

Managing crisis: Perceptions of academics towards remote operations during the outbreak of COVID-19

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CHUX GERVASE IWU

School of Business and Finance, University of the Western Cape, South Africa

Email: cgiwu@uwc.ac.za

ORCID: <https://orcid.org/0000-0002-6290-9864>

HILARY KENNEDY NJI BAMA*

Department of Tourism and Events Management, Cape Peninsula University of Technology, Cape Town, South Africa

Email: bamah@cput.ac.za

ORCID: <https://orcid.org/0000-0002-9356-9137>

*Corresponding author

FRANK MAKOZA

Department of Entrepreneurship and Business Management, Cape Peninsula University of Technology, Cape Town, South Africa

Email: makozaf@cput.ac.za

ORCID: <https://orcid.org/0000-0002-5818-3810>

OYEBANJO OGUNLELA

Department of Public Administration & Governance, Cape Peninsula University of Technology, Cape Town, South Africa

Email: ogunlelaog@cput.ac.za

ORCID: <https://orcid.org/0000-0001-5982-116X>

RYLYNE MANDE NCHU

Department of Entrepreneurship and Business Management, Cape Peninsula University of Technology, Cape Town, South Africa

Email: rylelangwe@yahoo.com

ORCID: <https://orcid.org/0000-0001-9776-4434>

ABSTRACT

Purpose of the study: The emergence and rapid evolution of the COVID-19 pandemic presented unparalleled novel socio-pedagogical challenges within the higher education landscape in South Africa as an entire education system was forced to adapt to new ways of operating. This study sought to unearth the experiences of academics within South African higher education institutions on changes experienced consequently to the sudden and unexpected disruption of 'normal' academic activities during the initial months of the COVID-19 pandemic.

Design/methodology/approach: A qualitative approach utilising an interview schedule was implemented owing to mobility restrictions during the early stages of the pandemic. Seventy-nine academics from various higher education institutions in South Africa participated in the study. Data were collected between April and September 2020. Using QSR NVivo 12 software, a textual analysis was implemented to analyse the data generated.

Findings: A mix of responses emerged from this study ranging from feelings of vulnerability and anxiety, loss of collegiality, and confusing assessment of productivity to excitement linked to savings on transportation and adaptations to technology.

Recommendations/value: The study proposes adaptation processes for future crises of this nature and the need to effectively communicate these adaptation processes across all organisational levels. This enables a better understanding of the effects of not only Covid-19 but any other health pandemic on the South African higher education landscape.

Managerial implications: Since the study highlights the necessity for technological innovations and in developing fit-for-purpose ancillary systems for dealing with crises contexts such as that engendered by the COVID-19 pandemic, HEI management should seek opportunities to invest in innovative systems and infrastructure while at the same time providing opportunities for capacity enhancement of the human capital within HEIs in South Africa.

Keywords

Coronavirus pandemic; COVID-19; Higher education; Emergency remote learning; Social distancing; Socio-pedagogical challenges

JEL Classification: O32

1. INTRODUCTION

COVID-19 impinged how social interactions and business transactions were undertaken across all organisational contexts, including higher education institutions (HEIs). The emergence of the COVID-19 pandemic signalled the need for global adaptation and compromise in the approach to academia (Iwu *et al.*, 2022). HEI's like other businesses require alternate approaches to provide services or products to their customers and simultaneously manage to keep the business environments optimistic (Rossow, 2018; Rashid & Yadav, 2020; Bama & Nyikana, 2021; McNamara, 2021). Both from a global and South African perspective, the rapid spread and evolution of COVID-19 peaked international concern, with many geographies opting to implement transmission-curbing measures (Mishra *et al.*, 2020; McNamara, 2021). In the HEI context, this translated to establishing remote modes of scholarship, away from the hitherto largely practised face-to-face modes of learning, a situation described by contemporary scholars as a *de facto* global experiment of remote working, thus a 'new normal' (Kniffin *et al.*, 2021). In essence, the pandemic drove a mass social experiment of 'remote working', 'teleworking' or 'work from home' (WFH), concepts

driving many organisational policies in recent times (Mishra *et al.*, 2020; Sobaih *et al.*, 2020; Kniffin *et al.*, 2021; Iwu *et al.*, 2022).

According to Xiang *et al.* (2020), the pandemic inflicted untold hardship on the higher education system globally, including in South Africa. To prevent the transmission of the virus, governments implemented mobility restrictions and 'curve flattening' strategies such as business closures and social distancing, thereby necessitating the closure of academic institutions, thus preventing face-to-face lecture delivery, leading to the introduction of online classes. The abrupt adaptations implemented in HEIs owing to the outbreak and spread of the COVID-19 pandemic in South Africa have caused a myriad of challenges. These challenges ranged from lack of equitable access to multi-modal learning, skills challenges to match the suggested adaptations with the accompanying anxieties, increased vulnerability of previously disadvantaged institutions and the lack of supporting infrastructure and facilities (Basilaia & Kvavadze, 2020; Mishra, 2020; Pokhrel & Chhetri, 2021). The novelty of the situation at the beginning of the pandemic, the challenging conditions under which academics were constrained to operate, and the paucity of available literature on the subject, particularly from a South African perspective, conditioned the undertaking of this empirical enquiry.

As such, this study seeks (1) to consider the experiences of South African academics relating to the adaptations engendered by the COVID-19 pandemic-induced regulations, (2) to highlight the challenges encountered by academics in embracing multi-modal learning and teaching approaches and (3) to suggest strategies for implementation in managing learning within HEIs in the context of the pandemic.

Disruptions of the academic project, either in the form of student protests or the recent Covid-19 pandemic, raise multiple threats to higher education in South Africa (Motala & Menon, 2020). For instance, virtual working denied academics the benefit of social interaction and relationships, which are important for mental well-being (Leal Filho *et al.*, 2021). Poor mental well-being can lead to occupational stress (Poalses & Bezuidenhout, 2018). In this respect, we argue that the strategic importance of the academic in the academic project is invaluable (Jansen & Walters, 2018; Rashid & Yadav, 2020; Toquero, 2020; Pokhrel & Chhetri, 2021; Vyas & Butakhieo, 2021) and therefore necessitates continuous research to monitor an academic's well-being.

Beyond this introduction, the study considers a review of extant literature exploring the nature of COVID-19 in the higher education sector and the challenges of remote working encountered by academics at HEIs in South Africa due to COVID-19-induced adaptations. A presentation

of the methodological stance and the findings and discussions of the study follow this. Recommendations, policy implications, future research direction and conclusion, are then provided.

2. LITERATURE REVIEW

This literature review provides an overview of the study. It also contextualises the debates around the challenges and opportunities encountered by HEIs in the context of the COVID-19 pandemic. Discussions will consider HEIs in South Africa within the COVID-19 context, explore some theoretical considerations of the study and consider the challenges engendered by the pandemic on the HEI sector in South Africa.

2.1 COVID-19 and the higher education sector in South Africa

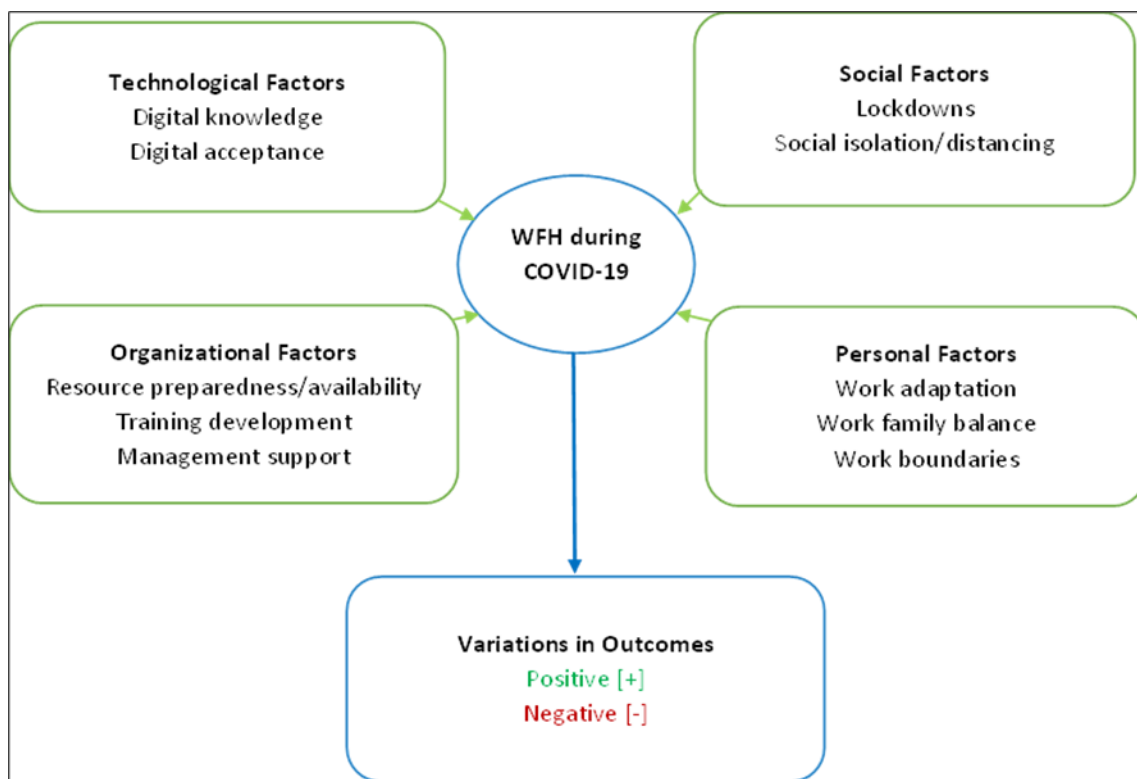
The outbreak and spread of the COVID-19 virus engendered unprecedented and multi-faceted responses from industries in all walks of life, including the higher education sector (Dlamini & Ndzinisa, 2020; Le Grange, 2020; Mpungose, 2020; Quattrone *et al.*, 2020). Within the higher education sector, specifically in South Africa, the immediate response was the implementation of lockdowns and other mobility restriction regulations intended to curb the spread of the virus and limit infections among the academic community (Jena, 2020; Mncube *et al.*, 2021; Abrahams & Bama, 2022). These protracted closures proceeded with concerted efforts from HEIs to maintain continuity of teaching and learning as well as research activities, or some semblance of these, with most students and academics having to rely on individual resources to continue learning and teaching remotely (Mncube *et al.*, 2021).

Higher education as a sector was already dealing with a crisis of its own before the pandemic. The sector required reforms such as funding for scarce and specialist skills and epistemological and curriculum transformation (Lange, 2017; Leal Filho *et al.*, 2018; Mzangwa, 2019). The crisis engendered by COVID-19 in terms of having to adapt to new pedagogical concepts and modes of lecture delivery further exacerbated the situation, in particular, access to digital learning resources and lack of resilience and engagement (Jena, 2020; Schleicher, 2020; Mncube *et al.*, 2021; Iwu *et al.*, 2022). This meant that academics were faced with a plethora of challenges. A consideration of the theoretical underpinnings is presented next, followed by a presentation of the challenges the HEI sector was exposed to in the pandemic context.

2.2 Theoretical considerations of the study

The advent of the COVID-19 pandemic signalled several unforeseen challenges to HEIs at various levels requiring academics to adapt to new ways of working while simultaneously seeking coping mechanisms relating to the prevailing uncertainties. As noted by Iwu *et al.* (2022), virtual working arrangements in the COVID-19 context considered organisational, technological, social and personal (especially psycho-social) factors essential, as depicted in Figure 1.

Figure 1: A quadrant factorial analytical framework of remote working by HEIs.



Source: Iwu *et al.* (2022).

These factors have been highlighted in other studies (Bolisani *et al.*, 2020; Dhawan, 2020; Deutrom *et al.*, 2021) concerned with working from home tenets in the COVID-19 context and have highlighted information technology (IT), training, management support, and digital infrastructure as essential organisational factors. According to the authors, the pandemic and its associated regulations entrenched the need for technologically enabled systems and infrastructure, resource preparedness/availability, training and development, management support, digitisation, institutional management support, attention to one's work-family balance and work boundaries, and psycho-social support for academics (Iwu *et al.*, 2022). The extent of the adoption of these different factors would also lead to varying outcomes.

In the context of the current enquiry, the abrupt adoption of the various approaches to operations during the pandemic outbreak necessitated consideration of academics relating to their operations in virtual and blended learning and teaching activities. Guided by the factors highlighted in the framework, the perceptions of academics in the South African context will illuminate how HEIs in South Africa fared in the early stages of the pandemic in relation to their readiness when these factors are put into context.

2.3 COVID-19-induced challenges on higher education institutions

At its outset, the COVID-19 pandemic posed unparalleled challenges to higher education systems globally, with devastating effects. The pandemic significantly changed the nature of academic life, affecting educational systems at all levels, from how lessons were delivered to how the learning was and continues to be acquired (Kaup *et al.*, 2020). On January 30, 2020, the World Health Organisation (WHO) declared the COVID-19 outbreak a global health crisis, and shortly after, on March 11, 2020, the level was raised to that of a global pandemic (Bama & Nyikana, 2021; Rashid & Yadav, 2020). The COVID-19 virus affected people differently, ranging from severe symptoms, including difficulty breathing and chest pains, to moderate symptoms, including fever, dry cough, tiredness, sore throat, and mild symptoms, which include headaches, loss of taste or smell and diarrhoea (WHO, 2020). With little research at the time on adequate modes of prevention available, the higher education system needed to consider alternative means to render their teaching and learning services. Many HEIs encouraged members of the faculty to transition from traditionally based systems of physical classrooms to virtual platforms (Sobaih *et al.*, 2020; Mncube *et al.*, 2021). Such migration posed challenges as some HEIs either did not have the appropriate learner management systems (LMS) or struggled with access to facilitating communication between students and faculty members on these platforms seamlessly due in part to connectivity challenges (Sobaih *et al.*, 2020).

Although the COVID-19 pandemic affected in-person teaching and learning, it paved the way for virtual and digital learning in the traditional education system through the introduction of new technologies and upskilling staff on the utilisation by introducing new technologies and upskilling staff on utilising existing technologies which hitherto had been underutilised. Another enduring challenge of COVID-19 was the enforced adoption of distance education approaches, resulting in the inability for in-person interactions (Rashid & Yadav, 2020), thus, limiting the possibility of knowledge sharing in this context as there was the potential for less engagement in virtual platforms. Additionally, the rendering of adequate support for students

struggling with their learning became a challenge, especially in laboratory settings, corroborating claims that COVID-19 has drastically distorted our lives; in that the social distancing and lockdown measures have noticeably disrupted traditional educational practices (Kaup *et al.*, 2020; Sintema, 2020).

2.4 Challenges of virtual offices and working from home

The COVID-19 pandemic compelled mobility restrictions, and related regulations created many challenges for stakeholders within the HEI sector, ranging from destabilised educational activities, limitations on research-related travel and reduced employment opportunities (Jena, 2020). Further challenges identified by Pokhrel & Chhetri (2021) are attributed to the affordability of the various infrastructure, accessibility, flexibility in the mode of delivery and pedagogy, as well as educational policy. Many authors have highlighted issues affecting lecture delivery from home by academics (Joshi *et al.*, 2020; Sharma *et al.*, 2020; Arora & Srinivasa, 2020; Kaup *et al.*, 2020; Almaiah *et al.*, 2020; Shenoy *et al.*, 2020; Mahajan, 2020; Sahni, 2020). Furthermore, research conducted among six universities in Australia, Malaysia and Indonesia found adoption of the virtual classroom model takes place in combination with learning management systems, blended learning, and remote support (Djajadikerta *et al.*, 2021). Outcomes indicated that the blended learning model and the online classroom shift were quite effective with these factors in place. However, online assessments increase students' chances of cheating (Djajadikerta *et al.*, 2021).

Reliable internet connectivity is fundamental to ensure equity in the delivery of remote lessons. In developing countries, having a reliable internet connection remains a challenge for academic staff and students (Mumtaz *et al.*, 2021). Access to technology may not be affordable to all, and some students lack personal computers or laptops. Jibrin *et al.* (2017) indicate that a challenge associated with utilising the internet was the speed and availability of a constant supply of electricity in Nigerian universities. Additionally, in some cases, countries were unfamiliar with a "home office" or did not have one available during the initial stages of the pandemic. Thus, the infrastructure requirements for a conducive work-from-home environment were lacking. Academics were forced to cope with what they had to create a working space from home. With already brittle and overburdened educational and healthcare systems and infrastructure, the pandemic exacerbated the socio-economic fabric of the region, forcing researchers such as Mumtaz *et al.* (2021) to opine that the poor economic status of middle-income countries and developing countries complicated online teaching.

The lack of technological skills posed an obstacle to embracing online teaching. Some academics and students were intimidated by the notion of online classes because they were not equipped with the proper skills to manage virtual classes and online technology (Syska & Mesley, 2021; Lee *et al.*, 2022). In fact, Mumtaz *et al.* (2021) note that most faculties regarded themselves as vulnerable where online teaching was concerned. A study conducted in Turkey by Koçoğlu and Tekdal (2020) revealed that the accessibility, reliability, and flexibility of remote learning or working from home was a significant challenge for academics and students. According to Rashid and Yadav (2020), the unexpected move to online learning led to extensive and extended working hours for academics. This resulted in immense pressure due to the need to adapt learning and assessment materials and adapt to home environments which may be entrenched with various distractions and noise pollution (Rashid & Yadav, 2020; Yildirim & Ziya, 2021). During the initial stages of COVID-19, working from home affected academics with children due to child-minding requirements, leading to a reduction in productivity (Lutter & Schroder, 2020; Yildirim & Ziya, 2021).

Countermeasures against the COVID-19 pandemic would not be without challenges in academia (Deryugina *et al.*, 2021). HEIs would have to provide more resources to help redesign and build infrastructure accommodating blended learning approaches. Attention would need to be paid to skills development for academics and providing adequate infrastructure and technology that supports the online learning process (Rashid & Yadav, 2020), with the government encouraging continuous professional development to help improve skills for academics.

3. METHODOLOGY

This study has three main goals: 1) to consider the experiences of South African academics relating to the adaptations engendered by the COVID-19 pandemic-induced regulations; 2) to highlight the challenges encountered by academics in embracing multi-modal learning and teaching approaches; and 3) suggest strategies for implementation in managing learning within HEIs in the context of the pandemic. In furthering these goals, the study adopted a qualitative approach utilising an interview schedule designed for email response capability. This approach aimed to facilitate responses owing to COVID-19 mobility restrictions, social distancing requirements and technology implementation deficiencies for virtual interviews. The study participants were purposively selected (academics) from 15 South African HEIs to solicit responses seeking to understand their experiences due to disruptions in regular academic

activity during the early stages of the pandemic. In total, 79 academics across the higher education sector participated in the study.

3.1 Data quality, reliability and trustworthiness

The responses from 79 respondents were captured in Microsoft Excel to avoid data loss and guarantee trustworthiness, credibility and quality (Saunders *et al.*, 2012). The captured data was then exported to the QSR NVivo 12 software for easy coding and analysis, as qualitative data's strength depends on proper coding (Strauss, 1987; Kiger & Varpio, 2020). The software represented the coded data as nodes, thus grouping the information into manageable categories and subcategories. Based on the coded data, which was approached both deductively and inductively, core themes and sub-themes emerged (Thomas, 2006). The coded dataset was reviewed to confirm that it fits perfectly within the emerging themes. To ensure the thematic map depicted a clear picture of the relationship between themes and the research objective (Braun & Clarke, 2006), suggestions on reviewing themes through the adoption of a two-level process of analysis were adhered to. Once the data arrangement process was completed, the generated thematic map from the analysis presented an accurate picture of the data, which was then adjusted to constitute the final data that was included in the data analysis process.

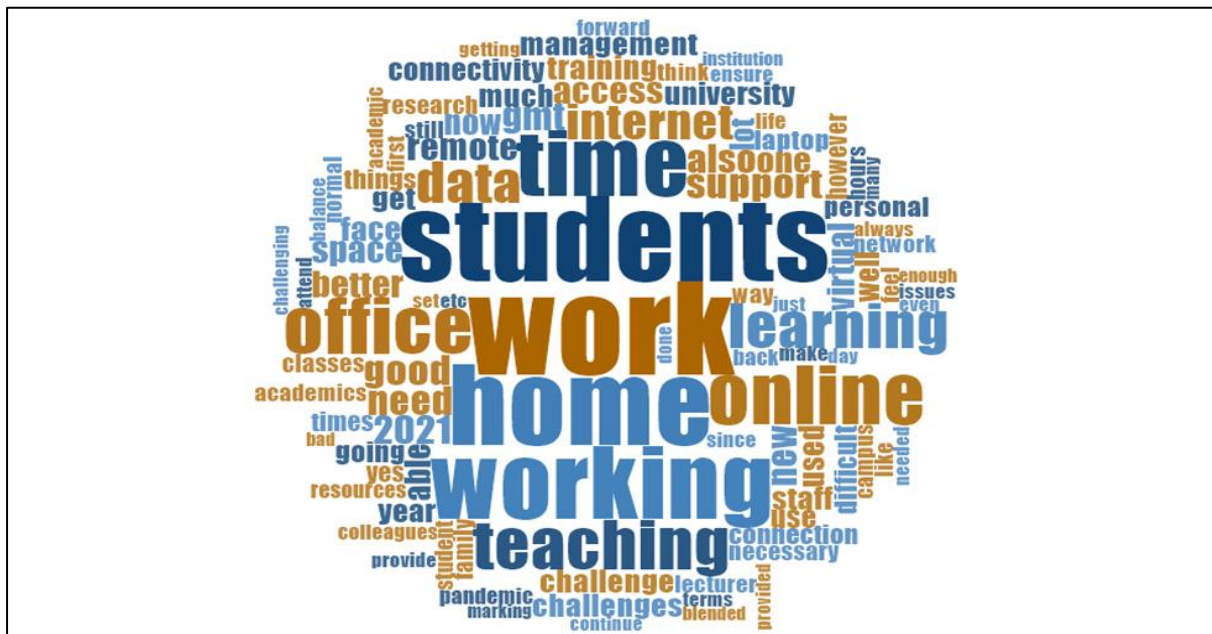
3.2 Data analysis

A thematic approach was employed to analyse the data. This approach followed a recourse procedure, whereby a back-and-forth movement was employed based on any new or emergent themes emanating from the data to allow for further analysis (Braun & Clarke, 2006). The themes that were identified in the data were then extracted and presented in the form of visual thematic categories. The ensuing sections present the findings and discussion of the study based on the analysis of the captured data.

Coded data were represented as nodes in the software, allowing for the organisation of the data into more digestible categories and subcategories. Figure 3 depicts the five overarching themes that emerged from the coded and grouped data, including attitudes toward remote work, desired features of a virtual workplace, obstacles faced by remote workers, job duties, and long-term goals. The use of both inductive and deductive reasoning was followed in the coding process (Thomas, 2006). Adequate comparisons were made both within and between the responses following the theoretical underpinnings of the investigation (Smith & Osbourn, 2003). Among the five identified themes from the data, two were particularly pertinent to the

4. FINDINGS AND DISCUSSION

Figure 2: Word cloud based on responses from seventy-nine participants



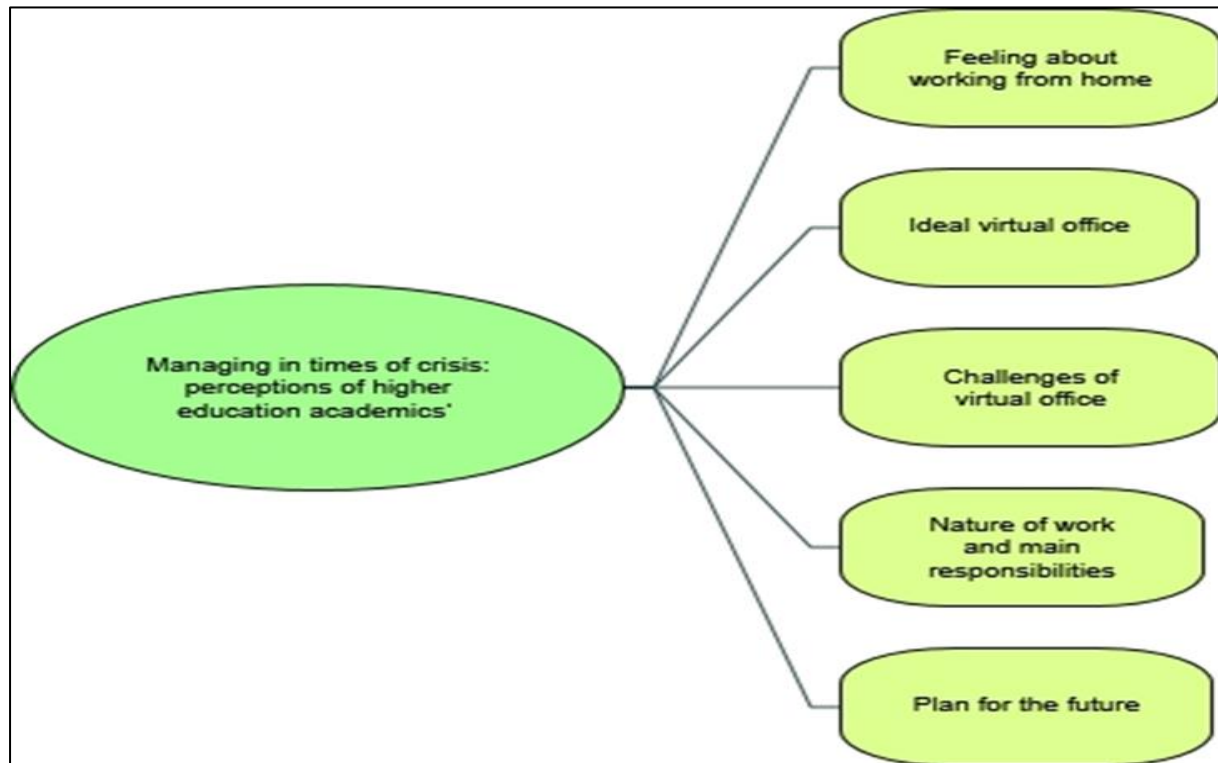
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The data on the experiences of academics within the South African HEI sector and their perceptions of working from home revealed five main themes. Themes included their feelings about experiences of working from home, feelings about the virtual office space, feelings about the challenges of a virtual office, considerations about the emerging approaches and future considerations for working from home.

4.1 Perceptions of academics in HEIs on work-from-home experiences

From the data, five major themes emerged, as depicted in Figure 3. The themes are feelings about experiences of working from home; opinions about ideal virtual offices; challenges of operating a virtual office; the nature of working remotely and main responsibilities; and plans for hybrid working environments. Due to the COVID-19 crisis, academics within HEIs found themselves in a situation where they faced the challenges of having to adapt to the changes brought about by pandemic-induced restrictions, compelling them to embrace digital and virtual teaching approaches as the medium of teaching and learning process (Lederman, 2020). As such, this study sought to unearth the experiences of academics within the South African HEI landscape relating to the unexpected disruption of 'normal' academic activities during the initial months of the COVID-19 pandemic. Thus, the academics were asked to provide information about their experiences during the pandemic lockdown whilst working from home. Following the content analysis of the interview transcripts, the data were grouped according to the varying conceptual categories and discussed in line with the apparent themes. Discussions will focus on how participants evaluated their experiences of working from home accordingly.

Figure 3: Perceptions of academics in HEIs on work-from-home experiences



Source: Authors' own compilation

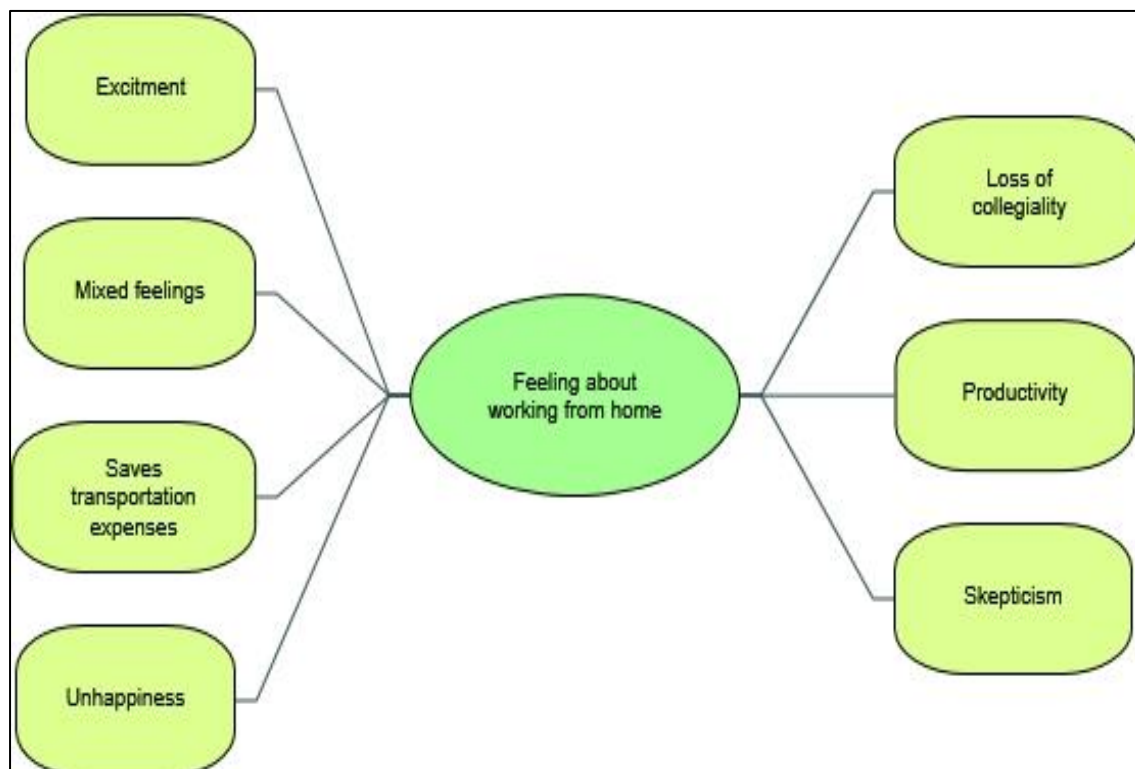
4.2 Respondents' feelings about experiences of working from home

Academics indicated that during the early stages of the pandemic, they saw themselves as vulnerable to work-from-home, specifically in online environments. Although the experiences varied among the respondents, most of them highlighted that they experienced feelings of sadness, scepticism, reduced productivity, loss of collegiality, and anxiety, and many further indicated that the process was tedious with distractions from family members. In this regard, one of the respondents noted that *"at the beginning, I did not like it since the change was sudden and the structure of my home was not conducive to remote work."* Another respondent noted that *"It was quite difficult at the beginning. I was anxious with the fact that I have school children at home too"*, while another respondent intimated that they were *"very anxious since I am not very computer/technology savvy"*. In concurrence, another participant indicated that *"at first, it was not easy and a bit intimidating since I have been used to conducting face-to-face teaching sessions"*. One would argue from such feedback that transitioning to alternative modes of tuition brought about by the outbreak of the pandemic was quite intimidating to academics. Iwu *et al.* (2022) noted similarly that academics sometimes felt trapped, lonely and disadvantaged. Even though these sentiments were highlighted by most of the respondents,

there was also a noticeable segment who noted their satisfaction with the new approach to virtual teaching and learning.

Positives such as savings on transportation and adaptations towards utilising digital technology by those with a home office space and who were able to adjust quickly to the new way of virtual teaching and learning delivery were noted. Respondents further indicated that they were achieving more by working from home, [that] they were learning new ways of working, acquiring new skills, and could exercise flexibility in their work schedules. One of the respondents stated that *"It has been a wonderful time to be able to catch up with home duties and work at the same time. While it has reduced interaction with colleagues and students that used to happen on campus, it has allowed for more time to focus on the work at the distributed time, and these intervals have assisted in creating the balance"*. Another respondent noted that they *"... however, [I] managed to adapt promptly to the new way of working and capitalise on some of the advantages that came with it, such as flexibility, establishing a work-life balance"*. Figure 4 highlights a thematic representation of the perceptions around respondents' feelings about working from home experiences.

Figure 4: Respondents' feelings about their experiences of working from home



Source: Author's own compilation

The findings highlighted above corroborate results from recent studies (Koçoğlu & Tekdal, 2020; Talib *et al.*, 2021) that while accessibility, reliability and flexibility of remote learning or working from home was a significant challenge for academics and students, some academics experienced positive outcomes. Furthermore, as Iwu *et al.* (2022) noted, the positive and negative views expressed were not distinct constructs, as individual respondents could have been associated with either of such experiences. In summary, many respondents indicated that they had experienced both positive and negative feelings.

Table 1: Main Theme: Feeling about working from home.

Sub Theme	Frequency	Percentage
Excitement	18	23%
Mixed feelings	20	26%
Saves Transportation Expenses	5	6%
Unhappiness	15	19%
Loss of Collegiality	5	6%
Productivity	9	11%
Scepticism	7	9%
Total	79	100%

Source: Authors' own compilation

From Table 1, the sub-themes that emerged show that 26 percent (20) of respondents had mixed feelings about working remotely, 23 percent (18) of respondents were excited to work from home, 19 percent (15) were unhappy with the change, Next came 11 percent (9) said it had an adverse effect on their productivity, 9 percent (7) were sceptical while 6 percent (5) indicate that they were able to save on transportation expenses and 6 percent (5) also mentioned that there is loss of collegiality due to the virtual work.

4.3 Respondents' feelings about the virtual office space

Mixed responses were received regarding the respondents' perceptions of an ideal virtual (home office) working platform. Feedback suggested that respondents viewed an ideal virtual office as one where academics have or are provided with the necessary tools to work. For instance, provision or accessibility of reliable, fast internet, stable computers with adequate

memory space and mobile phones for easy correspondence with/to students. A respondent in this regard noted that HEIs should:

Give the academics the necessary tools needed to make this happen, such as a good laptop with enough memory space, fast internet access, mobile phones and data to contact students via WhatsApp since the academics will be overwhelmed with calls and messages if their private mobile phones are used.

These views were shared by other respondents, with one of them stating that:

We need to have the tools we have at the office at home; Internet, computer, printer, stationary, office chair and workstation and the space in our home for these things.

Another respondent asserted that:

Staff need to be well supported; resources need to be channelled towards making virtual offices work. I think in addition to data dongles, we are also supplied with maybe contract sim card (telephone costs) which we can use to reach students. Our work offices have telephones which we can't take home since they are landlines, I think something can be done maybe providing a small budget to help get mobile credit so that if we are to reach anyone within the university system more quickly, we would do that.

These findings confirm the existing narrative that even though significant strides have been made in the areas of adapting to new-age learning, there were obstacles to achieving real success by the total population. Especially in the context of students trapped in rural areas that are particularly deprived of technology, thereby hampering the cause of online education. As such, it is evident that the pandemic has taught society to adopt online learning and introduce a virtual learning culture (Jena, 2020; Mijiritsky *et al.*, 2020). Besides providing the tools, the home office should be ergonomic to help support mental health and stress reduction (Mijiritsky *et al.*, 2020). In this light, the feedback from the respondents indicates that an ideal home office would be one which allows for the balancing of attention between work, home, children and quiet time. A key informant stated that:

... Also we need to respect our own personal time. It's so easy at home to overstep your family, rest or personal time. I found myself sending emails at 22h00 and responding to deadlines at 04h00 even taking phone calls from my boss late at night. We get the work done but our sleep or family suffers.

Additionally, others believe that providing tools alone is not enough to operate an ideal virtual office. Rather the office should provide academics with:

... a quiet space in your home to set up with the necessary equipment and super-fast, reliable Wi-Fi connection. Ongoing training that supports online/reliable teaching, additional support to students via TAs and tutors.

These findings resonate with Mishra (2020), who asserts that many HEIs do not provide the required facilities to accommodate the shift from physical lecture delivery to an online delivery system. Similarly, Pokhrel and Chhetri (2021) indicate that most academics lacked the prerequisite skills to deliver lectures online. A growing body of literature highlights that academics have struggled with the transition from face-to-face teaching to internet-enabled teaching or remote teaching due to inadequate information technology (IT) skills and resources, e.g., up-to-date information communication technology (ICT) equipment and support services (Mpungose, 2020; Pokhrel & Chhetri, 2021; Iwu *et al.*, 2022).

4.4 Respondents' feelings about the challenges of a virtual office

The sudden change to virtual offices posed enormous challenges to academics, mostly in developing countries, with some not being familiar with a "home office." Also, as highlighted in Figure 5, the infrastructure and types of equipment for a conducive work-from-home environment were lacking. Issues such as online assessments and evaluation, digital burnout and fatigue, misrepresented technology adaptation, digital competencies and literacies, lack of interaction and communication and the need for digital infrastructure to facilitate online learning emerged as challenges as highlighted by respondents. In addition, concerns around participation in lessons delivered on virtual platforms were also highlighted. One of the respondents remarked that:

It was the first time for our students and most lecturers to interact online, very complicated to manage students, not easy to offer personal help to individual students.

Furthermore, some respondents posited that they experienced poor work-life balance with very uneven working hours and work pressures. One of the respondents highlighted that:

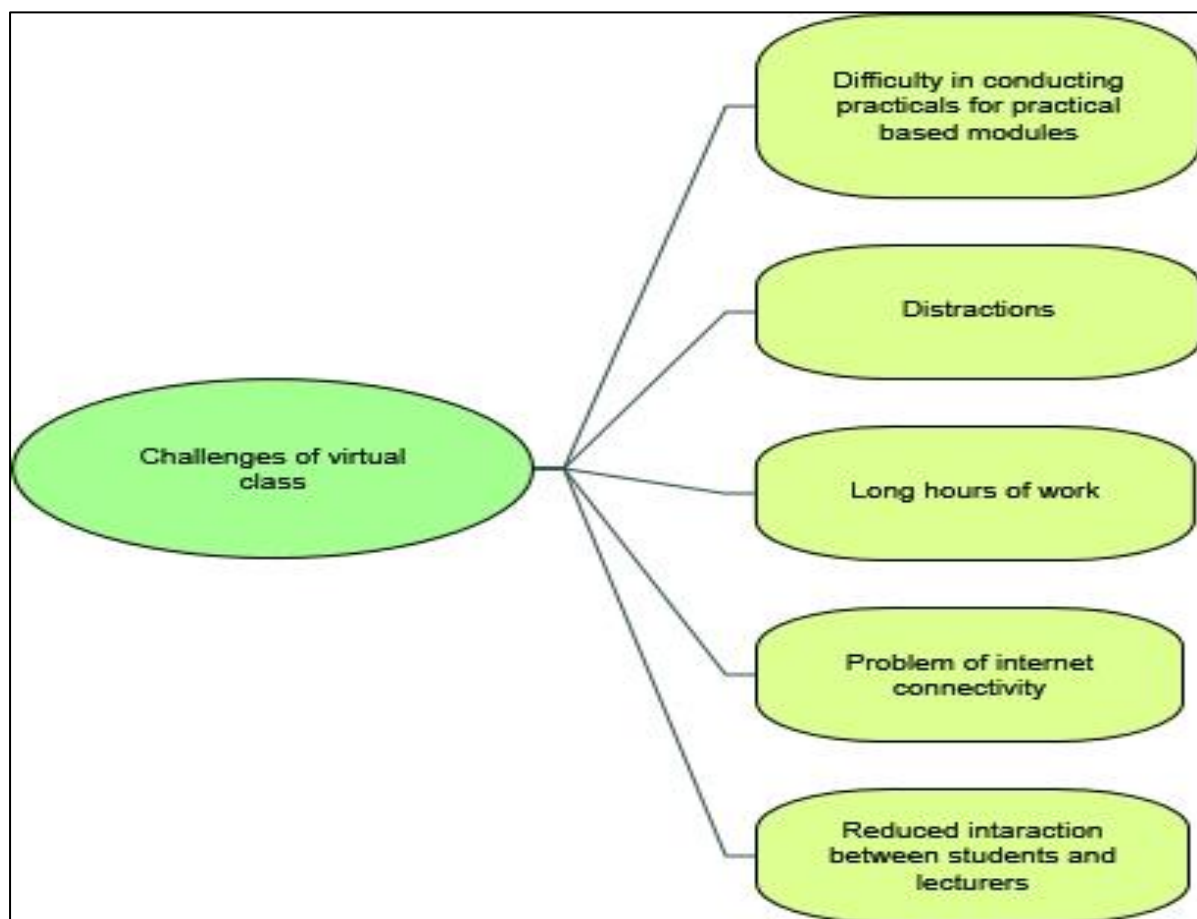
being able to know when to stop working was overwhelming. I start work when I wake up and can still work till late at night, especially when email alert comes in, balancing family life and work from home was really challenging.

Another respondent mentioned that the:

working space is the most challenging, as sitting on the bed or dining table is not conducive for the long hours I put into the work.

While recent literature (Lee *et al.*, 2022; Moodly & Toni, 2017) mostly highlights mixed feelings in this area, some indicate the need for reliable internet connectivity for students as fundamental in ensuring equality and equity in the delivery of online classes. Other studies (Mumtaz *et al.*, 2021; Pokhrel & Chhetri, 2021), especially those focused on developing countries and countries in Sub-Saharan Africa (SSA), note that having a reliable internet connection remains a challenge for academic staff and students.

Figure 3: Perceptions of academics in HEIs on work-from-home experiences.



Source: Author's own compilation

Bozkurt (2022) asserts that eliciting best practices, encouraging creativity and drive in transforming the current challenges around online learning practices, and granting autonomy and agency can be considered opportunities in a post-pandemic environment if properly harnessed.

Table 2: Main Theme: Challenges of Virtual Class

Sub Theme	Frequency	Percentage
Difficulty in conducting practical for practical based modules	6	8%
Distractions	19	24%
Long hours of work	12	15%
The problem of internet connectivity	30	38%
Reduced interaction between students and lecturers	12	15%
Total	79	100%

Source: Authors' own compilation

The subthemes that emerged from the data in table 2 show that the issue of internet connectivity was cited by 38 percent (30) of respondents; 24 percent (19) mentioned that they were distracted when working at home; next, 15 percent (12) reported working long hours during the period; the same percentage reported a decrease in student-teacher interaction, and 8 percent (6) reported difficulty conducting practical for a practical based module.

4.5 Emerging approaches and future considerations for work-from-home

Even though many challenges emerged owing to the COVID-19 pandemic, HEIs responded by adopting various strategies to face the crisis. Some of these involved focussing on staff training and providing adequate online technology tools that can support the online learning process (Rashid & Yadav, 2020), with the government encouraging continuous professional development to help improve skills among academics. Respondents believe that hybrid approaches to teaching and learning have emerged as the focal point during the evolution of the pandemic and that they should be encouraged. One of the respondents indicated thus, "I am improving on the blended learning", while another respondent stated, "well, I think I am well equipped for effective online teaching and learning in the higher education virtual settings. This is the right move in view of the current transition to the Fourth Industrial Revolution where higher education institutions are expected to fully operate online." For many academics, this represents a shift from the routine of in-person teaching and learning to a more refreshing virtual opportunity which may allow for reflection, and HEIs are taking the chance to help their workforce to adapt to the changing norms quickly (Nandy *et al.*, 2021).

Respondents expressed optimism about the future as it is becoming increasingly clear that new survival strategies (resilience models) are required for the HEI sector. These strategies may include ways to absorb the shocks of the pandemic in reorganising for student empowerment and knowledge creation (World Bank, 2020; Nandy, Lodh, & Tang, 2021), a requirement which prompts the need for investigating a suitable survival strategy for implementation during the currency of the pandemic. HEIs are encouraged to launch and maintain virtual platforms which combine digital resources for online education. One of the participants noted that the “ergonomics resulting from such work arrangement should be given considerable attention. The necessary equipment to support such work arrangement should be critically evaluated.” This highlights the need for a holistic approach to new trends that allow the education sector to imagine new ways of teaching and learning, such as encouraging personalised learning, capacitation of academics on utilisation of online teaching technologies, subsidisation of data and provisions of infrastructure such as laptops, computers and tablets (Jena, 2021). Such measures could lead to recognition of adaptability and increase confidence among academics and further engender coping strategies.

5. CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

The COVID-19 pandemic affected HEIs in various ways, including forcing academics to specifically deal with working virtually. In short, COVID-19 presented a novel socio-pedagogical challenge within the higher education system in South Africa, significantly changing the nature of academic life, affecting educational systems at all levels, from how lessons are delivered to how education is acquired (Kaup *et al.*, 2020). The abrupt turn to emergency remote teaching at the beginning of the pandemic altered the daily activities of both academics and students. Some of the challenges included inadequate IT skills, inability to integrate technology in teaching and learning, and difficulties in transforming institutional structures. A significant outcome due to the transition from face-to-face to remote learning related to inadequate IT skills for effective use of technologies in teaching and learning among academic staff.

Academic staff were required to undergo training and conduct online teaching and learning activities simultaneously (Dlamini & Ndzinisa, 2020), a scenario that was initially met with scepticism and anxiety as the process was tedious and often distractive, with issues of internet connectivity being a significant impediment. Furthermore, the transition to online teaching and learning affected the delivery of the courses in terms of the limited time available for training. Furthermore, socio-psychological issues and ergonomics resulted in the pressure to adjust to

the new normal, and institutions have been encouraged to invest in mental health support for academics and students alike. Additionally, assessment and evaluation approaches should be reviewed to comply with pedagogy adaptations. Capacitation programmes would also provide a platform for dealing with the challenges experienced by academics in these circumstances.

Given the evolution of the pandemic, and with online teaching and learning seemingly being adopted for the longer term despite the relaxation of disaster management regulations, it is incumbent that government develops policies to ensure equality and equity. The government should therefore consider an educational infrastructure policy that will collaborate with telecommunication service providers in internet provision to make it affordable for students and academics. Such policies should focus on the affordability of internet services and skills development for academics.

5.1 Pathways for future research

This study is exploratory and focused on the perceptions of academics in HEIs in South Africa and their views on the move to remote models of learning and teaching during the initial stages of the pandemic. With the evolution of the pandemic in both time and stages, future enquiry could combine both perceptions of academics and students to garner a more broad-based holistic understanding. While this study served as a pointer to the experiences of academics within the South African higher education landscape on changes experienced during the COVID-19 pandemic, future research could provide insights into how virtual learning can be rendered more effective in the context of COVID-19's changing landscape in the HEI context in South Africa. The current study did not focus on establishing the demographic profiles of the participants. This suggests that future studies might seek to establish the demographic profiles of participants in terms of their gender and years of service and apply a more rigorous non-descriptive analysis to determine whether these demographic variables have a bearing on how different academics perceived their experiences in dealing with the pandemic.

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