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The Responsiveness of Teacher Education Managers at an ODeL College to Resilience and the Well-Being of Staff Working from Home During COVID-19

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Abstract: The Coronavirus disease (COVID-19) pandemic has increased anxiety and stress among teacher education managers and has given rise to the question of whether they have the competencies to execute their operational responsibilities productively. The theories of resilience and transformational leadership underpin this study in which teacher education managers' resilience and their responsiveness to the well-being of staff executing their operational practices in an open distance e-learning context were explored. A qualitative approach was adopted and virtual video conferencing interviews with teacher education managers were used to explore how they mitigated their strategic and operational roles and their managerial functions to ensure the well-being and organisational performance of staff working from home. Results revealed the experiences of distance managers to have been positive in that they implemented organisational strategies to mitigate the challenges faced to ensure wellness and performance among staff working from a distance. Further research applying a mixed-method design should be undertaken to determine how resilient managers and staff working from home are. That may yield different results.

Keywords: *Qualitative approach, resilience, single case study design, staff working from home, teacher education managers.*

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Introduction

The Coronavirus disease (COVID-19) has caused a pandemic that is impacting the world of work drastically. The last week of March 2020 changed our lives completely and drastically into something that has become the "new normal". We vividly remember how, a week before the dramatic new reality took effect, distance managers and staff sat in their offices on campus, planning events for the year. The following week, everyone was placed under strict lockdown regulations. On the 27th of March 2020, the South African government had declared a state of national disaster which citizens were forced to adhere to social distancing, the wearing of masks and constant hand sanitising. In addition, curfews were implemented (Disaster Management Act, 2020). Citizens' lives came to an abrupt standstill and every movement, from governance to socialisation, was harshly impacted with the borders of countries being closed for fear of the spread of the virus. The situation has also affected the higher education sector worldwide profoundly. Universities have been forced to shift their teaching towards e-learning and blended learning modes. Globally, institutions of higher learning have ventured into online video conferencing as part of teaching and learning. Many hours of conventional teaching and learning at contact residential and distance education universities have been lost, taking a serious toll on academic performance and, possibly, on throughput-rates.

The pandemic has also affected the management styles of distance managers in executing strategic and operational objectives. Apart from ensuring it among staff working from home (WFH), they must also maintain wellness and safety among staff should the latter work from a campus office during the pandemic.

In the context of this article, the College of Education (CEDU) is the largest of the eight colleges at the University of South Africa (UNISA), providing undergraduate and postgraduate teacher education programmes. Currently, the CEDU produces more than 52% of teacher education graduates in the South African education sector (University of South Africa, 2021). The college consists of an executive management structure comprising different portfolio managers who have been

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working mainly from home during the COVID-19 pandemic. In this article, these portfolio managers are referred to as “teacher education managers” (TEMs) who execute their roles, responsibilities and functions as stipulated in the *Performance Management Policy for Extended Management and Directors* (University of South Africa, 2018). Based on this policy, the portfolio teacher education managers (TEMs) who participated in this study were executive deans, chairs of departments, school directors, managers for teaching and learning, managers for quality assurance and enhancement, managers for mixed/blended programme qualifications and other distance managers operating by way of open distance e-learning (ODEL). The functions, roles, and accountabilities of these TEMs have been put the test by COVID-19 – how they have been supporting, managing and accounting for the work required to achieve the objectives of the academic project’s strategic operations; in other words, how they have been ensuring strategic and organisational performance at the college. The pandemic has increased anxiety and stress among TEMs and has given rise to the question of whether they have the competencies to execute their operational responsibilities productively (Xiao et al., 2021). The pandemic has taken them by surprise in that they suddenly had to manage staff WFH, something they were not prepared for. Moreover, Xiao et al. (2021) reported that staff WFH during COVID-19 say that the pandemic has impacted their mental wellness and put physical strains on their bodies, which affect their performance. TEMs have become anxious and have raised concerns about the wellness of staff while they work remotely and whether such staff perform their tasks effectively. Some managers have concerns about whether they have adequate knowledge and skills to manage staff during the pandemic. They are stressed and even question their abilities and digital competency skills to manage their respective departments or directorates productively while ensuring staff wellness and safety. In this paper, we argue that the wellness of managers and staff is of paramount importance during times of crises such as the current pandemic. According to Poulsen and Ipsen (2017), well-being involves both the physical and psychosocial distance work performed by managers and staff to achieve institutional strategic operational objectives.

This research reports the lived experiences of TEMs, their views on resilience and wellness in executing operational duties during the pandemic and how they mitigated operational strategies to ensure wellness among and organisational performance by staff WFH. The following research questions were raised:

- What were the positive experiences of TEMs while managing staff WFH during the pandemic?
- What organisational practices did TEMs follow to ensure that staff WFH performed?
- What challenges did TEMs face in managing staff WFH during the pandemic?

Literature Review

The inquiry lens of this study was based on a dualistic theoretical framework, namely *theory of resilience* (Masten, 2001) and *theory of transformational leadership* (Burns, 2003). Based on the seminal texts of Masten (2001) and Burns (2003), resilience in college TEMs who managed and supported staff WFH were studied. Since the onset of COVID-19, both TEMs and staff WFH have been compelled to execute their operational practices in an open distance e-learning context. In view of Masten’s (2001) work, the *theory of resilience* offers an all-inclusive perspective and promotes practical guidance to achieve goals in the midst of disruptions like the current pandemic. Scholars posited that the presence of resilience in a TEM and their teams allows them to bounce back from a crisis such as COVID-19 by adapting to circumstances and coping with new-normal conditions to survive (Abdullah et al., 2020; Greene et al., 2004; Jowkar et al., 2014; Kuntz, 2021; Obrenovic et al., 2020). The main tenets of this theory are the ability to persevere through tough times, to adapt to circumstances and to maintain composure under pressing crises. In the context of this study, TEMs were challenged to manage staff morale and well-being while working remotely to carry out their tasks during extremely difficult and disruptive times. These managers had to align and adapt the vision of their portfolios to circumstances. They tried extremely hard to build good relationships and to create awareness among staff that challenges could be overcome with tenacity. In his *theory of transformational leadership*, Burns (2003) argued that managers and staff work together to achieve the strategic and operational objectives of an organisation. Within the context of this research, we adopted Burns’s theory of transformational leadership, which is based on motivation, influence, and mutual consideration, inasmuch as it could instil a sense of pride and trust among TEMs and staff WFH. The task of TEMs is to support and transform teams to achieve the goals of the college. Their purpose is to guide staff through any crisis by inspiring them to succeed in challenging times such as the current pandemic. According to Antonopoulou et al. (2021), transformational leadership and digital skills are positive attributes when managing staff under conditions such as those resulting from the pandemic. Kirchner et al. (2021) concurred with the view that managers are obliged to motivate, transform, and build trust among staff WFH during such times, while additional studies showed that managers started using digital resources such as social media, Microsoft (MS) Teams and e-mails as ways of communication in adapting and transforming their operations during the COVID-19 pandemic (Agostino et al., 2021; Antonopoulou et al., 2021; Kudyba, 2020).

Overall, scholars agreed that resilience and transformational leadership could be realised and driven by motivation, trust, compassion, perseverance, adaptability and ensuring the well-being of staff WFH to achieve goals as a collective team (Abdullah et al., 2020; Antonopoulou et al., 2021; Kuntz, 2021; Rutter, 2006).

Building Wellness and Trust among Staff in Times of Crises

The COVID-19 pandemic has created isolation that is impacting the well-being of TEMs and staff WFH alike. Nobody expected to be required to perform their duties effectively from office space created at home. Considering this isolation and the additional pressure to remain productive, it is important that institutions look into ensuring the well-being of both TEMs and staff working remotely. Failure in this regard would ultimately lead to high levels of anxiety and stress (Nielsen et al., 2017). In support of this view, Juchnowicz and Kinowska (2021) reported that the well-being of staff is of critical importance if TEMs want to see their staff performing their daily tasks properly. However, working remotely could have a negative impact on staff morale and well-being since it requires balancing personal and professional duties (Bergefurt et al., 2021). It is important that TEMs enjoy some non-official time before starting their daily tasks. Engaging in relaxing activities prior to work would result in more effective work performance as talking with people about things other than work could assist in easing the mind. Unfortunately, COVID-19 has led to restrictions that include prohibited social gatherings and enforced social distancing. People cannot always visit one another because of that, and isolation has become the order of the day (Bolisani et al., 2020; Matteredne et al., 2020). Some people have taken up exercising at home. However, people are not equal and not everyone has space and equipment for such an activity. That has resulted in a global health crisis (Abbas et al., 2021). To function in isolation is depressing for people. Humans feel the need to interact and according to Matteredne et al. (2020), human activity involves the building of all kinds of relationships, be it for friendship, romance, work, or family contact.

Furthermore, for employees to perform at their best, distance managers should demonstrate trust in and empower their subordinates through wellness practices (Hesketh & Cooper, 2019). In addition, Newman and Ford (2021) argued that working remotely could result in employees losing trust in and support from their managers and organisations. A lack of personal contact between managers and staff could also affect trust in co-workers and the building of a friendly atmosphere in the workplace negatively (Juchnowicz & Kinowska, 2021). Ahmed et al. (2019) suggested that there should be constant communication between the employer and the employee about any changes during the day that affect the employee and that staff should work according to a schedule that works for both parties to create trust. When a supervisor uses technology rather than in-person meetings to communicate, such communication should be very clear and provide explicit instructions to gain the employee's trust (Ahmed et al., 2019). According to the same author, regular feedback would establish rapport and trust. Additionally, it has been noted that, for performance to be successful, effective communication, the ability to recognise requirements and the ability to foster trustworthy relationships are necessary (Hesketh & Cooper, 2019; Poulsen & Ipsen, 2017).

Line Managers Establishing Organisational Practices and Strategies to achieve what the Company has set out to achieve

It is crucial for managers to understand the challenges of managing employees who are in different locations. They must adopt new transformational leadership strategies and change their communication tools and strategies (Newman & Ford, 2021). According to Newman and Ford (2021), many businesses now utilise video conferencing platforms to communicate and collaborate with staff who are working remotely. Company managers could also use various other social media communication techniques (e.g., WhatsApp, MS Teams and Zoom) to achieve the objectives of their companies. That would require companies to have efficient technology in place (Maher & Bedawy, 2015). The suggested strategies could also assist in promoting socialisation and relationship building among individuals in virtual situations and could, as such, be used to prevent feelings of isolation.

Juchnowicz and Kinowska (2021) posited that employers aiming to support remote work should opt for a hybrid system that combines working from a distance and being in the physical workplace. Line managers could offer online seminars and workshop training that would help employees to empower themselves. Additionally, employers could expose their employees to training that would help them to adapt to new roles and demands (Juchnowicz & Kinowska, 2021). Working from home furthermore causes employees to lose connection with the corporate culture, values, beliefs and norms of the companies they work for. Keeping such values, beliefs and norms alive thus becomes the responsibility of managers who should make use of new communication tools and techniques to keep in touch with employees (Newman & Ford, 2021). As has already been highlighted, various social media platforms could facilitate collaboration (Waizenegger et al., 2020) and assist with both formal and informal communication (Razmerita et al., 2014). Sarka and Ipsen (2017) also proposed the leveraging of social media in this regard. Organisations should thus provide managers with the necessary communication tools that would ensure effective communication with staff WFH.

Creating an Enabling Work-at-home and Infrastructure Space

The outbreak of COVID-19 has presented challenges to people from all walks of life. The disease does not discriminate based on race, colour, gender, class or age and has forced most institutions to shift from work in offices to work from home. Scholars have argued that the extensive implementation of telework poses several challenges, thus demanding people to rethink how work should be done through coordination (Poulsen & Ipsen, 2017; Razmerita et al., 2014; Sarka & Ipsen, 2017). It is not a myth that people are not the same financially. South Africa is furthermore characterised by provinces housing many villages. It is a fact that these villages are under-resourced with little or no infrastructure at all in some areas. WFH demands proper infrastructure that can be classified as physical space, working resources, reliable tools, and a

healthy environment. In addition, people must be healthy physically, emotionally, and mentally to perform effectively. WFH poses a challenge to staff in this regard because, unlike in the physical workspace where colleagues can share ideas and frustrations, one finds oneself alone at home, which may result in all the challenges one may face becoming too heavy to carry. Studies furthermore reported that for staff and, in this case, managers to be able to work effectively, there are enabling conditions that must be adhered to. Such conditions include infrastructure, work tools and an enabling space (Razmerita et al., 2014; Sarka & Ipsen, 2017). When these conditions are not met, managers become frustrated, which may result in poor health.

Operational Task-Scheduling Times for Effective Meetings

Mental health is important for staff to perform their duties to the best of their abilities. Managers find themselves under pressure in that they must help staff to maintain a healthy and balanced life while working remotely. Abbas et al. (2021) argued that COVID-19 has brought a mental health crisis to the world. Accordingly, correct information is deemed indispensable to dispel uncertainty, fear, and mental stress. Amid COVID-19, people have taken refuge in social media platforms like Facebook, WhatsApp (in the context of South Africa), Twitter, Instagram, YouTube, and Telegram (Brown, et al., 2020). These social media platforms help to ease the anxiety experienced by staff and managers as they allow them to release their frustrations. Through these media platforms they are able to communicate and share their frustrations and ideas. According to Abbas et al. (2021), people with high levels of anxiety use social media regularly in the 21st century to deal with depressing situations. Social media brings comfort to people and as such creates a bond among its users (Abbas et al., 2021). Against this background, to be effective, distance managers should monitor staff WFH continuously to ensure that they carry out their tasks to meet performance targets and strategic objectives. COVID-19 has come into people's lives uninvited, and no one was prepared for it. Institutions of higher learning were caught unprepared for the new normal but could not stop functioning even though that seemed almost impossible. Managers had to embark on the extremely difficult task of learning new digital skills to manage and monitor their staff remotely.

Establishing Reliable Tools of Trade and Devices to optimise Productivity

Distance work has not been an easy transition for most managers. Besides the challenges involved in managing staff from home, managers must also do their own work, especially those who have other duties like teaching, publishing, and tasks other than management. The pandemic has caused an increase in their duties and accountability to ensure that their departments function effectively with staff WFH. For them to perform their duties effectively, managers need reliable devices all the time. Technological challenges in this regard include, among other things, unreliable internet connectivity and electronic devices (Ferri et al., 2020). It has also become evident that distance managers and staff should be digitally literate and have a sound knowledge of technology to be effective when working remotely. One of the main issues requiring the attention of managers to ensure that duties are executed successfully in the WFH scenario is therefore to ensure that staff have the necessary technological skills and capabilities to use the tools of trade when working remotely (Hughes, 2021; Rehm et al., 2021). In this regard, the university should ensure that distance managers and staff are provided with the necessary tools of trade, as well as updated data packages and laptops so that they could perform their duties in an online space fully. Regular virtual training in terms of digital literacy and information and communication technology (ICT) skills should also be offered to upskill staff and empower them to conduct their duties in an entirely online capacity (Ferri et al., 2020).

Load-shedding Disruptions and their Impact on Internet Connectivity and Performance

Over the past decade, South Africa's electricity generation company Eskom has been experiencing serious challenges in generating and supplying enough electricity to the growing economy (Calitz & Wright, 2021). It has been forced to introduce scheduled times (of different stages) when no electricity is allocated to or available in specific areas of the country (Eskom, 2020). The process, known as "load shedding", has a severe impact on the country. Since business and institutions of higher learning have had to adapt to a new way of functioning during the pandemic, the internet has become the source of operations. Load shedding has consequently placed serious constraints on the ability of distance managers and staff WFH to perform satisfactorily (Matli, 2020; Mortaji et al., 2017). While working remotely, more people must use the internet to perform their duties optimally. Their productivity thus depends heavily on the availability of the internet. Load shedding affects internet connectivity and, as such, the delivery of work by managers and staff to the detriment of both society and institutions (BusinessTech Newspaper, 2020). The huge effect this has had on schools and institutions of higher learning has forced them to shift swiftly from blended to open pedagogies. Farooq and Sultana (2021) conducted a study on staff WFH and how COVID-19 impacted on their productivity. Their findings empirically supported the fact that staff could be productive if they were competent in using online tools, thus implying access to sound internet connectivity. Load shedding has, indeed, made things for managers at higher education institutions very difficult because they have to monitor, lead and manage remotely (Matli, 2020). In the process they rely heavily on electronic devices and if electricity supply is not stable, managers cannot function effectively. This has posed serious challenges to TEMs in that target dates could not always be met, while some priorities were compromised. That affected managers not only on the technical side, but also emotionally and mentally as they had to work long hours in an attempt to recover lost time.

Methodology

Before conducting the research, we applied for ethics approval from the university's ethics committee (Reference 2020/08/12/90159772/19/AM). In accordance with stipulated university policy, confidentiality and COVID-19 protocols were observed and adhered to before, during and after applicable COVID-19 lockdown levels.

Literature searches and analyses of the different empirical paradigms of inquiry were done and the constructivist-interpretivist paradigm was adopted after deliberations. An interpretivist approach focuses on the lived experiences of people and is influenced by hermeneutics and phenomenology (Neuman, 2014). Since our purpose was to open up the life-world of the participants in an attempt to address the study's critical sub-questions effectively, we concluded that the questions formulated to study the way in which TEMs executed their roles and functions during the pandemic could possibly be answered by applying this dualistic paradigm of inquiry lens. Knowledge is acquired through human activity and in the context of an open distance e-learning context, it is socially constructed by portfolio TEMs (Creswell & Poth, 2018). As a collective research team, we therefore agreed that the constructivist-interpretivist paradigm would provide the best philosophical research lens to explore participants' views on meaning making as revealed by their answers to specific questions related to the execution of their managerial roles and functions during COVID-19.

This single case study furthermore adopted a qualitative approach to explore the TEMs' views on how they executed their responsibilities from a distance during the pandemic (Cohen et al., 2007; Yin, 2013). For any qualitative research study to be regarded as trustworthy, its findings must radiate credibility, transferability, dependability, and conformability (Guba, 1981; Lincoln & Guba, 1985;). In qualitative research, credibility is perceived as the extent to which data, data analysis and conclusions are correct, congruent, and trustworthy (McMillan, 2016; Shenton, 2004). As one of the many forms of proving the credibility of data, Padgett (2008) encouraged the use of triangulation. Six line managers who were members of the college's executive management were consequently purposively selected for this inquiry and steps were taken to ensure that the data gathered were credible. That included verbatim recording of participants' input and giving them the opportunity to confirm the correctness of the data gathered. The portfolios of the participating managers ranged from executive deans to chairs of departments. They are referred to as TEMs in this study and worked from home in managing their departments to achieve the strategic objectives of the CEDU. Coding was used to protect their identities and ensure confidentiality. The following coding was applied: AM5 (Female, Manager Quality Assurance & Enhancement), DM1 (Male, Chair of Department), DM2 (Male, Manager Curriculum Transformation), PB3 (Male, Executive Dean), JS6 (Male, Chair of Department), MM1 (Female, Tuition Manager) and SM4 (Female, Manager Continuous Professional Development and Engaged Scholarship).

As the team, we collectively made appointments with the participants to set dates and times for MS Teams meetings. The agreed-on scheduled online interviews were subsequently conducted with each portfolio manager. The responses of the managers were recorded and sent to a research assistant to transcribe. Recording the verbatim accounts of participants' experiences with a digital audio recorder was done to ensure the validity and correctness of the captured data. The participants were also afforded an opportunity to validate that their views had been captured and reflected correctly. Data sets were then compiled manually, using a thematic analysis process (Creswell & Poth, 2018; Nowell et al., 2017). The steps provided by Maguire and Delahunt (2017) were followed in the process. As a first step, we read and re-read the transcribed data and highlighted the concept patterns that emerged. As a next step, we highlighted the semantic concepts and words in each transcribed data set manually. We then organised the data in a systematic manner and used codes for meaning making and identification. Step 4 entailed the identification of the codes that linked up with the general theme. Finally, the data were clustered according to associated categories and themes.

Results

The study results are discussed with reference to the formulated research questions and related data set themes.

Question 1: What were the positive experiences of TEMs while managing staff WFH during the pandemic?

During the global COVID-19 pandemic, TEMs at Unisa demonstrated resilience. They managed to identify what was positive and learnt some lessons from the negative COVID-19 lockdown experience. While they faced many challenges, it must be noted that participants eagerly shared how they had learnt from these challenges and attempted to turn the challenges into opportunities for growth and development.

Moving beyond comfort zones and implementing new online operational skills

Trying new things and learning new skills can often be seen as a challenge and something staff can be reluctant to try. However, the COVID-19 lockdowns forced them to learn new skills and try new teaching and learning techniques quickly to meet the needs of their changed roles and duties in working remotely.

Participant DM1 shared these sentiments when she said the following: "We were normally not keen to try new things until when we are pushed into a corner... we were pushed beyond our comfort zone."

Distance manager JS6 echoed these sentiments and stated: “You would remember from May up till now we always thinking of about diversified ways of delivering education to our students, so it made us to think out of the box... we began thinking out of the box as I have indicated and started exploring innovative non-venue-based assessment modes, and we also learned innovative ways of supporting our students using online platforms.”

Improving technological skills and learning to use online platforms for operational practices

The rush to implement fully online teaching and learning offered managers and staff the opportunity to learn swiftly how to use new platforms they were not previously familiar with, such as MS Teams, to enhance their teaching and improve their ability to perform their duties in a fully online teaching and learning context.

DM1 confirmed this when she explained the following: “Using Teams... as a tool for teaching, a teaching for communication, a tool for meetings, seminars and so many things. That are benefits. I didn’t even know that we can hold a live event using Teams... lesson tools, etc., posting messages on discussion forums, and those things were there, we are able to have seminars on how to teach effectively using online tools.”

PB3 also expressed this sentiment when he stated: “We must actually fast track technology-related training and we must shift it towards non-venue-based teaching, learning and assessment as we strive to fit into the digital online or virtual educational space.”

Accelerating online examinations and creating an institutional culture towards a vision of ODeL

Distance manager JS6 emphasised the benefit of how Unisa, as an ODL institution, was quickly thrust towards being an ODeL institution and being more effective in offering fully online teaching and learning to its students. “Online presence for us as Unisa, the non-venue-based exams that we have conducted has elevated the institution to another level, so it made our presence felt amongst colleagues in other universities and I must also indicate that the lockdown made us conduct a successful examination online.”

Participant PB3 echoed these sentiments and said: “...if we are truly an ODeL institution because an ODeL institution does not depend on office spaces, because you can work from a distance.”

Working anywhere at any time – creating a flexible working environment

While remote working has many challenges, the managers reported that working from home also offered some benefits, such as greater flexibility in terms of workspace, time and costs related to going to the office.

PB3 explained the benefit of flexibility when he said the following: “Because an ODeL institution does not depend on office spaces, because you can work from a distance. Now you become a digital resident of South Africa even if you are in America.”

Manager SM4 also highlighted the time flexibility related to remote working as a positive: “Working from home assists because now colleagues are not limited to say: ‘I have to be at the office’. They can multi-task. So, if a colleague must go to a doctor or whatever, and he knows that the meeting is at that particular time, they can still do both things at the same time, so that is positive. We are now no longer bound by time.”

Effective communication among staff, increasing turnaround time on tasks

Online and digital communication is another positive aspect of the COVID-19 lockdown that was identified in this study. Managers alluded to the fact that communication with staff, students and outside stakeholders of the university became more time effective and easier once staff understood the communication tools. Before the pandemic, meetings would often be lengthy and staff lost productive time travelling to and from meetings or waiting to meet managers who were busy. With the options provided by online communication tools, managers confirmed that they experienced communication to be more effective.

DM2 had the following to say: “We have learnt new ways of communication. I used frequently WhatsApp and Teams as social media tools. Now it is even easier ways of reaching out to our stakeholders outside the university.”

Creating a home office that suits the needs to execute operational duties

The pandemic has forced managers to establish home offices connected to staff WFH. After the “hard lockdown” imposed by the government from 26 March 2020 was lifted on 16 April 2020, some TEMs decided to return to their offices at the university subject to COVID-19 protocols. However, most managers and staff indicated that they preferred to work remotely from their homes because they had invested in establishing fibre and internet infrastructure.

TEM PB3 expanded on the matter as follows during his interview: “Working from home has alleviated the challenge of limited office space on campus we were facing before lockdown.”

Participants JS6 and MM1 agreed: “We had invested in high-speed fibre or Wi-Fi for internet connectivity at our houses. This became our home offices. I preferred to work from home because I am more productively. You would recall that office space used to be a problem at Unisa.”

Question 2: What organisational practices did TEMs follow to ensure that staff WFH performed?

Proving their resilience as distance managers, the participants introduced organisational strategies to support staff WFH and found innovative ways of mitigating the challenges experienced when executing managerial functions during the various lockdown levels of the pandemic.

Encouraging collaboration and teamwork towards shared operational objectives

Participants were positive about collaboration and teamwork to achieve operational objectives. They also commented on the importance of teamwork and collaboration with staff WFH as a way of easing the challenges both managers and staff faced. Working as part of a team with everyone working towards a shared goal made it easier to address challenges and everyone felt more supported. Participant DM1 described teamwork and collaboration as the spirit of *ubuntu* and stated that it was “part one” in mitigating challenges faced by staff and managers: “Personally I think ubuntu part is of our fibre – the college DNA – we are because of you.”

DM2 reciprocated these sentiments and said that one has a lot to learn and gain from working with colleagues as a team: “Look at a problem as a team... rely on colleagues... These individuals, some of them are even more intelligent, or even wiser, or even more experienced than you and you can get a lot of solutions from them if you create that, you know, spirit of reliance.”

Insufficient provision of data bundles, ICT support for the j-Router marking tool and installation of the virtual private networking (VPN) application

By issuing data to staff (and students), the university enabled staff to fulfil their duties and responsibilities while working remotely. Participants had the following to say in this regard during the data collection process:

Participant DM1 said: “Some staff members did not receive timeously data bundles.”

Participant SM4 said: “The installation of VPN was a challenge – another issue. There was also the online marking tool, the J-router. Staff reported some markers could not complete marking but was waiting for ICT.”

Building trust and strong relationships by conducting seminars and workshops to empower staff

Due to the unknown nature of remote working and many staff members not being sure how to execute their duties while working remotely, managers held seminars and workshops on a regular basis to support and empower staff.

Participant SM2 said: “It can be lonely working remotely but building trust and maintaining strong relationships amongst staff is done online and with seminars or using other online methods.”

Referring to such seminars, participant MM1 stated: “Staff members were exposed to team building Teams and webinars who challenged with uploading of exams papers or with sign-off examination result. Support was provided with recording of Tippy Tube video lessons for students to prepare to teaching practice.”

Using communication tools during remote working

Early in the pandemic and national lockdown, the university identified several communication tools that would be used as the tools of choice by the management, staff and students of Unisa. That included e-mails, MS Teams and WhatsApp messages, which made it easier for role players at the university to communicate frequently, using the same communication tools.

Participant DM1 explained this when she said: “Teams is a universal tool, so we became accustomed to”. I have created a WhatsApp group for my staff. I communicated also with e-mails and held often Teams meetings which were the most effective for me.”

Question 3: What challenges did TEMs face in managing staff WFH during the pandemic?

Staff and TEMs faced many challenges working remotely. That included a lack of ICT support and data, tools of trade shortages and load shedding, all of which impacted performance severely.

Frustrations of shortage of and outdated tools of trade, and slow response by ICT unit

During the interviews, participants alluded to the shortage of and outdated tools of trade, which impacted on the performance of managers and staff. Participants also mentioned the higher cost of doing “new” business in these challenging times.

Line manager PB3 voiced the frustrations in this regard: “Yah, an urgent need for data bundles... upgrade of laptops... additional training for lecturers, external markers amongst others, and these had to be done during this difficult period.”

The following was stated by participant MM1: “COVID-19 pandemic has raised some questions regarding the reliability and stability of our ICT infrastructure. I was frustrated with the slow responses from our ICT unit.”

Anxiety and stress impacted staff well-being in balancing office work and private life

As mentioned, staff and TEMs faced many challenges. That had a severe impact on their performance and managers expressed concern about their own well-being and that of the staff they managed during lockdown. Some managers mentioned that some staff had experienced high stress levels affecting their performances. Managers also mentioned heavy workloads and the challenges of balancing official work and private life.

Manager DM1 expressed the following concern about the well-being of staff: “Staff must also balance their family time and the heavy workload-related issues in their modules”.

Participants PB3 and JS6 also expressed concern in this regard, with JS6 saying: “Staff well-being is a challenge to manage. This had effect on managers workload, anxiety and stress working from a distance”.

Load shedding creates connectivity challenges and impacts negatively on online teaching and learning quality

South Africa faces the challenge of producing enough electricity. Due to load shedding, distance managers and staff were often unable to connect to official staff meetings and workshops and to perform their duties fully. The pandemic also resulted in venue-based examinations being changed to online examinations. Various challenges emerged in that regard, namely unpreparedness, absence of applicable technological skills, the ability of staff and students to engage in writing online examinations, and so on. That had a huge impact, resulting in low productivity.

Participant PB3 said that load shedding had a negative impact on performance: “Challenges of load shedding, disruptions in work affected our performances which lead to low productivity levels.”

Distance manager JS6 nonetheless reported that the unpreparedness to host online examinations ended on a positive note: “We were unprepared because of the lockdown to run a fully-fledged non-venue-based exams papers. Yah, we were unprepared... but at the end we conducted 1.7 million online exams successfully.”

Discussion

A dualistic theoretical framework based on the theories of *resilience* and *transformational leadership* was applied in the context of TEMs at the CEDU, one of the colleges at an ODeL university. These theories assisted in reflecting how TEMs experienced managing their portfolios during the pandemic productively while continuing to carry out their operational practices in the new normal through resilience and how they demonstrated “collectiveness” in transforming teams WFH beyond the pandemic (Abdullah et al., 2020; Jowkar et al., 2014; Kuntz, 2021; Obrenovic et al., 2020).

The first study question formulated interrogated the positive experiences of TEMs while executing their operational practices and managing staff WFH during the pandemic. Participants said they were challenged “to explore with new things but were pushed beyond their comfort zones” and were obliged to implement new online operational skills. These comments of participants reflected their resilience and also showed transformational leadership in the management of wellness in times of crises. Some earlier studies did not support these sentiments and reported that working from a distance is professionally challenging, lonely and frustrating (Poulsen & Ipsen, 2017; Westgaard & Winkel, 2011). Hertel et al. (2005) furthermore proposed that managers working remotely should adapt to the “new virtual reality” as an online phenomenon in managing staff successfully. However, the TEMs participating in this study were abruptly compelled to change how they executed their line management roles and forced to “swim or sink” by a stressful pandemic. Several scholars posited that the new virtual reality is an exciting, shared management approach that opens up new horizons for TEMs working at a distance (Afrianty et al., 2021; Hertel et al., 2005; Perez-Ramirez et al., 2021). In view of this, urgent reskilling of TEMs in digital literacy becomes vitally important for all institutions of higher education to ensure effective management of virtual WFH teams in a post-COVID-19 era. These sentiments were echoed by participants DM1, PB3 and MM1 who raised the issue of improving or reskilling managers in technological competences to enable them to operate effectively. A study by Perez-Ramirez et al. (2021) concurred that virtual training presented a platform to empower or reskill managers to operate in a virtual reality space. Participants in the study were positive about the impact of the pandemic that had accelerated a sense of care among distance managers as part of a new institutional culture based on the shared experience that to work at home and manage staff WFH could be lonely.

A major challenge in managing from a distance was the creation of home-office infrastructure suitable for executing operational duties and tasks and various studies looked into the views of distance managers on flexible working hours and the establishment of working environments (Adenle, 2020; Afrianty et al., 2021; Perez-Ramirez et al., 2021). The study conducted by Afrianty et al. (2021) revealed that, to be an effective manager in a virtual space, effective communication tools must become a priority. Participants DM1, MM1 and JS6 said that they were able to communicate through e-mails,

WhatsApp messages, MS Teams and calls with other managers for advice or support when facing challenges in their daily operations. Rehm et al. (2021) concurred that such communication tools supported effective and efficient communication among school leaders and staff, with increased turnaround time on tasks as a result.

The second research question invited responses on the organisational strategies and practices TEMs implemented to ensure that staff WFH performed. Scholars have argued that institutions must implement enriching operational job redesign strategies for managers to execute responsibilities effectively (Demerouti et al., 2001; Poulsen & Ipsen, 2017; Sørensen & Holman, 2014). In addition, Jowkar et al. (2014) claimed that academic resilience could be enhanced if managers implemented motivational sessions to provide support and build trust as strategies to decrease high stress levels and anxiety. During the study interviews, several organisational strategies to mitigate the challenge of high stress and anxiety levels emerged. One particular strategy used by most participants involved the expression of appreciation towards staff who performed their duties well and met submission deadlines. Participant MM1 said that she sent messages of appreciation and wrote friendly reminders to encourage staff and boost staff morale. Their responses that one sometimes needed to delegate to colleagues and share collective responsibilities illustrated that participants DM1, MM1 and SM4 appreciated teamwork and collaboration as organisational strategies to mitigate the challenges they faced and demonstrated virtues of care, collegiality and *ubuntu*.

Several scholars furthermore suggested operational strategies such as open communication, keeping track of due dates, separating family time from office time, creating an environmental working space and creating a to-do-list to maintain productivity and stay connected while working remotely (Lane et al., 2020; Newman & Ford, 2021). In this study, TEMs, as a collective, presented several virtual MS Teams seminars and workshops related to online examinations to assist staff WFH. Most participants also indicated that they managed to keep morale high and performance satisfactory by building sound staff relations. They called staff and sent WhatsApp messages of appreciation, birthday wishes and encouraging e-mails. Other useful strategies that were implemented to encourage resilience included self-care time-out sessions; scheduled-time virtual video conferencing sessions via MS Teams; meditation; and early-morning neighbourhood walks (Lane et al., 2020; Weight et al., 2013).

The third and final research question focused on the challenges TEMs faced in managing staff WFH during the pandemic. In this regard, participants echoed several challenges. They all alluded to a shortage of and outdated tools of trade. They felt strongly that every WFH staff member should have access to the required tools. Studies highlighted the impact of the COVID-19 pandemic on the availability of computers, laptops and other information technology equipment in the supply chain in the United States of America as well as globally (Bhatia, 2020; Graham, 2020; Paul & Chowdhury, 2021; Voas & Kshetri, 2021). A shortage of laptops was also experienced at the college, as was confirmed by participant JS6 who felt that the roll-out of tools of trade like laptops was very slow due to stringent protocols. Moreover, in view of the shortage of new laptops, distance managers felt that the university's ICT unit has to provide refurbished laptops and desktop computers as a priority. Another challenge was their unpreparedness to install infrastructure such as internet connectivity, as it was a financial burden that they had not budgeted for. In line with the findings of Xiao et al. (2021) that working remotely impacted staff's wellness both at a physical and mental level, participant DM1 confirmed that it was challenging to balance home- and work-related issues in ensuring effective execution of their portfolios. Distance managers were burdened with a heavy workload and participants experienced high stress levels, anxiety and isolation that impacted their well-being and ability to perform effectively. Zhao et al. (2021) conducted a study on nurses who were unprepared to cope with the pressure in the workplace during COVID-19. The findings suggested that nurses experienced high levels of stress and anxiety and strategies to assist them in facing the challenges were proposed. We concur with the proposal that a variety of coping strategies are required to eliminate loneliness and stress among TEMs and staff WFH and ensure wellness in the workplace.

Conclusion

The COVID-19 pandemic has increased anxiety and stress among TEMs and has led to the question of whether they have the competencies to execute their operational responsibilities productively under such circumstances. We have concluded that TEMs showed *resilience* and demonstrated *transformational leadership* amid a crisis. They adapted, coped and pushed boundaries beyond the new normal while working remotely in an open distance e-learning context. We found that they employed organisational strategies and practices such as to-do lists and used social media tools to communicate openly and keep track of due dates. They were able to separate family and work time and established environments to use as workspace. Those strategies mitigated anxiety and stress levels and enabled them to achieve their strategic and operational goals as portfolio TEMs. They succeeded in ensuring that organisational performances were met by implementing operational and digitalised practices and managing the well-being and morale of, and relations among, staff WFH by keeping in touch with staff through calling them, sending WhatsApp messages of appreciation for work done, posting birthday wishes and sending encouraging e-mails. This exploratory, single case study goes some way towards enhancing our understanding of resilience and transformational leadership qualities among TEMs in executing their operational responsibilities amidst a crisis to achieve strategic and operational goals successfully.

Limitations

Although the interviews by way of MS Teams as a virtual conferencing tool assisted in understanding how to manage resilience and the well-being of staff WFH, the findings of this single case study cannot be generalised. The results of this qualitative inquiry and our conclusions could be seen as being applicable to an ODeL context only. Furthermore, a study comprising a bigger sample of TEMs and staff WFH and employing a mixed-method design should be undertaken to investigate resilience and transformational leadership. That could yield different results.

Recommendations

Based on the findings of this study, it is suggested that human resource policies related to an individual performance management system be provided to capacitate portfolio TEMs and staff WFH through training in resilience and transformational leadership competencies. All TEMs should be capacitated with organisational (transformational leadership) and wellness (resilience) competencies to mitigate levels of loneliness, anxiety and stress so as to achieve the strategic and operational goals of their respective portfolios in the college. It is further suggested that the college initiate specific human capital empowerment initiatives, for example training in how to manage staff WFH virtually and providing distance managers with appropriate digital literacy skills in the use of digitalised practices to support staff remotely. It is also suggested that the college's executive management committee, the directorate for human resources and the wellness unit draft strategies to mitigate loneliness, isolation, stress and anxiety and assist TEMs and staff WFH in coping in crisis situations. Finally, further research investigating the wellness and performance of staff WFH during the pandemic could be beneficial.

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Authorship Contribution Statement

van Wyk: The first author conceptualized the idea of writing, introduction, methodology, discussion. Kotze: Editing/reviewing, writing the results. Tshabalala: Literature review. Mukhati: Literature review.

References

- Abbas, J., Wang, D., Su, Z., & Ziapour, A. (2021). The role of social media in the advent of COVID-19 pandemic: Crisis management, mental health challenges and implications. *Risk Management and Healthcare Policy*, 14(1), 1917–1932. <https://doi.org/10.2147/RMHP.S284313>
- Abdullah, M., Husin, N. A., & Haider, A. (2020). Development of post-pandemic COVID-19 higher education resilience framework in Malaysia. *Archives of Business Research*, 8(5), 201–210. <https://doi.org/10.14738/abr.85.8321>
- Adenle, C. (2020, March 31). *Working from home during coronavirus? 6 tips to make it work*. Elsevier Connect. <https://www.elsevier.com/connect/>
- Afrianty, T. W., Artatanaya, I. G., & Burgess, J. (2021). Working from home effectiveness during COVID-19: Evidence from university staff in Indonesia. *Asia Pacific Management Review*. Advanced online publication. <https://doi.org/10.1016/j.apmr.2021.05.002>
- Agostino, D., Arnaboldi, M., & Diaz Lema, M. (2021). New development: COVID-19 as an accelerator of digital transformation in public service delivery. *Public Money & Management*, 41(1), 69–72. <https://doi.org/10.1080/09540962.2020.1764206>
- Ahmed, A. I. A., Ab Hamid, S. H., Gani, A., & Khan, M. K. (2019). Trust and reputation for internet of things: Fundamentals, taxonomy, and open research challenges. *Journal of Network and Computer Applications*, 145(1), 2–17. <https://doi.org/10.1016/j.jnca.2019.102409>
- Antonopoulou, H., Halkiopoulou, C., Barlou, O., & Beligiannis, G. N. (2021). Transformational leadership and digital skills in higher education institutes: During the COVID-19 pandemic. *Emerging Science Journal*, 5(1), 1–15. <http://dx.doi.org/10.28991/esj-2021-01252>
- Bergefurt, A. G. M., Weijs-Perrée, M., Appel-Meulenbroek, R., & Arentze, T. A. (2021, June 21). *The influence of employees' workspace satisfaction on mental health while working from home during the COVID-19 pandemic* [Paper presentation]. Healthy buildings 2021 - Europe, Oslo, Norway.
- Bhatia, A. (2020, June 10). *COVID-19 impact: Lenovo sees increased demand of laptops, 'users going up value chain'*. The Indian Express. <https://bit.ly/3jpFdfH>

- Bolisani, E., Scarso, E., Ipsen, C., Kirchner, K., & Hansen, J. P. (2020). Working from home during COVID-19 pandemic: Lessons learned and issues. *Management & Marketing. Challenges for the Knowledge Society*, 15(1), 458–476. <https://doi.org/10.2478/mmcks-2020-0027>
- Brown, E., Gray, R., Monaco, S. L., O'Donoghue, B., Nelson, B., Thompson, A., Francey, S., & McGorry, P. (2020). The potential impact of COVID-19 on psychosis: A rapid review of contemporary epidemic and pandemic research. *Schizophrenia Research*, 222, 79–87. <https://doi.org/10.1016/j.schres.2020.05.005>
- Burns, J. M. (2003). *Transforming leadership: A new pursuit of happiness*. Atlantic Monthly Press.
- BusinessTech Newspaper. (2020). Eskom doesn't know when load shedding will end. <https://bit.ly/3GcqkAd>
- Calitz, J. R., & Wright, J. G. (2021). Statistics of utility-scale power generation in South Africa in 2020. <http://hdl.handle.net/10204/11865>
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (8th ed.). Routledge. <https://doi.org/10.4324/9780203029053>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Sage Publications Inc.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands – resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <https://doi.org/10.1037/0021-9010.86.3.499>
- Disaster Management Act, 43096 Staatskoerant § 57. (2020). <https://bit.ly/3C3pMdz>
- Eskom. (2020). *Eskom load shedding*. <https://loadshedding.eskom.co.za/loadshedding/Index>
- Farooq, R., & Sultana, A. (2021). The potential impact of the COVID-19 pandemic on work from home and employee productivity. *Measuring Business Excellence*, 25(1), 1–18 <https://doi.org/10.1108/MBE-12-2020-0173>
- Ferri, F., Grifoni, P., & Guzzo, T. (2020). Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. *Societies*, 10(4), 86. <https://doi.org/10.3390/soc10040086>
- Graham, J. (2020, August 25). *Another pandemic shortage: What to do if you can't find a laptop?* Cape Cod Times. <https://bit.ly/3AZmTJz>
- Greene, R. R., Galambos, C., & Lee, Y. (2004). Resilience theory. *Journal of Human Behavior in the Social Environment*, 8(4), 75–91. https://doi.org/10.1300/J137v08n04_05
- Guba, E. G. (1981). ERIC/ECTJ annual review paper: Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology*, 29(2), 75–91. <https://doi.org/10.1007/BF02766777>
- Hertel, G., Geister, S., & Konradt, U. (2005). Managing virtual teams: A review of current empirical research. *Human Resource Management Review*, 15(1), 69–95. <https://doi.org/10.1016/j.hrmr.2005.01.002>
- Hesketh, I., & Cooper, C. L. (2019). *Wellbeing at work: How to design, implement and evaluate an effective strategy*. Kogan Page Publishers.
- Hughes, C. (2021). The changing learning technological landscape for trainers in the wake of COVID-19. *Advances in Developing Human Resources*, 23(1), 66–74. <https://doi.org/10.1177/1523422320972108>
- Jowkar, B., Kojuri, J., Kohoulat, N., & Hayat, A. A. (2014). Academic resilience in education: The role of achievement goal orientations. *Journal of Advances in Medical Education & Professionalism*, 2(1), 33–38. <https://bit.ly/3psiHQs>
- Juchnowicz, M., & Kinowska, H. (2021). Employee well-being and digital work during the COVID-19 pandemic. *Information*, 12(8), 293. <https://doi.org/10.3390/info12080293>
- Kirchner, K., Ipsen, C., & Hansen, J. P. (2021). COVID-19 leadership challenges in knowledge work. *Knowledge Management Research & Practice*. Advance online publication. <https://doi.org/10.1080/14778238.2021.1877579>
- Kudyba, S. (2020). COVID-19 and the acceleration of digital transformation and the future of work. *Information Systems Management*, 37(4), 284–287. <https://doi.org/10.1080/10580530.2020.1818903>
- Kuntz, J. C. (2021). Resilience in times of global pandemic: Steering recovery and thriving trajectories. *Applied Psychology*, 70(1), 188–215. <https://doi.org/10.1111/apps.12296>
- Lane, I. A., Mullen, M. G., & Costa, A. (2020). Working from home during the COVID-19 pandemic: Tips and strategies to maintain productivity & connectedness. *Psychiatry Information in Brief*, 17(5), 1145. <https://doi.org/10.7191/pib.1145>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications. [https://doi.org/10.1016/0147-1767\(85\)90062-8](https://doi.org/10.1016/0147-1767(85)90062-8)

- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, 8(3), 3351–3353. <https://bit.ly/3m3Se9H>
- Maher, A., & Bedawy, R. (2015). Core practices for managing virtual employees in public organizations. *Journal of Business and Economics*, 6(1), 113–120. [https://doi.org/10.15341/jbe\(2155-7950\)/01.06.2015/011](https://doi.org/10.15341/jbe(2155-7950)/01.06.2015/011)
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227–238. <https://doi.org/10.1037//0003-066X.56.3.227>
- Matli, W. (2020). The changing work landscape as a result of the Covid-19 pandemic: Insights from remote workers life situations in South Africa. *International Journal of Sociology and Social Policy*, 40(9/10), 1237-1256. <https://doi.org/10.1108/IJSSP-08-2020-0386>
- Matterne, U., Egger, N., Tempes, J., Tischer, C., Lander, J., Dierks, M. L., Bitzer, E. M., & Apfelbacher, C. (2020). Health literacy in the general population in the context of epidemic or pandemic coronavirus outbreak situations: Rapid scoping review. *Patient Education and Counseling*, 104(2), 223–234. <https://doi.org/10.1016/j.pec.2020.10.012>
- McMillan, J. H. (2016). *Fundamentals of educational research* (7th ed.). Pearson.
- Mortaji, H., Ow, S. H., Moghavvemi, M., & Almurib, H. A. F. (2017). Load shedding and smart-direct load control using internet of things in smart grid demand response management. *IEEE Transactions on Industry Applications*, 53(6), 5155-5163. <https://doi.org/10.1109/TIA.2017.2740832>
- Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed.). Pearson.
- Newman, S. A., & Ford, R. C. (2021). Five steps to leading your team in the virtual COVID-19 workplace. *Organizational Dynamics*, 50(1), 1–11. <https://doi.org/10.1016/j.orgdyn.2020.100802>
- Nielsen, K., Nielsen, M. B., Ogbonnaya, C., Käsälä, M., Saari, E., & Isaksson, K. (2017). Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work & Stress*, 31(2), 101–120. <https://doi.org/10.1080/02678373.2017.1304463>
- Nowell, L. S., Norris, J. M., White, D., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 23–26. <https://doi.org/10.1177/1609406917733847>
- Obrenovic, B., Du, J., Godinic, D., Tsoy, D., Khan, M. A. S., & Jakhongirov, I. (2020). Sustaining enterprise operations and productivity during the COVID-19 pandemic: “Enterprise Effectiveness and Sustainability Model”. *Sustainability*, 12(15), 1-27. <https://doi.org/10.3390/su12155981>
- Padgett, D. K. (2008). *Qualitative methods in social research*. Sage Publications Inc. <https://doi.org/10.4135/9781483384511>
- Paul, S. K., & Chowdhury, P. (2021). A production recovery plan in manufacturing supply chains for a high-demand item during COVID-19. *International Journal of Physical Distribution & Logistics Management*, 51(2), 104–125. <https://doi.org/10.1108/IJPDLM-04-2020-0127>
- Perez-Ramirez, M., Arroyo-Figueroa, G., & Ayala, A. (2021). The use of a virtual reality training system to improve technical skill in the maintenance of live-line power distribution networks. *Interactive Learning Environments*, 29(4), 527–544. <https://doi.org/10.1080/10494820.2019.1587636>
- Poulsen, S., & Ipsen, C. (2017). In times of change: How distance managers can ensure employees’ wellbeing and organizational performance. *Safety Science*, 100(Part A), 37–45. <https://doi.org/10.1016/j.ssci.2017.05.002>
- Razmerita, L., Kirchner, K., & Nabeth, T. (2014). Social media in organizations: Leveraging personal and collective knowledge processes. *Journal of Organizational Computing and Electronic Commerce*, 24(1), 74–93. <https://doi.org/10.1080/10919392.2014.866504>
- Rehm, M., Moukarzel, S., Daly, A. J., & Del Fresno, M. (2021). Exploring online social networks of school leaders in times of COVID-19. *British Journal of Educational Technology*, 52(4), 1414–1433. <https://doi.org/10.1111/bjet.13099>
- Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Sciences*, 1094(1), 1–12. <https://doi.org/10.1196/annals.1376.002>
- Sarka, P., & Ipsen, C. (2017). Knowledge sharing via social media in software development: A systematic literature review. *Knowledge Management Research & Practice*, 15(4), 594–609. <https://doi.org/10.1057/s41275-017-0075-5>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for information*, 22(2), 63–75. <https://doi.org/10.3233/EFI-2004-22201>
- Sørensen, O. H., & Holman, D. (2014). A participative intervention to improve employee well-being in knowledge work jobs: A mixed-methods evaluation study. *Work & Stress*, 28(1), 67–86. <https://doi.org/10.1080/02678373.2013.876124>

- University of South Africa. (2018). *Performance management policy for extended management and directors*. UNISA Council, Pretoria. <https://staff.unisa.ac.za/>
- University of South Africa. (2021). College of education – About the college. <https://www.unisa.ac.za/sites/>
- Voas, J., & Kshetri, N. (2021). Scarcity. *Computer*, 54(1), 26–28. <https://doi.org/10.1109/MC.2020.3033611>
- Waizenegger, L., McKenna, B., Cai, W., & Bendz, T. (2020). An affordance perspective of team collaboration and enforced working from home during COVID-19. *European Journal of Information Systems*, 29(4), 429–442. <https://doi.org/10.1080/0960085X.2020.1800417>
- Weight, C. J., Sellon, J. L., Lessard-Anderson, C. R., Shanafelt, T. D., Olsen, K. D., & Laskowski, E. R. (2013). Physical activity, quality of life, and burnout among physician trainees: The effect of a team-based, incentivized exercise program. *Mayo Clinic Proceedings*, 88(12), 1435–1442. <https://doi.org/10.1016/j.mayocp.2013.09.010>
- Westgaard, R. H., & Winkel, J. (2011). Occupational musculoskeletal and mental health: Significance of rationalization and opportunities to create sustainable production systems – A systematic review. *Applied Ergonomics*, 42(2), 261–296. <https://doi.org/10.1016/j.apergo.2010.07.002>
- Xiao, Y., Becerik-Gerber, B., Lucas, G., & Roll, S. C. (2021). Impacts of working from home during COVID-19 pandemic on physical and mental well-being of office workstation users. *Journal of Occupational and Environmental Medicine*, 63(3), 181–190. <https://doi.org/10.1097/JOM.0000000000002097>
- Yin, R. K. (2013). *Case study research design and methods* (5th ed.). Sage Publications Inc.
- Zhao, S., Yin, P., Xiao, L. D., Wu, S., Li, M., Yang, X., Zhang, D., Liao, L., & Feng, H. (2021). Nursing home staff perceptions of challenges and coping strategies during COVID-19 pandemic in China. *Geriatric Nursing*, 42(4), 887–893. <https://doi.org/10.1016/j.gerinurse.2021.04.024>