

Digital Transformation and Mental Health in Higher Learning Institutions

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Abstract: Mental health is one of the neglected aspects in workplaces during planning and policy formulation which affects job performance. This study, aimed at examining digital transformation and mental health at higher learning institutions in African nations like Uganda. The specific objective was to examine the use of digital transformation in managing the alarming mental health snags at higher learning institutions like Uganda and suggest possible remedies. A literature review method with an integrative literature technique was used with content analysis as research approaches to study public universities in Uganda and Tanzania. The results revealed that mental health issues are mainly depression due to economic crisis (economic factors), stress from the Coronavirus Disease 2019 (COVID-19) effects, anxieties, and low access to counselling services. This study has implications and suggested the use of digital transformation to address the mentioned trials of mental health among other recommendations.

1 INTRODUCTION

Higher Learning Institutions (HLIs) were highly disrupted in the wake of the Coronavirus Disease 2019 (COVID-19) global pandemic. A plethora of articles have documented the disruption of the COVID-19 pandemic on HLIs and these include Ardy (2022), and Garcha et al. (2021). The study by Mphahlele et al. (2022) revealed that there were severe inequalities in the higher education for students learning during the COVID-19 pandemic in the Southern Africa in terms of digital access.

Apart from digital access inequalities, Rha and Lee (2022) added that digital transformation is an important research topic because of the services sector. Due to its importance in research, this study was motivated to examine digital transformation in the service sector by considering HLIs which offer education services to students. During the COVID-19 pandemic, HLIs were closed and forced to go digital causing mental issues among students. For examples.

Son et al. (2020) conducted in the USA showed college students in a public university had mental health related to stress and anxiety (71%), fear and worry (91%), sleeping patterns were disrupted (86%) and concerns about their academic performance (82%). Similarly, in the UK, the mental

health among female students was high in terms of depression and anxiety (Chen & Lucock, 2022).

Although Africa was the least affected continent from the pandemic, restrictions such as closing HLIs were implemented thus more research is needed to avail information on the status of students in HLIs regarding their mental health. This paper therefore, examined digital transformation and mental health in HEIs. Guided by psychodynamic theory, the specific objective was to examine the use of digital transformation in managing the alarming mental health snags at HLIs by comparing Uganda and Tanzania. The research question was “Is digital transformation used in managing the alarming mental health snags at HLIs?”

2 LITERATURE REVIEW

2.1 Definition of Concepts

2.1.1 Higher Learning Institutions

Higher Learning Institutions (HLIs) are referred to as knowledge-based organizations which generate, acquire and transfer knowledge to society at

different levels (Kipesha & Msigwa, 2013; Wetengere, 2016). Equally, higher education in general has institutions with prominent universities performing functions of education, research and contributing to the society (Alemu, 2018; JICA, 2000). This paper adopts the definition of HLIs by Kipesha and Msigwa (2013).

2.1.2 Mental Health

The mental health generally means the health of one's physical, social and spiritual status (Universities UK, 2015). Nurunnabi et al. (2022) added that students faced with mental health such as stress and depression lack engagement and productivity to fully contribute to the society. In this paper, mental health refers to the constraints on students' health induced by COVID-19 pandemic.

2.1.3 Digital Transformation

Digital transformation has been described as guiding changes in organizational structures via the internal process evolution (Kretschmer & Khashabi, 2020). The changes in a company business model, product or organizational structure brought by the use digital technologies is defined as digital transformation (Hess et al., 2016). However, Nadkarnin and Prugil (2020) stated that digital transformation requires technology and people. This paper refers to digital transformation as the use of digital technologies in assisting HLIs.

2.2 Theoretical Frame

The psychodynamic theory was developed by Sigmund Freud in 1885 which assumes that psychological processes like fear take place outside the conscious awareness (Bornstein, 2022). From a COVID-19 pandemic perspective, Son et al. (2020) found that college students' mental health was related to fear.

Furthermore, the psychodynamic theory is also linked to understanding the individual behaviour. For instance, Conversano (2021) commented that psychodynamic approach views human behaviour from an unconscious motive which influences how their personality functions. In fact, Conversano (2021) noted that psychodynamic theories can offer contribution in studying unconscious processes related to mental distress.

Not only mental distress but in the COVID-19 pandemic as evidenced in studies such as Lee et al. (2021) there was depression among college students

due to closures of HLIs. Hence, the application of the psychodynamic theory in guiding this paper's examining of digital transformation and mental health in HLIs in the context of Uganda and Tanzania.

2.3 Digital Transformation and Mental Health in HLIs

Globally, Verhoef et al. (2021) expressed that there are factors driving the use of digital transformation and these are adoption of World Wide Web, new digital technologies and the consumers' behaviour towards digital revolution. However, the COVID-19 pandemic disrupted HLIs and forced many to go online to provide education and ultimately increased the drive in the use of digital technologies.

In Africa, Fatureti (2022) argued that most countries within the continent were not prepared for emergency shift to online learning in reference to the education system. Grajeck (2021) also advocated for engagement of digital transformation by higher education in creating the post-COVID-19 institutions. Hence, this paper was interested in expanding the scope of digital transformation by examining digital transformation and mental health in HLIs by comparing Uganda and Tanzania which are countries located in East Africa.

2.3.1 Digital Transformation and Mental Health in HLIs in Uganda

Uganda closed HLIs due to the pandemic (Nawangwe et al., 2022). Other studies from African countries such as Mphahlele et al. (2022) revealed that there were digital access problems during the pandemic in higher education and therefore, to expand the scope of study, this paper focused on digital transformation and mental health.

Rawlings et al. (2022) used a web-based survey and found that students in Uganda engaged in behaviours such as drinking alcohol, smoking and taking drugs as psychological outcomes of the COVID-19. Rawlings and others acknowledged that there are few studies examining students' well-being and health from the impact of the lockdown due to COVID-19. There is existing literature on digital transformation and also students' mental health in HLIs for Uganda and this paper has compiled and summarized some of the articles in Table 1 which include studies by Kaggwa et al. (2022) and Najiuka et al. (2021).

Table 1: Digital transformation and mental health in HLIs of Uganda.

Source	Digital transformation
Rawlings et al. (2022)	-Majority of those students who studied online did not enjoy the experience
Nawangwe et al. (2021)	-The Makerere University Research and Innovation Fund (MAK-RIF) was active due to government support which paid staff salaries and provided internet accessibility -Over 80% of academic programs are not visible on the virtual space -Lack of electricity
Makerere University (2020)	-Makerere University had almost 40% of its academic program online during the pandemic
Kagoya (2020)	-inadequate e-readiness and e-participation. Recommended for initial and continuous professional training of students
Source	Mental Health findings
Kaggwa et al. 2022	-Effects are depression/suicidal ideation -Financial tuition constraints
Najjuka et al. (2021)	-Depression, anxiety, and stress
Rawlings et al. (2022)	-Depression, frustration, stress, anxiety, less physically active, spent more time on social media, eating, sleeping and watching movies

2.3.2 Digital Transformation and Mental Health in HLIs in Tanzania

Closure of HLIs happened in the country but Tanzania was the first country in East Africa to re-open its educational institutions (Manyengo, 2021). The use of digital technologies from the traditional ways of learning to digital was a huge transformation to ensure that there is access to education (Manyengo, 2021). Although digital transformation studies exist, there are few looking at digital transformation and mental health in HLIs in Tanzania. Therefore, in expanding the scope of digital transformation, this paper examined digital transformation and mental health in HLIs in the context of Tanzania in comparison to Uganda.

Innocent and Masue (2020) applied quantitative and qualitative methods and noted that the use of e-learning has made it possible for rural areas in Tanzania to access education. However, Innocent and Masue (2020) commented that there is inadequate application of e-learning even though e-learning services such as online teaching (95.2%) and online tests (85%) are available for students and

this is due to challenges like power cuts, insufficient internet connectivity and operating costs of internet services. The existing studies (Mtebe et al. 2021; Mponela & Mkulu, 2021) on digital transformation and mental health in HLIs are compiled and summarized in Table 2. Although mental health studies exist in Tanzania, most have concentrated on adults, for example, Ivanova et al. (2022). Few studies focused on students like Losioki and Hemed (2021).

Table 2: Digital transformation and mental health in HLIs of Tanzania.

Source	Digital transformation
Mtebe et al. (2021)	-Moodle system and Zoom video conference were recommended for delivery of courses
Innocent and Masue (2020)	-Inadequate application of e-learning in HLIs, challenges like power cuts
Manyengo (2021)	-Lessons were transmitted via TV, radio and YouTube.
Mponela and Mkulu (2021)	- majority of HLIs are not prepared for the use of e-learning in post-covid-19 -recommended for institutional policy, and the government to formulate e-learning policy to facilitate the use of e-learning in HLIs
Mkwizu (2022)	-need for Artificial Intelligence (AI) technologies usage to advance higher education services
Source	Mental Health findings
Losioki and Hemed (2021)	-fear, anxiety, depression, low access to counselling services

3 METHODS

The study applied literature review method as a research methodology with content analysis to examine digital transformation and mental health in HLIs in Uganda and Tanzania. The literature review method used the integrative review to gather relevant literature on digital transformation and mental health while content analysis assisted to analyse the text from the reviewed literature. Similar studies in the field of tourism have applied the approaches of literature review method and content analysis, for instance, the study by Mkwizu (2020).

4 FINDINGS AND DISCUSSION

Findings based on Table 1 and Table 2 revealed that

the digital transformation used in managing the alarming mental health snags (depression, stress, anxiety, fear) at HLIs need improvements for both countries. In Uganda, MAK-RIF and MAK was the notable digital transformation readiness with almost 40% online program although many HLIs did not have this strategy in place as indicated by Makerere University (2020). However, Rawlings et al. (2022) stated that students in HLIs did not enjoy studying via online and this could explain their sense of depression and anxiety which complements the guidance of the psychodynamic theory in this paper particularly the findings by Rawlings et al. (2022) on students' behaviours like drinking alcohol as among the psychological outcomes of the COVID-19.

On the other hand, Tanzania's efforts in using digital technologies such as Moodle system and Zoom in HLIs is acknowledged but challenges included cost of operating internet services are outlined by Innocent and Masue (2020). Although recommendations by past scholars included policy formulation by institutions and the government for digital transformation, another challenge noted by Mponela and Mkulu (2021) was the issue of most HLIs not being prepared to use e-learning in the post-COVID-19 pandemic. The findings revealed very few studies on mental health on students in Tanzania. The existing few studies found mental health infliction on students like depression, anxiety and stress as noted by Losioki and Hemed (2021) which complement the application of psychodynamic theory in guiding this study in the context of comparing Tanzania and Uganda.

5 CONCLUSIONS

This study examined digital transformation and mental health at HLIs in Africa nations like Uganda and Tanzania. The specific objective was to examine the use of digital transformation in managing the alarming mental health snags at HLIs. The findings revealed that mental health issues are mainly depression due to economic crisis (economic factors), stress from the COVID-19 pandemic effects, anxieties, and low access to counselling services.

5.1 Implications

This study's implication is for policy makers and HLIs stakeholders in Uganda and Tanzania to be vigilant and consider the factors affecting mental

health among students. But also consider the recommendations availed in this paper. Similarly, policy makers and HLIs stakeholders should fully embrace and incorporate up to date digital transformation education tools in the education system in HLIs as supported by prior researchers (Grajek, 2021; Kagoya, 2020; Mkwizu, 2022). Implication for academic is that this study contributes as a foundation for empirical literature and methods for future researchers.

5.2 Recommendations

Both countries should aim to minimize the challenges faced in the digital transformation in HLIs such as increasing the visibility of academic programs in virtual spaces and reduce costs of operating internet services. Managing mental health of students through policy formation and access to counselling services.

5.3 Limitations and Direction for Further Studies

This paper was limited to examining digital transformation in managing the alarming mental health snags in HLIs (public universities) in Uganda and Tanzania. The study was limited to literature review method as a research methodology with application of content analysis. Future researchers can use mixed methods to compare findings to get similarities and differences.

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