Check for updates

Online learning experiences of female students living with albinism amidst a global pandemic: evidence from South Africa and Zimbabwe

Alfred H. Makura[1]* and Davison Zireva[2]

[1]Department of Postgraduate Studies, Faculty of Humanities, Central University of Technology, Bloemfontein, South Africa, [2]Theory of Education Department, Morgenster College of Education, University of Zimbabwe, Masvingo, Zimbabwe

Our paper explores the online learning experiences of two female students living with albinism in South Africa and Zimbabwe during the COVID-19 era. Using a two-case qualitative research design, we conducted in-depth face to face interviews with the purposefully selected sample. The intention was to bring to the fore, the unique online experiences of female students living with albinism. Data were thematically analyzed. Literature suggests that the unique health and physiological characteristics of students living with albinism tend to present unique but surmountable challenges. Our study established that the gender and physiology of the students tended to complicate or enhance their desire to benefit from online learning during the COVID-19 era. The findings make a case for academic inclusion in universities' academic projects. Institutions May consider instituting pedagogically inclusive online learning mechanisms that are not only gender sensitive, but are in sync with, not only the COVID-19 realities, but similar calamities.

KEYWORDS

female student, albinism, COVID-19, online learning, qualitative

1 Introduction

The global COVID-19 pandemic has exposed some hitherto unknown and underlining social ills in many sectors globally. The tertiary education sector has not been spared either. Many higher education institutions adopted the online learning modes not only to mitigate the deleterious impact of the global pandemic, but to ensure that students continue receiving some semblance of education. The online platforms, while hailed as a natural alternative to face-to-face pedagogical interactions and panacea to education access, have exposed some unintended though exclusionary practices. Some of the well-intentioned strategies have not been fully revealed. Students living with albinism or disabilities alike, like any other students within the higher education sector experience plethora challenges since the adoption of the online learning regime.

Thus, the COVID-19 pandemic has disrupted the lives of people worldwide. While the virus has affected everyone, certain communities, including those with disabilities, have been disproportionately affected. Female learners with albinism, in particular, face unique challenges that are exacerbated by the pandemic. Hence the call by the United Nations for

concerted effort to mitigate COVID-19 challenges by caring for people with disabilities (United Nations, 2020). The paper begins by outlining the general health challenges experienced by people living with albinism. Later, we explore how COVID-19 impacted on the leaning of female students with albinism. It is accepted that the COVID-19 pandemic disrupted education worldwide, with many schools and universities transitioning to remote learning (Smith, 2020). Female students with albinism, face unique challenges in accessing online education. Hence, this paper seeks to explore the online learning experiences of female students with albinism during the COVID-19 era.

2 Literature review

2.1 Conceptual framework: albino identity

Female Albino students in the African (study) context are a unique group. They possess multiple identities. They are black, though with a distinct light or pale pigmentation, blonde hair, are female, and experience unique health challenges in addition to those related to their feminine gender (esp. photophobia). Additionally, their distinct physiology is legally viewed as a disability. Trepte and Loy (2017) citing Tajfel and Turner (1979) Social identity theory posit that individuals have a propensity to categorize and associate themselves with particular groups. In our study, the two informants can be categorized as belonging to the African race, girls, females, Albinos and students' groups. Hence, the intersectionality of sex or gender, race, class, Albino identity and other variables played out in their articulation of their online experiences during the COVID-19 pandemic. In that regard, an individual displays social or personal identity, dimensions as articulated by Turner (1999) in the Self-categorization theory (SCT). The Albino girls can be viewed as social group members but can align themselves with the personal identity dimension as individuals or in their personal capacities (South African Albino girl or Zimbabwean Albino girl). Their behaviors are dictated by social and personal processes or "…a dynamic interplay of both" (Trepte and Loy, 2017, p. 1).

2.2 Albinism and education in the COVID-19 era

It is generally accepted that there is limited research specifically on the impact of COVID-19 on learners living with disabilities (Cebisa, 2021; Turk and McDermott, 2020) particularly albinism. Albinism is regarded as a rare, genetic, non-contagious skin condition due to reduced melanin pigmentation causing it to be light and most prevalent in Africa (Astle et al., 2023; Ikuomola, 2015). It is likely that these individuals have faced unique challenges during the pandemic due to a range of factors related to their condition particularly gender (Chadambuka et al., 2024; Thompson et al., 2021). Given the nature of their skin people with albinism have a higher risk of developing skin cancer due to their reduced ability to produce melanin, which provides natural protection from the sun's harmful ultraviolet rays (Hassan et al., 2022; Saka et al., 2021). Hence, they will have difficult in managing or surviving in an online learning environment. It is our contention that with COVID-19 lockdowns and restrictions, caused many individuals with albinism to have limited access to sunscreen and other protective measures, putting them at greater risk of skin damage and cancer. Moreover, female students with albinism face additional social or cultural barriers to accessing education, which could be exacerbated by the isolation of online learning. School going female/girl students May have unique concerns related to their appearance and skin health. A report by the United Nations called "COVID-19 and the rights of persons with disabilities" highlights the unique challenges faced by people with disabilities during the pandemic, including barriers to healthcare, education, and employment (United Nations, 2020). Turk and McDermott (2020), implore society to provide information on the effect of COVID-19 on people living with disabilities (especially health care needs).

In the education arena, learners with albinism face additional challenges in accessing remote or online learning resources during the pandemic, particularly if they have vision impairments (Madzivire and Mavhunga, 2021; Mzini, 2021; Smith, 2020). In addition, many learners with albinism rely on assistive technologies such as screen readers, magnifiers, or braille displays, which May not be easily accessible or affordable. Cultural norms, practices and attitudes (Kajiru and Nyimbi, 2020; Ikuomola, 2015) have presented their fair share of problems to the albinos. People with albinism and other disabilities have long faced discrimination and stigma in many parts of the world particularly Africa (Mzini, 2021; Thompson et al., 2021; Bradbury-Jones et al., 2018; Ikuomola, 2015). The COVID-19 pandemic has potentially exacerbated these issues. For example, some people have wrongly associated albinism with the spread of the virus or blamed individuals with albinism for the pandemic (Lipenga, 2022). Given the advent of the pandemic lockdown restrictions, the mental health and wellbeing of people (Makura, 2022; Holm et al., 2021) especially learners with albinism were impacted. Like any other people, some Albinos experienced isolation, discrimination, or difficulty accessing education support and resources particularly for online learning. As females or girls with albinism, the students face intersectional challenges related to gender, disability, and other aspects of their identity (Ikuomola, 2015), which could impact their online learning experiences in complex ways. African albino students also face social and emotional challenges related to the isolation and lack of social interaction that can come with online learning. Students with disabilities are often at higher risk for social isolation and loneliness. A newspaper article in Tanzania (Daily News, Dar es Salaam, 2020) details some graphic discriminatory lamentations and tribulations of people living with albinism in Tanzania. These were corroborated by Kajiru and Nyimbi (2020) Tanzanian study which revealed that girl learners particularly, were targeted by people holding weird but strong myths and superstition about albinism. The cumulative effect of these challenges is essentially a violation of the rights and liberties of people with disabilities (Brennan, 2020; Kajiru and Nyimbi, 2020; Ikuomola, 2015). Consequently, albinos struggle to form connections with their peers and instructors in an online environment. Overall, online learning has the potential to be a highly effective mode of education, but requires careful planning, preparation, and execution to ensure that learners can meet their educational goals and achieve success.

2.3 COVID-19 and online learning

Online learning, also known as e-learning, is a mode of education that involves the delivery of educational content and instruction

through digital platforms such as the internet. Online learning can take many forms, from self-paced courses to live virtual classes, and can be accessed from anywhere with an internet connection (Farrant and Keates, 2020). Online learning has become increasingly popular in recent years, and especially during the COVID-19 pandemic, as many schools and universities have shifted to remote learning (Biwer et al., 2021; Mbiydzenyuy, 2020). There are several but different modes of online learning that are commonly used in educational settings. A popular type is synchronous learning (Agyeman, 2022). This is learning that occurs in real-time, wherein learners and instructors are connected at the same time through an online platform such as a video conferencing tool. The popular tools are Zoom and Teams. This mode of learning allows for immediate feedback and interaction between learners and instructors. Academics also use asynchronous learning. In this regard, learning occurs when learners access course materials and complete coursework on their own schedule. In South Africa, the Blackboard platform is commonly used. This mode of learning allows for greater flexibility and can be particularly helpful for learners who have health challenges or other commitments or who prefer to work at their own pace particularly those living with albinism.

Blended learning is yet another learning mode. It combines both traditional classroom instruction and online learning, allowing learners to engage in both synchronous and asynchronous activities. This mode of learning is often used in hybrid or flipped classroom models. In this mode, the cellphones come in handy. Mobile learning involves the use of mobile devices such as smartphones or tablets to access course materials and complete coursework. This mode of learning allows for greater flexibility and accessibility, as learners can access course materials from anywhere with an internet connection (Adarkwah, 2021). Lastly, we have massive open online courses (MOOCs). In essence, MOOCs are online courses that are designed to be open and accessible to many learners. MOOCs often use a combination of synchronous and asynchronous learning activities and can be a cost-effective way to access high-quality educational content. The benefits of online learning include greater flexibility and accessibility, as learners can access course materials and complete coursework from anywhere and at any time, as well as cost savings, as online courses are often less expensive than traditional in-person courses (Merisi et.al. 2022).

2.4 COVID-19 and its relationship with online learning

The advent of COVID-19 resulted in online learning becoming a new normal. The pandemic presented some unique challenges and benefits for students with disabilities or conditions such as albinism. Many African countries (South Africa and Zimbabwe included) have limited infrastructure and resources to support online learning (Adarkwah, 2021; Tadesse and Muluye, 2020), and students from low-income families May not have access to devices or reliable internet connections (Agormedah et al., 2020; Kreutzer, 2009). Additionally, African albino students May require accommodations such as accessible materials or assistive technology to support their learning, which May be more difficult to provide in an online environment due to inherent poverty characterizing communities. While it is anticipated that learners need to be self-directed and motivated, or expected to effectively manage their time and stay organized, diseases

May disrupt these ideals. For example, learners May struggle with self-motivation and time management, and May miss out on the social and collaborative aspects of traditional in-person learning. Additionally, learners face technical difficulties or challenges related to access to technology or reliable internet connections (Adarkwah, 2021; Agormeda et al., 2020). Moreso, learners with visual impairments struggle to access online materials or participate in video calls. Hence the call by the Kenyan health ministry for governments to suggest ways of managing albinism (Ministry of Health, Kenya, 2021).

There is limited research specifically on the experiences of African albino students with online learning during the COVID-19 pandemic. Each mode of online learning has its own advantages and disadvantages, and educators May choose to use different modes depending on the needs and preferences of their learners. Ultimately, the most effective mode of online learning will depend on a variety of factors, including the content being taught, the goals of the learning experience, and the needs and preferences of the learners. However, based on what is known about the experiences of students with disabilities and the challenges they have faced with online learning, it is possible to research and make some generalizations about how African albino students May have been affected.

In summary, African albino students face stigma and discrimination related to their albinism (Bradbury-Jones et al., 2018; Daily News, Dar es Salaam, 2020; Kajiru and Nyimbi, 2020; Ikuomola, 2015), which May be exacerbated in an online learning environment. Such environment makes it more difficult for female Albinos to connect with peers and instructors on a personal level. Hence the need for educators and institutions to take steps to address these issues. This will ensure that African albino students are able to fully participate in online learning and receive the support they need to be successful.

Based on the forgoing, we argued that the experiences of learners with disabilities should be explored whenever there emerges a turbulent situation to the traditional practices. The observance of the COVID-19 protocols in institutions of higher learning had some influence on the learning of students who were compelled to embark on the online mode. The realities of some students, especially female students with albinism needed to be explored and shared to the academic community. Thus, the questions about plight of female students with albinism which needed answers are:

> RQ1: How virtuous was the online learning experience to female students with albinism?

> RQ2: How vicious was online learning to female students with albinism and how could the vicious experiences been mitigated (according to the perceptions of female students with albinism)?

3 Methodology

The learners' experiences and perceptions on online courses during the COVID 19 era were empirically investigated. The South African Participant or respondent was a young, 28-year-old single woman, government employee living with albinism. She was then a government sponsored part-time Postgraduate Diploma in Education student at a local university. The Zimbabwean Participant was also a 28-year-old unemployed woman then pursuing a Diploma

in Education at a local Teacher Education College on fulltime basis. Both were adjudged to be literate, and thus able to articulate issues ventilated by the study. The requisite data were generated through in-depth interviews with the two learners with albinism. The interviews were audio-recorded by the respective authors, and each lasted around 30 min. Each interview was transcribed verbatim and studied. Thus, the methodology which was employed in the empirical investigation was qualitative. The informants discoursed their experiences and perceptions on online learning during the COVID-19 pandemic era. Thus, the paradigm was phenomenological feminist. The paradigm explicates the realities about feminist practices on certain issues. The research design that was considered is the two-case study which focused on the typical cases concerned with the study. The quality of the verbal data generated was primarily influenced by the efficacy of the researchers who were the major instruments (Xu and Storr, 2012). The contractual relationship created by the researchers with the informants and the extent of probing yield data which are trustworthy (Connelly, 2016). The trustworthiness of data is influenced by the context of the research which considers the proficiency of the researcher in interacting with the informants in particular situations.

The two informants were purposively selected. They were the only exclusive cases which the researchers identified within the spatial and temporal situation of the research. The two-case sample allowed for an in-depth tapping and exploration of an often marginalized and underrepresented group. The two Albino females provided rich qualitative data that yielded unique education challenges they faced. Qualitative studies seek theoretical saturation wherein additional sample or data May not necessarily add value to existing data or conclusions. Such approaches enabled the authors to tap into the unique and unadulterated circumstances without the dilution characterizing larger samples. In qualitative research, the size of the sample is not an issue of concern, but the richness of the data generated. People with a quantitative orientation would brand such a sample to be yielding subjective information. The critiquing is not valid since in qualitative research focus is on contextual trustworthiness of information not on objectivity versus subjectivity measures. The information got from qualitative research is not generalizable but is implicated to similar situations. In keeping with Research Ethics the informants were assigned pseudonyms to camouflage their identities. They are referred to as PNR from South Africa and MTB from Zimbabwe. Moreover, the two informants consented to being interviewed. Their autonomy, regarding continued participation or withdrawing was granted. The purpose, potential impact and methods of the study were explained to them. Given that the two female Albino girls belong to a vulnerable sector of the population, particular attention was paid to assuring, and safeguarding them from potential stigma, marginalization, privacy and confidentiality. As researchers, we were alive to the challenges experienced by Albinos in accessing (online) education particularly during calamities such as COVID-19. The interviews were held in a professional, inclusive, respectful and in line with the *Ubuntu* African cultural philosophy.

The data generated were analyzed by employing the thematic approach with a focus on the Johnson-Christensen method. The experiences of the informants which were captured verbatim through audiotaping were analyzed to come up with themes whose authentication was imbedded in excerpts (Johnson and Christensen,

2019). Thus, the emic (informant's) experiences were used as evidence to generate themes which are the etic (researchers') interpretations.

4 Results

The thematic results are presented in line with the respective research questions posed in section 2.3. The questions focused on the virtues and the vicious nature of the COVID-19 experiences. The experiences of the female students living with albinism are considered under some themes. The themes show that the experiences of the learners had both promotional (virtuous) as discussed from sections 4.1 to 4.4. The militating effects are due to some inadequacies of the human and material resources are outlined below from sections 4.5 to 4.8.

4.1 Experiences of female students

Generic promotional statements about the virtuous experiences during online learning given by MTB was,

> "Almost everything was upside down and inside out. With my condition of albinism, I benefited very little. Very few aspects of online learning can be appraised."

In corroboration, PNR postulated,

> "I can say my experiences were good and they were bad as well."

4.2 Virtues of online learning

Some aspects of online learning were found to be virtuous to the female students with albinism. PNR posited,

> "The online learning gave me more time to prepare for my assignments. I had plenty of time and nobody was rushing me. During the in person classes, I could not finish my work, I wrote some work just for the sake of not leaving blank spaces. Thus, marks for online work were better than in person class work. Because of my poor eyesight, I had problems caused by the projector or the illegible script on the board. As for the online courses, there was nothing restrictive due to my eyesight."

4.3 Concealment of physical conditions

Online learning was found to be virtuous to the learners who are vulnerable to discrimination and prejudice due to physical conditions. PNR explained,

> "Regardless of my condition and gender, I got the help that I needed. If not online—normally you get a cold shoulder from people. Online learning reveals no identities—no one knows who you are. When not learning online there is discrimination."

MTB corroborated,

> "You know the face-to-face tuition has some connotations of stigmatization and discrimination especially for me with this condition. Some students and even lecturers are not comfortable to interact with me."

PNR further remarked,

> "I got the marks which I was happy with I used to get marks in the 50s."

The remarks have implications that even the lecturers succumb to discrimination of learners with albinism when they interact face-to-face with them.

4.4 Nullity of socio-cultural femininity restrictions

In some communities, interactions between adults of opposite sexes who are not related are held with suspicion. MTB explained the virtue of online learning in warding off the socio-cultural femininity restrictions,

> "Interactions with lecturers during online learning had no misconstructions of ulterior intentions. You know, in our culture the moment a female regularly interacts with a male, it is thought that there is an illicit relationship. The woman is always labelled to have behaved in a suggestive manner to lure the male. Online learning interactions are almost immune to these misconstructions."

Confirmatory remarks were given by PNR who posited,

> "During online learning, I was not affected by gender stereotypes. I am an outspoken person. I do not mind whether male or female."

4.5 Exacerbated social isolation

The in-person class is characterized by face-to-face interactions. MTB compared her experiences and postulated that:

> "I thought that Google classes were going to be my salvation in minimizing solitude. I thought I was going to interact freely with fellow students. But I was more isolated than ever before. I could not interact with any fellow students - partly due to my condition, and partly due to scarcity of requisite materials, the students who lived in my locality increased the physical distancing between us."

PNR gave confirmatory remarks,

> "Some instructions given by lecturers were not clear. If you missed something, almost everything was lost. There were no fellow students around to consult so at times I felt terribly lonely."

4.6 Inconsiderate online learning materials

The female learners with albinism thought that the materials provided by the lecturers were not sensitive to their conditions. MTB postulated,

> "Some e-learning materials were posted on the WhatsApp platform—just as ordinary WhatsApp text messages, I had torrid times to read the messages since I have a blurred vision due to my condition of albinism. The font that was used to write the text material was too small for me to read. The materials could not be enlarged. I was by and large disadvantage by very small font of the print material."

4.7 Technology inaccessibility and technological incompetence of online participants

Technological accessibility was a challenge to the female students living with albinism. MTB postulated;

> "There are also hosts of problems that were brought about by the online learning mode. The very critical one was the lack of online-learning gadgets. I could not afford the computer as well as the data bundles. At times I could borrow a computer but I met with the problem of internet connectivity. This was a formidable challenge. As for electricity it was something else—I had to rely on a very small solar panel for powering my phone. The phone battery could not even be charged to full capacity. In terms of gadgets and facilities, online learning was a nightmare."

MTB further explained,

> "The materials that were sent as document attachments were not easy to download due to very poor internet connectivity."

In corroboration PNR remarked,

> "There was the problem of lack of resources. I had to borrow a laptop."

PNR further remarked,

> "Most of the time I had the problem of data bundles for downloading the study materials. So sometimes I had to go to the library for the internet facility. I also had to go to the campus since I wanted use the disability lab and the screen reader."

The students postulated that there was technological incompetence of the lecturers to effectively facilitate online learning. MTB postulated that,

> "We were once told that we were going to be engaged in Google classes but that was a pipe dream. We paid for the Google classes but ummm—we were deceived. Even if we were going to be engaged in the Google class activities I am not sure whether I was going to cope

with the activities. I terribly lack the requisite technological competences."

PNR posited,

"I met with some technological challenges. At times I thought I had submitted the assignment when I hadn't."

In corroboration, MTB explained,

"During my initial experiences in online learning I could not attach my assignment to the e-mail so I sent a blank document."

MTB further remarked on the incompetence of lecturers in online learning technology,

"Lecturers need workshops about online learning technologies. Most of the materials were given in point form and were not clear at all. There were no explanations or illustrations. One was forced to do further research but with no requisite resources."

Corroborative remarks were posited by PRN,

"Lecturers were different. Some could not send the study materials via Yu Tube. They sent the materials via WhatsApp and we were sharing the information via WhatsApp. In some instances, the feedback on assignments was not given early."

4.8 Infrastructural limitations

The learners encountered the problem of infrastructure which is conducive to effective learning. MTB postulated,

"I had challenges of studying space. I did not have a specific room for studies. The bedroom I shared with my sibling was the one I used as a study room. There were hosts of disturbances from my sibling. Some people say that e-learning enables students to study in the comfort of their homes. That is not true for most of the students. Some homes are not conducive for studying."

From the themes above, the informants experienced both virtuous and vicious encounters during the COVID-19 pandemic. In the main, the online learning experiences were particularly challenging for the girl learners living with albinism.

5 Discussion

The COVID-19 pandemic caused significant disruptions to education around the world including South Africa and Zimbabwe. Many institutions closed (Smith, 2020) or operated on a reduced schedule and resorted to online modes (Mzini, 2021). For learners with disabilities, these disruptions May have been particularly challenging, as they are people who rely on specialized support and accommodations to access learning. Many higher education institutions which transitioned to online or remote learning during

the pandemic, were presented with significant challenges for learners with disabilities (Smith, 2020), including those with albinism. Albinism can cause a range of visual difficulties, such as reduced visual acuity, nystagmus (involuntary eye movements), and sensitivity to bright light. These difficulties can be exacerbated by prolonged screen time, making it harder for learners with albinism to participate in online learning. Online learning often requires access to technology, such as computers, tablets, or smartphones. Learners with albinism in South Africa and Zimbabwe faced technological accessibility challenges with accessing and using online technology due to difficulty with visual tasks. COVID-19 also limited their social interaction with peers. Online learning is generally a more solitary experience compared to traditional classroom learning. Hence it exacerbated feelings of isolation or exclusion for learners with albinism who May already feel marginalized due to their condition.

The other obstacle encountered by learners was the inefficacy of learning facilitation by the lecturer. According to the informants, some lecturers were not conversant with the employment of technologies that are requisites for online learning. Some learning materials given to the students by the lecturers were not user friendly to the students with albinism.

Zimbabwe and most rural areas of South Africa are under-resourced with education provisions. Learners with albinism require specialized resources, such as visual aids or adaptive technology and data to support their online learning. Access to these resources is limited in online learning environment to support learners who live in remote and urban but under-resourced contexts. Online needs learners to spend more time indoors, which could limit their exposure to natural light and reduce their production of vitamin D, an essential nutrient for bone health. While this May advantage in the interim, individuals with albinism are at increased risk of sun damage and skin cancer (Saka et al., 2021; Kajiru and Nyimbi, 2020; Ikuomola, 2015).

Online learning was not vicious in all aspects, it was found to be partly virtuous by female students with albinism. The students found out that online learning concealed their condition. Consequently they could interact with other participants in atmospheres that were devoid of stigma and discrimination. One of the students claimed that even lecturers could not succumb to prejudice since she got higher marks as compared to in person class learning situations. The proclamation is in line with Ellwood (2022) who postulated that the physically attractive female university students received lower marks when lecturers moved online during the COVID 19 pandemic. Thus, the marks of the female students were not adversely affected by the biases of the lecturers. The other virtue was that there was nullity of some socio-cultural restrictive interactions.

6 Implications and future directions

While more research is needed to understand the experiences of female students with albinism in online learning contexts, it is important for educators and policymakers to be aware of the potential challenges and work to address them. This May include providing specialized resources and accommodations, such as assistive technology or visual aids. Moreover, higher education should focus on

promoting a safe and inclusive learning environment that recognizes and values the unique perspectives and experiences of all learners, including those with albinism. Universities May provide or assist with promoting, the use of protective measures such as sunscreen and hats to reduce the risk of sun damage.

To be successful in an online learning environment, instructors must also be skilled in delivering content and instruction through digital platforms. The institutions of higher learning need to be proactive in capacitating the lecturers with the requisite skills, knowledge and attitudes for effective online learning. The learners also had some skill deficiencies in using the technologies for online learning. Thus, there was a dire need to equip the learners with the indispensable skills. Moreover, the institutions of higher learning must be able to effectively engage and support learners in virtual environments.

It is important to note that the impacts of COVID-19 on learners with albinism May vary widely depending on factors such as geography, socioeconomic status, and access to resources and support. Further research and advocacy are needed to better understand and address the challenges faced by this population during the pandemic and beyond.

7 Conclusion

The COVID-19 pandemic has highlighted and amplified the challenges faced by female learners with albinism worldwide. These challenges range from health issues to access to education and social stigma. It is crucial to recognize these challenges and take steps to address them, including providing access to medical care, resources for remote learning, and combating stigma and discrimination.

While this research has attempted to explain how female learners with albinism have been affected by online learning due to COVID-19, these contextual issues and challenges can be implicated to learners with this condition the world over. It is important, therefore, for educators and policymakers to consider the unique needs and experiences of learners with disabilities, including those with albinism, as they navigate the on-going impacts of the pandemic on education especially in Africa.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

References

Adarkwah, M. A. (2021). An outbreak of online learning in the COVID-19 outbreak in Sub-Saharan Africa: prospects and challenges. *Global J. Comp. Sci. Technol.* 21, 1–10. doi: 10.17406/GJCST

Agormedah, E. K., Adu Henaku, E., Ayite, D. M. K., and Apori Ansah, E. (2020). Online learning in higher education during COVID-19 pandemic: A case of Ghana. *J. Educ. Technol. Online Learn.* 3, 183–210. doi: 10.31681/jetol.726441

Agyeman, N. (2022). An exploration of Students' perceptions of online teaching in a developmental university in the Eastern Cape province of South Africa. *Ponte* 78. doi: 10.21506/j.ponte.2022.4.1

Astle, B., Buyco, M., Ero, I., and Reimer-Kirkham, S. (2023). Global impact of climate change on persons with albinism: a human rights issue. *J. Clim. Change Health* 9:100190. doi: 10.1016/j.joclim.2022.100190

Ethics statement

Author contributions

AM: Conceptualization, Writing – original draft, Writing – review & editing. DZ: Data curation, Formal analysis, Methodology, Writing – review & editing.

Funding

Acknowledgments

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Biwer, F., Wiradhany, W., Oude Egbrink, M., Hospers, H., Wasenitz, S., Jansen, W., et al. (2021). Changes and adaptations: How university students self-regulate their online learning during the COVID-19 pandemic. *Front. Psychol.* 12:642593. doi: 10.3389/fpsyg.2021.642593

Bradbury-Jones, C., Ogik, P., Betts, J., Taylor, J., and Lund, P. (2018). Beliefs about people with albinism in Uganda: A qualitative study using the Common-Sense Model. *PLoS One* 13:e0205774. doi: 10.1371/journal.pone.0205774

Brennan, C. S. (2020). Disability rights during the pandemic. UK: a global report on findings of the COVID-19 disability rights monitor.

Cebisa, Z. E. (2021). Student support in an open and distance electronic learning (ODeL) context: The experiences of students with disabilities in KwaZulu-Natal. *International Journal on Open and Distance e-Learning*. 7, 53–62.

Chadambuka, P., Muridzo, N. G., Hungwe, C., and Mugari, Z. E. (2024). "They do not perceive us as people": women with disabilities' access to key social services during the COVID-19 pandemic: a Zimbabwean case study. *J. Hum. Rights Soc. Work*, 9, 1–14. doi: 10.1007/s41134-024-00327-x

Connelly, L. M. (2016). Trustworthiness in qualitative research. *Medsurg Nurs*. 25, 435–436. doi: 10.4236/jbm.2018.68002

Daily News, Dar es Salaam (2020). Discriminating Albinos is communal anathema. Available at: https://www.proquest.com/newspapers/discriminating-albinos-is-communal-anathema/docview/2413679607/se-2?accountid=15731 (Accessed March 7, 2023).

Ellwood, B. (2022). Attractive female university students received lower marks when lecturers moved online Available at: https://www.psypost.org/2022/11/attractive-female-students-no-longer-earned-higher-grades-when-classes-moved-online-during-covid-19-64251 (Accessed January 11, 2023).

Farrant, B., and Keates, S. (2020). Accessible online learning during COVID-19: lessons learned. *J. Assist. Technol*. 14, 221–225.

Hassan, S., Louis, S. J., Fethiere, M., Dure, D., Rosen, J., and Morrison, B. W. (2022). The prevalence of nonmelanoma skin cancer in a population of patients with oculocutaneous albinism in Haiti. *Int. J. Dermatol*. 61, 867–871. doi: 10.1111/ijd.16199

Holm, M. E., Sainio, P., Parikka, S., and Koskinen, S. (2021). The effects of the COVID-19 pandemic on the psychosocial well-being of people with disabilities. *Disabil. Health J*. 15:101224. doi: 10.1016/j.dhjo.2021.101224

Ikuomola, A. D. (2015). Socio-cultural conception of albinism and sexuality challenges among persons with albinism (PWA) in South-West, Nigeria. *AFRREV IJAH* 4, 189–208. doi: 10.4314/ijah.v4i2.14

Johnson, B., and Christensen, L. (2019). Educational: Quantitative, Qualitative And Mixed Approaches. Los Angeles, CA: Sage.

Kajiru, I., and Nyimbi, I. (2020). The impact of myths, superstition and harmful cultural beliefs against albinism in Tanzania: a human rights perspective. *Potchefstr. Electr. Law J*. 23, 1–27. doi: 10.17159/1727-3781/2020/v23i0a8793

Kreutzer, T. (2009). Internet and online media usage on mobile phones among low-income urban youth in Cape Town. *Int. J/ Educ. Dev. Using ICT* 5, 1–21.

Lipenga, K. (2022). "Social consciousness: the rapper as an activist" in Rap music and the youth in Malawi: Reppin' the flames (Cham: Springer International Publishing), 133–159.

Madzivire, A., and Mavhunga, E. (2021). Experiences of visually impaired students during COVID-19 lockdown period: Implications for distance learning in Zimbabwe. *J. Technol. Sci. Educ*. 11, 53–68.

Makura, A. H. (2022). COVID-19 impact on teaching and learning, security, peace and development: implications for African higher education. *Ponte Multidiscip. J. Sci. Res.* 78, 74–82. doi: 10.5281/zenodo.6950567

Mbiydzenyuy, N. E. (2020). Teaching and learning in resource-limited settings in the face of the COVID-19 pandemic. *J. Educ. Technol. Online Learn*. 3, 211–223. doi: 10.31681/jetol.732077

Merisi, P. O., Emekako, R., Legg-Jack, D. W., and Bechuke, A. (2022). Pre-service teachers' perceived usefulness of the asynchronous teaching practice in the covid-19 era. *Ponte Acad. J.* 78:127–142. doi: 10.21506/j.ponte.2022.1.8

Ministry of Health, Kenya. (2021). Guidelines for management of albinism in the context of COVID-19. Available at: https://www.health.go.ke/wp-content/uploads/2021/02/Guidelines-for-Management-of-Albinism-in-the-Context-of-COVID-19.pdf

Mzini, L. (2021). COVID-19 pandemic planning and preparedness for institutions serving people living with disabilities in South Africa: an opportunity for continued service and food security. *J. Intell. Disab. Diagn. Treat*. 9, 11–20. doi: 10.6000/2292-2598.2021.09.01.2

Saka, B., Akakpo, S. A., Teclessou, J. N., Gnossike, P., Adam, S., Mahamadou, G., et al. (2021). Skin cancers in people with albinism in Togo in 2019: results of two rounds of national mobile skin care clinics. *BMC Cancer* 21, 1–5. doi: 10.1186/s12885-020-07747-8

Smith, C. (2020). Challenges and opportunities for teaching students with disabilities during the COVID-19 pandemic. *Int. J. Multidiscip. Perspect. Higher Educ*. 5, 167–173. doi: 10.32674/jimphe.v5i1.2619

Tadesse, S., and Muluye, W. (2020). The impact of COVID-19 pandemic on education system in developing countries: a review. *Open J. Soc. Sci*. 8, 159–170. doi: 10.4236/jss.2020.810011

Thompson, S., Chuba-Uzo, S., Rohwerder, B., Shaw, J., and Wickenden, M. (2021). "This pandemic brought a lot of sadness": people with disabilities' experiences of the COVID-19 pandemic in Nigeria. Brighton: Institute of Development Studies.

Trepte, S., and Loy, L. S. (2017). Social identity theory and self-categorization theory. *Int. Encycl. Media Effects*, 1–13. doi: 10.1002/9781118783764.wbieme0088

Turk, M. A., and McDermott, S. (2020). The COVID-19 pandemic and people with disability. *Disabil. Health J*. 13:100944. doi: 10.1016/j.dhjo.2020.100944

Turner, J. C. (1999). "Some current issues in research on social identity and self-categorization theories" in Social identity: context, commitment, content. eds. N. Ellemers, R. Spears and B. Dossje (Blackwell: Oxford), 6–34.

United Nations. (2020). COVID-19 and persons with disabilities. Available at: https://www.un.org/development/desa/disabilities/covid-19.html

Xu, M. A., and Storr, G. B. (2012). Learning the concept researcher as instrument in qualitative research. *Qual. Rep*. 17, 1–18.