economic backgrounds. Online learning may have worked for students from high socio-economic backgrounds, who had stable internet connections and secure housing, but those from low socio-economic backgrounds are more likely to continue struggling emotionally and academically due to the pandemic’s impact [13]. Thus, socio-economic background was a challenge for students and hindered some students’ ability to thrive in online learning.

2.5 Advantages of online learning

Despite the impact and challenges that students faced with online learning, there were also benefits to this mode of education. The first advantage was that it made it easier for students to access lecture content provided by their lecturers. Online learning became more beneficial as it improved the quality of some courses, allowing them to better meet students' needs and giving students the opportunity to teach themselves [14].

Additionally, online learning offered flexibility, breaking down the barriers of distance typically associated with traditional education and enabling students to learn at their own pace and in their own time [15]. Lastly, online learning allowed students to save time and money on transportation to attend lectures. Overall, online learning provided various advantages that would continue to impact students' learning even after the pandemic [16].

2.6 The value of collaboration in an online learning environment

In light of the challenges associated with online learning, collaborative learning gained increased value. The platforms used may have included discussion forums and WhatsApp groups. These platforms reduced isolation and offered students multiple perspectives on a topic [17]. When students work together, they tend to be more engaged and motivated compared to working individually [18]. Research indicates that collaborative learning fosters higher-level thinking skills, as students engage in debates, discussions, and problem-solving activities with their peers [18]. This process also enhances students' self-esteem and sense of responsibility.

2.7 The value of revision in enhancing learning in an online environment

Revision plays a crucial role in learning, as it fosters independence and allows students to review their academic work at their own pace and in their preferred way [19]. Online learning enhances the effectiveness of revision by enabling students to revisit topics covered in lectures, which supports memory retention and reinforces learning [20]. Through revision, students are able to consolidate knowledge into their long-term memory, allowing them to recall information long after completing their studies [20].

2.8 Challenges of online learning

Despite the various advantages of learning and teaching with technology, there were many challenges, as will be explained next.

2.8.1 Technical challenges

Considering that the students come from different backgrounds, their experiences with online learning and perceptions regarding it were diverse. Students from poor socio-economic backgrounds faced more challenges with online learning, as it required access to technological devices and the internet to engage with lecture content and interact with their peers and lecturers regarding their academic work [21]. Online learning was particularly difficult for them, as they and their parents could not afford the laptops, computers, or smartphones needed to attend the synchronous lectures conducted during the day. In contrast, students from middle and high socio-economic backgrounds encountered fewer challenges with access to online learning, as they could easily afford the necessary technological devices and data for their academic work [21].

A study was conducted at the University of Pretoria as part of the Scholarship of Teaching and Learning research project to determine whether South Africa's higher education system was equipped for online education. The findings indicated that students reported challenges with online learning due to national infrastructure issues, including load-shedding, lack of preparedness, and insufficient access to technological resources [6].

Online learning involves technical problems; many students are not very familiar with it, which delays feedback and interaction between them and their lecturers. The technical issues include computers not turning on, slow internet connections, Windows update problems, laptops freezing or becoming slow during lectures, load-shedding, devices crashing during lectures, limited data during the day, and students being unable to attend live or synchronous lessons [4].

These challenges create feelings of frustration among students, affect their performance, and influence their perceptions and experiences regarding online learning. Some university students received technological devices, such as laptops, from their universities, which helped them access online lectures, while others received these devices late, making it very challenging for them to progress with their academic work during the COVID-19 pandemic [22].

2.8.2 Distractions at home

One of the challenges of online learning in the student's environment was the presence of distractions at home, which interfered with their attention during online classes or lectures. Students attended these lectures in their home environments, where some faced overcrowding and background noise created by parents or siblings [23]. Such disturbances distracted students, as their parents or siblings would often engage them in conversation or innocently ask questions. Students could manage these distractions by becoming more organised, planning their assignments, and avoiding procrastination.

2.8.3 Gender disparities in the distribution of household chores

During the COVID-19 pandemic, girls took on a larger share of household chores, including cooking, cleaning, and tidying [24]. This placed them at a disadvantage, as these responsibilities took up time that could have been used for online learning and academic work. The additional workload reduced their opportunity to attend online lectures and complete assignments, ultimately giving boys an advantage, as they were often not expected to perform the same household duties [25].

2.8.4 Support strategies at wits university during the COVID-19 pandemic

The university offered various types of supports to students to enable the pivot to online teaching and learning. These supports included the provision laptops and 30 gigabytes (30GB) which included 10GB anytime data and 20GB night data for the students which was for different networks [26]. Faculty members developed various online educational content and provided training to students on how to access these resources. Additionally, the university provided telephonic advising, mentoring and online counselling services through the University's Counselling and Career Development Unit (CCDU).

3 Theoretical framework: ecological systems theory

The theoretical framework underpinning this study is the ecological systems theory, developed by Urie Bronfenbrenner in 1979 [27]. This theory emphasises the influence of an individual's surroundings or environmental context on their behaviours [23] and provides a framework for examining participants' relationships within their community and the broader society. The researcher used this theory to gain insight into the environmental systems that influence students' perceptions and experiences of online learning during the COVID-19 outbreak. The theory encompasses six interconnected systems: the microsystem, mesosystem, macrosystem, technosystem, exosystem, and chronosystem [27].

3.1 Microsystem

The *microsystem* is the environment closest to an individual [27]. In this study, it includes the students' university and place of residence. This system provides insight into how students' immediate environments, such as their campus or home, influence their experiences and perceptions of online learning.

3.2 Mesosystem

The *mesosystem* encompasses interactions between an individual's microsystems [29]. In this study, it includes the support students receive from their parents, such as allowing them time and space to attend online lectures without interruptions, which may positively impact their perception and experience of online learning during the COVID-19 outbreak. Additionally, the mesosystem includes Information and Communication Technology (ICT) tools, such as laptops, computers, and smartphones.

3.3 Macrosystem

The *macrosystem* involves a collection of people who usually share common values and beliefs [27]. It encompasses the larger culture as a whole. In the research study under discussion, this system includes the socioeconomic backgrounds of the students, the Wits student community, and load-shedding. These factors play a significant role in the research, as they impact students' access to online learning resources, such as laptops or computers, and their attendance of online lectures.

3.4 Techno-subsystem

The *techno-subsystem* is a subsystem of the ecological systems theory. It is a system where the interactions between humans and non-humans intersect [30]. The techno-subsystem functions as a microsystem in which direct interactions with technology occur [30]. In this research study, the techno-subsystem encompasses the technological resources that students use for online learning, such as computers, laptops, and internet data. It also includes the technical issues that students encounter while engaging in online learning, such as load-shedding, Windows updates, and computers not turning on during lectures.

3.5 Exosystem

The *exosystem* is a system that does not actively involve an individual but can have an impact on them [29]. In this research study, the exosystem includes the students'

household income or their guardians' employment. If a student's household income is high, they may be able to purchase technological resources and devices. Conversely, if their household income is low, it could hinder their access to these necessary resources for attending online lectures. This, in turn, may influence the students' experiences and perceptions of online learning during the outbreak of COVID-19. The final system is the chronosystem.

3.6 Chronosystem

The *chronosystem* involves the environmental events that occur over time [27]. In the research study, this system referred to the COVID-19 pandemic, which began in March 2020 in South Africa and resulted in students transitioning from face-to-face lectures to online learning. The pandemic itself can also influence students' perceptions and experiences regarding online learning (see Fig. 1).

4 Methods

The study utilised a qualitative research approach to explore students' perceptions of online learning, employing a case study design to examine the experiences of social work students. The population included all social work students at Wits, from which a purposive sample of nine third- and fourth-year students funded by NSFAS and other bursaries was selected. The inclusion criteria encompassed students actively engaged in online

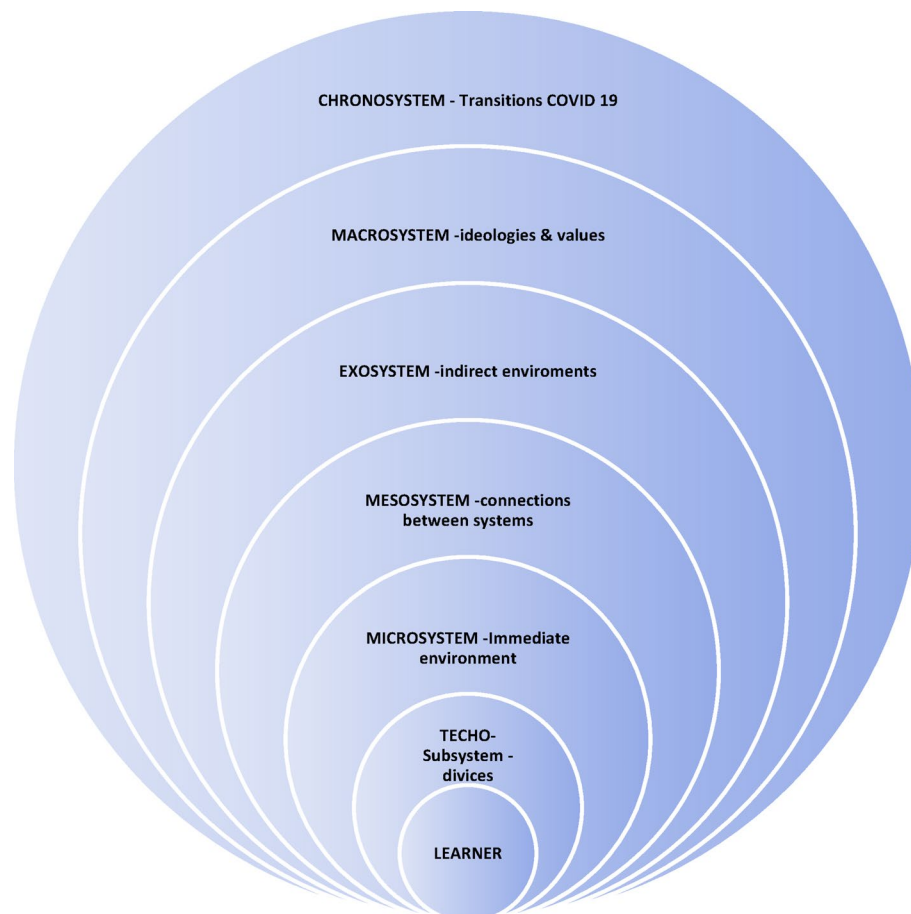


Fig. 1 The Ecological Systems Theory-Own drawing adapted from Bronfenbrenner ecological system theory [31]

Table 1 Demographic profile of participants (N=9)

Demographic factor	Sub-category	No.
Ages	18–20	5
	21–22	4
Gender	Female	9
Sponsor	NSFAS	7
	Bursary	2

learning, both male and female, enrolled at Wits, and between the ages of 18 and 23. Purposive sampling was advantageous as it allowed the researcher to select participants aligned with the study's objectives, ensuring that each provided unique and valuable insights [32]. Data were collected through a focus group schedule, with two face-to-face focus groups conducted post-lockdown. The first focus group comprised five students and the other four students.

One of the advantages of a focus group is that it allows the researcher to gather information from different people simultaneously, and it does is cost effective [33]. Another advantage of focus groups is that they enable the researcher to gather richly detailed data and allow for follow-up questions if further clarification is needed from the participants [33]. Focus groups facilitate the provision of information more quickly than if participants were providing information individually. They enable the researcher to collect more detailed data, making it easier to gather insights and feedback from the participants [34]. Some limitations include recall bias as the data was collected after COVID 19 and students returned to face to face teaching. In addition all participants were female however certain professions such as social work have more females than males students [37].

All participants were made aware of the research through a participant information sheet and signed a consent form to be part of the research and to have the focus group audio recorded. Participants were made aware that the transcripts can be used for a publication later. Data were analysed using thematic analysis, which involves identifying, analysing, and interpreting patterns of meaning in the collected data [28]. The study was unconditionally approved by the University of the Witwatersrand Non-medical ethics committee, Protocol Number SW22/08/15 on 14 September 2022. Pseudonyms were used in this report to protect the identity of the participants.

5 Findings

This section presents the study's findings, covering benefits of online learning and challenges of online learning (see Table 1).

5.1 Benefits of online learning

5.1.1 Family support

One advantage of online learning was that students could receive full emotional and social support from their families while engaging in their academic work, regardless of their location. During the focus group discussions, one participant, Lisa, shared her experience:

“For me, no, for me, like I actually enjoyed the fact that I could be home, like spend time with the family but also be able to do like my school. I think that also is kind of like an

encouragement, having like a good support system. Even when you got that you that with your family and relatives around, you could be fully supported" (Lisa).

Lisa's experience highlights the benefit of family support as one of the key advantages of online learning. Being at home allowed students to engage in academic work while receiving support from their families during the pandemic.

5.1.2 Collaborative online learning in online forums

Another advantage of online learning was that it made it easier for students to participate and engage in lecture discussions and content, as they could use technological devices to attend lectures. Online learning did not require students to be physically present to engage in their academic work with lecturers and classmates, which reduced social anxiety for students who experienced it. One research participant, Thabang, reported, *"Because I am socially awkward, and I didn't feel like I could participate in the class discussions and to be able to ask questions to the lectures, but with online learning, I could, which helped to improve academic performance"*.

Another quote is this one by James so expressed a *"Because I rarely ask questions in class normally I ask them privately and the tutor would give responses"*.

These quotes demonstrate how online learning was beneficial for some students who experienced social anxiety, as it allowed them to feel more comfortable interacting and engaging in lecture discussions remotely.

5.1.3 Allows for students to revise and revisit lecture content efficiently

Another advantage of students using online learning was that it made it easier for them to revise their academic work, as they could access their lecture content or discussions anytime and from anywhere. Another student participant, Tshembho, who took part in the focus group discussion, reported:

"Yes, it does have its advantages, cause like when let's say you are watching a lecture video and you have the opportunity to rewind; it actually allows you to do that, and that would be very advantageous, the fact that you can actually rewind it".

This option of revision in your own time was also made by Paul who aid, *"it [online learning] had its advantages in terms of like if you had to revise they would have uploaded the videos."* These quotes from research participant Tshembo and Paul illustrates how online learning allows students to revisit lecture content by watching recorded lectures and reviewing the material.

5.2 Challenges of online learning

5.2.1 Lack of self-discipline/regulation

The first challenge students reported with online learning was a lack of self-discipline and self-regulation. Participants noted that the comfort of home made it difficult to attend lectures on time, as it was easy to lose focus and motivation in a home environment [28]. During the focus group discussions, one participant, Pethu, shared:

"But I feel like another challenge is also not being forced to attend classes, which would have like if you like for example, if you're not forced to attend class at last, and you would have fallen back on your school work because, yeah, and if you're not keeping a record of, you know".

Thato had a similar experience, *“like you, like when you’re in bed I can’t work cause now, I just want to sleep for no reason. And I just, I just, the home environment makes me very lazy”*. The research participants also indicated that online learning was challenging for them as they struggled with self-regulation. The students noted that they found it difficult to regulate themselves, unlike in face-to-face learning, where they were able to stay motivated to complete their academic work, attend lectures, and meet assessment deadlines. Marry, who was also a participant in the focus group discussion, reported, *“Okay, so I think the provision of data was okay. But the problem is on some mobile networks, like Telkom, the data doesn’t work. It only works after midnight and starts at 7pm; that is the problem”*.

5.2.2 Power outages and load-shedding

Online learning presented additional challenges related to students’ structural external environments, notably load-shedding. This issue affected students across various social backgrounds, often disrupting their online classes and impeding their academic progress. Khanyi, a participant in the research study, shared during a focus group discussion with other students that

“Load-shedding was a problem that would actually make it difficult for efficient use of online learning. And then you get surprise load-shedding, you know, and you’re like, well, that’s the next day. And then literally happens and someone steal their cable, and you don’t have one”.

The above quote illustrates how some university students faced challenges due to load-shedding, which varied depending on their home environment. Many students experienced power outages in their hometowns during scheduled lecture times, making it difficult to attend online classes throughout the COVID-19 pandemic.

5.2.3 Difficulty listening and concentrating in online lectures

Some of the research participants indicated that online learning was challenging for them during the COVID-19 pandemic. One disadvantage experienced by the participants was their difficulty in listening and concentrating during online lectures, as they attended these sessions from different social environments during the pandemic. Tshepang, one of the participants in the focus group discussion, reported that

“I like, I think I like the whole, like being in class thing, you know, like, because I knew that, okay, at this time I’m supposed to be in class and then after I leave class, but then I wake up like five minutes before the lecture starts and I’m asleep. I’m not even, I feel like I didn’t even learn anything cause I was, like, half the time, not even listening to what they’re saying”.

This quote by Tshepang demonstrates how some students may have found online learning challenging, as they struggled to pay attention to lectures while managing their academic work from the comfort of their homes.

5.2.4 Technical challenges

To provide a supportive learning environment where students can interact effectively with lecturers and other students, technological resources such as access to a computer

or other associated devices and internet connectivity are required [30]. However, a significant challenge that students from lower socioeconomic backgrounds must overcome to engage in online learning is the absence of the necessary resources to access the internet and computers [35]. Online learning requires university students to use technological devices and data to engage with and access course materials. Students from economically disadvantaged backgrounds often struggle with internet access and experience glitches when using online platforms for their academic work. Some students find it challenging to afford data due to its high cost. Phindile, a participant in the focus group discussion, reported, *“So for us who live in rural places or locations, it’s not really easy to have like Wi-Fi or like fibre[high speed internet], like stuff like that. So we had to depend on data, which was very expensive for online learning”*. This demonstrates how students from poor backgrounds struggle to obtain funds for data and attend lectures for their academic work.

In response, the institution provided essential resources, including laptops and other technological devices, which proved helpful to students. Additionally, e-counselling was offered through the CCDU to support students’ mental and psychological well-being during the shift from in-person to online learning. However, some participants indicated they were unaware of the CCDU services available at Wits, and those who were aware often found access insufficient. The CCDU website frequently became overwhelmed with high traffic, limiting its effectiveness. Queen, one of the student participants in the research study, also reported that

“I think wasn’t it enough at the time because there are a lot of people actually visiting the site, even stopping. I used to go to the site; I’ve just got to go and leave it because I find it pointless. I need help now and then. I can’t actually reach them; the time I lose them, by then, I’m fine. So you can point this in the way”

The excerpt illustrates that while some students were aware of the e-counselling services, others encountered difficulties accessing them due to the high demand, which limited timely support for those seeking help during that period.

“So even if like you do have Wi-Fi and then for some reason it just glitches in the middle of class, and then like it’s like when like when you’re in classes and then the Wi-Fi glitches, and then you only heard one word from an entire paragraph, you don’t even know what they saying”

Technical challenges are linked to the techno-subsystem of the ecological systems theory. This system involves technical challenges such as network signals, internet connectivity, and Windows updates that students encounter when engaging in online learning.

5.2.5 Distractions at home

Some participants reported that a significant challenge they faced with online learning was the constant distractions within their home environments. They noted that these distractions often led to procrastination with their academic work. One participant Allen stated that

I think online learning did mess up my time management skills. Okay. Because I procrastinate and I think to the last minute submission to the last one, you know, and that had its consequences it sort of cause, you know, sometimes I don’t normally

like I have difficulty asking for help with the submissions and all of that. I want someone to actually show me how things are working.

This quote shows how students would experience a challenge in time management because they would get distracted in their home environments during online learning. Additionally, they mentioned the difficulty of managing their time and balancing social and academic responsibilities. One participant, Kate, shared that

"It [learning] does have difference; I hated online learning because like I'm at home and every two minutes my mom is calling me. Yeah. Yeah, so it's kind of like the home environment for me isn't very conducive to study because I'm at home and as soon as I get tired of studying, okay, let me go chat, chat to my mom and I got distracted and then it's just then I'm no longer, I no longer have the energy".

This quote demonstrates how online learning created difficulties for some students in finding a conducive space to fully concentrate on their academic work. Many student participants reported that their home environments were not suitable for focused study.

5.2.6 Gender inequality regarding household chores

During the COVID-19 pandemic, as students engaged in online learning, an aspect of gender inequality particularly affected female students. Some participants were required by their parents or guardians to complete household chores before attending to their academic work or participating in online learning [40, 41]. One female participant in the focus group discussion reported,

"Well, for me, I felt demotivated uh in that sense of when we are at home; no one is, is, is doing schoolwork. All they do is go to work or maybe like do house chores and all of that. But when we are in the, well when I'm in the school environment, I'm able to be, well, other students might motivate me in a way to study" (Nkateko).

6 Discussion

The findings of the study demonstrates that online learning has both advantages and disadvantages. One of the benefits of online learning was family support. This advantage connects to the mesosystem in the ecological systems theory, which focuses on the interactions between various microsystems that directly influence individuals [24]. Family support aligns with the mesosystem, as it includes the student's immediate environment – family, peers, teachers, school, place of worship, and neighbourhood – that provides crucial support to students. Another advantage of online learning was collaborative online learning in online forums. This advantage of online learning links to the technosubsystem of ecological systems theory [27], which focuses on the intersection of human and non-human interactions and the interconnection between students and technology. The last advantage of online learning was that it allowed for students to revise and revisit lecture content efficiently. This repetition enhances academic performance by enabling students to engage more deeply and effectively with the content. This approach made it easier for students to understand what was being taught at their respective institutions during lecture lessons [28]. By listening to and repeating the lectures, students were able to improve their academic performance. One of the challenges of online learning was the

student's lack of discipline or regulation. Wits provided university students with 10 GB of data during the day and 20 GB at night, depending on the networks they were using [26]. For some students, online learning was therefore challenging, and they held a negative perception of it because they could not attend online lectures when their mobile networks, for which the institution had provided data, did not work during the day. This disadvantage of internet connectivity issues in online learning relates to the techno-subsystem within ecological systems theory. The techno-subsystem encompasses the use of technology for human interaction [27]. Internet connectivity issues fall under this subsystem, as students encounter these challenges when relying on technological resources for online learning and academic tasks. Another challenge of online learning was power outages and load shedding. This finding aligns with the exosystem in Ecological Systems Theory, which, while not directly influencing students, can still impact them [27]. The exosystem represents the second outermost layer, encompassing broader settings that indirectly affect individuals by influencing the microsystems they are part of. Some students faced the challenge of load-shedding during their scheduled online lecture times throughout the pandemic. The other challenge with online learning was difficulty listening or concentrating during online lectures. Online learning requires students to focus on the screens of computers or laptops for extended periods, which can be difficult for some, as they easily get distracted by their surroundings or engage with other social media platforms while attending online lectures [36]. Technical challenges were also another challenge of online learning. Technical challenges were experienced by students during online learning, as some students' laptops would experience glitches and would not work optimally due to low bandwidth during online lectures. Others faced load-shedding, causing their laptops to restart mid-lecture, which disrupted their learning which is similar to exiting literature within the South African context [38, 39]. Another challenge of online learning was distractions from home. This challenge of home distractions connects to the microsystem of ecological systems theory. The microsystem comprises the student's immediate environment, including interactions with peers, teachers, and family members, which directly impact their daily experiences [27]. The last challenge of online learning in the study were gender inequality regarding household chores. Other South African research conducted suggests that most male students were not required to do any household chores by their parents or guardians. This situation adversely affected female students, as they often had to attend online lectures late or miss them altogether due to completing household chores beforehand [41].

7 Implications for future disasters and research

It is suggested that to mitigate for future challenges universities should design accessible hybrid teaching and learning artefacts. Plans should be put in place to address the needs of students from resource scarce backgrounds to ensure they have an equitable opportunity to achieve academic success. Moreover, bursary funders need to consider the inclusion of funds for devices and resources needed by recipients. Future research may focus on different cohorts of students in different academic spaces and can use different research methods.

8 Limitations

Limitations include a small sample with participants from only one gender and from one higher education institution. In addition recall bias may have influenced the comments of the participants. Findings from this study offer insights into how the institution might incorporate flexible teaching and learning models in the future so that students can adopt to enhance academic performance during times of crisis. As online learning becomes a regular aspect of higher education, students with key personal attributes, such as self-regulation and self-efficacy, tend to report more positive experiences.

9 Conclusion

This research study provided an opportunity to examine students' perceptions and experiences with online learning during the COVID-19 pandemic. The shift from face-to-face learning enabled an exploration of new approaches to academic engagement. This study specifically explored the experiences of social work students, revealing a mix of positive and negative perceptions, though negative experiences were more prevalent.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1007/s44282-025-00285-3>.

Supplementary Material 1.

Supplementary Material 2.

Acknowledgements

We appreciate the anonymous reviewers' valuable comments and suggestions for improving the quality of this manuscript.

Author contributions

RM: Conceptualization, Writing- Original research, Methodology, Validation, DataRP: Conceptualization, Supervision.RP: writing of the article RM some assistance in the initial draft.

Funding

No Funding was received.

Data availability

The datasets generated during and/or analysed during the current study are available from the author on reasonable request.

Declarations

Ethics approval and consent to participate

The study received unconditional ethical clearance by the University of Witwatersrand Non-Medical Committee South Africa. The ethical clearance Protocol Number is SW22/08/15. All methods were carried out in accordance with relevant guidelines and regulations. Informed consent was obtained from all individual participants included in the study.

Consent for publication

All authors have read and approved the final manuscript and provided informed consent to publish this article in the journal.

Competing interests

The authors declare no competing interests.

Received: 29 May 2025 / Accepted: 13 October 2025

Published online: 01 November 2025

References

1. Jansen J, Madhi SA. How to do social distancing in a shack: COVID-19 in the South African context. *S Afr J Sci*. 2022;118(5–6):1–3. <https://doi.org/10.17159/sajs.2022/13989>.
2. Perumal N, Pillay R, Zimba ZF, Sithole M, Van der Westhuizen M, Khosa P, et al. Autoethnographic view of South African social work educators during the COVID-19: Highlighting social (in)justice. *SWMW*. 2021;57(4):393. <https://doi.org/10.15270/57-4-964>.

3. Ali W. Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *High Educ Stud.* 2020;10(3):16–25. <https://doi.org/10.5539/hes.v10n3p16>.
4. Dhawan S. Online learning: A panacea in the time of COVID-19 crisis. *J Educ Technol Syst.* 2020;49(1):5–22. <https://doi.org/10.1177/0047239520934018>.
5. World Bank. (2018). Overcoming Poverty And Inequality in South Africa. An Assessment of Drivers, Constraints and Opportunities <https://documents1.worldbank.org/curated/en/530481521735906534/pdf/124521-REV-OUO-South-Africa-Povert-y-and-Inequality-Assessment-Report-2018-FINAL-WEB.pdf>
6. Knoetze JJ. Online theological education within the South African context. *HvTst.* 2022;78(1). <https://doi.org/10.1080/01587919.2023.2198484>.
7. Mossey JM, Haozous EA. Vulnerable populations: disparate pain care. In: Christo PJ, Gallagher RM, Katzman JG, Williams KA, editors. *Pain management in vulnerable populations*. New York, NY: Oxford University Press; 2024. pp. 231–40. <https://doi.org/10.1093/med/9780197649176.003.0014>.
8. Getenet S, Cantle R, Redmond P, Albion P. Students' digital technology attitude, literacy and self-efficacy and their effect on online learning engagement. *Int J Educ Technol High Educ.* 2024;21(1):3. <https://doi.org/10.1186/s41239-023-00437-y>.
9. Baloran ET. Knowledge, attitudes, anxiety, and coping strategies of students during COVID-19 pandemic. In: Harvey JH, editor. *Loss and trauma in the COVID-19 era*. New York, NY: Routledge; 2024. pp. 134–41. <https://doi.org/10.1080/15325024.2020.1769300>.
10. Staley K, Randle E, Donaldson A, Seal E, Burnett D, Thorn L, et al. Returning to sport after a COVID-19 shutdown: Understanding the challenges facing community sport clubs. *MSLJournal.* 2024;29:107–27. <https://doi.org/10.1080/23750472.2021.1991440>.
11. Sahli S, Størdal K. Systematic review of socioeconomic factors and COVID-19 in children and adolescents. *Acta Paediatr.* 2024;113(3):384–93. <https://doi.org/10.1111/apa.17091>.
12. Catalano A, Torff T, Anderson K. Transitioning to online learning during the COVID-19 pandemic: differences in access and participation among students in disadvantaged school districts. *Int J Inf Educ Technol.* 2021;38:258–70. <https://doi.org/10.1108/IJILT-06-2020-0111>.
13. Fung CY, Su SJ, Perry EJ, Garcia MB. Development of a socioeconomic inclusive assessment framework for online learning in higher education. In: Garcia M, editor. *Socioeconomic inclusion during an era of online education*. IGI Global; 2022. pp. 23–46. <https://doi.org/10.4018/978-1-6684-4364-4.ch002>
14. Rueda MM, Cerero JF, Cerero DF, Meneses EL. Perspectives on online learning: advantages and challenges in higher education. *Contemp Educ Technol.* 2024;16:ep525. <https://doi.org/10.30935/cedtech/15011>.
15. Castro MDB, Tumibay GM. A literature review: efficacy of online learning courses for higher education institution using meta-analysis. *Educ Inf Technol.* 2021;26:1367–85. <https://doi.org/10.1007/s10639-019-10027-z>.
16. Zaki MS. Advantages and disadvantages of online learning. *J Int Social Res.* 2022;15(92). <https://doi.org/10.17719/jisr.2022.7516>.
17. Khunou G. Transformation reflections on opportunities and challenges in a context of 4IR developments and Post-Covid-19. Transforming higher education scholarship: after Covid-19 and in the context of the 4th industrial revolution. G. Khunou. Johannesburg; 2024. pp. 1–10. <https://doi.org/10.36615/9781776490073-01>
18. O'Donnell AM, Hmelo-Silver CE. Introduction: what is collaborative learning? An overview. In: O'Donnell A, Chan C, Hmelo-Silver CE, Chinn C, editors. *The international handbook of collaborative learning*. New York and London: Taylor and Francis; 2013. pp. 1–15. <https://doi.org/10.4324/9780203837290>.
19. Weldon A, Ma WWK, Ho IMK, Li E. Online learning during a global pandemic: perceived benefits and issues in higher education. *Knowl Manage E-Learning.* 2021;13(2):161–81. <https://doi.org/10.34105/jkml.2021.13.009>.
20. Saeed MA, Ghazali K. Modelling peer revision among EFL learners in an online learning community. *e-FLT.* 2016;13(2):275–92. <https://e-flt.nus.edu.sg/wp-content/uploads/docroot/v13n22016/saeed.pdf>.
21. Adnan M, Anwar K. Online learning amid the COVID-19 pandemic: students' perspectives. *JPSp.* 2020;2(1):45–51. <https://e-flt.nus.edu.sg/wp-content/uploads/docroot/v13n22016/saeed.pdf>.
22. Fincher ME. Navigating the new normal: strategic higher education leadership in the post-Covid shutdown world. In: Miller MT, Gearhart GD, editors. *Handbook of research on the changing role of college and university leadership*. IGI Global; 2021. pp. 120–33. <https://doi.org/10.4018/978-1-7998-6560-5.ch008>.
23. Blasiman RN, Larabee D, Fabry D. Distracted students: A comparison of multiple types of distractions on learning in online lectures. *JoSoTL.* 2018;4(4):222. <https://doi.org/10.1037/stl0000122>.
24. Wang Z, Li J, Wu D. Mind the gap: gender disparity in online learning platform interactions. *M&SOM.* 2023;25:2122–41. <https://doi.org/10.1287/msom.2022.0426>.
25. Pillay A, et al. African female university students' experiences of online education at home during the COVID-19 pandemic. *J Educ (University KwaZulu-Natal).* 2021;8431–47. <https://doi.org/10.17159/2520-9868/i84a02>.
26. University of the Witwatersrand. (2020). Wits switches to remote online teaching and learning from 20 April 2020. 2020, April 14.
27. Gee E. Ecological systems theory in media research. In: Roskos-Ewoldsen DR, van den Bulck J, editors. *The international encyclopaedia of media psychology*. John Wiley & Sons, Incorporated; 2020. pp. 1–5.
28. Creswell J. The use of mixing procedure of mixed methods in health services research. *Med Care.* 2013;51(8):e51–57.
29. Darling N. Ecological systems theory: the person in the center of the circles. *RHD.* 2007;4(3–4):203–17. <https://doi.org/10.1080/15427600701663023>.
30. Samsudin MA. Digital learning landscape in Malaysia during the COVID-19 pandemic: the perspective of ecological Techno-Subsystem theory. *JICE.* 2021;24(2):131–51. [file:///C:/Users/a0017954/Downloads/JICE_24-2_131%20\(1\).pdf](file:///C:/Users/a0017954/Downloads/JICE_24-2_131%20(1).pdf).
31. Senk C. Why does this have to be so hard? Perinatal experiences from an Ecological Systems Approach. Antioch University. 2024. <https://www.proquest.com/docview/3055279952?pq-origsite=gscholar&fromopenview=true&sourcetype=Dissertations%20&%20Theses#>.
32. Neuman WL. *Social research methods: qualitative and quantitative approaches*. 7th ed. Pearson Education Limited; 2014.
33. Burns AC, Veeck A. *Marketing research*. Pearson Education; 2020.
34. Webb C, Kevern J. Focus groups as a research method: a critique of some aspects of their use in nursing research. *J Adv Nurs.* 2001;33(6):798–805. <https://doi.org/10.1046/j.1365-2648.2001.01720.x>. <https://onlinelibrary.wiley.com/doi/pdf/>.

35. Akpinar E. The effect of online learning on tertiary level students mental health during the COVID-19 Lockdown, 2021. <https://doi.org/10.15405/ejsbs.288>
36. Yuliansyah A, Ayu M. The implementation of project-based assignment in online learning during covid-19. *J Engl Lang Teach Learn*. 2021;2(1):32–8. <https://publikasi.teknokrat.ac.id/index.php/jeltl>.
37. Khunou G et al. (2012). Social work is women's work: an analysis of student's perceptions of gender as a career choice determinant. *Social Work Practitioner-Researcher* 24(1). <https://tinyurl.com/36dfhyw3>
38. Zimba ZF, Khosa P, Pillay R. Using blended learning in South African social work education to facilitate student engagement. *J Soc Work Educ*. 2021;40(2):263–78. <https://doi.org/10.1080/02615479.2020.1746261>
39. Czerniewicz L, Agherdien N, Badenhorst J, Belluigi D, Chambers T, Chili M, De Villiers M, Felix A, Gachago D, Gokhale C, Ivala E, Kramm N, Madiba M, Mistri G, Mqgqwashu E, Pallitt N, Prinsloo P, Solomon K, Strydom S, Wissing G. A Wake-Up call: Equity, inequality and Covid-19 emergency remote teaching and learning. *Post-digital Sci Educ*. 2020;2(3):946–67. <https://doi.org/10.1007/s42438-020-00187-4>.
40. Bora GSGS. Challenges of online learning: digital inequality in the context of India. *PalArch's J Archaeol Egypt/Egyptol*. 2021;18:4234–9.
41. Parry BR, Gordon E. The shadow pandemic: inequitable gendered impacts of COVID-19 in South Africa. *Gend Work Organ*. 2021;28(2):795–806. <https://doi.org/10.1111/gwao.12565>.

Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.