A work-from-home framework for the South African private higher education institutions

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Thesis accepted in fulfilment of the requirements for the degree Doctor of Philosophy in Business Administration at the North-West University

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ABSTRACT

The COVID-19 pandemic has had severe implications for businesses worldwide, whereby many businesses faced challenges in continuing their operations. Due to countries' lockdown regulations, businesses had to implement work-from-home (WFH) arrangements for continuity and survival. Higher education was no exception. This study considers the WFH arrangement for private higher education in South Africa. It looks at the WFH factors impacting employee sentiment, employee engagement, organisational commitment, and perceptions of leadership styles. The primary objective of this study was to develop a WFH framework for academic personnel within private higher education in South Africa. The study used a quantitative research approach to investigate WFH within private higher education institutions. The respondents were employees from a private higher education institution in South Africa, holding various positions such as managers, lecturers, and academic administrators (i.e., academic personnel). Thus, the target population (133) comprised 16 managers, 27 academic lecturers (faculty members), and 90 support staff (academic administrators). A response rate of 75% was achieved (N = 105). Data were collected using an online self-administered questionnaire and analysed utilising descriptive, inferential, and multivariate techniques.

The study's primary findings suggested that academic personnel within private higher education in South Africa held positive views and sentiments of WFH, were engaged and committed during the WFH period, and generally had positive feelings about the leadership they received during WFH. These could all be attributed to the appropriate support received by the institution that enabled the effective implementation of WFH. Several suggestions for improvement were received, while managerial shortcomings were also identified regarding managing academia during WFH.

Through appropriate assessments of academic personnel's perceptions of WFH, employee engagement during WFH, organisational commitment levels during WFH, and perceptions of leadership received during WFH, the study identified the requisite antecedents and factors for a WFH framework. The study identified four key antecedents comprising 13 factors. These antecedents and factors were to be included in the framework for WFH in private higher education. The study also found a lack or misalignment in existing WFH frameworks. This study's framework followed a holistic approach and could assist private higher education in effectively managing WFH.

This study's practical contribution was providing a WFH framework, allowing private higher education to implement and sustain remote working within their institutions effectively. Empirically, due to the absence of similar studies in South Africa and possibly globally, this

study contributed to the body of knowledge surrounding the assessment of WFH in private higher education. Finally, methodologically, this is the first time a study has used the quantitative methodology to develop a framework for managing WFH for academic personnel in private higher education in South Africa.

Key Terms: Work-from-home, WFH, COVID-19 pandemic, private higher education, academic personnel, sentiment, motivation, organisational commitment, leadership, management

ACKNOWLEDGEMENTS

I wish to commence my acknowledgement by thanking Almighty God for the strength, perseverance, and opportunity to embark on this journey.

I thank my family for their patience and motivation throughout the study. Thank you to my wife, Nasreen, my daughter Amani and my mother, Yasmin.

I wish to express my sincerest appreciation to my mentor, Professor Ahmed Shaikh, for his continuous motivation and support during the study. This study would not have been possible without his support.

I am also profoundly grateful to my supervisors, Professors Christoff Botha, Christo Bisschoff and Doret Botha, for their unwavering guidance and support throughout the study. Their knowledge and professionalism are much appreciated. I would also like to thank Mrs Antionette Bisschoff for the language and technical editing of the study, as well as Professor Suria Ellis from the Statistical Consultation Services at the North-West University.

Last but certainly not least, I sincerely thank the participants of this study. Without your participation, this study would have been incomplete.

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LIST OF ABBREVIATIONS

ANOVA:	Analysis of Variance
AVE:	Average Variance Explained
BMC:	BioMed Central
CEO:	Chief Executive Officer
CFI:	Comparative Fit Index
CHE:	Council on Higher Education
CMIN/DF:	Chi-Square Statistic Divided by Degrees of Freedom
CON WFH:	Conducive work-from-home Environment
COVID-19:	Corona Virus Disease of 2019
CR	Contingent rewards
CSR:	Corporate Social Responsibility
EQS:	Equations
HE:	Higher Education
HEI:	Higher Education Institution
HR:	Human Resources
HRM:	Human Resources Management
IBM:	International Business Machines Corporation
ICT:	Information and Communications Technology
ILO:	International Labour Organisation
IOSR:	International Organisation of Scientific Research
IT:	Information Technology
KMO:	Kaiser-Meyer-Olkin
MBEA:	Management by Exception (Active)
MBEP:	Management by Exception (Passive)

ML:	Mulukmahomed Lappa
MLQ:	Multifactor Leadership Questionnaire
NHS:	National Health Services
NWU:	North-West University
OCB:	Organisational Citizenship Behaviour
PSEI:	Public sector educational institutions
RMSEA:	Root Mean Square Error of Approximation
SACHED:	South African Committee for Higher Education
SEM:	Structural equation modelling
SME:	Small Micro Enterprise
SOC CH:	Social Challenges
SPSS:	Statistical Package for Social Sciences
TCM:	Three-Component Model
UCT:	University of Cape Town
UGES:	Utrecht General Engagement Scale
UWES:	Utrecht Work Engagement Scale
WFH CH:	Work-from-Home Challenges
WFH:	Work-from-Home
WHO:	World Health Organisation

CHAPTER 1: NATURE AND SCOPE OF STUDY

1.1 INTRODUCTION

Modern business experienced a mindset shift by policymakers on higher education's role in economic growth (Shadrack & Yüksel, 2019). Increasingly, countries across the globe realise that higher education plays a more substantial role in their economic and social development. As a result, there has been a significant shift in the attitude of governments. Large organisations and higher education are now perceived as the epicentre of socio-political and economic success (Findler *et al*., 2019; Penn State, 2019). While there is global consensus on this philosophy, different results are realised on a country level. For example, developed countries such as the United Kingdom, the United States of America, New Zealand, and Australia have formidable policies and infrastructure to ensure the efficacy of higher education on economic development. In contrast, some developing and poorer countries have not realised the full potential of higher education in this regard (Findler *et al.*, 2019).

The inability of governments to pledge resources for the roll out of quality higher education, lack of funding, bureaucracy, corruption, and infrastructure are a few reasons why developing countries perform poorly and struggle to reach their higher education potential (Kromydas, 2017). However, following past decades of no or little investment in higher education, developing countries are now reviewing their priorities and changing their commitment to investing in higher education (Altbach & Reisberg, 2009).

Interestingly, because of the commodification of higher education, some countries now realise the economic potential that higher education as a product offers. More emphasis is placed on fostering global relationships between industry and the higher education sector (Ali, 2020). Intriguingly, several of these new relationships involved traditional public higher education institutions and private higher education institutions. As the demand for higher education continually grows globally, we find that public institutions no longer hold the capacity to respond to the ever-increasing demand (Blom, 2015). As a result, we see the rise of private higher education institutions, particularly in emerging markets where education is a cornerstone of societal progression. Private higher education has become a key player in absorbing students wanting a higher education. Hence, their role and importance are increasingly recognised. State-owned institutions exist, but we also find a rise in privately owned higher education institutions (Findler *et al.*, 2019). Developing countries have been the destination for foreign institutions. Many privately owned tertiary institutions open their

institutions in developing countries, knowing that the addressable market in developing countries is even more significant, solidifying the idea of the commodification of higher education (Findler *et al.*, 2019). The Philippines, Brazil, Malaysia, Vietnam, Indonesia, Thailand, the Middle East, and several African countries serve as examples. Asvat (2018) supported this argument, indicating a trend or move towards private higher education in developing countries. He also stated that this scenario is evident in the schooling system.

The scenario is no different in South Africa. The country's higher education arrangement is a living example of the global ownership arrangements. South Africa has over a million students enrolled in higher education systems subscribed to 150 higher education and training institutions (see Figure 1) (Council on Higher Education, 2020).

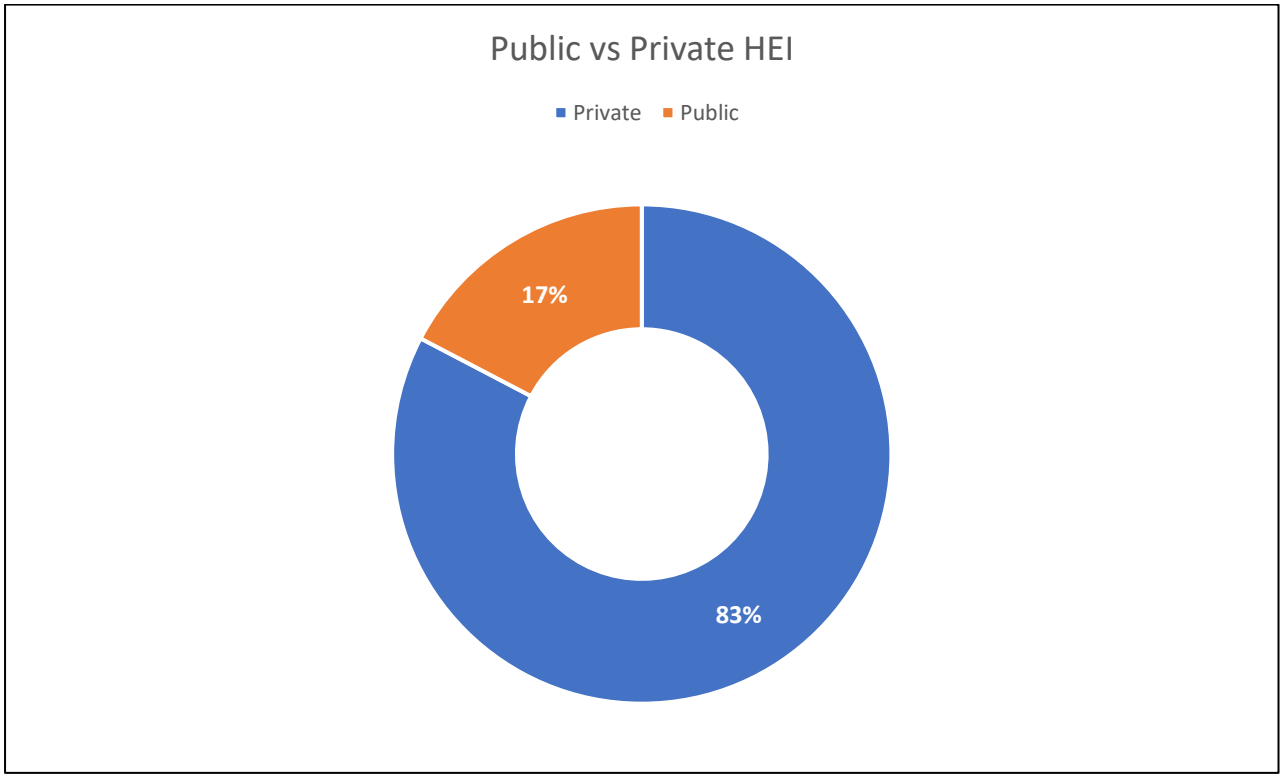


Figure 1*:* **Public vs. Private HEI South Africa**

Source: CHE (2020)

The 150 institutions consist of 26 public universities (with over 1,000,000 students enrolled) and 124 private institutions (with over 80,000 in private education). This demand has doubled since 1994 (Council on Higher Education, 2020). Figure 2 shows the enrolment numbers of students at public and private universities.

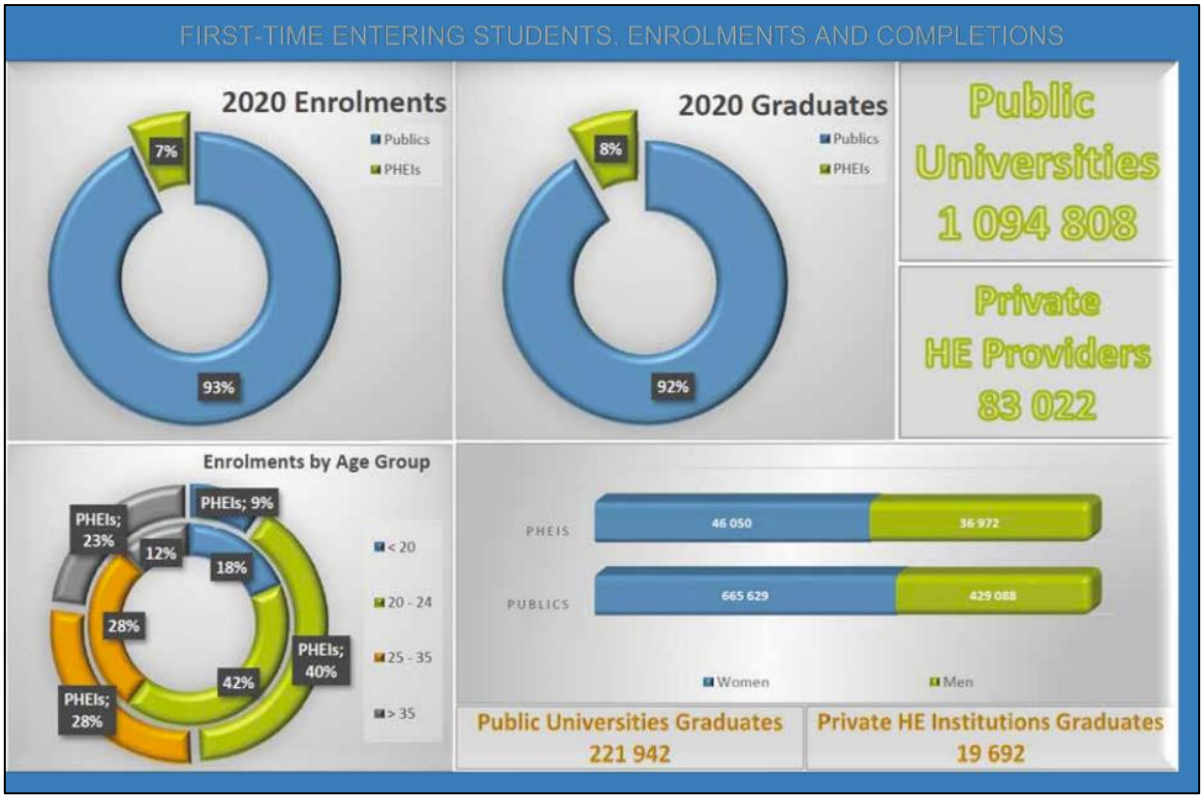


Figure 2: Number of students enrolled in public and private HEIs

Source: CHE (2020)

Private higher education is expected to absorb the demand for higher education as public higher education institutions are oversubscribed. Although private higher education traditionally played a minor educational role in South Africa, this has drastically changed in the last decade. Table 1 shows a brief history of private higher education development in South Africa.

Table 1: History of private higher education development in South Africa

YEAR	EVENT
1829	- Establishment of the South African College in Cape Town. - It was founded by influential citizens who sought a better education for their children. - Almost a century later (1918) this institution became the University of Cape Town (UCT).
1890	- The Kimberley School of Mines was created. - Focus was to serve the needs of the rapidly expanding mining industry. - Eventually (1908), it split into the University of Witwatersrand and the University of Pretoria.

1916	- The South African Native College was founded. - It eventually became the University of Fort Hare.
1929	- Creation of a technical college for Indian workers in Durban. - This later became ML Sultan Technikon, a public institution.
1974	- There were 32 registered private institutes - These private providers also supplied alternative routes to matriculation.
1980	- Start of partnerships addressing deficiencies in education and training opportunities for black South Africans. - South African Committee for Higher Education (SACHED) was established.
1995	- Creation of the National Commission on Higher Education. - Adoption of the Higher Education White Paper and the Higher Education Act of 1997 (SA, 1997b).
1998	- 120 private providers registered with enrolments of less than 1,000 students. - Including ninety providers with less than 250 enrolments. - Rapid growth of private, high-profile MBA programmes that attracted media coverage and interest in private higher education provision.
2009	- strong implementation of mergers and incorporations. - the creation of tools to aid the realisation of policy objectives. - variety of initiatives to improve higher education inefficiencies and lack of delivery.
2020	- Impact of COVID-19 on Higher Education. - Higher education required to make the transition to different modes of delivery. - Rise in online and distance education providers. - Transition in contact providers to offer distance and online formats of education.

Source: Mabizela (2015); Lange (2017); Hedding, *et al.* (2020)

Private higher education is now seen as a positive sentiment and is recognised for its contribution (Coetzee, 2019). Nevertheless, there still exists a disjuncture in the contribution of both sectors. While private higher education has five times the number of institutions in the country (i.e., 124), it only accounts for 10-20% of the enrolments. The government must change the scales for equitable access to all society members. Blom (2015) also argued that private higher education institutions must move from single purpose to multi-purpose, which implies offering many disciplines or fields of study at a particular institution. In support,

Coetzee (2019) indicated that the need for private higher education will be 500,000 students by 2030.

In addition to higher education arrangements, the Fourth Industrial Revolution (4IR) also impacted higher education. More specifically, the 4IR has brought about three significant changes to business (and subsequently, higher education) (Xing & Marwala, 2017):

- Digitisation and Integration of Vertical and Horizontal Value Chains
- Digitisation of Product and Service offerings
- Digital Business Models and Customer Access.

Compounding the changes of the fourth industrial revolution is the new work arrangement commonly known as '*Work-From-Home*' (WFH) that has been introduced globally during the COVID-19 pandemic, which will be the focus of this study. Due to movement restrictions of regulated lockdowns, many industries, including higher education, had to request that staff work remotely (i.e., from their homes) for business continuation (Mollenkopf ***et al.***, 2020). Although Teaching and Learning still took place where students could attend a contact class at a 'venue', how this Teaching and Learning session is structured has been transformed dramatically. Traditionally, students would physically participate in a lecture at a specific venue and be lectured by a physically present academic. This methodology still exists, but a radical shift towards using digitally enabling solutions to facilitate teaching and learning in an online space is happening (Dipa, 2020).

The COVID-19 pandemic's WFH solution has significantly accelerated the contactless and online teaching and learning experience. The lockdown forced education institutions globally to rethink education delivery methodology and models (World Economic Forum, 2020). Changes such as virtual classrooms, virtual libraries, virtual research space, virtual assessments, virtual student administration and virtual student consultation have replaced the traditional modality of Teaching and Learning (Xing & Marwala, 2017), and a strong emphasis on e-learning surfaced (World Economic Forum, 2020). The pandemic necessitated digital transformation in business, and higher education was no exception. Social distancing and the nationwide and global lockdown regulations resulted in an abrupt and total shift to online Teaching and Learning (Dipa, 2020). COVID-19 acted as a catalyst to accelerate digital transformation in higher education. South Africa, for example, experienced a sudden nationwide lockdown in March 2020, and providers of higher (and other) education had to adapt halfway into the first semester from contact teaching and learning to a complete online e-learning and digital teaching and learning model because no student was allowed on campus for lectures or consultation. Onsite services were limited to, for example, faculty

research, finance, and information technology support. Hence, higher education continued to provide education in a safe and contact-free environment (Dipa, 2020). This is how private higher education adopted the WFH strategy, which was implemented globally.

Many traditional institutions embraced webinar facilities to lecture and online Learner Management Systems to provide study material and assessments. Although the lockdown restrictions after the first and second waves of the pandemic are bound to ease, and vaccinations could curb the severity of the pandemic, higher education institutions may not likely revert to traditional contact teaching and learning methodologies. They may still utilise the WFH arrangement for academic personnel, as WFH has been regarded as a sustainable model for the future of work, education and business (Mollenkopf ***et al.***, 2020). A plausible scenario is that higher education institutions will retain the positive elements of WFH in the digital and e-learning platforms and that typical new hybrid teaching and learning platforms will develop (Word Economic Forum, 2020). Others may choose to remain fully digital and e-learning providers. The World Economic Forum's (2020) warning is noteworthy that the transformation to WFH in higher education is here to stay.

These changes have also resulted in a shift within the nature of work for academic personnel who find themselves at the centre of the transformation to Teaching and Learning. Academic personnel entered a steep and sudden learning curve to acquire new skill sets and cope with digital and e-learning demands. In addition to discipline-specific knowledge, academic personnel must employ 21st-century skills that enable them to achieve digital dexterity to survive the new teaching and learning era (Dipa, 2020).

Regarding academic personnel as a critical success factor, one needs to consider that human capital is regarded as a key tenet within any organisation. Due to the transformation to a knowledge economy, organisations emphasise human capital due to a rise in the skill content of labour. Dhanpat *et al.* (2018) emphasised that no machine or technology can replace the skills within communication, problem-solving abilities, and customer-centricity that humans (employees) provide (Dhanpat *et al.*, 2018). It is against this backdrop that the WFH dynamics (i.e., employee perception of WFH, employee engagement, leadership and organisational commitment) have become a focal point of organisational research based on the premise that the success of work-from-home (WFH) is directly proportional to organisational productivity. It has been noted that the ability to prepare employees for WFH effectively allows organisational stability, growth and increased business revenue. At the alternate end of the spectrum, the inability to enable employees to WFH effectively can be a costly exercise for a business (Cloutier *et al.*, 2015).

Therefore, organisations should try to ensure their cohort of staff is well equipped for WFH rather than bear the financial and productivity costs related to the inability to successfully implement WFH measures (Dhanpat *et al.*, 2018).

With this rapid increase in demand and access to higher education, institutions are becoming more aware of the role that academic personnel play in their institutions' satisfactory functioning. With this in mind, institutions are attempting to understand the factors related to WFH that impact the effectiveness of academic personnel, with an ultimate aim of enhancing the quality of education provision, by enhancing the ability of academic personnel to successfully WFH (Guo and Wang, 2017). This will allow for a framework for WFH to be devised for managing and supporting academic personnel within private higher education.

1.2 PROBLEM STATEMENT

Human resources (i.e., academic personnel in this regard) is a cornerstone of business success (Khan, 2018). However, given the abrupt implementation of WFH, one could assume that the WFH period has had a significant impact on the work experience of human resources (i.e. academic personnel), raising concerns about the long-term implications for academic personnel and the institutions they work for (Selvanathan, 2019). Thus, the pandemic has fundamentally changed the world of work for the foreseeable future. WFH was regarded as the “new normal” work arrangement during the COVID-19 pandemic, and organisations, even with physical infrastructure, may consider WFH as an arrangement post pandemic (Mehta, 2021). For example, TATA Consultancy Services (TCS), a significant force in the software sector, stated that 75% of its employees will continue WFH by 2025, and only a quarter of its employees will return to the office (FEOnline, 2020).

Another example of this is the company Automattic. This software company announced in 2021 that it will continue to permanently allow all its staff to WFH due to the benefits experienced by the WFH arrangement (Chen, 2022). The WFH arrangement has created new work environments and organisational climates, changing everything that business once regarded as “normal”.

Key determinants to the success of modern-day business, given the new WFH model, are employee engagement, organisational commitment and leadership styles used during WFH, as most employees work from their places of residence with no physical presence of superiors or colleagues (Riyanto & Adhitama, 2020). Studies have shown that the use of WFH has had a significant effect on the personal lives of employees, leading to exasperation, anxiety, and exhaustion (Riyanto & Adhitama, 2020; Romero *et al.*, 2022; Society of Human Resource Management, 2021). When left unattended, these influences hamper employees’

performance, dedication, willingness to work and relationships with colleagues and family, resulting in poorer levels of engagement and commitment (Riyanto & Adhitama, 2020; Tušl *et al.*, 2021). The autonomy and self-management requirement placed on employees during WFH is a critical success factor to business; hence, understanding the effect of WFH on their levels of engagement and organisational commitment, as well as their perceptions of leadership received, will be topical and priority for business continuity (Liu *et al.*, 2021).

The COVID-19 pandemic, as indicated, has brought about unprecedented changes to how people live and work, and higher education has been no exception. With social distancing procedures, many higher education institutions have been mandated to adopt remote work arrangements, including private higher education institutions in South Africa. The abrupt shift to remote work has created new organisational challenges for academic personnel in maintaining employee engagement, organisational commitment, and leadership approaches (Jowsey *et al*., 2020; Karakose, 2021; Selvanathan, 2019). The pandemic furthermore forced traditional contact higher education institutions into e-learning and digital teaching and learning, thereby forcing these institutions into competition with global education institutions. The protective geographical boundaries of the contact teaching-learning models vanished. South African institutions (both public and private) now fight in the open teaching and learning market for students on digital and e-learning education. Higher education institutions, now more than ever, need to adapt to this era of global competition and try to retain their key talented staff by appropriating adequate and sustainable workforce dynamic solutions (Dhanpat *et al.*, 2018).

Employees possess the skills and competencies necessary for an organisation to succeed and compete effectively. Likewise, Higher education institutions compete in the global market as a service provider. However, higher education institutions are vulnerable because they require a high skill set. Most academics are from a selected proportion of highly educated individuals possessing a master's or doctorate. Academics are also needed to research, publish, and transfer knowledge effectively, thus acting as teachers to students. This is a scarce combination, and it is, therefore, vital to retain quality academic staff.

Against the background above, no study could be located that investigated employee sentiments of WFH, employee engagement, organisational commitment, and leadership styles within the private higher education setting, particularly during the WFH period during the COVID-19 lockdown, at a global and national level. Thus, these elements have not been given meaningful attention within the private higher education setting, particularly during the WFH period. This is the first gap in the existing body of knowledge that this study aimed to fill.

The second gap in the existing body of knowledge concerns the research geography. Although some concepts (i.e. organisational commitment, for example) have been investigated in countries such as Japan, China and Malaysia, not much research has been conducted in South Africa. This study aims to be one of the foundation studies in understanding the impact that WFH has had on the organisational commitment, employee engagement and perceptions of leadership styles of academic personnel in South African private higher education.

The results of this study provide meaningful insights into the effects of remote work, particularly WFH, on academic personnel in higher education institutions and inform best practices for supporting these personnel during WFH. Emphasis will be given to the COVID-19 period in this study as the circumstances for Teaching and Learning have transformed, impacting academic personnel's work experiences. This research is critical to ensuring that academic personnel in private higher education institutions in South Africa continue to thrive professionally and personally in the face of ongoing challenges posed by the COVID-19 pandemic.

1.3 THE PRIMARY RESEARCH QUESTION OF THE STUDY

The primary research question of this study is: What constitutes a framework to inform WFH in private higher education institutions in South Africa?

1.3.1 Secondary research questions

- What are the existing global approaches and perspectives on WFH, and how can they be used to inform a WFH model for private higher education?
- What are the existing approaches, perspectives and theories regarding employee engagement, organisational commitment and leadership styles, and how can they be employed to inform a WFH model for private higher education?
- What are the sentiments of the academic personnel (managers, lecturers, and academic administrators) regarding WFH at the private higher education under investigation in the context of the COVID-19 pandemic?
- What are the levels of engagement of academic personnel (managers, lecturers, and academic administrators) working from home in a private higher education institution in South Africa in the context of the COVID-19 pandemic?
- What are the levels of commitment of academic personnel (managers, lecturers, and academic administrators) working from home in a private higher education institution in South Africa in the context of the COVID-19 pandemic?

- What are the employees' perceptions of leadership styles used during WFH in a private higher education institution in South Africa in the context of the COVID-19 pandemic?
- What are the associations between selected socio-demographic variables and employees' sentiments of WFH, employee engagement, organisational commitment and leadership styles used during WFH in a private higher education institution in South Africa in the context of the COVID-19 pandemic?
- What conclusions can be drawn from the literature review and empirical results to develop a WFH framework for South African private higher education?

1.4 THE PRIMARY RESEARCH OBJECTIVE OF THE STUDY

The primary objective of this study was to develop a WFH framework for private higher education institutions in South Africa.

1.4.1 Secondary research objectives

The secondary objectives of the study were to:

- To explore the existing approaches and perspectives regarding WFH on a global level and to determine how these approaches can be used in a WFH model for private higher education. *(Article 1)*.
- To scrutinise the existing approaches, perspectives and theories regarding employee engagement, organisational commitment and leadership styles and to determine how these approaches can be used in a WFH model for private higher education. *(Articles 2, 3 and 4)*.
- To ascertain the sentiments of the academic personnel (managers, lecturers, and academic administrators) regarding WFH at the private higher education under investigation in the context of the COVID-19 pandemic. *(Article 1)*.
- To determine the levels of engagement of academic personnel (managers, lecturers, and academic administrators) working from home in a private higher education institution in South Africa in the context of the COVID-19 pandemic. *(Article 2)*.
- To determine the organisational commitment of academic personnel (managers, lecturers, and academic administrators) working from home in a private higher education institution in South Africa in the context of the COVID-19 pandemic. *(Article 3)*.

- To determine the employees' perceptions of leadership styles used during WFH in a private higher education institution in South Africa in the context of the COVID-19 pandemic. *(Article 4)*.
- To determine the associations between selected socio-demographic variables and employees' sentiments of WFH, employee engagement, organisational commitment and leadership styles used during WFH in a private higher education institution in South Africa in the context of the COVID-19 pandemic. *(Articles 1 to 4)*.
- To draw conclusions from the literature review and empirical results to develop a WFH framework for South African private higher education.

1.5 RESEARCH METHODOLOGY

This section describes the research methodology employed in the study.

1.5.1 Research approach

In academic research, four predominant approaches are utilised: positivism, post-positivism, interpretivism, and critical theory. These approaches serve as a foundation of beliefs and concepts that influence the research methodology and dictate how reality and events globally can be perceived, quantified, and comprehended (Bryman & Bell, 2018). This study employed a positivistic research approach. Therefore, a quantitative method of inquiry was the most applicable method in this study. The main distinction between qualitative and quantitative methods is their degree of flexibility (Christensen *et al.*, 2021). Quantitative methods are relatively inflexible due to standardised methods used in data collection and analyses. Additionally, responses from respondents are 'fixed' and closed-ended, which removes the freedom for respondents to express their views (Hennink, Hutter & Bailey, 2011; Dawson, 2019; Bryman *et al.*, 2021). Positivism depends on quantifiable data, enabling researchers to examine and categorise the data obtained through statistical techniques (Dawson, 2019; Bryman *et al.*, 2021). This approach focuses on finding patterns in the data and generalising the population being analysed (Vithal & Jansen, 2019).

This study applied a quantitative research method, which aligns well with the positivist research perspective, as indicated above. Quantitative research entails collecting and utilising numerical data to verify hypotheses and understand the connections between variables (Mellville & Goddard, 2001). The study was founded on a substantial sample size to enhance the statistical validity of the findings (Dawson, 2019).

1.5.2 Population and sample size

The respondents in this study were employees (academic personnel specifically) from a private higher education institution in South Africa, holding various job positions such as managers, lecturers, and academic administrators. All these individuals are considered academic personnel as they are involved in the academic functions of the higher education institution. The target population comprised 133 academic personnel; they are 16 managers, 27 academic lecturers (faculty members), and 90 support staff (academic administrators). The study utilised total population sampling, a type of purposive sampling that surveys the entire population based on specific criteria (in this case, academic personnel) (Dawson, 2019). A response rate of 79% was achieved (N = 105).

1.5.3 Data collection instruments

The data was obtained through an online survey using standardised questionnaires that were coded and contained various Likert scales. The survey was conducted at the end of 2021, when the institution was operating under a work-from-home (WFH) model due to the COVID-19 pandemic, requiring all employees to work remotely from their homes. The questionnaire consisted of two sections. The first section included 11 questions on the respondent's background information such as gender, age, department, years of experience in the organisation, highest education, country of residence, nationality, marital status, employment type, duration of WFH since the start of the pandemic in 2020, and current WFH situation. The second section consisted of 28 questions measuring employees' perceptions of WFH (the scale was developed in 2020 by Botha & Coetzee and reported on in 2022). The third section employed the 17-item Utrecht Work Engagement Scale (UWES) to measure employees' engagement levels (Schaufeli & Bakker, 2004). The fourth section used the revised version of the Three-Component Model (TCM) employee commitment survey (Meyer, Allen & Smith, 1993), comprising 18 questions that measure employees' organisational commitment. The last section utilised the Multifactor Leadership Questionnaire, comprising 46 questions, to measure leadership styles (Bass & Avolio, 2004). The psychometric properties of the scales are discussed in each article.

1.5.4 Data analysis

The collected data from the respondents underwent various statistical evaluations using SPSS software. The evaluations included descriptive, inferential, and multivariate techniques. Confirmatory factor analysis validated the variables and their connection to the research constructs. The internal consistency was measured using Cronbach's alpha coefficient. Descriptive statistics provided an overview of the sample characteristics. Independent

samples t-tests and one-way ANOVA compared the means of different groups and determined if significant statistical differences existed between the group means on the dependent variables. Effect sizes provided a clearer picture of the practical significance of the results. The effect size was measured by Cohen's d value, with 0.2 representing a small effect, 0.5 representing a medium effect, and 0.8 representing a large effect. Lastly, the correlation between two variables was analysed using Spearman's rank-order correlation to determine the strength and direction of their monotonic relationship.

1.5.5 Ethical considerations

Ethical issues present themselves in any research, regardless of the research approaches investigators take. Although ethical issues can be physically, psychologically, or emotionally damaging to respondents, this study poses a low risk (Mellville & Goddard, 2001). Nevertheless, the study was scrutinised by the NWU Scientific Committee and the NWU Ethics Committee to ensure that there is limited risk and potential to infringe on any ethical issue. The study applied the following ethical considerations.

1.5.5.1 Informed consent and ethical clearance

The first ethical issue that needed consideration was informed consent. Researchers are required to obtain informed consent from respondents. To obtain this consent, researchers need to ensure that respondents are informed about the purpose and nature of the study and the potential risks and benefits that could occur from participating in the research study (Christensen *et al.*, 2021; Mellville & Goddard, 2001). Respondents in this study were informed about the nature and objective of this study and were provided with an informed consent form, which formed the first page of the online administered questionnaire. Respondents were required to provide their consent to continue with the survey. A letter of permission was obtained from the higher education institution under investigation to conduct the study. The Economic and Management Sciences Research Ethics Committee (EMS-REC) at the North-West University approved the study and issued an official ethics number (*NWU-01253-21-A4*).

1.5.5.2 Confidentiality

A significant responsibility of the researcher is to ensure the protection of respondents by providing confidentiality. Confidentiality involves researchers abstaining from providing or reporting on private data identifying respondents. Surveys gather large amounts of personal data from respondents. Confidentiality was guaranteed by anonymity (not recording or mentioning the names of respondents in the report) (Hennink, Hutter & Bailey, 2011; Dawson,

2019). Furthermore, no respondents' names were recorded. As a result, no respondent can be identified.

1.5.5.3 Exploitation, inconvenience, and opportunity cost

Exploitation in research occurs through power imbalances in the relationship between researchers and respondents. These power relationships often result in the exploitation of respondents by pressuring them to partake in the study, asking sensitive questions, and prolonging interviews (Cooper and Schindler, 2014; Dawson, 2019). Exploitation in this study was avoided by informing respondents that they were not obligated to participate. Concerning sensitivity, personal or sensitive topics and questions were avoided to ensure respondents felt comfortable during data collection.

1.5.5.4 Reciprocity

Since this study's primary source of information was respondents, reciprocity was an ethical practice. Reciprocity in research involves the indebtedness of researchers to respondents. Reciprocity may involve allowing respondents to assist in the study, thank you gifts, or providing feedback for the study (Bryman and Bell, 2018). This study reciprocated participation by promising feedback on the results of this study. This was done at the end of the study. The researcher will provide and distribute the direct link to the report at the NWU library to the respondents. Interested respondents can then quickly locate and study the outcome of the research.

1.6 LAYOUT OF THE STUDY

1.6.1 Approval of the article format PhD programme

This doctoral thesis is formatted according to the approved **A-rules 5.2** and **5.10.4** of the North-West University. The faculty rule (**EMS 14.1.3**) governs these A-rules in the Faculty of Economic and Management Sciences (Buys, 2017). These rules are:

- "*Approval of the study programme and the procedure which should be adhered to take place in terms of general rule A.5.2. The study programme should, to the satisfaction of the research entity director, contribute to the research programme(s) of the University as established by the various research entities.*"
- *"For the objectives of a thesis in article layout, a minimum of three published articles or three unpublished manuscripts in article format must be presented."*

- *“A minimum of one article presented to a subsidy-bearing journal is a requisite prior to the submission of the for examination as a requirement to acquire a PhD degree (refer A-rule 5.10.4)*.”

Although the rules constitute three articles, this study consists of four academic articles. Two have been accepted for publication pending approval of the final corrections, while the other two articles have been submitted and are currently in review by subsidy-bearing accredited journals.

1.6.2 Chapter layout

The study consists of six chapters in the approved “article format”. Hence, Chapters 1 and 6 provide the introduction and closing chapters of the study. Chapters 2-4 are stand-alone articles investigating the problem, namely the impact of WFH on employee sentiment, employee engagement, organisational commitment and perceptions of leadership styles. More specifically, the chapters entail:

Chapter 1 is the introduction to the study. This chapter provides the background and a contextual preliminary literature study. The chapter also introduces the problem statement, objectives, and research methodology to be followed.

Chapter 2 contains the first article of the study. This article evaluates the perception of academic personnel on WFH arrangements. By investigating what employees felt regarding the implementation of WFH, higher education could identify the strengths and weaknesses surrounding the implementation of work-from-home. This would allow private higher education to devise conducive strategies to deal with WFH, ensuring that the solutions put forward meet the expectations of the staff.

Chapter 3 contains the second article of the study. This article identifies the impact that WFH has had on the employee engagement of academic personnel. The article adopts the Utrecht Work Engagement Scale (UWES) questionnaire to evaluate employee engagement based on rigour, dedication, and absorption. The outcome of this study would provide insight into how employee engagement could be enhanced or sustained in private higher education, particularly within the WFH context.

Chapter 4 consists of the third article of the study. This article aims to empirically evaluate WFH's impact on the organisational commitment of academic personnel. Like article 2, the intention of article 3 is to identify the levels of organisational commitment of staff to devise a series of recommendations to either maintain or enhance the organisational commitment of academic personnel during the WFH arrangement.

Chapter 5 contains the fourth and final article of the study. This article aims to understand the leadership style/s utilised by management during the WFH period and identify academic personnel's opinions on the leadership received during WFH. This is important as the literature identified organisational and management support (leadership) specifically as a critical success factor of WFH. For the article, the Multifactor Leadership Questionnaire (MLQ) was utilised to collect data from respondents.

The final chapter (i.e., *Chapter 6*) concludes the literature and empirical studies and makes recommendations accordingly. The chapter also introduces areas of possible future research on the WFH of academic personnel within a private higher education institution. More importantly, the chapter proposes a framework for WFH of academic personnel in private higher education. The chapter concludes the study with a comprehensive summary.

1.7 LIMITATIONS OF THE STUDY

The limitations of this study are that the study was a quantitative study with a limited sample, i.e., private higher education in South Africa. While the findings can be generalised to private higher education in South Africa, the recommendations may be adapted to public higher education. Still, they will not be generalised to public higher education, given the uniqueness of the context of private higher education. This also implies that the study may be limited in its comparative nature, as there were no studies of a similar nature that could be located that were conducted in public higher education. Hence, comparing public and private higher education in South Africa regarding WFH may be difficult.

1.8 CONTRIBUTIONS OF THE STUDY

The study aims to make the following contributions to private higher education in South Africa:

1.8.1 Practical contribution

South Africa has several private higher education institutions, now regarded as crucial players in absorbing the country's oversubscribed higher education enrolments. The practical contribution that this study intends to make is the provision of a WFH framework, which will allow private higher education to implement and sustain remote working within their institutions effectively. Although the pandemic has slowed down and lockdown restrictions have been lifted, many institutions, including the institution under study in this study, have maintained remote teaching, learning and assessment, thereby making the management of WFH critical. The framework put forward by this study would allow institutions to enhance employee satisfaction and productivity, ultimately contributing to the provision of quality higher education in the country.

1.8.2 Empirical contribution

Due to the absence of similar studies in South Africa and possibly globally, this study would contribute to the body of knowledge surrounding the assessment of WFH in private higher education. This study could be regarded as a founding study that looks at the WFH experiences of academic personnel within private higher education on perceptions of WFH, employee engagement, organisational commitment, and leadership styles. The study would provide valuable insights and be the foundation for future research in this field of knowledge.

1.8.3 Methodological contribution

In addition to being an empirical study in this field, it is the first time a study has used the quantitative methodology to develop a framework for WFH for academic personnel in private higher education in South Africa. This allows for accurate insight but, more importantly, provides meaningful data and correlations to be used as a foundation for further studies.

1.9 SUMMARY

This chapter overviews the aim, objectives, significance, research methodology and study contributions. The chapter has also provided a broad overview of the layout of the study, identifying the purpose of each article as well as the final chapter, which aims to propose a framework. Once the WFH environment is understood within each article, the necessary information on building a framework for the WFH within private higher education would be possible. It will benefit if private higher education institutions in South Africa consider the findings and recommendations of this study, as the WFH model has been identified as an arrangement that will be prevalent for the foreseeable future.

The next chapter provides the first stand-alone article on academic personnel's perception/ sentiments of WFH during the COVID-19 period within the context of private higher education in South Africa.

CHAPTER 2: ARTICLE 1:

UNDERSTANDING EMPLOYEE SENTIMENTS OF WFH ARRANGEMENTS DURING THE COVID-19 PANDEMIC IN SOUTH AFRICA'S PRIVATE HIGHER EDUCATION

This article has been published by the *Journal of Contemporary Management.* The Department of Higher Education indexes the journal.

Understanding employee sentiments of WFH arrangements during the COVID-19 pandemic in South Africa's private higher education

ABSTRACT

Purpose of the study: What were the sentiments of private higher education personnel in South Africa when they were working from home (WFH) during the global COVID-19 pandemic? Current research identified factors such as well-being, retention and rewards becoming increasingly important in the success of modern organisations, and that understanding employee sentiment regarding WFH significantly influences organisational performance. However, none of these studies specifically addressed private higher education and its critical success factors for quality teaching, learning and assessment.

Design/methodology/approach: The study adopted a quantitative method of enquiry and a cross-sectional research design. Total population sampling surveyed 133 personnel via an online self-administered, close-ended questionnaire. A response rate of 79% was realised. Data were analysed using descriptive, inferential, and multivariate statistical techniques.

Findings: The results suggest that academic personnel displayed positive sentiments regarding WFH arrangements. Respondents indicated that they received appropriate management and organisational support, allowing them to WFH successfully. There was consensus that their WFH environment was conducive. They did not experience many WFH challenges but did, however, experience social challenges due to the disruption in their routines and personal relationships with colleagues.

Recommendations/value: The key recommendations to enhance staff sentiment and experience of WFH during a pandemic are that 1) management should implement sound supportive strategies such as regular communication, clear guidelines, balanced work schedules, requisite WFH infrastructure, 2) provide support such as ICTs and workspace requirements, and emotional and social support, and 3) respond to the staff's psychological needs.

Managerial implications: This study contributes to the practical implementation of management strategies during a pandemic. Although the scare of the COVID-19 pandemic is fading, other pandemics may follow. WFH is now an established practice, and multiple academia now either WFH or work in a hybrid model where they spent some time WFH. Resultantly, WFH is a viable work arrangement for the foreseeable future, and it is imperative to develop appropriate management models to deal with WFH as a critical organisational success factor for private higher education (and other organisations) in South Africa.

Keywords

Academia; COVID-19 pandemic; higher education; South Africa; support staff; WFH

JEL Classification: I23; M12

1 INTRODUCTION

Working from home (WFH) is defined by the Oxford Dictionary (2023) as "…*to do your job in your own home, especially a job that is usually done in an office.*" Both Cambridge and Webster's dictionaries offer similar definitions. Definitions of WFH predating the COVID-19 pandemic are much vaguer and more dissimilar. That is because WFH was not a significant work practice before the pandemic. Although there are some examples of WFH (in higher education, taking an academic research sabbatical), the significance of WFH as a working model was negligible and managed cases individually. WFH challenged organisations and academic institutions as a working model; all managerial interventions were contact- or office-based. However, with the onset of the COVID-19 pandemic, and the resultant hard lockdowns that followed, WFH abruptly became a reality for organisations and specifically for higher education, where large student numbers were attending classes on a contact basis (Dubey &Tripathi, 2020).

Post-COVID, WFH experienced unprecedented global growth as industries responded rapidly to adapt their work models (Savic, 2020). Universities followed suit. Students and lecturers were sent home, and new online learning models were established almost instantly to continue with tuition and not lose an educational year. Only after re-establishing tuition from home could universities start to evaluate the WFH model and its influence on its personnel. The WFH model offers numerous advantages, such as reduced commuting, enhanced productivity, digital savviness, and worker health to business continuity (tuition). However, WFH also presents several challenges for employees, such as adapting to the new work environment, learning new technology, implementing digital transformation agendas at an unprecedented pace, and loneliness (Fazlurrahman *et al.*, 2020). Therefore, it is critical to gauge employee sentiment toward the WFH arrangement (Dubey &Tripathi, 2020) and how well they cope with the severe impact and adjust to the adopted new world of work, popularly referred to as the "new normal" (Manjaree & Perera, 2021).

2 PROBLEM STATEMENT

Modern business success is linked intrinsically to employee performance. This is even more so in a service industry such as higher education, where contact between lecturers and students is a key success factor. Lecturers must remain creative employees who positively contribute towards the education institution's productivity by adding value and keeping high academic standards, albeit WFH. Hence the private higher education institution must maintain a stable workforce to continue its tuition. Resultantly, lecturers' engagement, retention, and reward must be retained in satisfactory working conditions (Savic, 2020). Therefore, it became imperative that private higher education institutions incorporate employee sentiment in their

WFH management model. It is also noteworthy that Oakman *et al.* (2020) emphasise that WFH arrangements developed during the "new normal" may be here to stay for the foreseeable future. Apart from the pandemic, many organisations have seen the benefits of remote working, such as operational cost, staff productivity, and scalability of businesses, to mention a few (Budhrani *et al*., 2021). Private higher education benefits similarly. Hence, WFH is a plausible future work arrangement, and understanding personnel's sentiment on the WFH arrangement is crucial to ensure the success of higher education, given its digital transformation (Jowsey *et al*., 2020). Although there are numerous studies on WFH in business and industry, there is a lack of published research focusing on understanding personnel sentiment of WFH in private higher education. No study could be located that focused on these sentiments regarding the new WFH arrangements in South African private higher education. This study, therefore, investigates WFH sentiments of personnel at a private higher education institution in South Africa.

3 RESEARCH OBJECTIVES

The objective of this study was, first, to ascertain the sentiments of personnel (academic and support) WFH in a private higher education sector in South Africa in the context of the COVID-19 pandemic, second, to determine its association with selected socio-demographic variables, and third, to draw conclusions and recommendations from the literature review and empirical results to assist higher education institutions, in general, and specifically, in the private space, to improve the WFH experience of academic and support staff.

4 LITERATURE REVIEW

The literature on WFH focuses explicitly on the higher education sector. First, the concept of WFH is defined and conceptualised. Secondly, the digital transformation within the higher education landscape due to the enforced WFH arrangement during the COVID-19 pandemic is elaborated on. Lastly, the factors influencing employees and the organisation regarding WFH are discussed.

4.1 Defining and conceptualising WFH

The concept of WFH is not new, as schools of thought have highlighted this arrangement over the years, even before the advent of the global COVID-19 pandemic. Neo and post-Fordist accounts of work organisations concede that there has been a history of moving away from the Fordist model of work (i.e. standard employment, including continuous and full-time employment at a work location, with a direct relationship between employer and employee) to non-standard forms of work (i.e. impermanent, individually negotiated and not physically

bounded by the office or work locations) that arose in response to globalisation, technological advancements, market competition, demographic shifts and labour market conditions or relations (ILO, 2021; Watson, 2017). WFH was a concept developed as early as the 1970s by introducing telephones that connected offices to people's homes. In 1979, the first experiment of WFH or telework as it was known then, was conducted on five employees who worked for an ICT business, the International Business Machines Corporation (IBM), where these employees were allowed to work telephonically from their homes, which was soon expanded to 2000 employees by the early 1980s (Gajendran & David, 2007). By the mid-1990s, the concept of 'work is something you do, not something you travel to'' was coined, highlighting the global adoption and acceptance of WFH arrangements. By this time, WFH was supported through various ICT advancements such as collaboration software, conference calling, videotelephony, Internet, Microsoft Teams, and Whatsapp, to mention a few (Byrd, 2021).

Several terms describe employees working from flexible locations using ICTs to execute work requirements (ILO, 2020). WFH has been a commonly used term since the outbreak of the Corona virus (COVID-19). However, it would be important to understand its definitional characteristics as the phrase is thought widely to be synonymous with the concepts such as teleworking or telecommuting, remote work, virtual work, and flexible and distance work (ILO, 2020; Watson, 2017). Teleworking or telecommuting refers to employees performing their work duties in locations outside of the office which is not fixed; these could be coffee shops, airports, or hot desks, to mention a few. Remote work is somewhat like telecommuting, except the emphasis is on the fact that employees may live outside the geographical office location. Employees may need to work at another location or city (Savic, 2020). Virtual work refers to employees working virtually from any location through formal contractual obligations to the company (i.e., an employee may be employed virtually).

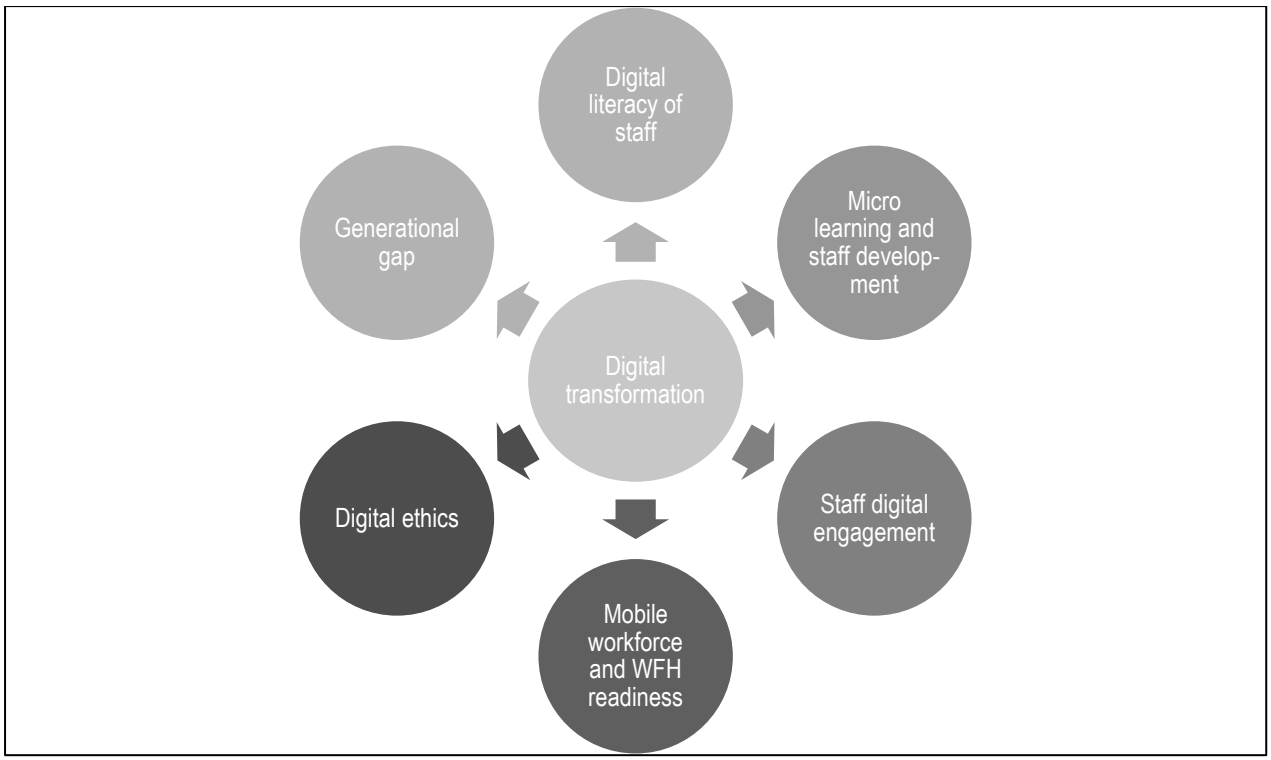
On the other hand, flexible work refers simply to organisations entering into agreements with employees without formal work-allocated times. For example, an employee may need to work 20 hours a week and can choose how they will fulfil those hours (Doyle, 2020). WFH, or "industrial homeworking", on the other hand, refers to a work arrangement that allows employees to work outside of the office at home and involves an employment relationship (Doyle, 2020; Watson, 2022).

Although the WFH model was used as early as the 1970s, as indicated above, the COVID-19 pandemic has recently been a critical driver to using the WFH arrangement. Due to the global lockdown, approximately 93% of the global workforce had to shift their office work to WFH from the end of 2019 (ILO, 2020). Hence, while WFH was evidential before the COVID-19 pandemic, the pandemic is a key stimulant to the global use of the WFH model (ILO, 2020).

4.2. Digital transformation in the context of higher education

An important concept to understand when assessing WFH is the concept of digital transformation. In essence, digital transformation refers to creating a new work model that surrounds the use of information technology (Manjaree & Perera, 2021). However, an important point to note within the digital transformation agenda is that digital transformation does not merely refer to the maximisation of technology use but, more importantly, refers to the transformation of the workforce to a 'digital mindset' (Chattopadhyay, 2016). Hence, digital transformation's components are digital literacy of staff, generational gap, micro learning and staff development, digital staff engagement, mobile workforce and WFH readiness, and digital ethics (Savic, 2020). These components are reflected in Figure 1, followed by a brief description.

Figure 1: Digital transformation components



Source: Authors' own compilation adapted from Savic (2020)

Savic (2020) conceptualises the digital transformation components as follows: *Digital literacy of staff* refers to the level of understanding or skillset of staff that are used to communicate, interact with and work utilising digital resources (both software and hardware). *Micro learning and staff development* refer to deliberate attempts to promote the skilling of staff through immediate and short online courses to assist with digital literacy and skillsets required to perform optimally in a WFH environment. *Staff digital engagement* refers to formalised strategies to enhance employee well-being through virtual means. *Mobile work force and WFH*

readiness refer to the acquisition or use of a virtual workforce/ team and how well-prepared employees are for WFH. *Digital ethics* refers to one's ability to manage oneself ethically and professionally via digital channels or mediums. *Generational gap* refers to the difference in technical skills and levels of understanding that occurs within different age groups.

Organisations across the globe have been, in the advent of the COVID-19 pandemic, given much meaning and attention to their digital transformation agendas. While a lot of thought has been shown to digital transformation, many organisations (including the higher education sector), have been sluggish in the uptake of digital transformation, thus affecting their capability of preparing staff and providing them with the requisite facilities and infrastructure to WFH (Dost *et al*., 2020; Mehta, 2021).

In many instances, organisations were caught off guard and ill-prepared for the pace of change. Hence the digital transformation components listed in Figure 2.1 were not given appropriate attention when organisations moved to a remote working model (Savic, 2020). Even in terms of management, a key characteristic of WFH's success was the ability of managers to hasten the adoption of new and digital management and communication techniques to ensure that the needs and welfare of a digital workforce have been met. However, due to the rapid transition from office-based to remote-based work, managers were not given the time and training to effectively adjust their managerial styles (Savic, 2020; Kossen & Van der Berg, 2022).

The COVID-19 pandemic has forced higher education in several countries to devise strategies to contain the virus' spread, including the complete closure of institutions (Mwita, 2020). Most of the workforce in higher education is still human capital dependent and requires people to put in hours of labour for the effective provision of education. COVID-19 gave rise to the normalisation of WFH (Rehman *et al.,* 2020). Alternative learning modes were to be considered to continue the academic year (Mwita, 2020) effectively.

The constant evolution of the ICT sector was considered a solution to the closure of institutions, offering higher education opportunities to integrate technology into education for effective teaching, learning and assessments (Huang *et al*., 2020). The efficacious adoption and swift deployment of education technologies allowed many institutions to transform in-person education into remote/online teaching effectively. Many institutions provide educational administrators and faculties with digital infrastructures for online education. In the same breath, many institutions, especially in developing countries, have wrestled with adapting teaching technologies (Smith & Judd, 2020). Nevertheless, the mass adoption of these technologies, such as video conferencing and online assessment tools, has allowed for the

continuation of higher education during the pandemic, albeit in a different delivery form (Czerniewicz, 2020).

4.3. Factors affecting and influencing WFH

This section reviews the factors affecting WFH, detailing the characteristics affecting the successful implementation of WFH, as well as describing the influence that these factors may have on employee and organisational productivity.

4.3.1. Staff resistance

Studies have shown that the move to remote working has been coupled with deficiencies in service delivery due to the lack of training and infrastructure required to administer online education successfully (Ali, 2020). Employees of higher education institutions have been affected by the radical, sudden shift to online learning to maintain the momentum of the academic year (Czerniewicz, 2020). The inexperience of employees due to the lack of training for the transition to online education has been noted and commonly featured when assessing academic staff sentiment and experiences regarding WFH arrangements (Ali, 2020; Czerniewicz, 2020; Rehman *et al*., 2020). This notion is also regarded as the 'politics of resistance,' where institutions across the globe have experienced considerable amounts of contention from staff, which has sometimes led to undue protests and the decision to transform to online and blended learning (Rehman *et al*., 2020).

Specific staff, particularly senior faculty members, contend that face-to-face learning is a superior pedagogy compared to blended and online learning. This has caused disagreements amongst universities, resulting in different adoption rates of online pedagogies due to the various acceptance rates of this mode of delivery (Murgatrotd, 2020).

In addition, staff have also cited difficult home environments that are not conducive to remote working. These include but are not limited to complexities of family life, such as children being at home, poor or insufficient Internet access and connectivity issues, and load shedding (in the case of South Africa) (Ali, 2020; Kossen & Van der Berg, 2022). These situations imply that institutions have not adequately provided the necessary tools for staff to function effectively while WFH (Ali, 2020). In addition, staff WFH have reported additional costs for areas such as Internet access, food, water, and electricity, to mention a few (Bellmann & Hubler, 2020). The World Bank (2020) has cautioned that institutions that do not provide staff with adequate tools, such as broadband and a connected device at home, will certainly not be able to support students that are now required to learn online. This has also raised equity concerns as both staff and students have differing access to the resources required for online learning (Jowsey *et al.*, 2020). A study conducted in Asia by Marinoni *et al.* (2020) indicates

that the country is on the verge of rising inequalities within its higher education institutions due to financial difficulties and the scarcity of access to educational technology.

4.3.2. Staff readiness

The preparedness of faculties and administrators to embrace the incorporation of technology into teaching and learning was critical for providing education and training for 21st-century skills; this is a vital skillset in the 4IR. However, the staff's willingness to adopt these technologies was a hurdle in implementing ICT solutions (Jowsey *et al.*, 2020).

Due to the rapid transition from in-person to online education, institutions did not spend adequate time assimilating employees with new technologies (Ali, 2019; Mehta, 2021). One of the main reasons for this was the lack of employee confidence resulting from ill-preparedness and a lack of training and support for utilising and applying these proposed solutions. On the other hand, employees were not confident in their ability to successfully carry out their portfolios in a new mode of delivery (i.e., online). For example, some lecturers struggled to provide effective learning because they did not receive proper training and support to conduct online lectures, tutorials, and assessments (Ali, 2019).

The lack of motivation and confidence was noted as a significant issue, as this has reduced the willingness to accept ICT solutions to WFH, ultimately impacting the quality of educational service delivery to students (Kossen & Van der Berg, 2022). Staff must be trained and supported to shift to the new normal. Staff and student readiness need to be considered (CoSN, 2020).

4.3.3. Employee physical and mental health (i.e., employee well-being)

Due to the potential of WFH being the new normal and an arrangement that could apply to the foreseeable future, researchers have begun to focus on remote work's influence on employees' mental and physical health. Oakman *et al.* (2020) conducted an extensive study in this area, highlighting WFH's positive and negative health impacts on employees. While working from home previously offered a social and mental balance, WFH implies that for most workers, the house has become their office, school, a place for relaxation, and place of residence, to mention a few (Manjaree & Perera, 2021). The blurring of these previous physical boundaries has negatively impacted the well-being of employees, giving rise to a need for organisations to emphasise the physical and mental health of their digital workforce (Allen *et al.*, 2015, Mehta, 2021). Some of the reported impacts on health include body aches due to the lack of movement, fatigue, increased stress, alienation and depression, quality of life, invasion of privacy, less autonomy, less social support and feelings of loneliness, work disengagement and lack of job motivation, and inability to achieve work-life balance (Oakman

et al., 2020; Savic, 2020). A study by Purwanto *et al.* (2020) showed that the health risks educators and staff face in an academic setting are not different. Their study indicated that academic staff in Indonesia experienced a lack of work motivation, improper work-life balance, distractions of family and social media, enhanced stress, less social support from colleagues, and the stress of increased financial burdens, as well as anxiety about the future and sustainability of their jobs (Purwanto *et al.*, 2020). Hence, the study of academic personnel in Indonesia correlates with other studies on the health risks posed by WFH arrangements.

The factors that have led to the physical and mental health risks can be categorised into:

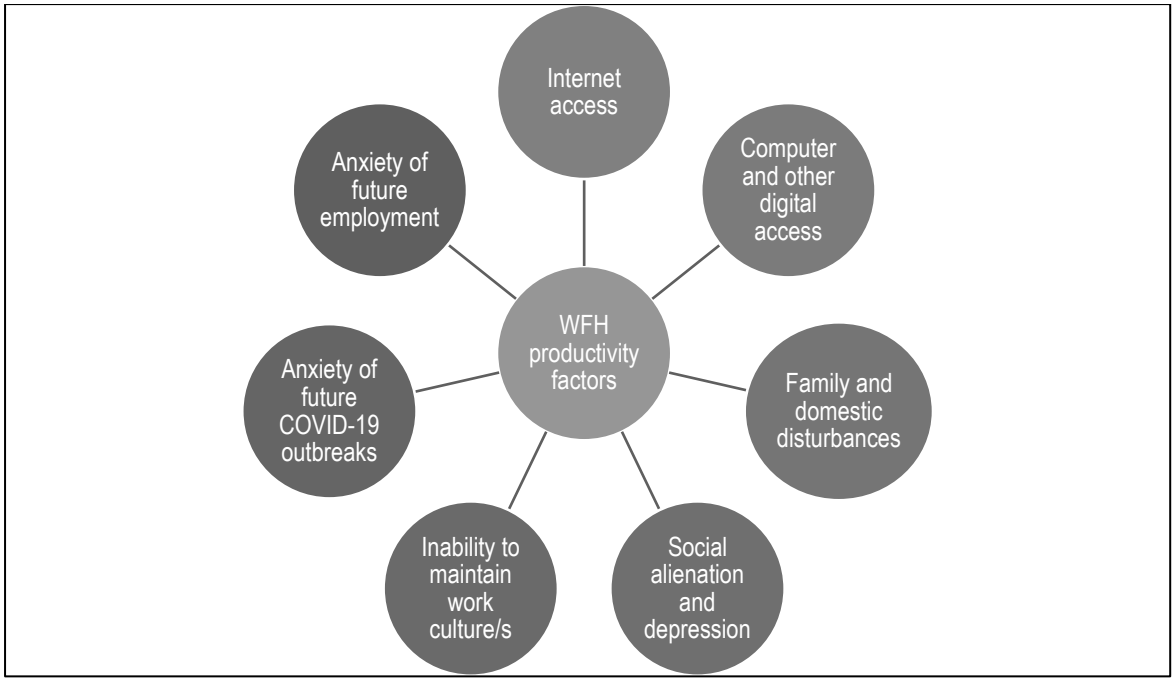
- Management and organisational support. This refers to employees' lack of clarity within their roles at the commencement of WFH. Amongst the lack of clarity, employees experienced uncertainty in communication, performance management, workloads, and access to human resources, to mention a few. These are aspects related to the inability of management to transition to the effective management of a digital workforce (Oakman *et al.*, 2020).
- Co-worker support. Due to the isolation of WFH, employees no longer have the effective and social support they received from co-workers. Co-workers were found to be an incidental connection that employees have with their colleagues. A relationship also contributes to resolving issues that employees may face in their personal lives (CoSN, 2020). However, with the implementation of WFH, workers found that digital contact with co-workers did not effectively replace the face-to-face relations once shared with co-workers (Oakman *et al.*, 2020).
- Technical support. WFH requires conducive and efficient technology support (Oakman *et al.*, 2020). This refers to the technical difficulties and the turnaround time to resolve these, which workers face due to the sudden and unforeseen transition to digital work.
- Boundary management. Workers often feel a lack of respect regarding personal boundaries as management does not know where to draw the line with working hours, workload, and assisting colleagues, thus impacting the work-life balance (Oakman *et al.*, 2020). Workers in the study mentioned that they felt as if they were on calls 24 hours / 7-days a week (CoSN, 2020). Although some workers indicate that WFH allows flexibility where they can arrange their working hours according to their convenience, the consensus is that employees feel greater restrictions in working hours and employers do not respect their working hours (Savic, 2020).
- Gender disparities. Although not substantially researched, literature does indicate that the social construction of gender, where women were regarded to be responsible for domestic chores, child rearing and caring, adult care, etc., does impact the well-being of women during the WFH period. While both men and women were required to WFH

during the COVID-19 lockdowns globally, women were said to be more affected as they had to, in addition to work, fulfil their social and domestic responsibilities (Savic, 2020).

4.3.4. Employee productivity

Some may believe that employees WFH are more productive because of the reduced time to commute and prepare for work and more time to arrange their day. However, a study by Savic (2020) has shown that, surprisingly, employee productivity declines when working remotely. This reduced productivity can be ascribed to a lack of reliable Internet access, computer facilities, restricted access to other digital equipment, family and domestic disturbances, social alienation, depression, inability to maintain a work culture, anxiety of future COVID-19 outbreaks, and anxiety of future employment.

Figure 2: Factors influencing productivity during WFH



Source: Authors' own compilation adapted from Magnusson (2019)

Although there are debates surrounding employees' productivity levels during WFH periods, it is still considered the most effective order or arrangement of work to date, even post the COVID-19 lockdown (Mwita, 2020; Mehta, 2021). This could be attributed to the enhancements in employee working time, the cost savings of operations, and the scalability of businesses (Magnusson, 2019). It is, therefore, important to understand employee sentiment surrounding WFH conditions, as this model is expected to prevail in the foreseeable future. A study by Pradato *et al.* (2021) focused on the role of work stress, organisational commitment, and employee performance in implementing WFH models. While these authors

agree with the negative effects that WFH has on employee well-being and productivity, they have suggested that eradicating these negative impacts through appropriate managerial strategies that: (1) promote a positive work climate with clear lines of communication, (2) improve on human resources ability to manage virtual teams, (3) enhance communication between workers with a climate that poses healthy attitude with mutual understanding, care and respect, (4) focus on staff development, particularly in digital literacy and motivation, and (5) ensure that employees are provided with the requisite skills and infrastructure to perform effectively in a digital world (Pradato *et al.*, 2022). Hence, while the literature reviewed portrayed a negative perception of WFH and its impact on employees, there could be instances where employees feel positive regarding WFH arrangements. This could be attributed to businesses' or organisations' good implementation of remote work strategies. Therefore, it becomes imperative to understand the sentiment around WFH amongst personnel in private higher education in South Africa to contribute positively towards the future of higher education in the country.

4.4. Theoretical approaches to understanding the implications of WFH

The following theoretical approaches provide an understanding of the factors associated with WFH: Social identity theory and Need-to-belong theory.

4.4.1. Social identity theory

The social identity theory, developed by Henri Tajfel and John Turner (1986) in the early 1980s, resonates with the WFH concept and will be used to provide context to the results of the study as the theory supposes that individuals classify themselves according to their cognitive abilities, in social categories related to religion, race, age, gender, and their affiliation with the organisation (Tajfel, 1974). The theory aims to give context to the effects of these categories on how people identify themselves with the organisation they are employed at. Hence, facets such as social classification, social individuality, uniqueness in psychology, and how people compare with other social groups are fundamental aspects shaping how individuals identify themselves within the workplace. The personalities and identities of employees are defined and shaped according to how they affiliate themselves with the organisation (Tajfel & Turner, 1986). The categories stated to assist individuals in shaping their identities as they shape their identities that resonate with the group accompanying them. For example, if an employee belongs to a group of colleagues at the workplace with a specific religious identity, then that employee's personality and cognitive abilities will be shaped via the social influence derived from the group. Important to note is that social identity theory also speaks about out-group prejudice, where employees can become discriminatory towards

other groups. In the same example, the employee who now associates with a specific religious group could become prejudiced against other religious groups (Tajfel, 1974).

The social identity theory may provide insight into how the demographic variables used in this study influence the respondents' perception regarding WFH. For example, the theory will explain how WFH shapes organisational identification (based on employee demographics). It allows for understanding why and how WFH impacts organisational identification, as people will have to reshape identities to develop positive work attitudes and behaviours (Wiesenfeld *et al.*, 2001).

4.4.2. Need-to-belong theory

The Need-to-belong theory, developed in the late 1980s by Roy Baumeister and Mark Leary, complements the social identity theory as the theory proposes that the need to develop interpersonal relationships with others is a naturally inherent trait of human beings (Baumeister & Leary, 1995). These relationships are deliberate, as they positively and negatively affect people's psychological, emotional, and physical well-being (Wang *et al.*, 2020).

The theory supposes that people possess a psychological desire to feel connected and to resonate with others and that this desire is critical in shaping one's thoughts, emotions, and behaviour (Baumeister & Leary, 1995). The theory suggests that people who belong and feel accepted by others are more inclined to be happier and more satisfied in their lives (personal and professional) and would display more outward-positive emotions. Due to the feeling of belongingness, individuals are less likely to show negative behaviours. On the contrary, individuals who are isolated and do not feel a sense of belongingness are prone to have negative emotions and are less capable of functioning effectively in social settings (Baumeister & Leary, 1995).

The needs-to-belong theory provides good insight into the impact of WFH on employees and their well-being. Employees strive to develop feelings of belonging through bonds created with colleagues. Employees develop these relationships with other colleagues at the workplace to develop interpersonal bonds that are stable, trusting, show concern and affection and are sustainable for the probable future (Baumeister & Leary, 1995). When employees lose interaction or feel isolated due to poor relations and minimal contact with others, their sense of belonging diminishes, leading to anxiety and depression (Golden *et al.*, 2008).

5 RESEARCH METHODOLOGY

5.1. Research approach

This study used a cross-sectional research design. A cross-sectional study is typically a research inquiry that gathers data from multiple respondents in a snapshot of time. The design allows researchers to witness the study's variables without necessarily shaping or affecting them (Bryman & Bell, 2018). A cross-sectional study is an efficient approach to research which is feasible and allows for the results to be used in the future, within a longitudinal study, for example (Mellville & Goddard, 2001).

5.2. Research methods

This study used the quantitative method of enquiry because there were predetermined variables affecting this study based on secondary research.

5.2.1. Population and sampling

The target population comprised the management, academic and support staff of the private higher education institution under investigation (N=133). In total, the institution employs 16 employees in management positions (directors/academic managers), 27 as academics (lecturers) and 90 as support personnel (academic administrators). All these personnel were included in the study. As a result, no sample was drawn because the population was used. This form of purposive sampling attempts to survey the entire population with certain traits (Dawson, 2019). A response rate of 79% was achieved, indicating that 105 of the 133 initially targeted respondents participated.

5.2.2. Data collection and measuring instruments

The data were collected online using a coded questionnaire posted on Google Forms. Respondents recorded their perceptions on a five-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). The data were collected at the end of 2021. At that time, the institution used a WFH model, where all employees were requested to work remotely from their type of residence (i.e., home). The questionnaire comprised two sections: The first section included 11 biographical questions on gender, age, the department employed, number of years working in the organisation, highest qualification, country of residence, nationality, marital status, nature of employment, duration working from home since the COVID-19 pandemic started in 2020, and current WFH situation. The second section included 28 questions measuring respondents' sentiments on WFH. Botha and Coetzee's (2022) questionnaire was used.

5.2.3. Research procedure, ethical considerations, and analyses

Respondents had three weeks to complete the survey. Google Forms automatically captured the raw data in an excel sheet, whereafter the data were exported to IBM's Statistical Programme for Social Sciences. Exploratory factor analysis explored the underlying structures surrounding WFH. Cronbach's coefficient alpha determined the internal reliability and consistency of the WFH scale. Additionally, independent sample t-tests, analysis of variance (ANOVA), effect sizes and Spearman's rank-order correlation coefficient were used to analyse the data.

In terms of ethics, this study is a relatively low-risk category study. Nevertheless, the following ethical considerations have been adhered to:

- Informed consent. The respondents were informed about the purpose and nature of the study, the potential risks and benefits that could occur from participating, and that they were required to indicate their consent to participate (Christensen *et al*., 2011; Mellville & Goddard, 2001).
- Anonymity and confidentiality. A significant responsibility of the researcher is to ensure the protection of respondents by guaranteeing anonymity and confidentiality via the informed consent process. This means that their identity, personal information, and responses will not be disclosed to any other parties, such as the institution or other respondents involved in the research (Hennink *et al.*, 2011; Dawson, 2019).
- Ethical clearance. A letter of permission was obtained from the higher education institution under investigation to conduct the study. Approval to conduct the research was obtained from the Economic and Management Sciences Research Ethics Committee (EMS-REC), North-West University (ethics number: NWU-01253-21-A4).

6 EMPIRICAL RESULTS

This section presents the results of the study. First, the biographical information is presented, followed by the results of the exploratory factor analyses on WFH and the comparison tests.

6.1. Socio-demographic information

The results presented in Table 1 indicate the respondents' biographical details.

Table 1: Biographical information

Biographical information			
Question	Category	N	%
With which gender do you identify yourself?	Female	66	62.9
	Male	38	36.2
	Prefer not to answer	1	1.0
What is your nationality?	South African	99	94.3
	Other	6	5.7
What is your age in years?	20–29	26	24.8
	30–39	52	49.5
	40–49	16	15.2
	50–59	8	7.6
	60 and older	3	2.9
What is your marital status?	Single or not in a relationship	25	25.3
	Unmarried and in a relationship	21	21.2
	Widowed	4	4.0
	Married	47	47.5
	Divorced/Separated	2	2.0
What is your highest qualification?	High (secondary) school graduate	23	22.3
	Completed technical/vocational training	6	5.8
	College/University degree	43	41.7
	Postgraduate degree	26	25.2
	PhD	5	4.9
How long have you been working at the institution?	0–6 months	16	15.2
	7–12 months	6	5.7
	1–2 years	14	13.3
	3–5 years	33	31.4
	6–10 years	24	22.9
	More than 10 years	12	11.4

What is the nature of your employment at the institution?	Management		17.1
	Academic (i.e., teacher, lecturer, researcher, postdoctoral fellow, etc.)		19.0
	Support (i.e. administrative, technical, etc.)		46.7
	Other		17.2
How long have you been WFH since the COVID-19 pandemic started in 2020?	0–3 months	24	25.0
	4–7 months	37	38.5
	8–11 months	25	26.0
	12 months and longer	10	10.4
Which scenario best describes your current work situation since the COVID-19 pandemic started in 2020?	I have been WFH since the beginning of the pandemic, but come to the office occasionally (i.e., to attend a meeting and at my own discretion)	11	10.8
	I work remotely a few days a week as directed by management	16	15.7
	I am working from the office most of the time	30	29.4
	I am working from the office all the time	45	44.1

Source: Authors' own compilation (2023)

The results in Table 4.1 provide insight into the respondent demographic. Majority of the respondents (94.3%), as indicated, are South African citizens. More than 60% of the surveyed population are young adults (between the ages of 20 and 39). There is also a good spread between management, academics, and support staff, with support staff understandably comprising the larger portion of the population as South Africa's higher education regulation requires specific support staff-to-student ratio. Hence the demographic is in line with regulations. The recommended learner-to-student ratio is 30:1 in South Africa (Kosie, 2022). Most respondents were married and possessed a degree (undergraduate or postgraduate) acquired from a college or university. All respondents indicated a period during which they had been WFH, implying that they would have acquired the necessary experience to provide meaningful insight into the study.

6.2. WFH

Exploratory factor analysis was conducted on the 28 items measuring employees' sentiments regarding WFH. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were employed to ensure the suitability and adequacy of the sample and the suitability of utilising the factor analysis. The KMO value was 0.849, and sphericity was

significant at the 95% confidence level ($p \leq 0.05$). This indicates that the sample size was adequate and that there was a sufficient correlation between the items. This means the data is suitable for multivariate statistical analysis, such as factor analysis (Field, 2017). Four factors (Conducive WFH environment, WFH challenges, Organisational and management support, and Social challenges) were extracted with eigenvalues exceeding one, as per the Kaiser criterion (Field, 2017). These factors explain a cumulative variance of 62.08.

Twelve statements loaded on Conducive WFH environment with scores ranging from -0.398 (item was reversed scored when reliability was calculated) to 0.848, six statements loaded onto WFH challenges with scores ranging from 0.610 to 0.875, four statements loaded onto Management and organisational support with scores ranging from 0.662 to 0.865 and, four statements loaded onto Social challenges with scores ranging from 0.508 to 0.846. The Conducive WFH environment factor included statements such as 'The physical conditions at my home afford a good working environment', 'My family supports me while I am working from home' and 'I have access to sufficient Internet data to do my work effectively when working from home'. The WFH challenges factor included statements such as 'Too many distractions at home prohibit me from functioning effectively while I am working from home', 'I find it difficult to keep focused on work when I am working from home' and 'Keeping a regular schedule prohibits me from functioning effectively while I am working from home'. The Organisational and management support factor included statements such as 'I feel the organisation trusts me while I am WFH', 'I have the support from the organisation to WFH' and 'My manager supports me while I am WFH'. The Social challenges factor included statements such as 'I am working more hours than normal when I am WFH', 'I feel tied to my computer to a greater extent than at my workplace while I am WFH' and 'I miss the interactions with my fellow employees'. The four factors obtained Cronbach's alpha coefficient values well above 0.7, showing high reliability and internal consistency (Conducive WFH environment: $\alpha=0.919$, WFH challenges: $\alpha=0.910$, Organisational and management support: $\alpha=0.723$, and Social challenges: $\alpha=0.795$). The factors obtained the following mean values (on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5)): Conducive WFH environment: $M=3.825$, WFH challenges: $M=2.099$, Management and organisational support: $M=3.935$, and Social challenges: $M=3.261$.

6.3. Association between socio-demographic variables and WFH

An independent sample t-test was used to determine the association between gender and WFH; the results are presented in Table 2.

Table 2: Association between gender and WFH

	Group statistics				Independent sample t-test	
Gender		N	Mean	Standard deviation	P-value	Effect size
Conducive WFH environment	Male	38	3.81	0.64	0.708	0.07
	Female	65	3.86	0.87		
WFH challenges	Male	38	2.20	0.78	0.276	0.22
	Female	65	2.02	0.83		
Organisational and management support	Male	38	3.78	0.65	0.059	0.38
	Female	65	4.05	0.72		
Social challenges	Male	38	3.21	0.77	0.608	0.10
	Female	65	3.30	0.97		

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

Source: Authors' own compilation (2023)

The independent sample t-test revealed no significant differences between the mean scores of male and female respondents for gender. However, the effect size showed a small to medium effect (d = 0.38) for the gender categories for Organisational support, where the female respondents (M = 4.05) scored higher on Organisational and management support than the male respondents (M = 3.78).

ANOVA tests were used to determine the association between marital status, nature of employment, WFH situation and the WFH factors; the results are presented in Table 3.

Table 3: Association between marital status, nature of employment and WFH situation, and WFH

	Group statistics				ANOVA	Effect sizes	
	Marital status	N	Mean	*SD	P-value	A with B and C	B with C
Conducive WFH environment	A: Single or not in a relationship	24	3.47	0.93	0.011		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	3.74	0.76		0.30	
	C: Married	47	4.05	0.68		0.63	0.40
	Total	98	3.82	0.80			
WFH challenges	A: Single or not in a relationship	24	2.38	0.97	0.035		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	2.17	0.72		0.21	
	C: Married	47	1.87	0.74		0.52	0.40
	Total	98	2.08	0.82			
Organisational and management support	A: Single or not in a relationship	24	4.02	0.62	0.714		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	3.89	0.74		0.18	
	C: Married	47	3.88	0.72		0.19	0.01
	Total	98	3.92	0.70			
Social challenges	A: Single or not in a relationship	24	3.36	0.83	0.558		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	3.37	0.61		0.02	
	C: Married	47	3.16	1.09		0.18	0.19
	Total	98	3.27	0.92			

	Group statistics				ANOVA	Effect sizes	
	Nature of employment	N	Mean	SD	P-value	A with B and C	B with C
	A: Management	18	3.72	0.73	0.014		

Conducive WFH environment	B: Academic	20	4.30	0.80		0.73	
	C: Support	64	3.72	0.79		0.01	0.72
	Total	102	3.83	0.81			
WFH challenges	A: Management	18	2.43	0.93	0.027		
	B: Academic	20	1.72	0.75		0.76	
	C: Support	64	2.11	0.77		0.34	0.50
	Total	102	2.09	0.82			
Organisational and management support	A: Management	18	3.83	0.66	0.572		
	B: Academic	20	3.84	0.75		0.01	
	C: Support	64	3.99	0.73		0.22	0.21
	Total	102	3.93	0.72			
Social challenges	A: Management	18	3.74	1.00	0.008		
	B: Academic	20	2.84	1.01		0.90	
	C: Support	64	3.26	0.78		0.48	0.42
	Total	102	3.26	0.91			

	Group statistics				**ANOVA**	**Effect sizes**	
	WFH situation	N	Mean	SD	P-value	A with B and C	B with C
Conducive WFH environment	A: I have been working from home since the beginning of the pandemic, but come to the office occasionally. / I work remotely a few days a week as directed by management.	27	3.99	0.61	0.122		
	B: I am working from the office most of the time.	30	3.98	0.76		0.02	
	C: I am working from the office all the time.	45	3.65	0.91		0.37	0.36
	Total	102	3.84	0.81			
WFH challenges	A: I have been working from home since the beginning of the pandemic, but come to the office occasionally. / I work remotely a few days a week as directed by management.	27	2.14	0.83	0.267		
	B: I am working from the office most of the time.	30	1.87	0.69		0.33	
	C: I am working from the office all the time.	45	2.16	0.82		0.02	0.35

	Total	102	2.07	0.79			
Organisational and management support	A: I have been WFH since the beginning of the pandemic but come to the office occasionally. / I work remotely a few days a week as directed by management.	27	4.11	0.55	0.365		
	B: I am working from the office most of the time.	30	3.93	0.81		0.23	
	C: I am working from the office all the time.	45	3.87	0.73		0.33	0.07
	Total	102	3.95	0.71			
Social challenges	A: I have been WFH since the beginning of the pandemic but come to the office occasionally. / I work remotely a few days a week as directed by management.	27	3.16	1.05	0.807		
	B: I am working from the office most of the time.	30	3.32	0.79		0.15	
	C: I am working from the office all the time.	45	3.25	0.88		0.09	0.07
	Total	102	3.25	0.89			

* SD = Standard deviation' d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

Source: Authors' own compilation (2023)

The results of the ANOVA test revealed significant differences between the mean scores of the marital status categories for Conducive WFH environment (p-value = 0.011) and WFH challenges (p-value = 0.035). The respondents that were married were more positive about the conduciveness of their WFH environments (M = 4.05) and were subjected less to WFH challenges (M = 1.87) than the respondents that were in a relationship, widowed, divorced or separated (CON WFH: M = 3.74; WFH CH: M = 2.17) and those that were single or not in a relationship (CON WFH: M = 3.47; WFH CH: M = 2.38). The effect sizes showed a medium effect (d ranged between 0.40 to 0.63).

Furthermore, the ANOVA test revealed significant differences between the mean scores of the nature of employment categories for Conducive WFH environment (p-value = 0.014), WFH challenges (p-value = 0.027) and Social challenges (p-value = 0.008). The academic staff respondents (M = 4.30) scored higher on Conducive WFH environment than the management (M = 3.72; d = 0.73) and support staff (M = 3.72; d = 0.72) respondents; the effect was large. The respondents in management positions were subjected more to WFH (M = 2.43) and social (M = 3.74) challenges than the academic (WFH CH: M = 1.72; SOC CH: M = 2.84) and support staff (WFH CH: M = 2.11; SOC CH: M = 3.26) respondents; the effect sizes ranged from small to large. The support staff respondents also experienced more WFH and social challenges

than the academic staff respondents; the effect was medium (WFH CH: d = 0.5; SOC CH: d = 0.42).

Although the ANOVA test showed no significant differences between the mean scores of the WFH situation categories for the WFH factors, the effect sizes showed small differences between some categories. Respondents working from the office all the time (M = 3.65) were less positive about the conduciveness of their WFH environments than the respondents that came to the office occasionally/working remotely a few days a week (M = 3.99; d = 0.37) and those that were working from the office most of the time (M = 3.98; d = 0.36). The respondents who were working from the office most of the time (M = 1.87) were subjected less to WFH challenges than the respondents who came to the office occasionally or who were working remotely only for a few days a week (M = 2.14; d = 0.33), and those that were working from the office all the time (M = 2.16; d = 0.35). Furthermore, the respondents who came to the office occasionally or worked remotely only a few days a week (M = 4.11) remotely were more positive about the management and organisational support received from the institution than the respondents who were working from the office most (M = 3.93; d = 0.23) or all the time (M = 3.87; d = 0.33).

Spearman's rank-order correlation determined the linear association between age, highest qualification, years working at the university and period working from home with the WFH factors. The results are presented in Table 4.

Table 4: Correlation of age, highest qualification, years working at the university and period working from home with WFH

		Age	Highest qualification	Years working at the university	Period WFH since the COVID-19 pandemic started in 2020
Conducive WFH environment	Correlation coefficient	0.07	.424**	0.085	.268**
	Sig. (2-tailed)	0.46	0.00	0.390	0.008
	N	104.00	102.00	104	96
WFH challenges	Correlation coefficient	-0.10	-.299**	0.007	-0.150
	Sig. (2-tailed)	0.32	0.00	0.946	0.144
	N	104.00	102.00	104	96
Organisational and management support	Correlation coefficient	-0.15	-0.08	-0.014	0.107
	Sig. (2-tailed)	0.13	0.42	0.889	0.299
	N	104.00	102.00	104	96
Social challenges	Correlation coefficient	-0.07	-0.11	.216*	-0.019
	Sig. (2-tailed)	0.47	0.26	0.028	0.854
	N	104.00	102.00	104	96

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)
(a) small effect: r = 0.1, (b) medium effect: r = 0.3 and (c) large effect: r > 0.5

Source: Authors' own compilation (2023)

Spearman's rank-order correlation revealed a medium positive correlation between the highest qualification and Conducive WFH environment (p = 0.00, r= 0.424), and a medium negative correlation between the highest qualification and WFH challenges (p= 0.00, r= -0.299). This indicates that the higher the personnel were qualified, the more satisfied they were with their WFH environments and the less they experienced WFH challenges. A small positive correlation was found between the number of years working at the university and Social WFH challenges (p = 0.028, r= 0.216), indicating that the more years of service the respondents had at the institution, the more they experienced social challenges. A small positive correlation was also found between Conducive WFH environment and the period working from home (p = 0.008, r= 0.268), indicating that the longer the respondents worked

from home, the more satisfied they became with their WFH environments. In addition, Spearman's rank-order correlation was used to determine the linear association between the WFH factors; the results are depicted in Table 5.

Table 5: Correlation between WFH factors

		Conducive WFH environment	WFH challenges	Organisational and management support	Social challenges
Conducive WFH environment	Correlation coefficient	1.000	-.621**	.267**	-.337**
	Sig. (2-tailed)		0.000	0.006	0.000
	N	104	104	104	104
WFH challenges	Correlation coefficient	-.621**	1.000	-0.112	.427**
	Sig. (2-tailed)	0.000		0.258	0.000
	N	104	104	104	104
Organisational and management support	Correlation coefficient	.267**	-0.112	1.000	-0.002
	Sig. (2-tailed)	0.006	0.258		0.983
	N	104	104	104	104
Social challenges	Correlation coefficient	-.337**	.427**	-0.002	1.000
	Sig. (2-tailed)	0.000	0.000	0.983	
	N	104	104	104	104

;** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)
(a) small effect: r = 0.1, (b) medium effect: r = 0.3 and (c) large effect: r > 0.5

Source: Authors' own compilation (2023)

The Spearman's rank-order correlation revealed a small positive correlation between Conducive WFH environment (p = 0.006, r= 0.267) and Organisational and management support, and medium to large negative correlations with WFH challenges (p = 0.00, r= -0.621) and Social challenges (p = 0.00, r= -0.337). This implies that the more the respondents found their WFH environments conducive, the more positive they were about the organisational and management support received and the less they were subjected to WFH and social challenges. A medium positive correlation was found between WFH challenges and Social challenges (p = 0.00, r= 0.427), indicating that the greater the challenges experienced with WFH, the more the respondents were subjected to social challenges.

7 DISCUSSION

The study aimed to determine the sentiments of the academic and support staff regarding WFH during the COVID-19 pandemic at a private higher education institution in South Africa.

The exploratory factor analysis conducted on WFH revealed four factors: Conducive WFH environment, WFH challenges, Management and organisational support, and Social challenges. The Cronbach's alpha coefficients for all the factors were above the required 0.7, showing excellent reliability and internal consistency. Management and organisational support (M=3.935) obtained the highest mean score, followed by Conducive WFH environment (M=3.825), Social challenges (M= 3.261) and WFH challenges (M=2.099).

Regarding management and organisational support, the results suggest that, on average, the respondents are satisfied with the support received from the organisation and colleagues. Respondents indicated that they are in regular contact with their manager/s, feel trusted by the organisation, and that managers support them when WFH. These results could be explained by some of the strategies laid down by Pradato *et al.* (2021) on the effective roll out of WFH arrangements. In particular, these authors mentioned promoting a positive work climate with clear lines of communication, improving human resources to manage digital teams, and enhancing communication between workers to foster a positive and healthy work environment.

The positive sentiments displayed by academic personnel suggest that some strategies could be implemented. The results of this study do, however, oppose findings from other literature sources. Literature has found that due to the rapid transition to WFH, managers were not given sufficient time to adjust their managerial styles to manage a digital workforce (Oakman *et al.*, 2020). Findings from the literature review show a lack of support from management and a breakdown of communication at the advent of WFH (Ali, 2020). As a result, staff readiness was not achieved, ultimately impacting service delivery (CoSN, 2020). However, the results of this study displayed the belief of academic and support personnel that appropriate management, support, and communication methods were in place.

The mean scores further revealed a consensus amongst respondents regarding their satisfaction with their WFH environments. Most of them did not necessarily experience WFH challenges that inhibit productivity. On average, respondents indicated that they enjoy working from home and have the necessary support from the organisation regarding infrastructure and support to WFH. In particular, the results show that respondents enjoy WFH. They have suitable workspaces at home, good physical conditions to WFH, sufficient ICT infrastructure and access to sufficient Internet data. The respondents also preferred to continue WFH. This can be attributed to the organisation's appropriate ICT infrastructure and support provision,

allowing them to perform their duties effectively. Researchers like Pradato *et al.* (2021), Czerniewicz (2020), Dost *et al.* (2020), and Mehta (2021) provide suggestions on how to eradicate the negative implications of WFH using appropriate strategies, such as ensuring that employees are provided with the requisite infrastructure and skills to perform effectively in a digital work environment.

However, it was evident from the study results that most respondents faced social challenges. Thus, on average, the respondents reported that they worked more hours than normal, felt tied to their computers to a greater extent, did not get enough exercise and missed interactions with their fellow employees. This concurs with an extensive study by Oakman *et al.* (2020) that investigated the impact of WFH on employees' mental and physical health. Due to the blurring of boundaries, employees' homes have become their offices, schools for kids, places of relaxation, and residences (Manjaree & Perera, 2021). As a result, WFH has negatively impacted employees' mental and physical health. Specifically, Oakman *et al.* (2020) and Savic (2020) found health-related issues due to fatigue, lack of movement due to working long hours and a lack of exercise, invasion of privacy, feelings of loneliness and alienation, and lack of social support, to mention a few. From a social perspective, the Consortium for School Network (CoSN) (2020) discovered that workers no longer have and miss the social support received from co-workers due to the isolation of being at home. The incidental connection with colleagues also impacted their personal lives as these relationships were deliberate in resolving employee issues at home.

The results of this study can be understood further by the social identity theory, which states that the personalities and identities of employees are shaped by how they affiliate themselves with colleagues and the organisation at large (Tafjel & Turner, 1986). During WFH, it has been discovered that collegiality has been reduced as employees no longer share the relationships they once had with colleagues. As a result, physical interactions and bonds were lost with colleagues, thus impacting employees' mental and emotive states. Hence, the social alienation of employees has negatively impacted their mental health, which explains why respondents of this study experienced social challenges.

Although most respondents reported that they were not affected by WFH challenges, there were staff affected by work-home interferences who found it difficult to keep a regular work schedule and focus on work when working from home. This finding correlates favourably with studies conducted by Ali (2020) and Kossen and Van der Berg (2022). These researchers found that employees working from home found it difficult to adjust to WFH environments due to domestic complexities such as family life, children being at home, situations such as loadshedding (in the case of South Africa), and poor or unstable connectivity issues. This also implies that, although the participants of this study indicated that they had received adequate

management and organisational support, there should be a particular focus on the complexities of home environments to ensure that staff are equipped with decent working spaces, backup power supplies to overcome loadshedding, and backup Internet, to mention a few. While only a few respondents were affected by WFH challenges, due attention should be given to all employees.

The comparison tests (independent sample t-tests, ANOVAs, and effect sizes) and Spearman's rank-order correlation tests revealed that marital status, nature of employment (management; academic; support), highest qualification, tenure and a period working from home are associated with WFH.

Regarding the influence of marital status on WFH, the effect sizes showed that the married respondents were more positive about the conduciveness of their WFH environments and were subjected less to WFH challenges than the respondents to the other marital categories. According to Kelly *et al.* (2008), to be able to WFH requires the development of one's identity under the group they assimilate to. In other words, personalities, cognitive abilities, and the ability to function effectively in differing settings largely depend on group assimilation. Kelly *et al.* (2008) found that married couples could relate to one another easier and manage their relationships more effectively as they belong to the same social group (i.e., the union of marriage). This finding can be explained by the Need-to-belong theory, which suggests that individuals need to belong and be accepted by others, which explains why married individuals feel a sense of acceptance and belongingness from their partners. They can harmoniously WFH.

The effect sizes also showed that the academic staff respondents scored higher on Conducive WFH environment and were less affected by WFH and social challenges. Furthermore, Spearman's rank-order correlation indicated a medium positive correlation between the highest qualification and Conducive WFH environment and a medium negative correlation between highest qualification and WFH challenges. The concept of 'fit' could explain the results. In an organisational setting, the concept of fit refers to how well an employee's skills fit with the professional skills required to perform tasks. With a mismatch in the skills required and skills offered by employees, individuals would fail to adapt to their working situations (Chen, 2021). Chen (2021) refers to the differences in fit related to one's skill set and nature of employment, implying that these variables would determine how well an individual copes with WFH. This is referred to as the P-V fit, the person-vocation fit. Chen's (2021) study specifically assessed how well a group of employees' fit' or have adapted to WFH situations and shows that without the requisite professional skillset, employees will not adapt to the new work arrangement. Higher qualified individuals and specialised higher-level job profiles already possess the skillset conducive to WFH-based requirements (Chen, 2021). This could

explain why academics, in terms of their associated (higher) qualifications and higher-level job profiles, have better WFH experiences than the support staff.

The results revealed that the longer the respondents' tenure at the institution, the more they experienced social challenges. This concurs with the findings of a study conducted by Boonstra *et al*. (1998). This researcher established that long-term employed individuals find difficulties in adapting or learning new methodologies or operations utilised in organisations, resulting in social challenges due to their inability to find comfort in the changing work environment (Boonstra *et al*., 1998). In addition, because of the redundancy that occurs from being stuck within a specific job portfolio for several years, long-term employees may experience feelings of frustration or isolation. In summary, long-term employees were found to have much more dynamism and complexities to manage in the workplace, resulting in social challenges (Boonstra *et al*., 1998).

Lastly, the results of this study also revealed that the longer the respondents worked from home, the more satisfied they became with their WFH environments. This can be explained by the comfort and convenience established by employees WFH. Criscuolo *et al.* (2021) argued that the longer individuals WFH, the more settled they become, resulting in greater levels of comfort and convenience, better-established routines resulting in higher levels of productivity and increased job satisfaction due to the flexibility offered by a WFH arrangement (Criscuolo *et al*., 2021). This could explain why the respondents of this study became satisfied with the WFH arrangement, as they continued working from home.

Concerning correlations amongst the WFH factors, Spearman's rank-order correlation coefficient revealed medium to large negative correlations with WFH challenges and social challenges. This implies that the more management and organisational support received, the less the respondents experienced WFH and social challenges. Oakman *et al.* (2020) explained that greater management and organisational support with clarity, good communication, clear goals, performance management, and access to management, to mention a few, were crucial in enhancing the conduciveness of WFH.

8 PRACTICAL IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

Practical implications: The study contributed to the body of knowledge regarding WFH in the higher education sector in the context of the COVID-19 pandemic. Higher education institutions should consider the study's results as implementing the findings and recommendations could assist higher education (HE) in developing appropriate WFH strategies. It was noted that industries (including HE) were not fully prepared for the radical shift to WFH. Therefore, if WFH is regarded as a viable solution for the foreseeable future,

then deliberate attempts must be made to determine Conducive WFH strategies. The recommendations include some practical managerial interventions.

Limitations: The study focused on one private higher education institution in South Africa. Therefore, the results cannot be generalised to other private or public higher education institutions in the country and abroad.

Recommendations: It is recommended (to private higher education institutions who implement WFH arrangements) that:

1. Private higher education institutions actively provide management and organisational support to ensure employees get conducive institutional support to afford them the best chance of succeeding in WFH arrangements. In practice, this means that the institution should actively formulate management strategies to address the challenges experienced by personnel. The "new normal" and its challenges should be incorporated fully into the institution's strategic planning, and the human resource plan should incorporate WFH as a viable employment model. Such a strategic plan should also incorporate financial interventions (such as providing lecturers and students with needed software licences, hardware, and other needed tools to continue quality tuition), the communication plan (initiating regular communication with employees, clear guidelines of WFH expectations, advising employees on managing work schedules, being cognisant of employees' work/life balance, constant support and contact from line managers) and the institution's official wellness programme (to add wellness activities befitting the WFH work model, dealing with the psychological process of adapting to WFH and loneliness, and providing a sense of trust and security among employees).
2. *Management should actively establish conducive environments for WFH in support of the above recommendation.* In practice, this means that private higher education institutions need to ensure that employees have a conducive physical working space that is free from distraction, have the necessary ICT requirements such as laptops, are provided with suitable data access, and can balance work and family life by respecting boundaries. (This study's findings showed that if these are resolved, employees will be productive and satisfied with WFH arrangements, resulting in greater productivity and the decision to continue working from home). It is also noteworthy that the literature evidence indicated that an inconducive WFH environment is a core reason why WFH failed as a viable work model. Managers should note this reason for failure, examine their WFH environments, and implement corrective actions where needed.
3. *Private higher education institutions need to ensure that the psychological needs of employees are attended to in WFH arrangements.* In practice, workers in a WFH

environment experience alienation and WFH anxiety. As a result, institutions must provide platforms and programmes that promote communication among colleagues. For example, platforms such as an intranet that keep employees informed on happenings of the institution and virtual social events such as an online team building activity would ensure that employees do not feel isolated during WFH. Likewise, the institution's wellness programmes should address and educate workers' anxiety and, if needed, provide applicable professional interventions.

9 CONCLUSION

The primary objective of this study was to determine the sentiments of the academic and support staff regarding WFH during the COVID-19 pandemic at a private higher education institution in South Africa. While the literature portrayed WFH during the COVID-19 pandemic as an arrangement that was ill-prepared and poorly executed, resulting in negative impacts on the well-being of staff as well as on the productivity of the institution, this study showed that WFH could be a viable resolution if appropriately executed. In particular, the results revealed that if factors such as Conducive WFH environments, management and organisational support, and social aspects of work are given due consideration, then WFH can be a flexible work practice that can result in employee wellness and organisational productivity. Academic and support staff respondents conveyed that they prefer WFH. With the appropriate implementation of the recommendations mentioned earlier, WFH can be regarded as a viable work arrangement for the foreseeable future.

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CHAPTER 3: ARTICLE 2

EMPLOYEE ENGAGEMENT DURING WFH AT A PRIVATE HIGHER EDUCATION INSTITUTION IN SOUTH AFRICA IN THE CONTEXT OF THE COVID-19 PANDEMIC

This article has been published by the *South African Journal of Human Resource Management (Manuscript ID: a2300).* The Department of Higher Education, Web of Science and Scopus indexed the journal. It is an Open Access journal.

Employee engagement during WFH at a private higher education institution in South Africa in the context of the COVID-19 pandemic

ABSTRACT

Orientation: During the COVID-19 pandemic, organisations, including higher education institutions, had to shift their thinking regarding traditional work models to new ones conducive to the lockdown.

Research purpose: This study investigated employees' levels of engagement during WFH (work-from-home) within a private higher education institution in South Africa in the context of the COVID-19 pandemic.

Motivation for the study: While some studies have looked at the effect of WFH on employee engagement, few studies could be located that look at this phenomenon within a private higher education setting.

Research approach/design and method: This study adopted the positivistic research paradigm using a quantitative research approach. The target population included 133 personnel. Total population sampling was used, and the data were collected by administering an online survey using the 17-item Utrecht Work Engagement Scale (UWES). Descriptive statistics, confirmatory factor analysis, independent sample t-tests, ANOVAs and effect sizes were used to analyse the data. A satisfactory response rate of 79% was realised.

Main findings: The study found that despite the difficulties and anxieties brought about by the radical shifts to WFH, the personnel could still thrive and show high levels of engagement. This was attributed to positive drivers of engagement such as autonomy, psychosocial safety, convenience, social union and, most importantly, organisational support.

Practical/Managerial implications: WFH is regarded as a viable work arrangement for the foreseeable future. Private higher education should take note of the suggestions put forward to improve, sustain and manage employee engagement successfully.

Contribution/Value-added: This study contributes to the body of knowledge surrounding employee engagement in the WFH context within the private higher education sphere.

Keywords: COVID-19 pandemic, employee engagement, private higher education, South Africa, WFH

INTRODUCTION

The prolonged lockdown caused by the social threat of the Coronavirus disease (COVID-19) has resulted in the reorganisation of work globally. Organisations, including higher education institutions, had to shift their thinking regarding traditional work models to new ones conducive to the lockdown (Liu *et al.*, 2021; Mehta, 2021). The International Labour Organisation (ILO) (2020) reported that close to 93% of organisations around the globe had to shift their traditional work arrangements to work-from-home (WFH). This work format or model allowed employees to perform the duties they once performed at their office/s at their places of residence (ILO, 2020).

The adjustment of WFH impacted work and employee engagement (Romero-Martín *et al.*, 2022). This was due to the sudden shift to unchartered territories experienced by employees, as well as the level of preparedness of organisations to successfully implement the WFH model (Tušl *et al.*, 2021; Mehta, 2021). Organisations globally were required to determine innovative and efficient ways to encourage employee engagement during the pandemic (Chanana & Sangeeta, 2021), sustaining employee success and business productivity.

After the implementation of WFH during the COVID-19 pandemic, researchers (Adhitama & Riyanto, 2020; Botha & Coetzee, 2022; Botha *et al.*, 2023; Chanana & Sangeeta, 2021; Manjaree & Perera, 2021; Mehta, 2021) began to give precedence to understanding how employee engagement has been affected through the recently implemented WFH model. Kossen and Van der Berg (2022) emphasise that employee engagement is now a key priority for human resource practitioners due to the COVID-19 pandemic and its related changes to work. At this point, it would be important to note that the influence of employee engagement by WFH has been reported to be two-fold. While some studies show that WFH has led to better engagement due to flexibility and freedom of work planning (Society for Human Resource Management, 2021; Yu & Wu, 2021), other studies show that this work arrangement has a significant effect on the personal lives of employees, leading to exasperation, anxiety and exhaustion (Romero-Martín *et al.*, 2022; Riyanto & Adhitama, 2020; Society of Human Resource Management, 2021). Research conducted during the pandemic reported that employees WFH experienced increased workload and working hours, ineffective communication, procrastination, social isolation and alienation, work-home interference, fatigue, increased health and well-being issues such as body aches due to the lack of movement,

stress and depression, amongst other issues (Botha & Coetzee, 2022; Botha *et al.*, 2023; Carnevale & Hatak, 2020; Chanana, 2020, Oakman *et al.*, 2020; Romero-Martín *et al.*, 2022; Savic, 2020; Wang *et al.*, 2021). When left unattended, these influences hamper employees' performance, dedication, willingness to work and relationships with colleagues and family, resulting in poorer levels of engagement (Riyanto & Adhitama, 2020; Tušl *et al.*, 2021). Furthermore, the results of research conducted pre and during the global COVID-19 pandemic revealed an association between socio-demographic variables such as age, gender, marital status, level of education and tenure, and employees' engagement levels (Botha *et al.*, 2023; Mvana & Louw, 2020; Romero-Martín *et al.*, 2022). It is believed that when employees are engaged, they are generally more efficient and productive, more creative or innovative, and more likely to remain within their jobs at the organisation, which has been known to add value to business prosperity (Schaufeli & Bakker, 2004).

WFH, as a foreseeable future work arrangement, is a topic not explored fully yet. This study aims to add new insights to this emerging topic by reporting on the results of a study conducted during the global COVID-19 pandemic focusing on employees' levels of engagement during WFH within a private higher education institution in South Africa.

RESEARCH OBJECTIVES

The key research question the study aimed to answer was: What are the engagement levels of personnel WFH in a private higher education institution in South Africa in the context of the COVID-19 pandemic, and how are they affected by socio-demographic variables? Therefore, the objective of this study was first, to assess the levels of engagement of personnel WFH in a private higher education institution in South Africa in the context of the COVID-19 pandemic, second, to explore the association between selected socio-demographic variables and employee engagement, and third, to suggest recommendations, based on the literature review and empirical results, to assist higher education institutions, generally, and specifically, in the private space, to improve the engagement levels of personnel.

LITERATURE REVIEW

Employee engagement conceptualised

Employee engagement is a term that has attracted considerable debate regarding its conceptual definition. The concept has evolved, providing more insight into contemporary thinking around defining employee engagement in the workplace (Schuck & Wollard, 2009). Due to the recent inclusion of positive psychology and a focus on work engagement in recent management practice, there has been a greater focus on rethinking what employee engagement refers to (Sun, 2019). The concept of employee engagement was introduced first by Kahn (1990), who saw engagement as harnessing workers' selves towards their duties and cognitively investing in their work as a form of dedication. However, over the years, many researchers believed there is more to employee engagement than harnessing oneself towards work. As a result, the following contributions were made towards the understanding of employee engagement.

Employee engagement as a multi-faceted construct

Researchers believed that employee engagement should extend beyond cognitive ability and dedication and include the application of emotions and behaviours (May *et al.*, 2004). Others believed it is even more multi-faceted and should be considered a fusion of employee commitment, loyalty, productivity and ownership (Wellins & Concelman, 2005). Li and Chanchai (2019) stated that "employee engagement of a knowledge worker is composed of five dimensions: organisational identity, dedication, absorption, vigour, and pleasant harmony." Organisational identity refers to how a worker can identify with the organisation employed and the extent to which the workers feel a sense of belonging to the workplace (Sun & Bunchapattanasakda, 2019). Dedication refers to the extent to which an employee is committed to tasks and the organisation. Engaged employees tend to extend beyond their scope of work (Li and Chanchai, 2019). Work is regarded as important and is a source of 'enthusiasm, inspiration, pride and challenge' (Schaufeli *et al.*, 2002, p. 47). Absorption refers to how engrossed an employee is in their work, showing strong levels of engagement and productivity (Sun & Bunchapattanasakda, 2019). Employees tend to lose their sense of time and find it difficult to detach from their work (Schaufeli *et al.*, 2002). Vigour refers to the level of energy and enthusiasm reflected by employees in their work. Employees that show vigour are generally more physically and mentally engaged and can sustain and resolve challenging circumstances that may surround the workplace (Schaufeli *et al.*, 2002; Sun &

Bunchapattanasakda, 2019). Pleasant harmony refers to an emotional state where employees balance their emotions at the workplace. Employees that achieve this balance experience greater levels of wellness, work satisfaction and overall happiness in the workplace (Sun & Bunchapattanasakda, 2019).

Employee engagement includes a dedicated willingness

While multi-faceted, employee engagement should also be considered as the degree to which an employee is willing to remain within a company and the extent to which they are willing to dedicate themselves to the company (Sun, 2019). The terms 'say, stay and strive' are commonly used to describe an employee's willingness to remain in a company. In brief, 'say' refers to employees using positive communication to describe their company, 'stay' refers to employee ambition of becoming a permanent member of the company for a long time, and 'strive' refers to the willingness to devote extra personal resources such as time and hard work towards the success of the company (Guillen & Martinex-Alvarado, 2014).

Employee engagement as a positive state of mind

Zeng and Han (2005) indicated that employee engagement must be seen as a positive state of mind that has a positive and fulfilling feeling in employees' minds. Work should have a long-lasting impact, a good emotional sense and motivation towards the devotion of an employee to a task and is accompanied by pleasurable, gratified and encouraging feelings, which ultimately uplift an employee's experience of their work (Zeng & Han, 2005). In this regard, Schaufeli (2017) mentioned that employee engagement is "a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption." Schaufeli (2017) looks at how employees are motivated, committed, and focused on their work and can bring the best version of themselves to work. Schaufeli's conceptualisation of employee engagement has been extensively alluded to and remains very persuasive in the academic field of the concept (Schaufeli & Taris, 2014).

Employee engagement is the opposite of employee burnout

Some authors believe that employee engagement is the opposite of burnout. While burnout refers to tiredness in one's task, engagement is the opposite and refers to the extent to which an employee is immersed in their work (Schuck & Wollard, 2009). Engaged employees show a sense of energy when approaching tasks. Hence one can denote that employee engagement posits a positive connotation to work (Guillen & Martinex-Alvarado, 2014).

Thus, in broad terms, employee engagement comprises emotional and cognitive facets that drive employees to show vigour, dedication and absorption in their work. The emotional side relates to employees' feelings about their work, and the cognitive side refers to employee convictions and perceptions of the organisation, its management and staff, and its working climates (Riyanto & Adhitama, 2020).

A theoretical framework to understand employee engagement

Two influential frameworks have been used to understand employee engagement: the social exchange theory and the job resources demand model. These theories offer insights into the factors affecting employee engagement and how it can be enhanced during WFH.

Social exchange theory

The social exchange theory, developed by George Homans in the 1950s, is often regarded as one of the most robust theoretical perspectives to understand employee engagement (Eisenberger *et al.*, 1986). The theory supposes that work should be considered as a transaction between worker and employer, including labour, loyalty and employee interest, and rewards (including social rewards) (Levinson, 1965). It is a reciprocal relationship where a party expects a return in the future for the provision of services to the other party. The party that receives something of value is then expected to show a sense of responsibility in the exchange of services (Levinson, 1965). Once the value is recognised in rewards, employees will demonstrate commitment and continue performing to expect further value and rewards. The theory highlights that employees remain dedicated and loyal to organisations to exchange economic benefits and social reward schemes (Eisenberger *et al.*, 1986). Organisational support plays an essential role in the relationship between employer and employee, as

appropriate organisational support from the employers is crucial to employees' commitment to their tasks. Employees repay organisations with positive behaviours and attitudes conducive to success (Masterson *et al.*, 2000). Researchers such as Saks (2006) argued that employees repay organisations primarily through their engagement, implying that employees choose to be engaged with the organisation to differing extents depending on the resources they receive, both financial and supportive.

Job Demands-Resources model

The Job Demands-Resources model, developed in the early 2000s by Gerard Frederik Rutgers and Wilmar Schaufeli, postulates that while organisations may differ in terms of their environments and modes of operation, all organisations are characterised by an environment that can be classified into two common categories: job demands and the job resources (Schaufeli & Taris, 2014; Salanova *et al.*, 2005). The term "job demand" refers to aspects of the organisation and work that require employees' physical and psychological dedication to perform tasks. It is thus associated with physical and mental trade-offs (Crawford *et al.*, 2010). For example, large work pressure, heavy work demands, and poor and unconducive environments are characteristics of job demands that may impact employees' physical and mental well-being. On the other hand, job resources refer to physical, psychological, and social resources required to perform a task to allow the functional fulfilment of work goals, eradicate job demands and negative impacts on well-being, and promote the personal development of employees (Sun & Bunchapattanasakda, 2019). Employee engagement is related to the Job Demands-Resources model, as the dedication, absorption and vigour displayed by an employee towards work depend on the job's demands and the provision of resources to fulfil that task (Salminen *et al.*, 2014).

Employee engagement during WFH in the context of the COVID-19 pandemic

Due to the rapid implementation of the WFH model during the COVID-19 pandemic, organisations have begun to provide insight into how well the model works. A key variable within this success was employee engagement. The following drivers of engagement were identified:

Autonomy. Autonomy at work refers to the level of freedom that an employee has to make decisions regarding the manner and timing of which a task should be completed (Mehta, 2021). Autonomy is a driver of employee engagement even before the COVID-19 pandemic, where previous studies have denoted a strong relationship between these two constructs (Amabile & Kramer, 2011; Christian *et al.*, 2011; Deci & Ryan, 1985). Studies by Jaafar & Rahim (2022), Jamal *et al.* (2021), and Metha (2021) found that during WFH, employees had greater levels of freedom in deciding on the timing and methodology of performing their work tasks and experienced greater levels of autonomy which ultimately, enhanced their engagement levels.

Psychosocial safety refers to an employee's freedom or security regarding psychological and social risks or threats (Metha, 2021). Jamal *et al.* (2021) concur that there is an association between WFH and psychosocial safety, where employees experienced higher levels of psychosocial security when WFH, thereby enhancing employee engagement. Mehta (2021) found that employees displayed a greater sense of psychosocial safety as being at home gave them a great sense of self-security, security, and family security, resulting in positive engagement within their work. Mehta (2021) assessed the relationship between WFH and employee engagement in the Information technology (IT) sector.

Convenience. Wiese *et al.* (2020) examined how commuting strain affects daily self-control capacities at work and home. They found that commuting to a physical office leads to employees exhibiting irritation or negative behaviour, as commuting is regarded as an inconvenience to employees. Burch and Barnes-Farrell (2020) explained that commuting to the place of work represented not only a physical transaction but also the need for a mental transition from home to the place of employment, leading to degrees of irritability, poorer levels of concentration and dedication, and anxiety of commuting back to places of residence in terms of time and safety. Hence, the convenience of WFH and redeeming on the cost and time of commuting has shown to have a positive impact on engagement levels to an extent where employees, in certain respects, were willing to accept lower wages if allowed the convenience of WFH (Mas & Pallais, 2019).

Happiness. Mehta (2021) found that WFH has led to greater levels of happiness, which can be defined as 'a state of mind in which an individual experiences a sense of joy, satisfaction, and positive thinking and a feeling that one's life is good and carries meaning and is worthwhile.'

Cheng and Zhang (2022), Lunde *et al.* (2022) and Mehta (2021) found that WFH enhances employee levels of happiness, resulting in superior levels of employee engagement.

Social union. Riyanto and Adhitama (2020) add the concept of a social union as a driver of employee engagement. Their study concluded that when managers make concerted efforts to allow employees a sense of belonging by sharing information with employees, communicating shared visions, enhancing employee trust, and displaying constant attempts of communication, then employees show greater levels of self-esteem as they feel regarded, which subsequently enhances their engagement (Riyanto & Adhitama, 2020). In their respective study, Tooren & de Jong (2014) also reported an association between social union and employee engagement. Unlike Riyanto and Adhitama (2020), their studies were conducted in physical office settings, not remote working environments.

Organisational support. Organisational support was cited as another driver of employee engagement (Burch & Barnes-Farrell, 2020). Support also refers to degrees of assurance related to communication. Employees must be provided with assurances regarding the future of their jobs (i.e. job security) and their salaries. Organisations have found that employee engagement is reduced if employees are not provided with the necessary IT and infrastructural support (such as computers, webcams, and Internet access). This results from the stress of being unable to perform their duties effectively, which causes employees to be withdrawn from their tasks (Burch & Barnes-Farrell, 2020; Singh, 2020). Anxieties surrounding the possibility of losing their jobs and experiencing a salary reduction have also been noted as key drivers of engagement (Chanana & Sangeeta, 2021).

Practices to enhance employee engagement during WFH

Many organisations, given the importance of engagement and its subsequent impact on employee and organisational productivity, have devised innovative ways to counteract the effect of WFH on engagement. This section briefly elaborates on the practices used.

Organisational support. One of the prominent practices of modern organisations to enhance employee engagement is to ensure that employees are well equipped with the requisites to work effectively. Managers need to guarantee that all WFH requirements (such as ICT, social support, and constant communication, to mention a few) are provided to employees before the

commencement of remote work to remove any anxieties that employees may have about performing their duties effectively (Sarkar, 2020). Talukar (2020) suggests that employers should invest in technologies that allow employees to perform work effectively and replace the lack of physical relations that were once experienced with other colleagues before the lockdown. This will allow for activities such as hosting virtual team building. Goswami (2020) further stated that technologies should also allow for learning and development as the new work models require new sets of skills. Virtual learning platforms would assist in 'right-skilling' employees to withstand the requirements of new and future business trends.

Communication. Communication is a critical practice that needs to be adequate to ensure that organisations have engaged employees. Chanana and Sangeeta (2021) emphasise the need for management to ensure constant communication with virtual teams, ensuring that teams are aware of the company's vision and shared values, are given decision-making capabilities, are acutely aware of their expectations, are provided with feedback from time to time on performance, host podcasts on business operations, provide feedback on their growth opportunities and be given some degree of job and salary security. Effective communication strategies require using Information and Communications technology (ICT), such as intranets and sharing information through various multimedia channels. Given that WFH relies on virtual rather than physical teams, key reliance is placed on technologies to ensure that communication methods are effective and on-demand (Nair, 2020). This allows for promoting virtual communities among staff (Sarkar, 2020).

The ***focus on employees' personal well-being*** has been cited as one of the most creative yet effective strategies to encourage engagement during WFH periods (Fan *et al.*, 2020). Fan *et al.* (2020) mentioned five ways in which organisations can promote engagement through support for their well-being:

- *Healthy workspaces*. This refers to organisations encouraging employees to create dedicated and practical workspaces that are healthy and ergonomics within their places of residence.
- *Routine*. Managers and superiors should participate in assisting employees in creating work and personal routines to ensure that a work-life balance is achieved. Remote working has been accused of invading employees' private

space and time. Hence routines are effective in separating work and personal lives.

- *Socialisation*. Organisations are encouraged to promote healthy and constant communication with and between employees/colleagues. This was found to be key in reducing work anxiety and stress.
- *Well-being practices*. Organisations should also devise practices that promote the well-being of their employees. For example, online exercise classes could be offered to guarantee employee health maintenance. This was found to reduce employee absenteeism and promotes dedication and performance.
- *Technology investment*. Organisations should invest in communication technologies such as messaging services and video conferencing to promote constant communication and remove social alienation among employees. A recognition software platform is also advised as this will allow employees to be recognised in terms of their efforts and recognise others.

Socio-demographic variables and employee engagement

Pre- and during the COVID-19 pandemic, research suggests that socio-demographic variables such as age, gender, marital status, level of education and tenure may influence the levels of employees' engagement (Botha & Coetzee, 2022; Botha *et al.*, 2023; Chaudhary & Rangnekar, 2017; Mvana & Louw, 2020; Romero-Martín *et al.*, 2022).

Cascio *et al.* (2014), Botha and Coetzee (2022), Botha *et al.* (2023), Mvana and Louw (2020), and Romero-Martín *et al.* (2022) in their respective studies found that age influences the engagement levels of employees. Mvana and Louw (2020) found that younger teachers are less engaged in their work than older teachers. Cascio *et al.* (2014) mentioned that when educators reach the age of 50, they can become disengaged from their work as they are less likely or capable of dealing with stressful circumstances. In the WFH context, Romero-Martín *et al.* (2022) found that younger employees displayed more levels of engagement than older employees. Romero-Martín *et al.* (2022) conducted their study among active workers in the United Kingdom during the COVID-19 pandemic.

Interestingly, Botha *et al.* (2023) found in their study conducted among employees within higher education in South Africa that older employees showed more dedication, vigour and absorption when WFH during the pandemic than the younger employees. A study by Botha

and Coetzee (2022) also revealed that older employees displayed higher levels of absorption than younger employees. The authors conducted their study during the COVID-19 pandemic among employees working in a debt collection organisation in South Africa.

The study conducted by Botha *et al.* (2023) revealed that gender affects the engagement levels of employees; the results showed that the male employees displayed higher levels of engagement than the female employees during the WFH period. The study conducted by Romero-Martín *et al.* (2022) confirmed the results. However, Botha and Coetzee (2022) found no significant differences between the genders in employee engagement during WFH.

Earlier studies suggested that married people are more engaged in the workplace (Rigg *et al.*, 2014; Zeng *et al.*, 2009). Romero-Martín *et al.* (2022), whose study was conducted during the pandemic, showed that employees within the UK who were married or lived with a life partner showed greater engagement in their work during the WFH period. However, Sungmala and Verawat (2021) and Botha *et al.* (2023) did not find that marital status does affect employee engagement.

Mvana and Louw (2020) and Sungmala and Verawat (2021) found that the level of qualification influences employees' engagement levels, where employees with higher qualifications were less engaged in their work than their counterparts with lower qualifications. However, the studies conducted by Botha and Coetzee (2022) and Botha *et al.* (2023) revealed no association between the level of qualification and the engagement levels of employees during WFH.

Mvana and Louw (2020) found that employees, particularly teachers with more experience, displayed lower levels of engagement. Klassen and Chiu (2010) explained that educators show greater engagement and psychological capital at their career's commencement and mid-stages. This would decrease as they mature in their career, which could explain why younger teachers are more vibrant and display greater engagement.

Earlier studies (Avery *et al.*, 2007; Coetzee & Rothmann, 2005; Montes & Irving, 2008) revealed an association between tenure and employees' engagement levels, where engagement tends to decline the longer the employee's tenure within the organisation. However, in the COVID-19 context, Botha & Coetzee (2022) and Botha *et al.* (2023) found no significant

relationship between tenure and employee engagement. According to Robinson *et al.* (2007), the kind of experience the organisation offers may influence employees' engagement levels.

Despite the differences in the results of the studies mentioned above, it can be deduced that socio-demographic variables may influence the engagement levels of employees. This will be explored further in this study.

RESEARCH METHODOLOGY AND DESIGN

The following section discusses the research methodology and design adopted for this study.

Research approach

Four research approaches are commonly utilised in research: positivism, post-positivism, interpretivism and critical theory. These paradigms reference different views of the world, allowing researchers to perceive, quantify and realise individuals' unique and social experiences (Bryman & Bell, 2018). This study adopted the positivist paradigm and quantitative method of inquiry to measure employees' engagement levels at a private higher education institution and to determine its association with selected socio-demographic variables (Bryman *et al.*, 2021; Dawson, 2019).

Research methods

The target population of this study comprised individuals from a private higher education institution in South Africa that were employed at different categories or levels of employment. Thus, the target population (133) comprised management (16), academics lecturers (27) and academic administrators (i.e., support staff) (90). The total population was targeted. Total population sampling is a form of purposive sampling which utilises or surveys a total population based on specific traits (i.e., academic personnel in this regard) (Dawson, 2019). The population received the invitation to participate in the study via email. A total of 105 responded, signifying a satisfactory response rate of 79% (n = 105).

Measuring instruments

Data was collected from respondents via an online administered survey that utilised the 17-item UWES questionnaire. The questionnaire contains six items that measured academic personnel's vigour, five that measured personnel's dedication and six that measured personnel's absorption (Schaufeli & Bakker, 2004). Various existing studies supported that these three scales' internal consistency and validity are good. The Cronbach's alpha coefficients are equal to or exceed the critical value of 0.70 (Botha *et al.*, 2023; Goliath-Yarde & Roodt, 2011; Schaufeli & Bakker, 2004; Storm & Rothmann, 2003). A socio-demographic section was included in addition to the UWES questionnaire.

Statistical analysis

Descriptive, inferential, and multivariate statistical analyses were performed on the data gathered from respondents, utilising SPSS AMOS version 27 as the statistical software. Descriptive statistics were used to describe the characteristics of the sample or data set. Confirmatory factor analysis was used to verify the factor structure of the UWES. Cronbach's alpha coefficient was used to determine the internal consistency and reliability of the scales (Vigour, Dedication and Absorption). Field (2009) suggested that Cronbach's alpha coefficient should preferably be 0.7 and above. Independent sample t-tests and ANOVA’s were used to determine whether there were significant differences between the means of independent groups. Cohen's d-values were used as effect sizes to determine whether the differences in means affect practice, where d = 0.2 indicates a small effect, d = 0.5 a medium effect and d = 0.8 a large effect (Cohen, 1988). Spearman's rank-order correlation determined the direction and strength of the association between two ranked variables.

Research procedure and ethical considerations

A permission letter was obtained from the institution under investigation, granting permission to conduct the study. An invitation email was sent to the study's target population, comprising management, academics lecturers and administrators (i.e., support staff). The email explained the purpose and nature of the study and the respondents' rights. Informed consent was included on the first page of the online survey that respondents were required to sign. By signing the form, the respondents provided informed consent and agreed that their data may be used for

research and publication purposes. Respondents' anonymity and confidentiality were ensured during data collection, analysis and reporting. Ethical clearance was obtained from the North-West University's Ethical Committee.

EMPIRICAL RESULTS

This section presents and discusses the results of the primary research conducted and aims to discover patterns or trends that may have implications for practice and future research regarding the topic under investigation.

Socio-demographic information

Table 1 reflects the socio-demographic information of the participants collected.

Table 1 Socio-demographic information

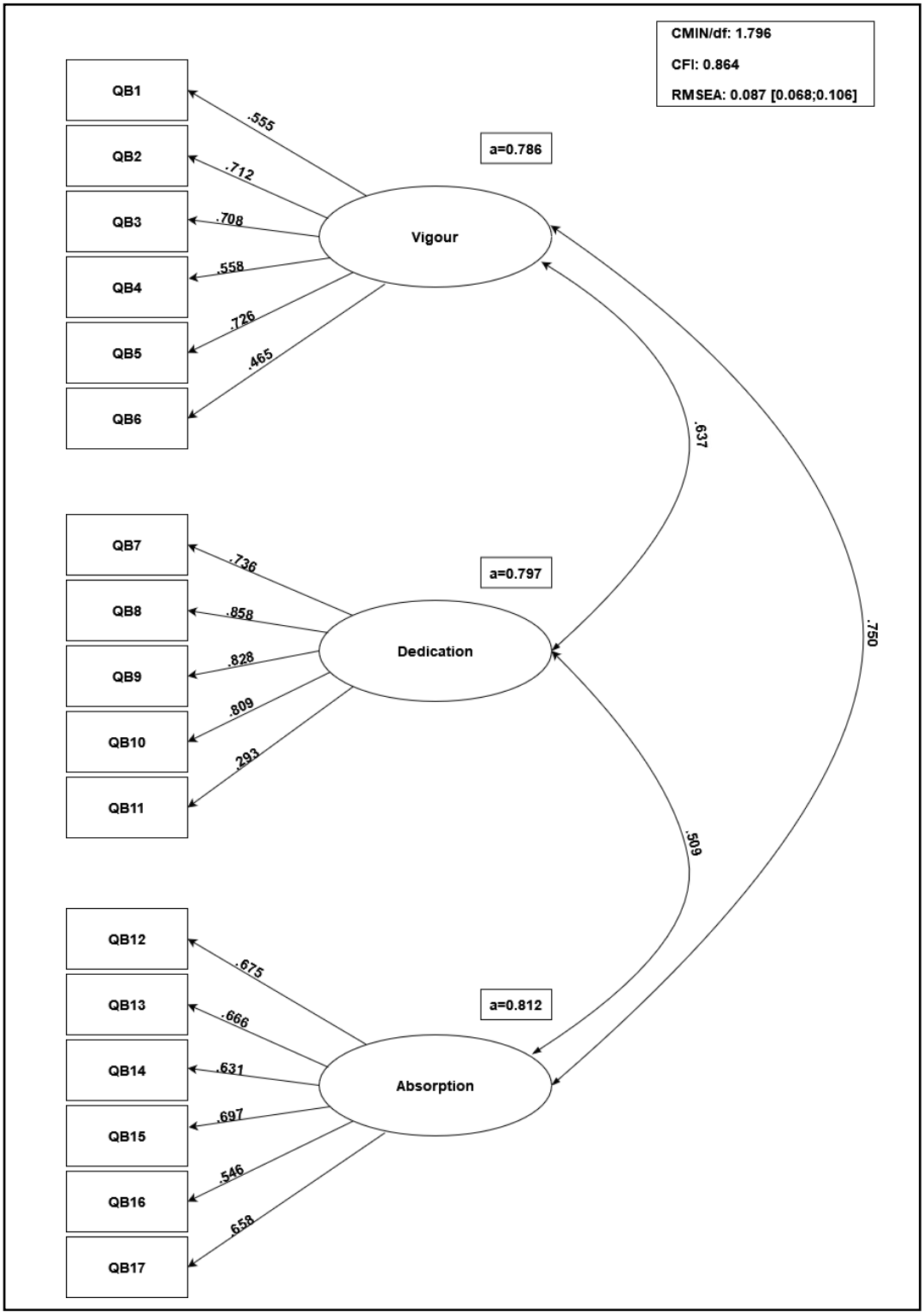
Biographical information			
Question	**Category**	**N**	**%**
With which gender do you identify yourself?	Female	66	62.9
	Male	38	36.2
	Prefer not to answer	1	1.0
In which country do you reside?	South Africa	102	97.0
	Other	3	3.0
What is your nationality?	South African	99	94.3
	Other	6	5.7
What is your age in years?	20–29	26	24.8
	30–39	52	49.5
	40–49	16	15.2
	50–59	8	7.6
	60 and older	3	2.9
What is your marital status?	Single or not in a relationship	25	25.3
	Unmarried and in a relationship	21	21.2
	Widowed	4	4.0
	Married	47	47.5

	Divorced/Separated	2	2.0
What is your highest qualification?	High (secondary) school graduate	23	22.3
	Completed technical/vocational training	6	5.8
	College/University degree	43	41.7
	Postgraduate degree	26	25.2
	PhD	5	4.9
How long have you been working at the institution?	0–6 months	16	15.2
	7–12 months	6	5.7
	1–2 years	14	13.3
	3–5 years	33	31.4
	6–10 years	24	22.9
	More than 10 years	12	11.4
What is the nature of your employment at the institution?	Management		17.1
	Academic (i.e. teacher, lecturer, researcher, postdoctoral fellow, etc.)		19.0
	Support (i.e. administrative, technical, etc.)		46.7
	Other		17.2
How long have you been WFH since the COVID-19 pandemic started in 2020?	0–3 months	24	25.0
	4–7 months	37	38.5
	8–11 months	25	26.0
	12 months and longer	10	10.4
Which scenario best describes your current work situation since the COVID-19 pandemic started in 2020?	I have been WFH since the beginning of the pandemic, but come to the office occasionally (i.e. to attend a meeting and at my own discretion)	11	10.8
	I work remotely a few days a week as directed by management	16	15.7
	I am working from the office most of the time	30	29.4
	I am working from the office all the time	45	44.1

The data collected indicates that majority (i.e. 94.3%) of the respondents included in the study are South African, represent a young adult population with over 65% of respondents being between the ages of 20 and 39 years, and have been employed at the institution at varied tenures (i.e. 6 months to over 10 years) and are predominantly female (i.e. 62.9%). The data also represented all employment levels (i.e., management, academic and support staff). Support staff was expected to represent the larger population due to the South African higher education requirement of a 30:1 support staff-to-student ratio (Kosie, 2022). Most respondents have a university degree or postgraduate degree (72%), and a large proportion (47%) indicated they were married. All respondents mentioned that they did WFH for specific periods during the COVID-19 pandemic, inferring they can offer significant insight into this study.

Employee engagement measurement model

The confirmatory factor analyses conducted on the UWES found that the three-factor structure (i.e. vigour, dedication and absorption) has a good fit to the data derived from the respondents (see Figure 1). Six items loaded on Vigour (ranging from 0.465 to 0.726), five on Dedication (ranging from 0.293 to 0.858) and six on Absorption (ranging from 0.546 to 0.697). All factor loadings were found to be statistically significant at the 0.05 level. Arguably, item QB11 (with a loading of 0.293) did not load adequately on Dedication. Field (2009) suggested that a factor loading of 0.3 is regarded meaningful and that for a sample of 100, the factor loadings should be preferably greater than 0.5. Botha and Coetzee (2022) also suggested omitting this item from future studies.



** All factor loadings were statistically significant at the 0.05 level.*

Figure 1: Confirmatory factor analysis results of the employee engagement measurement model

Cronbach's coefficient alpha determined the reliability and internal consistency of the three factors. Cronbach's alpha coefficients were satisfactory ($\alpha \geq 0.70$) for Vigour (0.786),

Dedication (0.797) and Absorption (0.812) (Field, 2009). An alpha coefficient should ideally exceed 0.7 to achieve reliability and internal consistency (Field, 2009). Thus, the data and the questionnaire scales are considered reliable and internally consistent.

The questionnaire captured data on a five-point Likert-type scale (with responses rated between 1 and 5, where 1 = strongly disagree and 5 = strongly agree). The responses indicated that the mean scores for all the factors were 3.7 and above. The highest mean score was achieved for Dedication (M = 4.1), followed by Vigour (M = 3.71) and Absorption (M = 3.69) on a five-point Likert scale. Thus, the results showed that the respondents displayed acceptable levels of engagement during WFH, although there is room for improvement to increase their vigour and absorption levels.

Hancock and Mueller (2010) suggested that reporting fit indices from three broad classes is good practice. Therefore, the following three goodness-of-model-fit indices were used to evaluate the model-data fit: the chi-square statistic divided by degrees of freedom (CMIN/DF), the comparative fit index (CFI) and the root mean square error of approximation (RMSEA). The CMIN/DF ratio should be close to one for correct models (Bollen & Jackman, 1993). Scores below one indicate a poor fit between the data sampled and the hypothetical model utilised (Shadfar & Malekmohammadi, 2013). According to Kline (1998), a CMIN/DF ratio smaller than three indicates an acceptable model-data fit. According to Shadfar and Malekmohammadi (2013), a ratio closer to two is considered a strong fit, while ratios between 2 and 5 are considered appropriate. A CFI index of one indicates a perfect fit, while an index below 0.95 generally indicates a poor fit (Bentler, 1990). However, according to Hair *et al.* (2010) and Bentler (1990), an index greater than 0.9 for CFI indicates a good fit. For the RMSEA, an index of zero indicates a perfect fit, while indices below 0.05 demonstrate a good fit. Indices between 0.05 and 0.08 are acceptable, while indices above 0.10 indicate a poor fit (Steiger, 1990). Table 2 reveals the model's ratios and indices concerning the CMIN/DF, CFI and RMSEA indexes.

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Table 2: Goodness-of-model-fit indices for employee engagement

Goodness-of-model-fit indices				
Fit index	Rule	Author	Model score	Result
CMIN/DF	Close to 1; 3–5 still satisfactory	Mueller (1996), Paswan (cited by Shadfar & Malekmohammadi, 2013), Bollen & Jackman (1993), Kline (1998)	1.796	Good fit
CFI	≥ 0.9 (good fit)	Hair *et al*. (2010), Mueller (1996), Bentler (1990)	0.864	Acceptable fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre) ≤ 0.10 (still satisfactory)	Hu and Bentler (1999:1), Blunch (2008), Bentler (1990), Steiger (1990)	0.087 [0.068; 0.106]	Acceptable fit

The three goodness-of-model-fit indices indicated an acceptable fit between the measurement model and the sampled data (see Table 4). The measurement model obtained a CMIN/DF ratio of 1.76, a CFI index of 0.864 and the following RMSEA values: 0.087, 0.068 (low), 0.106 (high).

A measurement model needs construct validity to be fit for use. Construct validity can be achieved if the model possesses both discriminant and convergent validity. The model has convergent validity if the Average Variance Explained (AVE) value exceeds 0.5 (Fornell & Larcker, 1981). The results showed that the AVE of Vigour=0.466; Dedication=0.614, and Absorption=0.419. Thus, the AVE values of the two factors were marginally below the recommended 0.5 AVE cutoff value. The Dedication factor shows acceptable convergent validity, the Vigour factor almost acceptable convergent validity, while the Absorption factor lacks convergent validity. For a model to achieve discriminant validity, the square root of the AVE (√AVE) should be higher than the correlation coefficient between the two factors under scrutiny (Fornell & Larcker, 1981). The results show the √AVE for Vigour=0.683, Dedication=0.784, and Absorption=0.647 (see Table 3). Table 3 shows that the criterion (√AVE > r) was met, and there is discriminant validity between Vigour and Dedication (√AVE

= 0.784; r =0.710), but not concerning Absorption, and Vigour (√AVE =0.647; r =0.677), and Dedication (√AVE =0.647; r =0.671) factors. Thus, it is concluded that the model possesses some evidence of construct validity. Campbell and Fiske (1959) seminally warned that these findings are not uncommon because partial convergent and discriminant validity is common in exploratory models (such as this one). Likewise, an exploratory model could have good discriminant validity but relatively poor convergent validity (or vice versa) (Hill & Hughes, 2007). In such cases, emphasis should be on the confirmatory results showing consistency between the identified factors and the data (Cole, 1987).

Table 3: Average variance extracted, square root of AVE and matrix of correlations between factors

	AVE	Vigour	Dedication	Absorption
Vigour	0.466	0.683		
Dedication	0.614	.710**	0.784	
Absorption	0.419	.677**	.671**	0.647

Association between gender, marital status, nature of employment, current WFH situation, and employee engagement

Independent sample t-tests determined the association between gender and employee engagement (Table 4).

Table 4: Association between gender and employee engagement

Group statistics					Independent sample t-test	
Gender		**N**	**Mean**	**SD**	**P-value**	**Effect size**
Vigour	Male	37	3.87	0.58	0.046	0.41
	Female	66	3.63	0.61		
Dedication	Male	37	4.25	0.44	0.048	0.37
	Female	66	4.04	0.66		
Absorption	Male	37	3.80	0.60	0.340	0.19
	Female	66	3.67	0.73		

* *SD = Standard deviation*

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The independent sample t-test results revealed significant differences in the mean scores of male and female respondents for Vigour (p-value = 0.046; d = 0.41) and Dedication (p-value = 0.048; d = 0.37); the effect sizes showed a small towards medium effect. The male respondents displayed more Vigour (Male: M = 3.87; Female: M = 3.63) and Dedication (Male: M = 4.25; Female: M = 4.04) during WFH than the female respondents.

The ANOVA's revealed the associations between the socio-demographic variables marital status, nature of employment, WFH situation, and employee engagement (see Table 5).

Table 5: Association between marital status, nature of employment, and WFH situation, and employee engagement

Group statistics					ANOVA	Effect sizes	
Marital status		N	Mean	SD	P-value	A with B and C	B with C
Vigour	A: Single or not in a relationship	24	3.40	0.57	0.013		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	3.76	0.54		0.62	
	C: Married	47	3.84	0.62		0.71	0.13
	Total	98	3.71	0.61			
Dedication	A: Single or not in a relationship	24	3.78	0.78	0.010		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	4.19	0.55		0.52	
	C: Married	47	4.22	0.48		0.56	0.06
	Total	98	4.10	0.61			
Absorption	A: Single or not in a relationship	24	3.69	0.73	0.503		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	3.60	0.75		0.12	
	C: Married	47	3.80	0.62		0.14	0.26
	Total	98	3.72	0.68			

Group statistics					ANOVA	Effect sizes	
Nature of employment		N	Mean	SD	P-value	A with B and C	B with C
Vigour	A: Management	18	3.83	0.40	0.595		
	B: Academic	20	3.66	0.60		0.29	
	C: Support	64	3.68	0.65		0.24	0.03
	Total	102	3.70	0.60			
Dedication	A: Management	18	4.14	0.49	0.830		
	B: Academic	20	4.14	0.45		0.01	
	C: Support	64	4.06	0.69		0.12	0.11
	Total	102	4.09	0.61			
Absorption	A: Management	18	3.98	0.56	0.178		
	B: Academic	20	3.69	0.63		0.46	
	C: Support	64	3.63	0.77		0.46	0.09
	Total	102	3.70	0.72			
WFH situation		N	Mean	SD	P-value	A with B and C	B with C
Vigour	A: I have been WFH since the pandemic's beginning, but I come to the office occasionally. / I work a few days a week remotely as directed by management.	27	3.81	0.58	0.574		
	B: I am working from the office most of the time.	30	3.64	0.64		0.26	
	C: I am working from the office all the time.	44	3.75	0.57		0.11	0.16
	Total	101	3.73	0.59			
Group statistics					**ANOVA**	**Effect sizes**	

Nature of employment		N	Mean	SD	P-value	A with B and C	B with C
Dedication	A: I have been WFH since the pandemic's beginning, but I come to the office occasionally. / I work remotely a few days a week as directed by management.	27	4.07	0.63	0.811		
	B: I am working from the office most of the time.	30	4.10	0.62		0.05	
	C: I am working from the office all the time.	44	4.16	0.59		0.15	0.10
	Total	101	4.12	0.61			
Absorption	A: I have been WFH since the pandemic's beginning, but I come to the office occasionally. / I work a few days a week remotely as directed by management.	27	3.78	0.59	0.212		
	B: I am working from the office most of the time.	30	3.53	0.71		0.34	
	C: I am working from the office all the time.	44	3.82	0.76		0.05	0.38
	Total	101	3.72	0.71			

* SD = Standard deviation; d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The ANOVA indicated significant differences between the mean scores of the different marital categories for Vigour ($p = 0.013$) and Dedication ($p = 0.010$). The respondents that were single scored lower on Vigour ($M = 3.40$) and Dedication ($M = 3.78$) than the respondents that were in a relationship, widowed, divorced and separated (Vigour: $M = 3.76$, $d = 0.62$; Dedication: $M = 4.19$, $d = 0.52$), and are married (Vigour: $M = 3.84$, $d = 0.71$; Dedication: $M = 4.22$, $d = 0.56$); the effect sizes showed medium towards large effects.

The effect sizes further showed that the respondents that belonged to the management category scored higher on Vigour ($M = 3.83$) and Absorption ($M = 3.98$) than the respondents that belonged to the Academic (Vigour: $M = 3.66$, $d = 0.29$; Absorption: $M = 3.69$, $d = 0.46$) and Support (Vigour: $M = 3.68$, $d = 0.24$; Absorption: $M = 3.63$, $d = 0.46$) categories; the effect sizes indicated small towards medium effects.

Furthermore, the effect sizes showed, regarding WFH situation, that respondents that were working from home but came to the office occasionally or a few days a week scored higher on Vigour ($M = 3.81$) and Absorption ($M = 3.78$) than respondents that were working from the office most of the time (Vigour: $M = 3.64$, $d = 0.26$; Absorption: $M = 3.53$, $d = 0.34$). Interestingly, the effect sizes showed that the respondents that were working from the office all the time ($M = 3.82$: $d = 0.38$) were more absorbed in their work than the respondents that were working from the office most of the time ($M = 3.53$); however, the effect was small.

Correlation of age, highest qualification, years working at the university and period WFH with employee engagement

Spearman's rank-order correlation was performed to establish the linear relationship between age, highest qualification, years working at the university and period WFH with employee engagement (see Table 6).

Table 6: Correlation of age, highest qualification, years working at the university and period WFH with employee engagement

		Age	Highest qualification	Years working at the university	Period WFH
Vigour	Correlation coefficient	.296**	0.03	0.043	-0.103
	Sig. (2-tailed)	0.00	0.80	0.666	0.322
	N	104.00	102.00	104	95
Dedication	Correlation coefficient	0.17	0.02	0.001	-0.051
	Sig. (2-tailed)	0.08	0.88	0.993	0.626
	N	104.00	102.00	104	95
Absorption	Correlation coefficient	.278**	0.05	.205*	-0.072
	Sig. (2-tailed)	0.00	0.61	0.037	0.491
	N	104.00	102.00	104	95

*** Correlation is significant at the 0.01 level (2-tailed)*

** Correlation is significant at the 0.05 level (2-tailed)*

(a) small effect: r = 0.1, (b) medium effect: r = 0.3 and (c) large effect: r > 0.5

Spearman's rank-order correlation established medium positive correlations between age, vigour (p = 0.00, r = 0.296), and absorption (p= 0.00, r = 0.278). This indicates that the older employees were, the more vigour and absorption they displayed. In addition, a small positive correlation was found between the years working at the university and absorption (p= 0.037, r = 0.205), signifying that the longer employees were in the institution, the more they found themselves absorbed in their work.

Correlation between Vigour, Dedication and Absorption

Spearman's rank-order correlation test determined the linear relationship between Vigour, Dedication and Absorption (see Table 7).

Table 7: Correlation between Vigour, Dedication and Absorption

		Vigour	Dedication	Absorption
Vigour	Correlation coefficient	1,000	.710**	.677**
	Sig. (2-tailed)		0,000	0,000
	N	397	396	397
Dedication	Correlation coefficient	.710**	1,000	.671**
	Sig. (2-tailed)	0,000		0,000
	N	396	396	396
Absorption	Correlation coefficient	.677**	.671**	1,000
	Sig. (2-tailed)	0,000	0,000	
	N	397	396	397

*** Correlation is significant at the 0.01 level (2-tailed)*

** Correlation is significant at the 0.05 level (2-tailed)*

(a) small effect: r = 0.1, (b) medium effect: r = 0.3 and (c) large effect: r > 0.5

Large positive correlations exist between Vigour and Dedication (p = 0.00, r = 0.710), and Vigour and Absorption (p= 0.00, r = 0.677). This indicates that the more vigour employees expressed in their jobs, the more dedicated and absorbed they are. In addition, a large positive correlation was found between Dedication and Absorption (p= 0.00, r = 0.671), signifying that the more dedicated employees are to their jobs, the more they find themselves absorbed in their work.

DISCUSSION

The study explored the levels of work engagement of academic personnel during the WFH period during the COVID-19 lockdown within private higher education in South Africa. The results indicated that although there has been a shift experienced in the nature of work (i.e. WFH) comprised of radical and immediate shifts in 'business as usual,' respondents were able to cope with the changes brought about by the WFH model. These findings suggest that despite

the difficult COVID-19 environment and the anxiety regarding WFH, respondents could still thrive and display high levels of engagement.

Interestingly, these findings concur with a study conducted by Botha and Coetzee (2022), who studied employee engagement and WFH in a debt collection organisation in Gauteng, South Africa, in the context of the COVID-19 pandemic. The authors also utilised the UWES questionnaire to quantity employees' level of engagement. They found that all three factors (Vigour, Dedication and Absorption) scored a mean above 3.7, and secondly, Dedication was ranked the highest, followed by Vigour and Absorption (Botha & Coetzee, 2022).

Concerning the above, the literature review showed that employee engagement during WFH is enhanced by greater levels of autonomy achieved (Mehta, 2021), psychosocial safety experienced (Manjaree & Perera, 2021) and limiting the financial and mental cost of travelling (Wiese *et al.*, 2020). Singh (2020) warned against poor organisational support's impact on WFH engagement. Engagement levels might be negatively affected when organisations do not provide remote employees the requisite infrastructure and support. However, it is concluded that organisational support was offered to respondents of this study, resulting in high levels of engagement.

The study's results can also be understood via the social exchange theory and the Job Demands-Resources model. Regarding the social exchange theory, it is noteworthy that employees have remained engaged through the WFH period as the reciprocal relationship between employee and organisation has been maintained. It is also concluded that academic personnel were provided with adequate organisational support and, in exchange, reciprocated with engagement and commitment to their tasks. Similarly, from a Job Demands-Resources model's perceptive, the organisational support received by the institution afforded academic personnel to work in conducive workspaces with related IT and support infrastructure, thereby enhancing or maintaining their levels of engagement.

The comparison and correlation tests conducted established that gender, marital status, nature of employment, age and tenure affect the engagement levels of personnel. Concerning gender, the independent samples' t-test revealed that the male respondents displayed more vigour and dedication during WFH than the female respondents. This study's result is confirmed by Botha *et al.* (2023) and Romero-Martín *et al.* (2022); both studies were conducted during the global

COVID-19 pandemic. According to Mukhopadhyay (2022) and Stefanova *et al.* (2021), due to societal gender expectations, tasks such as childbearing, child rearing and domestic responsibilities rest mainly on women's shoulders. Thus, women find it harder to balance home life and work-life given their domestic commitments at home. Hence the authors found that men were afforded greater opportunities to engage in their work than women.

Regarding marital status, the ANOVA results showed that the single respondents displayed lower levels of vigour and dedication than those in a relationship, widowed, divorced and separated and married. This result is supported by researchers such as Rigg *et al.* (2014) and Zeng *et al.* (2009), whose studies established that married individuals are more engaged in their work than unmarried individuals. Romero-Martín *et al.* (2022) also found that employees who were married or lived with a life partner showed higher engagement levels when WFH.

Furthermore, the effect sizes showed that the management staff displayed higher levels of vigour and absorption than the academic and support staff. This finding was interesting to note, as Mvana and Louw (2020) found in their study that employees with more experience and larger portfolios displayed lower levels of engagement (Mvana & Louw, 2020). This can be attributed to the fact that employees at the commencement of their careers show greater levels of vigour, dedication and absorption than those who are settled or have matured in their careers (Klassen & Chiu, 2010).

Regarding age, Spearman's rank-order correlation found that older academic personnel were more engaged within their roles at the institution than their younger peers. The studies conducted by Botha and Coetzee (2022) and Botha *et al.* (2023) confirmed this result. However, it contradicts the results of studies undertaken by Cascio *et al.* (2014), Mvana and Louw (2020), and Romero-Martín *et al.* (2022), who found that younger employees are more engaged in their work than older employees.

In addition, this study revealed that the longer the tenure of employees in the institution, the more they absorbed themselves in their work. This result contradicts previous studies conducted before the global COVID-19 pandemic (Avery *et al.*, 2007; Coetzee & Rothmann, 2005; Montes & Irving, 2008).

PRACTICAL IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS

Practical implications: This study contributes to the body of knowledge surrounding employee engagement in the WFH context within the private higher education sphere. The study's results could be used to address the issue of employee engagement during WFH within private higher education in South Africa. As the WFH model has been identified as a model that would be viable for the foreseeable future, the results of this study would be beneficial to private higher education even after the COVID-19 pandemic as many institutions continue remote teaching, learning and assessment. Higher education leaders should teach and promote healthy and engaged workplace cultures in the new world of work through the appropriate adaptations of the recommendations made below.

Limitations: The study focused on one private higher education institution in South Africa. Therefore, the results cannot be generalised to other private or public higher education institutions worldwide.

Recommendations: The following recommendations are suggested to ensure that the engagement of personnel in higher education is improved and sustained.

Organisational support. The most important engagement strategy is organisational support, given the complexities of WFH. Organisational support allows employees to successfully WFH and is the most viable engagement strategy in the digital age. Management of organisations should ensure that employees WFH are provided with appropriate guidance on their roles, constant communication, appropriate team building, required ICT infrastructure, and meaningful deliberation is conducted to ensure that employees have conducive spaces to WFH.

Employee well-being. Given the anxieties and strain placed on employees WFH, a meaningful focus on employee well-being was noted as another viable solution to engagement. Organisations could assist employees by ensuring they are equipped with healthy workspaces, work routines, socialisation opportunities, well-being physical and mental practices, and investment in technologies that promote well-being by allowing employees to communicate and keep abreast with one another and to recognise employee efforts, for example.

***Social Union*.** Although mentioned above as communication, the emphasis on developing a social union cannot be overstated. Organisations should make concerted efforts to ensure that employees experience a sense of belonging to the organisation, are communicated with on shared visions, are confident that their input is trusted, and provide them with recognition of their work.

Furthermore, as only a few studies in South Africa reported on employee engagement during the WFH context, and because it is regarded as a viable workplace model for the foreseeable future, it is suggested that the topic be further explored, not only in the private and public higher education sector but also in organisations in the private and public sector. A qualitative study could also provide a deeper understanding of the phenomenon.

CONCLUSION

The main objective of this study was to explore the levels of engagement of personnel WFH during the COVID-19 lockdown. The study focused on private higher education personnel in South Africa. The study found that despite the difficulties and anxieties brought about by the radical shifts to WFH, the personnel could still thrive and show high levels of engagement. This was attributed to positive drivers of engagement such as autonomy, psychosocial safety, convenience, social union and, most importantly, organisational support. Due to WFH being regarded as a viable work arrangement for the foreseeable future. Taking its iterative nature into account, it is recommended that private higher education take note of the suggestions put forward and constantly reevaluate their strategies to improve, sustain and manage employee engagement successfully.

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CHAPTER 4: ARTICLE 3

THE INFLUENCE OF WFH ON THE ORGANISATIONAL COMMITMENT OF ACADEMIC PERSONNEL WITHIN PRIVATE HIGHER EDUCATION, SOUTH AFRICA

This article has been submitted to the *South African Journal of Industrial Psychology* and is under review. The journal is indexed by the Department of Higher Education, Web of Science, Scielo SA, Proquest's IBSS, Scopus and the Norwegian Register for Scientific Journals.

The influence of WFH on the organisational commitment of academic personnel within private higher education, South Africa

ABSTRACT

Orientation: The COVID-19 pandemic has changed how higher education institutions operate, and the WFH operating model has been implemented widely.

Research purpose: This study investigated the organisational commitment of academic personnel within private Higher Education in South Africa, WFH during the COVID-19 pandemic.

Motivation for the study: While some studies exist assessing employees' organisational commitment levels during the COVID-19 pandemic, no studies evaluated this phenomenon within private higher education in South Africa.

Research approach/design and method: This study adopted a quantitative research methodology. The target population comprised 133 academic personnel employed at a private higher education institution. Data was collected using an online survey with the validated Three-Component Model employee commitment questionnaire. A satisfactory response rate of 79% was realised.

Main findings: The study found that notwithstanding the struggles and unease brought about by the swift transformations to WFH due to the global COVID-19 pandemic, the organisational commitment levels of academic personnel were sustained, specifically affective and normative commitment. This can be attributed to social support, job resources, job satisfaction, communication, and organisational support. These factors are the critical success factors for maintaining commitment.

Practical/Managerial implications: Due to WFH being noted as a feasible and noteworthy work model for the foreseeable future, private higher education should give due consideration to the findings of this study to manage the levels of organisational commitment from academic staff appropriately.

Contribution/value-add: The study contributes to the body of knowledge regarding organisational commitment within a WFH context in private higher education.

Keywords: Academic personnel, COVID-19 pandemic, organisational commitment, private higher education, remote work, WFH.

INTRODUCTION

Orientation

The COVID-19 pandemic has profoundly changed how organisations and employees operate. The most significant and widely accepted change as a result of the pandemic has been the pervasive implementation of the work-from-home (WFH) model (Hall *et al.*, 2020), which has resulted in a substantial shift on how employees work (Jiang & Wen, 2020; WHO, 2020). The WFH model is a model that has been widely used by organisations during the COVID-19 pandemic, that refers to employees working remotely and performing their duties from the vicinity of their homes (rather than the office, for example), utilising an array of information technology for communication, productivity and business continuity. This model intended to prioritise workers' health and well-being by minimising the spread of the virus (via home isolation) while maintaining business continuity (Prayag, 2020). As a result of this change, most organisations, including those in higher education, were required to adapt to new methods of organising work, and employees were required to swiftly adjust to working and operating in the new environments (Bell & Sheridan, 2020). Organisations that have failed to adapt to the WFH model successfully have been affected by negative cash flows, ultimately resulting in business closures and a threat to business continuity (Jiang & Wen, 2020). This exacerbated the problem because viable solutions to the new work arrangement regarding business success have yet to be discovered in specific industries, such as the hotel industry (Mao *et al.*, 2020). Organisations that have survived the impact of the COVID-19 pandemic have been noted to display notions of resilience. Still, it is important to note that not all organisations (even those within the same industry) have shown resilience in business continuity (Prayag, 2020).

As a result, the attractiveness of certain occupations has declined, resulting in the rise of the need to understand the effect of WFH on organisational commitment (Baum & Hai, 2020). Organisational commitment is a multi-faceted concept that has been conceptualised in various ways over the years (Meyer & Allen, 1991). It is defined primarily as a state of mind, or a psychological state amongst employees, that assesses the level or manner in which employees resonate with the organisation and how dedicated they feel to their work (Meyer & Allen, 1991). It is a psychological state in which employees recognise and feel devoted to their workplace and regarded as a well-researched concept (Meyer & Allen, 1991; Jowsey *et al.*, 2020). However, regardless of its presence and familiarity in research, WFH affects organisational commitment, which has been given little consideration in research (Filimonau

et al., 2020). Private higher education in South Africa is no exception and has limited deliberation on determining the effect of WFH on the organisational commitment of personnel (Jowsey *et al.*, 2020). In other words, WFH's effect on employees' organisational commitment within private higher education is understood poorly. Given the prevalent adoption of WFH in the context of the COVID-19 pandemic, as well as a future workplace arrangement, organisations must be cognisant of the effect of WFH, particularly on the organisational commitment of employees (Sogno, 2020). This would positively impact job satisfaction, employee commitment and retention, ultimately providing greater chances of business success (Baum & Hai, 2020). For higher education, it is critical to understand how WFH influences its personnel's commitment so that strategies can be devised to maintain and enhance commitment to provide quality teaching, learning and assessment.

Therefore, this study aims to provide valuable insight into how academic personnel's organisational commitment has been affected by WFH and provide awareness of the underlying mechanisms that determine this relationship. In the context of this study, academic personnel are regarded as managers, lecturers, and academic administrators involved in the institution's academic functions.

RESEARCH PURPOSE AND OBJECTIVES

The objectives of this study were first, to ascertain the organisational commitment of academic personnel (managers, lecturers, and academic administrators) WFH in a private higher education sector in South Africa in the context of the COVID-19 pandemic, second, to determine the association between selected socio-demographic variables and organisational commitment and third, to draw conclusions and recommendations emanating from the literature review and empirical results to assist higher education institutions, in general, and specifically, in the private space, to improve organisational commitment of academic personnel during the WFH arrangement.

LITERATURE REVIEW

The concept of organisational commitment has been an imperative aspect of business research and organisational and management behaviour, given its psychological nature and related impact on business performance (Acquah *et al.*, 2020). Traditionally, research surrounding organisational commitment has been directed at this construct's antecedents and related impact and how it varies depending on the context. However, given the advent of the COVID-19 pandemic, and the radical shift to work-from-home (WFH), there has been a budding focus on understanding how WFH influences employee's organisational commitment (Filimonau *et al.*, 2020; Moore, 2020). The research surrounding organisational commitment and how WFH impacts it is negligible. However, research conducted during the global COVID-19 pandemic revealed that WFH has both a positive and negative impact on commitment (Gigi & Sangeetha, 2020; Suárez-Albanchez *et al.*, 2021). The following sections will provide insight into the concept of organisational commitment and how WFH has influenced it with specific reference to the COVID-19 context.

Organisational commitment defined and conceptualised

Organisational commitment is a multi-faceted concept that has evolved in its definition over time (Acquah *et al.*, 2020; Suárez-Albanchez *et al.*, 2021). The earliest understanding of the concept was developed in 1968 by Porter and Lawler, who see organisational commitment as an individual strength possessed by employees, that is relative to how employees identify themselves with the organisation they are employed (Suliman & Iles, 2000; De las Heras-Rosas *et al.*, 2021). The definition regards the emotional and cognitive characteristics of commitment and emphasises that how employees identify with the organisation is imperative in determining their commitment to their roles (Meyer & Allen, 1991).

During the 1980s, an extension to the definition was provided by Steers, Mowday and Porter, who developed what is commonly known in the literature as the Three-Component Model for organisational commitment, which regards commitment as a hybrid of affective, continuance and normative commitment (Mowday *et al.*, 1982; Gigi & Sangeetha, 2020). These will be explained further in the next section.

An additional view of organisation commitment is the belief that it is a multidimensional construct that comprises different factors such as affective, behavioural and cognitive commitment (Meyer & Allen, 1991). Affective commitment refers to how much an employee

is attached emotionally to an organisation, behavioural commitment involves how willing an employee is to be involved in behavioural patterns that impact the organisation positively, and lastly, cognitive commitment refers to an employee personally adopting and being encouraged by an organisation's mission and vision (Acquah *et al.*, 2020).

In summary, organisational commitment is defined as workers' emotional attachment, perceived cost and moral obligations to their organisation (Meyer & Allen, 1991). The concept is complex and multi-faceted; this refers to the psychological state of employees, which includes an array of their emotions, behaviours and beliefs that ultimately impact how they identify with the organisation and how dedicated they are to their roles (Ghazzawi, 2019; Suárez-Albanchez *et al.*, 2021).

The Three-Component Model of commitment

The Three-Component Model of organisational commitment, commonly referred to as the "affective, continuance, and normative commitment" model, illustrates the various types of commitment workers may display towards their roles and the organisation at large (Meyer *et al.*, 2002). This model was developed and recommended by Allen and Meyer in 1990 and has been accepted broadly by the academic community (Meyer & Allen, 1991).

The first element of the framework refers to affective commitment. Affective commitment is an employee's emotional attachment to the organisation employed at (De las Heras-Rosas *et al.*, 2021; Meyer & Allen, 1997). Employees with higher levels of affective commitment are encouraged by their outlooks of association and connection to their place of work and regard their duties as a critical part of their identity. These employees are more bound to partake in behaviours that benefit the productivity of the organisation, such as going beyond their job scopes for example, and have been noted to be less likely to resign from their job (i.e., they are retained easily) (Meyer & Allen, 1997).

The second element of the framework is continuance commitment, which refers to the perceived costs of an employee resigning from the organisation (Meyer & Allen, 1991). Staff that possess higher levels of continuance commitment remain within the organisation due to the belief that they have invested considerable amounts of time and effort in their work and feel that resigning from their duties would impact the organisation considerably (De las Heras-Rosas *et al.*, 2021; Meyer & Allen, 1997). These individuals may not have a strong emotional

attachment to the organisation but remain in it as they believe it will be too costly to resign (Meyer & Allen, 1991).

The third element of the framework is normative commitment, which refers to strong feelings from employees that they need to remain with their portfolios because it is the morally correct thing to do (Meyer & Allen, 1997). The study reports that staff with higher levels of normative commitment build a sense of compulsion to the organisation, resulting in remaining within the organisation even if they are dissatisfied with their work or the organisation. These individuals often have a sense of loyalty towards the organisation and perceive leaving as a means of betraying the organisation (Meyer *et al.*, 2002).

The Three-Component Model of organisational commitment offers a practical framework for realising the various types of commitment employees may have towards their jobs and organisations (De las Heras-Rosas *et al.*, 2021). Employees may display higher levels of affective commitment, continuance commitment, or normative commitment or could possess a combination of the three (Meyer & Allen, 1991). The model permits organisational management to understand the different factors affecting organisational commitment and devise strategies to enhance commitment, which could ultimately result in greater staff satisfaction, improved productivity and enhanced human capital retention (Meyer & Allen, 1991).

Factors influencing organisational commitment

Organisational commitment is a vital notion in management and organisational behaviour. Determining the factors that impact organisational commitment is essential for businesses to understand, as this could significantly influence workers' attitudes and behaviours, thereby affecting business performance (Gigi & Sangeetha, 2020). The following factors influence organisational commitment:

Job satisfaction. Job satisfaction, briefly defined, describes an employee's perception or subjective experience of their work experience and the contentment they experience within their functions (Robbins and Judge, 2020). Simply, it refers to how much people are satisfied or dissatisfied with their jobs (Robbins and Judge, 2020). When employees are more satisfied in their jobs, they are more likely to show greater levels of commitment to the organisation (Ghazzawi, 2019; Zhang *et al.* 2020; Al Balushi *et al.*, 2022). Factors contributing to job satisfaction such as remuneration, work benefits, conducive working conditions and

opportunities for career development, were found to play a significant role in how committed employees are to the organisation (Sharif Nia *et al.*, 2020). If employees' jobs are fulfilling, they are more inclined to remain in the organisation and show greater commitment (Sharif Nia *et al.*, 2020; Gigi & Sangeetha, 2020).

Organisational culture. Organisational culture is the shared values, beliefs, and practices that nurture workers' behaviour within a work setting (Anwar *et al.*, 2022; Kyprianides *et al.*, 2022). Organisations possessing stronger and more positive cultures have more committed employees (Anwar *et al.*, 2022; Arifin *et al.*, 2019; Çilek, 2019). When employees feel they share and can resonate with the organisation's similar values and belief systems, they are more likely to show greater commitment to the organisation (Çilek, 2019).

Leadership. Leadership refers to a process that involves the influence and guidance of groups of employees towards attaining a common goal or objective (Northouse, 2019). In particular, transformational leadership (as a leadership style) refers to motivating and inspiring leaders, was established to create environments whereby employees work towards a common mission and vision (Karem *et al.*, 2019; Sharif Nia *et al.*, 2020). When employees sense that they are under the supervision of supportive and empowering leaders, they are more likely to be committed to their work and the organisation. It has been noted that a leader who can generate an optimistic and inclusive culture in the organisation will most likely enhance the commitment of employees (Muleya *et al.*, 2022). Furthermore, the relationship between supervisor and employee critically influences commitment (Lima & Allida, 2021). A positive relationship often results in greater job satisfaction and a greater sense of belonging to the organisation. Conversely, a negative relationship with a supervisor can lead to decreased job satisfaction and a lack of commitment to the organisation (Martinez-Zaragoza *et al.*, 2020).

Personal career development opportunities. Organisations that present employees with growth and career advancement opportunities have staff with greater morale and higher levels of organisational commitment (Sharif Nia *et al.*, 2020). Furthermore, organisations can retain employees more efficiently if they are given proper training and development opportunities congruent with their personalised development plans (Çilek, 2019). When an employee's development or career plan is clear and known to the employee, they are more likely to remain motivated and grow within the company (Al Balushi *et al.*, 2022).

Organisational support. Organisational support is defined as the extent to which employees believe that their employer meaningfully considers their well-being and supports their working requisites, such as adequate working infrastructure, conducive working environments, and work-life balance, to mention a few (González-Gil *et al.*, 2020). Organisational and management support shapes organisational commitment (Hussein & Turnpenny, 2020; Al Balushi *et al.*, 2022). In a personal capacity, these could also include access to benefits such as hybrid or flexible working arrangements, employee assistance courses, and health and well-being programmes (Al Balushi *et al.*, 2022).

Outcomes of organisational commitment

Organisational commitment is a critical success factor for organisational productivity (Hu *et al.*, 2020). Hence, in terms of the outcome of organisational commitment, one should view the overarching objective of organisational commitment as business success (Middleton *et al.*, 2021).

Enhanced job performance. The most widely accepted outcome of organisational commitment is enhanced job performance. Numerous studies have found that employees who are more committed to the organisation usually display superior productivity and performance than their less committed ones (Mathieu & Zajac, 1990; Meyer *et al.*, 2002). This can be attributed to the fact that committed employees are more motivated to work hard, are more engaged in their work, and are less likely to experience burnout (Meyer *et al.*, 2002).

Enhanced job satisfaction. Employees more committed to the organisation are often more satisfied with their duties, and thereby enhancing job embeddedness or job satisfaction (Martinez-Zaragoza *et al.*, 2020). This could be attributed to the fact that committed employees are more connected to the organisation and have a greater sense of pride and belonging, thereby possessing greater meaning and value in their work. These optimistic work engagement criteria result in greater work experiences (i.e., greater job satisfaction) (Gigi & Sangeetha, 2020).

Increased employee retention rates. Employees more committed to the organisation are less likely to resign, indicating that organisational commitment is linked directly to employee retention (Middleton *et al.*, 2021). Due to the knowledge economy and the reliance on human capital for the success of organisations, particularly in the fourth industrial revolution, employee retention has been a key focus in organisational and management strategy (Mo *et al.*, 2020). Hence it can be denoted that organisational commitment is fundamental in the success

strategies of modern business. This can also benefit businesses regarding business expenditure as high turnover rates can be costly, particularly in hiring and training new staff (Middleton *et al.*, 2021; Stuart *et al.*, 2021).

Enhanced Organisational Citizenship Behaviour (OCB). OCB, in essence, refers to a set of behaviour patterns shown by employees that may not be rewarded by the company but are advantageous to colleagues and the organisation at large (Organ *et al.*, 2006). Employees that are more committed to the organisation are more engaging in OCB, and partake in activities that benefit the business by, for example, being involved in additional projects that may not directly relate to their stream of work, assisting colleagues with their duties, serving as an ambassador for the company that helps promote the brand awareness of the company, to mention a few (Hussein & Turnpenny, 2020). This favours organisations, as OCB can enhance business performance and better and more optimistic work environments.

WFH and organisational commitment in the COVID-19 context

Organisations' radical move to remote work, or what, is commonly referred to as WFH, has resulted in a series of changes in how businesses operate and how employees engage in their duties (Mani & Siju, 2021). As a result, WFH has led to positive and negative implications for organisational commitment (Blustein *et al.*, 2020).

On a positive note, WFH offers employees a greater sense of autonomy and control in the duties that they are engaged in. Due to remote working often taking place within the vicinity of employees' homes, as a result of the COVID-19 lockdown, employees have created workspaces conducive to their duties, resulting in enhanced productivity (Huang *et al.*, 2020). This enhances job satisfaction, as staff have tailored their environments to enhance the span of control over their work (Martinez-Zaragoza *et al.*, 2020).

The WFH has to offer employees greater flexibility and the ability to manage a work-life balance, allowing them to manage their personal lives more effectively (Taborosi *et al.*, 2020). This decreases employee stress and burnout, enhancing worker morale and job satisfaction. Hence, WFH positively affected organisational commitment (Mani & Siju, 2021).

However, WFH also harmed organisational commitment as WFH is often denoted as a model that results in employees' feelings of isolation and disconnection from both colleagues and the organisation at large (Pouralizadeh *et al.*, 2020; Gigi & Sangeetha, 2020). Due to WFH spaces,

employees no longer maintain or have access to the physical relations they once had with colleagues, resulting in them feeling less connected to their peers (Mani & Siju, 2021). Employees may lose out on the social interactions and camaraderie connected with working in an office environment, which can also decrease organisational commitment (Hu *et al.*, 2020). In addition, due to employees no longer having physical interactions with management, for example, there are often feelings of detachment and alienation from the company's vision and goals (Mani & Siju, 2021). This could decrease organisational commitment, as staff feel less invested in company goals and less motivated to meaningfully contribute towards its success (NHS England, 2020).

WFH has also been notorious for lacking clear directives and communication between employees and their immediate managers (Taborosi *et al.*, 2020). Managers have experienced difficulty monitoring and nurturing employee progress and project deadlines, which decreases employees' sense of belonging to the organisation, negatively impacting organisational commitment (Gigi & Sangeetha, 2020). Furthermore, WFH employees may be less likely to receive criticism and appreciation for their work, contributing to lower organisational commitment levels (Middleton *et al.*, 2021).

To mitigate the negative impacts of WFH, companies should devise deliberate strategies to enhance communication and collaboration among employees working from home (Mani & Siju, 2021). This could include, but is not limited to, strategies such as virtual meetings regularly, programmes that assist employee collaboration, mechanisms to ensure constant feedback on work, and virtual social events, to mention a few (Mani & Siju, 2021).

In conclusion, the alteration to WFH was found to have positive and negative effects on employee organisational commitment. On the one hand, WFH has led to heightened worker satisfaction and motivation, as employees have more sovereignty and self-control over their work settings, resulting in increased organisation commitment. On the other hand, WFH has led to feelings of separation and detachment, the absence of clear communication, and a break in trust between employees and their immediate managers, leading to decreased organisational commitment.

RESEARCH DESIGN

Research approach

Four main research approaches are most used in academic research: positivism, post-positivism, interpretivism, and critical theory. These approaches serve as an array of beliefs and ideas that shape the study process and advise on experiences and events on how the business world can be observed, measured, and understood (Bryman & Bell, 2018). This study utilised the positivistic research approach, which is based on the use of measurable data, that allows researchers to analyse and categorise the information obtained through statistical methods (Bryman *et al.*, 2021; Dawson, 2019) and also to search for patterns in the collected data and make generalisations about the sample under study (Vithal & Jansen, 2019). This study employed a quantitative research methodology. The quantitative method refers to gathering numerical data and utilising this data to validate hypotheses and recognise relationships between variables (Mellville & Goddard, 2001).

Research method

Research participants

This study's participants comprised employees from a South African private higher education institution with different employment levels, including managers, faculty, and academic and support staff. These personnel were all considered academic personnel as they were directly involved in the academic operations of the institution. The target population comprised 133 academic personnel, 16 managers, 27 faculty members, and 90 support staff. The study employed total population sampling, which surveys the full population based on identified criteria (in this case, academic personnel) (Dawson, 2019). A response rate of 79% (N = 105) was achieved.

Measuring instruments

Data from respondents was collected using an online survey instrument. The data collection occurred during the COVID-19 lockdown in late 2021 when the institution implemented a WFH model that required all personnel to work remotely from their home/s. The survey instrument consisted of two sections, with the first part including 11 questions on participant demographics such as gender, age, department, years of experience at the organisation, highest education, place of residence, nationality, marital status, employment type, length of time

working from home due to the COVID-19 pandemic, and WFH status at the time of data collection. The revised version of the Three-Component Model (TCM) employee commitment survey (developed and validated by Meyer, Allen and Smith in 1993) was used to determine employees' organisational commitment levels during the WFH period (labelled as Section B in the questionnaire). Section B, therefore, comprised 18 questions or items, with six determining affective commitment, six determining the continuance commitment of respondents, and six measuring normative commitment. A seven-point Likert scale was used for this section (i.e., strongly disagree (1) to strongly agree (7)). All three scales measured inferred Cronbach's alpha coefficients exceeding 0.7 (Meyer *et al.*, 2002), indicating exceptional reliability and internal consistency.

Research procedure and ethical considerations

All the ethical considerations of research were given due diligence in this study. The study was categorised as a low-risk study. Concerning the letter of permission, permission was formally granted by the institution under study, advising the researcher of permission to conduct the study. Each respondent granted informed consent, as the survey requested the informed consent of respondents before the collection of data. Participants were advised on the study's objective and their rights within the study. In addition, the anonymity and confidentiality of respondents were protected during data collection, analysis of data, and the reporting of findings. The study obtained an ethical approval letter from the Economic and Management Sciences Research Ethics Committee (EMS-REC) at the North-West University (Ethics number: NWU-01253-21-A4).

Statistical analysis

The data analysis techniques involved analysing data using an array of descriptive, inferential, and multivariate statistical methods using IBM SPSS (V28) as the statistical software. A confirmatory factor analysis assessed the variables' validity and representation of the constructs affecting employee commitment. Internal reliability utilised Cronbach's coefficient alpha, while descriptive statistics calculated the biographical characteristics of the data. Independent samples t-tests and one-way ANOVA tests compared the mean scores of two or more groups to determine any significant statistical differences between groups ($p \leq .05$). Effect sizes measured the magnitude of the differences to determine whether the results were practically significant. Cohen's d-values measured the effect size: $d = 0.2$ represented a small effect, $d = 0.5$ represented a medium effect, and $d = 0.8$ represented a large effect. Lastly, Spearman's

rank-order correlations evaluated the ordinal scale regarding strength and direction to determine the relationship between two variables.

RESULTS

This section demonstrates and interprets the results using descriptive, inferential and multivariate analysis methods. The findings include patterns and trends identified, as well as the practical recommendations or implications of the study. The discussion investigates the value and impact of the findings.

Socio-demographic information

Table 1 displays the socio-demographic information of the participants gathered through the survey.

Table 1: Socio-demographic information

Biographical information			
Question	Category	N	%
With which gender do you identify yourself?	Female	66	62.9
	Male	38	36.2
	Prefer not to answer	1	1.0
In which country do you reside?	South Africa	102	97.0
	Other	3	3.0
What is your nationality?	South African	99	94.3
	Other	6	5.7
What is your age in years?	20–29	26	24.8
	30–39	52	49.5
	40–49	16	15.2
	50–59	8	7.6
	60 and older	3	2.9
What is your marital status?	Single or not in a relationship	25	25.3
	Unmarried and in a relationship	21	21.2
	Widowed	4	4.0
	Married	47	47.5
	Divorced/Separated	2	2.0

What is your highest qualification?	High (secondary) school graduate	23	22.3
	Completed technical/vocational training	6	5.8
	College/University degree	43	41.7
	Postgraduate degree	26	25.2
	PhD	5	4.9
How long have you been working at the institution?	0–6 months	16	15.2
	7–12 months	6	5.7
	1–2 years	14	13.3
	3–5 years	33	31.4
	6–10 years	24	22.9
	More than 10 years	12	11.4
What is the nature of your employment at the institution?	Management	18	17.1
	Academic (i.e., teacher, lecturer, researcher, postdoctoral fellow, etc.)	20	19.0
	Support (i.e. administrative, technical, etc.)	49	46.7
	Other	18	17.2
How long have you been WFH since the COVID-19 pandemic started in 2020?	0–3 months	24	25.0
	4–7 months	37	38.5
	8–11 months	25	26.0
	12 months and longer	10	10.4
Which scenario best describes your current work situation since the COVID-19 pandemic started in 2020?	I have been WFH since the beginning of the pandemic, but come to the office occasionally (i.e., to attend a meeting and at my own discretion)	11	10.8
	I work remotely a few days a week as directed by management	16	15.7
	I am working from the office most of the time	30	29.4
	I am working from the office all the time	45	44.1

The descriptive analysis revealed that the majority the respondents (i.e. 94.3%) are South Africans. The respondents constituted a young working adult population, where more than 65% of respondents were between 20 and 39 years of age. In addition, all personnel surveyed have worked at varying lengths of service at the institution, ranging from six months to over ten years, and most respondents were female (62.9%). The sample also represented all employment levels, including managers, academic faculty, and administrative and support staff. It was anticipated that the support staff form the larger portion of the demographics as the South African higher education obligation student-to-support staff ratio is 30:1 (Kosie, 2022). Most respondents held a university degree or postgraduate degree (72%), and just under half (47%) were married. All respondents indicated they were WFH during the COVID-19 pandemic, implying that they were in a good position to provide valuable understanding for this study.

Confirmatory factor analyses results of the TCM of employee commitment

The confirmatory factor analysis results on the TCM of employee commitment showed that the p-value of one of the items in the continuance commitment scale, "*One of the few negative consequences of leaving this organisation would be the scarcity of available alternatives*," was insignificant. The item was removed, and the confirmatory factor analysis repeated. The final results revealed that the three-factor structure (affective, normative and continuous commitment) had a good fit with the data collected from the respondents, as shown in Figure 1. Six items loaded on Affective commitment (ranging from 0.597 to 0.875), six items on Normative commitment (ranging from 0.636 to 0.886) and five items on Continuous commitment (ranging from 0.204 to 0.879). All the factor loadings were observed to be statistically meaningful at the 0.05 level.

It should be noted that item Q13, "*If I had not already put so much of myself into this organisation, I might consider working elsewhere*", had a low factor loading of 0.204. However, the item was retained because of its theoretical importance. Field (2009, p. 644) recommended that a factor loading of 0.3 is considered significant. In addition, for a sample size of 100 respondents, factor loadings ought to be greater than 0.5 for it to be meaningful. This item should be omitted from future studies because the factor loading remains below 0.3.

The Cronbach alpha coefficients of the three scales showed excellent reliability and internal consistency (Affective commitment: α=0.893; Normative commitment: α=0.900; Continuous commitment: α=0.745). Field (2009) suggests that Cronbach alpha coefficient should ideally

exceed 0.7. The descriptive statistics revealed that the highest mean score was obtained for Affective commitment (M=5.19), followed by Normative commitment (M=5.05) and Continuous commitment (M=3.85) – see Table 2.

Figure 1 follows on the next page

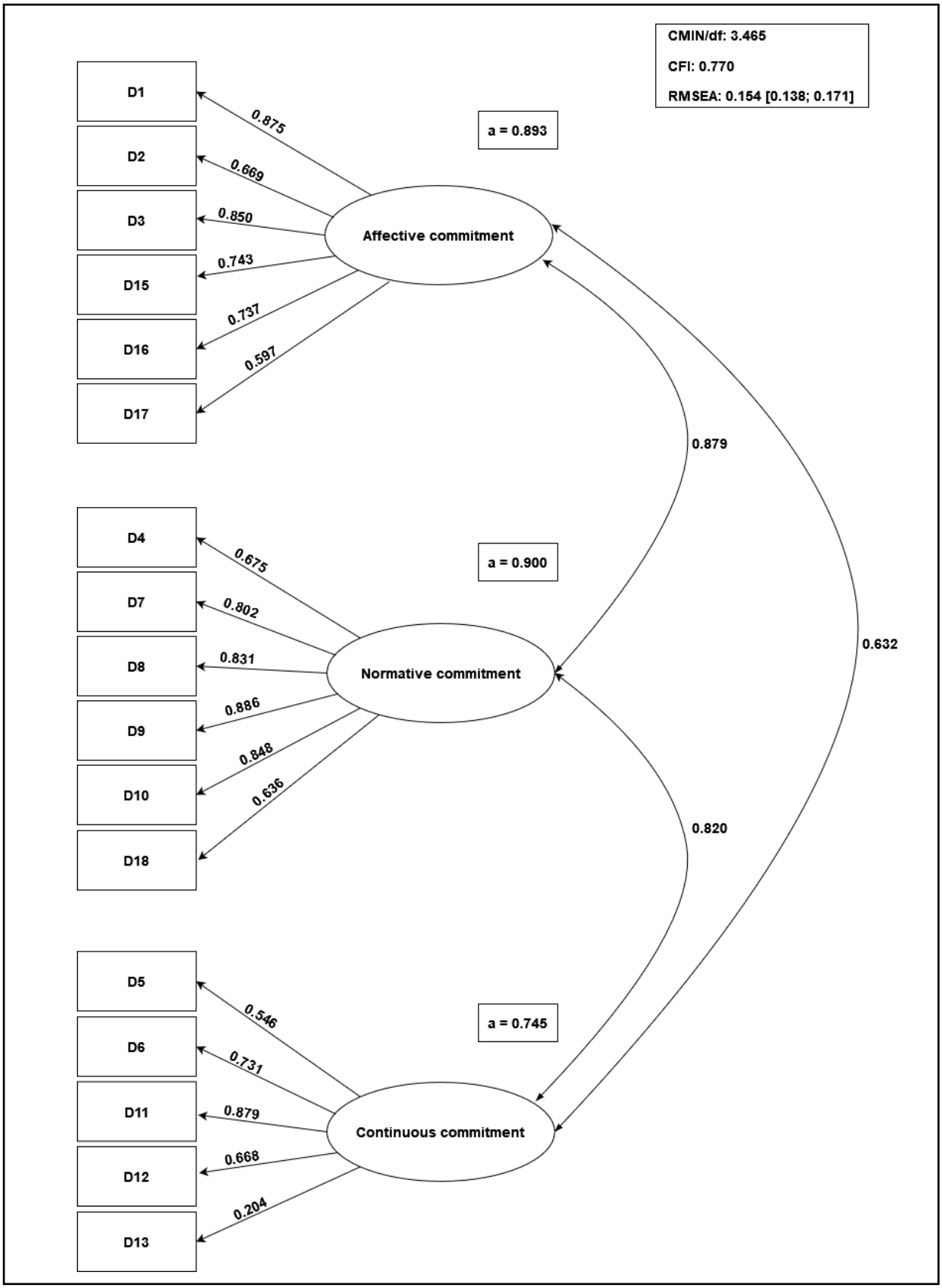

Figure 1: Confirmatory factor analysis results of the TCM of employee commitment

Table 2: Descriptive statistics of TCM of employee commitment

Descriptive statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Affective commitment	104	1.33	7.00	5.1958	1.35743
Normative commitment	104	1.00	7.00	5.0590	1.42049
Continuous commitment	104	2.00	5.00	3.8593	0.60093

Three goodness-of-model-fit indices evaluated how well the sample data of the study fits the measurement model, namely the CMIN/DF (chi-square statistic divided by degrees of freedom), the CFI, and the RMSEA. A CMIN/DF ratio close to one is expected for accurate models (Bollen & Jackman, 1993). Scores below one indicate a poor fit between the sample data and the hypothetical model used (Shadfar & Malekmohammadi, 2013). Kline (1998) suggests that a CMIN/DF ratio smaller than three indicates an acceptable fit, and values closer to two are considered a strong fit. Shadfar & Malekmohammadi (2013) also note that scores between 2 and 5 would be considered an appropriate fit. According to Bentler (1990), a CFI score of one represents a perfect fit, while scores below 0.95 typically indicate a poor fit. Bentler (1990) and Hair *et al.* (2010) suggest that a CFI score greater than 0.9 is a good fit between the sample data and the measurement model. For the RMSEA, a value of zero indicates a perfect fit, whereas a value less than 0.05 is generally regarded as a good fit. Steiger (1990) stated that values between 0.05 and 0.08 are acceptable, while values above 0.10 indicate a poor fit. Table 3 shows the results of the goodness-of-model-fit-indices. From the results, it is evident that the CMIN/DF (3.465) indicates an acceptable fit, the CFI (0.770) a close fit and the RMSEA (0.154; 0.138 [low]; 0.171 [high]), not a good fit.

Table 3: Goodness-of-model-fit indices for TCM of employee commitment

Goodness-of-model-fit indices				
Index	Decision rule	Author	Model score	Outcome
CMIN/DF	Close to 1; 3–5 still satisfactory	Mueller (1996) Paswan (cited by Shadfar & Malekmohammadi, 2013:585) Bollen & Jackman (1993) Kline (1998)	3.465	Acceptable fit
CFI	≥ 0.9 (good fit)	Hair *et al.* (2010) Mueller (1996) Bentler (1990)	0.770	Close fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre) ≤ 0.10 (still satisfactory)	Hu and Bentler (1999:1) Blunch (2008) Steiger (1990) Bentler (1990)	0.154 [0.138; 0.171]	Not good fit

Socio-demographic variables and organisational commitment

Independent sample t-tests were performed to determine gender differences in organisational commitment. Table 4 displays the results.

Table 4: Association between gender and organisational commitment

	Group statistics				Independent sample t-test	
Gender		N	Mean	Standard deviation	P-value	Effect size
Affective commitment	Male	38	5.28	1.29	0.776	0.06
	Female	65	5.21	1.33		
Normative commitment	Male	38	5.18	1.40	0.476	0.15
	Female	65	4.97	1.44		
Continuous commitment	Male	37	3.96	0.53	0.302	0.21
	Female	66	3.83	0.60		

d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results revealed no significant differences in the mean scores of male and female respondents for affective commitment (p-value = 0.776; d = 0.41), normative commitment (p-value = 0.476; d = 0.15) and continuous commitment (p-value = 0.302; d = 0.21); the effect sizes ranged from small to negligible.

One-way ANOVAs determined significant differences between the population's means of marital status, nature of employment, and WFH situation on organisational commitment. Effect sizes indicated how meaningful the differences were. The results are reported in Table 5.

Table 5: Association between marital status, nature of employment and WFH situation, and organisational commitment

	Group statistics				ANOVA	Effect sizes	
	Marital status	N	Mean	SD	P-value	A with B and C	B with C
Affective commitment	A: Single or not in a relationship	24	5.03	1.38	0.664		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	5.32	1.34		0.20	
	C: Married	47	5.32	1.30		0.21	0.00
	Total	98	5.25	1.32			
Normative commitment	A: Single or not in a relationship	24	4.81	1.40	0.604		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	4.98	1.43		0.12	
	C: Married	47	5.17	1.49		0.24	0.12
	Total	98	5.03	1.45			
Continuous commitment	A: Single or not in a relationship	24	3.64	0.53	0.009		
	B: Unmarried and in a relationship/ Widowed/Divorced/ Separated	27	3.78	0.53		0.26	
	C: Married	47	4.05	0.58		0.71	0.48
	Total	98	3.88	0.58			

Group statistics					ANOVA	Effect sizes	
Nature of employment		N	Mean	SD	P-value	A with B and C	B with C
Affective commitment	A: Management	18	5.62	1.10	0.116		
	B: Academic	20	4.71	1.37		0.67	
	C: Support	64	5.23	1.41		0.28	0.37
	Total	102	5.20	1.37			
Normative commitment	A: Management	18	5.50	1.26	0.035		
	B: Academic	20	4.40	1.47		0.75	
	C: Support	64	5.19	1.39		0.22	0.54
	Total	102	5.09	1.41			
Continuous commitment	A: Management	18	4.04	0.37	0.046		
	B: Academic	20	4.04	0.53		0.00	
	C: Support	64	3.74	0.65		0.47	0.47
	Total	102	3.85	0.60			

Group statistics					ANOVA	Effect sizes	
WFH situation		N	Mean	SD	P-value	A with B and C	B with C
Affective commitment	A: I have been WFH since the pandemic's beginning, but I come to the office occasionally. / I work a few days a week remotely as directed by management	27	5.32	1.17	0.938		
	B: I am working from the office most of the time	30	5.27	1.40		0.04	
	C: I am working from the office all the time	44	5.20	1.40		0.08	0.05
	Total	101	5.25	1.33			

Normative commitment	A: I have been WFH since the pandemic's beginning, but I come to the office occasionally. / I work a few days a week remotely as directed by management	27	5.14	1.19	0.869		
	B: I am working from the office most of the time	30	5.00	1.66		0.08	
	C: I am working from the office all the time	44	5.18	1.33		0.03	0.10
	Total	101	5.12	1.39			
Continuous commitment	A: I have been WFH since the pandemic's beginning, but I come to the office occasionally. / I work a few days a week remotely as directed by management	27	4.01	0.56	0.245		
	B: I am working from the office most of the time	30	3.75	0.59		0.44	
	C: I am working from the office all the time	44	3.90	0.61		0.17	0.26
	Total	101	3.88	0.59			

* SD = Standard deviation; d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the ANOVA revealed significant differences between the marital status categories for Continuous commitment (p = 0.009), where the respondents that were married (M = 4.05) scored higher on Continuous commitment than the respondents that were single or not in a relationship (M = 3.64; d = 0.71) and that are Unmarried and in a relationship/Widowed/Divorced/Separated (M = 3.78; d = 0.48); the effect was medium to large.

Regarding the nature of employment, the ANOVA revealed significant differences between the categories for Normative (p = 0.35) and Continuous commitment (p = 0.046). The management (M = 5.50) respondents scored higher on Normative commitment than the academic (M = 4.40; d = 0.75) and support (M = 5.19; d = 0.22) staff respondents; the effects were large and small, respectively. Furthermore, the support staff (M = 3.74) respondents

scored lower on Continuous commitment than the management (M = 4.04; d = 0.0.47) and academic (M = 4.04; d = 0.47) staff respondents; the effects were medium.

The ANOVA results indicated no significant differences between the categories of WFH situation; the p-values for all three factors were above 0.05. However, for Continuous commitment, Cohen's d-value showed a difference between respondents working a few days remotely (M = 4.01) and those working at the office most of the time (M = 3.75; d = 0.44); the effect was medium. A small difference was also evident between respondents working from the office all the time (M = 3.90) and those working at the office most of the time (M = 3.75; d = 0.26); the effect was small.

Table 6 presents Spearman's rank-order correlation test results to determine the monotonic relationship between organisational commitment and age, highest qualification, years working at the university, and duration of WFH.

Table 6: Correlation of age, highest qualification, years working at the university and period WFH with organisational commitment

		Age	Highest qualification	Years working at the university	Period WFH since the COVID-19 pandemic started in 2020
Affective commitment	Correlation coefficient	0.14	0.06	-0.021	-0.046
	Sig. (2-tailed)	0.17	0.57	0.834	0.657
	N	104.00	103.00	104	95
Normative commitment	Correlation coefficient	0.12	-0.03	-0.036	-0.025
	Sig. (2-tailed)	0.23	0.76	0.716	0.811
	N	104.00	103.00	104	95
Continuous commitment	Correlation coefficient	.411**	0.11	0.160	-0.020
	Sig. (2-tailed)	0.00	0.26	0.105	0.844
	N	104.00	102.00	104	95

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

(a) small effect: r = 0.1, (b) medium effect: r = 0.3 and (c) large effect: r > 0.5

The results of Spearman's rank-order correlation test revealed a medium positive correlation between age and continuous commitment (p = 0.00, r = 0.411), indicating that the older the employees, the greater they displayed a continuous commitment to the organisation.

Correlations between affective, normative and continuous commitment

Table 7 displays the results of Spearman's rank-order correlation test to establish the monotonic relationship between affective, normative and continuous commitment.

Table 7: Correlation between affective, normative and continuous commitment

		Affective commitment	Normative commitment	Continuous commitment
Affective commitment	Correlation coefficient	1.000	.802**	.444**
	Sig. (2-tailed)		0.000	0.000
	N	104	104	103
Normative commitment	Correlation coefficient	.802**	1.000	.380**
	Sig. (2-tailed)	0.000		0.000
	N	104	104	103
Continuous commitment	Correlation coefficient	.444**	.380**	1.000
	Sig. (2-tailed)	0.000	0.000	
	N	103	103	104

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)
(a) small effect: r = 0.1, (b) medium effect: r = 0.3 and (c) large effect: r > 0.5

The Spearman's rank-order correlation revealed significant medium to large positive correlations between affective commitment and normative (p = 0.00; r = 0.802) and continuous (p = 0.00; r = 0.444) commitment. This means that as employees displayed a more affective commitment to their organisation (i.e. employees stay because they want to), they tended to stay longer within their jobs due to the associated cost of leaving (i.e. continuous commitment) as well as because it was believed to be the morally correct thing to do (i.e. normative commitment). Additionally, a medium positive correlation was found between continuous commitment and normative commitment (p = 0.00; r = 0.380), indicating that as employees

remained in their jobs because of the associated cost of leaving, they also remained in their portfolios because they felt they ought to.

DISCUSSION

Outline of the results

The study set out to determine WFH influences the organisational commitment of academic personnel within private higher education in South Africa.

The confirmatory factor analysis confirmed the three-factor structure of the TCM of employee commitment. The goodness-of-fit indices suggested that the measurement model fit the sample data reasonably well (CMIN/DF = Acceptable Fit, CFI = Close Fit, RMSEA = Not good fit). The Cronbach alpha coefficients of the three scales showed excellent reliability and internal consistency.

Based on the descriptive statistical analysis, it was observed that the respondents demonstrated acceptable levels of affective (M = 5.19) and normative (M = 5.05) commitment during the work-from-home (WFH) period; the mean scores were above the scale midpoint. This implies that, on average, all academic personnel feel a sense of moral obligation towards the organisation as they believe that remaining in their post is the right thing to do (i.e. normative commitment). They possess an emotional attachment to the institution as they are encouraged by their role within the institution (i.e., affective commitment). However, they were neutral on continuous commitment (M = 3.85), implying that they do not strongly believe their resignation would negatively affect the institution. Generally, the results showed that the respondents could adapt to the changes brought about by the WFH model, despite the significant and sudden disruptions in their usual work environment. The results suggest that the respondents could thrive and maintain acceptable levels of commitment despite the challenges of the COVID-19 pandemic and the anxiety surrounding the WFH model. As noted, the sudden transition to remote work posed several challenges for employees and employers, with the most prominent concerns over productivity, mental health, and engagement. However, recent studies, such as studies by Usman *et al.* (2021), Cheng & Kao (2022) and Parent-Lamarche (2022), to mention a few, have shown, as indicated below, that workers have maintained high levels of commitment and engagement despite the challenges of the implementation of the WFH model during the global pandemic.

A study conducted by Usman *et al.* (2021) provides insight into the sustained organisational commitment of academic personnel who examined the influence of WFH during the COVID-19 pandemic on commitment, engagement, and well-being among employees within Pakistan's public sector educational institutions (PSEI's). The results of this study indicated that employees exhibited high levels of organisational commitment and engagement, despite the challenges accompanied by WFH (Usman *et al.*, 2021). The study maintained that organisational levels amongst staff were high due to the evident provision of organisational and social support, job autonomy, and job requisites (needs) by the organisation, which were crucial aspects in maintaining employee organisational commitment and well-being during the pandemic (Usman *et al.*, 2021).

Similarly, a second study by Cheng and Kao (2022) explored the effect of the COVID-19 pandemic on job commitment and engagement among workers within Taiwan's hotel industry. The results revealed that personnel were highly committed and engaged in their work, even during the implementation of the WFH model. This high level of commitment was attested to the maintenance of factors that impact employee satisfaction, such as constant communication and work-life balance, to mention a few (Cheng & Kao, 2022). Kifor *et al.*'s (2022) study investigated the relations between commitment, stress and employee engagement among employees employed in Computers/IT/Internet/Telecommunications, Agriculture, Industry, Health and Social work within Romania, further added that employees remain committed to the organisation during WFH if employees were treated fairly and receive adequate organisational support during the remote working period.

In another study conducted by Parent-Lamarche (2022) investigating the association between teleworking and job satisfaction among Canadian employees of SME's, it is suggested that teleworking positively impacts work dynamics such as organisational commitment and employee engagement. The researchers believe teleworking during the pandemic results in enhanced motivation and commitment as the working model offers better work flexibility and job autonomy (Parent-Lamarche, 2022).

Lastly, research led by Petcu *et al.* (2023) analysed how remote work during the pandemic impacted the work-life balance and work satisfaction of employees of various industries in Romania (i.e. banking system, education, consulting, HR, accounting, audit, research, public administration, trade, IT, tourism, etc.), also found that remote work during the pandemic had a constructive effect on worker' work-life balance, satisfaction, and commitment to their jobs

and workplaces. The study emphasises that factors such as collegial and management communication and management and organisational support are crucial in preserving organisational commitment during the WFH period (Petcu *et al.*, 2023).

The studies above demonstrate that employees could maintain high levels of organisational commitment despite the challenges of WFH provided that the organisation receives the required support during this period and provides significant insight into why academic personnel in this study display acceptable levels of commitment despite the shift to WFH.

The comparison tests carried out, including t-tests, ANOVAs, effect sizes and Spearman's rank-order correlation, showed that the organisational commitment levels of academic personnel were influenced by age, marital status and nature of employment.

Regarding age, the results found a medium positive correlation between age and continuous commitment. This means that the older the employees, the more they remain within the organisation as they believe they have invested significant amounts of time and energy. Their resignation would be a significant cost to the company. Bell and Sheridan (2020) also found that age was positively related to commitment, where older employees displayed higher levels of affective and continuance commitment than younger employees. These researchers emphasised that the relationship between age and commitment was mediated by employee perception of management and organisational support, proposing that older employees felt more supported by their workplace, resulting in higher levels of organisational commitment (Bell & Sheridan, 2020).

Concerning marital status, the study results indicated that the married respondents scored higher on continuous commitment than those who belonged to the other marital status categories. This means that married academic personnel, like older employees discussed above, were more inclined to remain within their jobs as they believed their resignation would impact the organisation considerably. This result concurs with a study conducted in 2020 by Hutagalung *et al.* (2020), which discovered that employees in a marriage displayed higher levels of commitment than their unmarried colleagues and explained that this could be attributed to the fact that those that are in a marriage show greater degrees of work maturity and are influenced by work-life balances (Hutagalung *et al.*, 2020). De Janasz *et al.* (2013) also found that married employees, and those in a relationship where partners were cohabiting, conveyed superior levels of organisational commitment compared to single employees. This

was ascribed to colleagues in committed relationships having higher levels of job satisfaction, hence were found to be more committed to the organisation (de Janasz *et al.*, 2013).

With regards to the nature of employment, the management staff scored higher on normative and continuous commitment than the academic and support staff, implying that management staff have a perceived responsibility as they believe that leaving the organisation would negatively impact the organisation (i.e. continuous commitment), as well as remain within their portfolios because they think it is the morally correct thing to do as they have built a sense of compulsion towards the organisation (i.e. normative commitment). While no study could be found to support this result, the finding could be explained by a study conducted by Allen and Meyer (1990). Allen and Meyer (1990) explored the effect that different job positions have on organisational commitment and found that managers showed higher levels of affective commitment than non-managerial staff, as managers had greater levels of job satisfaction, were more emotionally attached to the organisation, had higher order job characteristics and also experienced superior organisational climates (Allen & Meyer, 1990).

In conclusion, the empirical results of this study revealed that all academic personnel displayed acceptable levels of affective and normative commitment while being more neutral on their levels of continuous commitment. Generally, the results indicated that academic personnel could adapt to the radical change by WFH and maintain their commitment to the institution. The comparison tests, however, did reveal differences amongst the various demographics, particularly age, marital status and nature of employment regarding the commitment of academic personnel.

PRACTICAL IMPLICATIONS

The study contributes to the body of knowledge regarding organisational commitment within a WFH context in private higher education.

LIMITATIONS AND RECOMMENDATIONS

Limitations: The study is focused on a single private higher education institution within South Africa. Hence the findings cannot be generalised to higher education without further substantiating evidence.

Recommendations: The following recommendations should be regarded within the implementation of WFH to enhance the organisational commitment of academic personnel:

Organisational culture. Enhancing the organisational culture of private higher education during WFH may pose a challenge for many institutions. However, there are meaningful solutions that could contribute to the goal. Given the literature presented in this article, one of the important ways is to ensure that communication between employees is open and transparent. Institutions can achieve this via digital solutions that surround video conferencing, messaging applications, and management of project applications. Institutions should also promote social interaction among employees via online team building scenarios, gaming, virtual tea breaks, and online happy hours, to mention a few.

Professional development. Institutions should give due consideration to the professional growth of staff by reinforcing reward schemes through a deliberate focus on employee professional development opportunities. Apart from formal learning opportunities such as sponsored bursaries for higher education programmes, institutions could enhance staff development opportunities via online training sessions, workshops that provide staff with required skills within their field (e.g., supply chain) and skills to learn and develop their remote working capabilities.

Self-paced learning. Online short courses that are asynchronous are another beneficial modality to assist employees in their endeavours related to skills development. These could also include access to online conferences, vlogs (a blog in video format), and podcasts, to mention a few, and can be tailored to meet the unique skills needs of each employee.

Mentorship opportunities. Pairing experienced staff with less experienced staff through online mentoring sessions is another beneficial way of enhancing the skillset of employees. It allows the development of specific skills, awareness and exposure to new work concepts. It builds soft skills such as emotional intelligence or confidence, as working with senior colleagues assists in the development of critical soft skills as well.

Job satisfaction. Job satisfaction should be a key initiative to promote employees' organisational commitment. The key is ensuring employees are provided with conducive resources to perform their duties effectively. This could include, for example, technology, software applications, and appropriate spaces, to mention a few.

Another aspect of job satisfaction that should be given due attention is interactive social activities, such as virtual team building, virtual office parties, and online work games. One way to enhance job satisfaction during WFH is to ensure that employees have the necessary resources and support to perform their work effectively. This may include providing the right technology, software, and equipment to carry out their work and offering training and support to help them adapt to the remote work environment. Additionally, organisations can provide flexible work arrangements as working flexible hours is imperative in enhancing satisfaction within remote working models.

Leadership: As leadership was denoted as a critical success factor in promoting organisational commitment during WFH, higher education must pay specific attention to strategies that could enhance leadership effectiveness. For example, some of these attempts could include (but are not limited to): clear communication through appropriate digital channels between superiors and employees, clearly shared expectations and guidelines to employees regarding required tasks and projects, display of empathy and consideration in interactions with staff (i.e. emotional support), regular feedback to employees on progress and performance, demonstration of trust that employees can work effectively independently/remotely, and training and development opportunities for leaders on leading in the 21st century.

CONCLUSION

In conclusion, the COVID-19 pandemic has brought about many challenges to the workplace, with the WFH model being one of the most significant changes for academic personnel working in the private higher education space in South Africa. However, while studies have shown that WFH has created a series of challenges, thus impacting aspects of work dynamics of employees, this study has shown that the organisational commitment levels of academic personnel were sustained, specifically affective and normative commitment, even during the WFH arrangement implemented by private higher education. The results have shown that workers have maintained acceptable levels of commitment despite the challenges associated with the WFH model. This is attributable to the support received by the institution, such as social support, job resources, job satisfaction, communication, and other organisational support. These findings highlight the resilience of workers during times of crisis and emphasise the importance of organisational support in promoting employee commitment.

ACKNOWLEDGEMENTS

The researcher is grateful for the continuous support offered by the study supervisors: Profs C Botha, D Botha and C Bisschoff. Acknowledgement is also due to the institution under study and the personnel who formed the study's respondents.

COMPETING INTERESTS

The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

AUTHOR CONTRIBUTIONS

N.C. conducted the literature review and the empirical study and wrote the article. C.B., D.B and C.B. supervised the study and reviewed the article.

FUNDING

The study was self-funded by the author and the institution of employment of the author. The study did not require additional funding.

DATA AVAILABILITY

The data supporting this study's findings are available on request from the author.

DISCLAIMER

The author declares that the views expressed in this article are his own and not any official position of the institution that has funded this study or as part of this study.

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CHAPTER 5: ARTICLE 4

INVESTIGATING PERSONNEL'S PERCEPTIONS OF LEADERSHIP STYLES DURING WFH WITHIN PRIVATE HIGHER EDUCATION IN SOUTH AFRICA

This article has been submitted to the journal *Journal of Economic Development, Environment and People* and is under review.

This article is written in **US English** as per journal guidelines.

Investigating personnel perceptions of leadership styles during WFH within private higher education in South Africa

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KEYWORDS:

COVID-19 pandemic, leadership styles, leadership outcomes, WFH

ABSTRACT

The COVID-19 pandemic has transformed the nature of work by implementing the Work-from-Home (WFH) arrangement. This change has implied a series of considerations for business operations, including leadership. This study aims to ascertain academic personnel's view on the leadership received during the WFH period, assess the leadership styles used and measure the achievement of leadership outcomes. The study was conducted within private higher education in South Africa. While there are studies that assess the leadership styles during the WFH period, no study could be located that assesses this phenomenon within higher education and private higher education in South Africa. The study utilised a quantitative research methodology with a positivist research paradigm. The target population included all academic personnel within a private higher education institution under study (i.e., 133 personnel). Total population sampling was utilised, and data was collected through an online administered survey utilising the Multifactor Leadership Questionnaire (MLQ) comprising 46 items. Eleven items were also included to ascertain the demographic details of participants. The study utilised descriptive, inferential and multivariate analysis techniques. A response rate of 79% was achieved. The findings of this study suggested that academic personnel held a generally positive sentiment toward the leadership approaches used by seniors during the WFH period. Transformational leadership was found to be the dominant approach utilised, as was found, through the correlation with literature, to be the suitable approach used during WFH. In addition, the study found a general level of comfort amongst staff regarding the achievement of the outcomes of leadership. Although there was an overall positive sentiment held regarding leadership during WFH, primary results also suggest areas for improvement, particularly on the increase in the use of transformational leadership and avoidance of instances of passive avoidance leadership. Considering that WFH has been identified as a viable solution for the foreseeable future, private higher education in South Africa should consider the leadership suggestions recommended in this study to ensure that leadership approaches are conducive to WFH. This study contributes to the literature surrounding the concept of leadership within the WFH period within private higher education.

CONTEXTUAL BACKGROUND

The COVID-19 pandemic had a worldwide impact on the nature of business, forcing most organizations, including higher education institutions, around the world to rapidly adjust their work policies and procedures to ensure the health and safety of employees, as well as business continuity (Tautz *et al.*, 2022). The predominant change was the urgent shift to remote work, commonly called "work-from-home" (WFH). WFH refers to employees continuing their duties remotely from the convenience of their homes (Pérez-Nebra *et al*., 2021). What was previously an office setting has now been moved to the vicinity of employees' residences, where employees were required to transit to a new manner of working utilizing information technology from their homes (Kiziloglu, 2022; Pérez-Nebra *et al*., 2021). The concept of remote work is not unique to business and has been a modality utilised many decades before the COVID-19 pandemic. However, the difference with WFH during the pandemic is the pace and scale at which it was adopted, creating unprecedented challenges for workers and businesses across the globe (Kiziloglu, 2022). Subsequently, organization were exposed to dynamic challenges they were not adequately prepared for, such as remote leadership or leading teams in a remote environment (Zhang & Tian, 2022).

The leadership characteristics required for successfully implementing and continuing WFH are agility and adaptability (Tautz *et al*., 2022). Specifically, organization need their leadership team to build on skillsets that afford the advancement and execution of solutions that allow for the effective management of remote teams (Contreras *et al*., 2020). In many instances, this required abandoning traditional management approaches and adapting innovative and communicative solutions conducive to the fourth industrial revolution and the digital landscape of business (Tautz *et al*., 2022). Additionally, leaders were also required to deliberate on issues related to the health and well-being of staff during the pandemic, due to the rapid WFH impacts on the physical and mental health of staff, due to issues such as limited interaction, social alienation and challenges of maintaining appropriate work-life balances (Pérez-Nebra *et al*., 2021). Subsequently, leadership was mandated as the response team to transform the traditional health and safety strategies once performed in a physical setting to strategies that accommodate employees in remote locations (Contreras *et al*., 2020; Zhang & Tian, 2022).

Higher education, globally, was no exception to the leadership challenges of WFH. Due to the rapid evolution of teaching and learning to online arrangements for the continuation of the academic year, higher education faced similar leadership challenges during the pandemic (Karakose, 2021). Supporting staff in remote settings requires higher education to deliberate on innovative and inclusive leadership strategies for continuing teaching and learning and maintaining personnel's well-being (Karakose, 2021). Leaders were urged to find new methods of ensuring well-being (Lai *et al.*, 2020; McFarland *et al.*, 2020), engagement (Karakose, 2021; Nguyen & Tsang, 2023; Zhang & Tian, 2022), connectedness (Ahern & Loh, 2021; Karakose, 2021; Peters *et al*., 2020, Tautz *et al*., 2022) and productivity (Collings *et al*., 2021; Meiryani *et al*., 2022; Peters *et al*., 2020) of staff, amongst other things.

Effective leadership is linked to employee satisfaction, enhanced productivity at the employee and organizational levels, and enhanced employee engagement (Khan *et al*., 2020). It is, therefore, imperative to understand personnel's view of the leadership styles adopted during WFH and the outcomes, as WFH will be a viable work arrangement for the foreseeable future. The results of this study will provide insight into the academic personnel's perception of leadership styles utilized during the COVID-19 WFH period and whether the leadership outcomes were achieved.

PROBLEM STATEMENT

Higher education, because of the COVID-19 pandemic, had to evolve to new methods of teaching and learning, as well as new ways of research. These disruptions required leaders within higher education to adapt to new ways of navigating their teams' management, productivity, and well-being within a virtual setting (Karakose, 2021). One of the founding challenges that higher education leaders were exposed to during WFH was sustaining employee collaboration in a virtual environment. With teams now having to work in isolation from their homes, with the use of information technology that limited physical interaction, maintaining constant team communication and cooperation was a challenge (Rodrigues, 2021; Ramola, 2021). Leaders were urged to find new methods of ensuring the engagement and connectedness of staff (Karakose, 2021).

Another contest among leaders in higher education was the need to appropriate the well-being of employees (McFarland *et al.*, 2020). With employees now working from the vicinities of their homes, leaders in higher education were tasked to develop solutions to promote the well-being of employees in a virtual setting to assist employees with a work-life balance (Lai *et al.*, 2020; McFarland *et al.*, 2020). In addition, leaders were also challenged to adopt contemporary technology to maintain productivity and communication with staff, given the lack of face-to-face interaction with staff (Peters *et al.*, 2020).

Despite these challenges, the pandemic has also provided leaders with opportunities to innovate and grow higher education services during the lockdown (Karakose, 2021). However, how effectively leaders have dealt with both the opportunities and challenges of the pandemic within South African higher education is a gap in research. Research has not deliberated on the staff's view of leadership in higher education in South Africa, particularly on what leadership style and support was received during WFH and the subsequent impact of that support. This study aims to overcome this gap by evaluating the leadership styles used during the pandemic within private higher education in South Africa via the use of The Multifactor Leadership Questionnaire MLQ, which has 45 questions to evaluate the transformational, transactional, and passive avoidant leadership styles, that academic personnel believe their leaders used. By evaluating the type of leadership style leaders use, inferences can be made on whether it is conducive or not.

The pandemic significantly impacted leadership and the leadership style required in higher education, introducing leaders to new challenges and opportunities (Contreras *et al.*, 2020; Peters *et al.*, 2020). It is, therefore, imperative to understand academic personnel's view of leadership styles used during WFH to develop and address any challenges with conducive recommendations so that leaders may emerge stronger and further resilient in facing future challenges of remote work.

RESEARCH OBJECTIVES

The main objective of this study was first, to ascertain personnel perceptions of leadership styles adopted during the WFH period amidst the global COVID-19 pandemic within private higher education in South Africa, second, to establish whether there were any associations between selected socio-demographic variables and personnel's perceptions of the leadership styles adopted, and third, based on the literature review and empirical results to suggest recommendations for effective leadership during WFH.

LITERATURE REVIEW

Defining leadership

Leadership is a complex and multi-faceted organizational term studied for many years. The concept has been defined in several ways allowing various perspectives of what it means and how one should approach its definition (Northouse, 2018). At the root level, leadership is an individual's ability to influence other employees toward a shared or common objective or goal (Yukl, 2013). This, however, can be attained in several different ways, such as utilizing one's authority, the charisma of a leader, subject knowledge and skillset, which gives rise to the types of leadership that organization experiences (Goleman *et al*., 2013; Yukl, 2013). The objective of leadership regards the development of a journey (i.e., task/ project), influencing and motivating others to embark on that journey, and ensuring that employees work together harmoniously towards a common organizational objective (Bass & Riggio, 2006).

One commonly used way of conceptualizing leadership is viewing it as a series of traits or criteria connected to conducive leadership. This approach assumes leaders possess specific innate characteristics and attributes needed to succeed (Bass & Riggio, 2006). For example, this could refer to traits such as emotional intelligence, discipline skillset, charisma, and integrity, which form a recipe for an efficient leader. This approach, however, has been scrutinized and criticized for its inability to include situational factors that play a crucial role in shaping the behaviors of leadership (Northouse, 2018).

A second approach to conceptualizing leadership is to view leaders as individuals with specific behaviors and implement actions associated with qualitative leadership (Avolio & Yammarino, 2013). This approach suggests that a leader's ability is learned behavior, and it is a set of characteristics that can be developed, as opposed to the previous conceptualization, which believed that leadership is solely an outcome of innate behaviors and criteria (Goleman *et al.*, 2013). This approach assumes that leaders are involved in constant and efficient communication, reward and recognition schemes, and promoting positive working environments (Avolio & Yammarino, 2013).

Lastly, a third approach to conceptualizing leadership is the view that it is a process that includes interaction between leaders and staff (Northouse, 2018). This method iterates the importance of the relations between leaders and staff and the role that social influence in these relationships plays in the formation of leadership behaviors (Northouse, 2018). According to this approach, leadership is not the sole responsibility of a leader. Rather, it is a responsibility that occurs from the dynamic relationship between leaders and staff (Yukl, 2013).

The evolution of defining leadership reflects changes in the societal, economical, and political contexts in which leadership has been reviewed and studied. The earliest definition of the term was coined by the Greek philosopher Aristotle, who viewed a leader as an individual who can influence others towards a certain course of action (Northouse, 2018). The emphasis on persuasion and guidance remained key leadership characteristics from the medieval periods towards the early modern time, where leaders were seen as individuals with the natural ability to persuade others (Yukl & Gardner, 2020).

However, with the introduction and implementation of the industrial revolution and large-scale business, the focal point of leadership shifted towards hierarchy and formal bureaucracy (Avolio & Yammarino, 2013). This emphasized vertical hierarchy authority where leaders have direct control and power over staff (Avolio & Yammarino, 2013). This leadership perspective was sustained and dominated through most of the 20th century, when leaders were expected to be powerful, decisive, and respected (Northouse, 2018).

During the second half of the 20th century, however, there was increasing awareness that the traditional perspective of leadership as those who possess power and control, was beginning to be ineffective, precisely due to the complexity and agility of rapidly emerging social and economic change (Avolio & Yammarino, 2013; Yukl & Gardner, 2020). This has resulted in diverse approaches to leadership, which gave rise to what is commonly known as leadership styles (Peters *et al.*, 2020).

In conclusion, the conceptualization of leadership has progressed dramatically over time, indicating shifts in the social, economic, and political landscapes in which leadership operates. From the foundational iteration of influence to the more bureaucratic approach of power and control within the industrial era to a more collaborative approach within the emergence of leadership styles, how leadership has been viewed has evolved with rapidly changing business, societal and economic circumstances.

Types of leadership

Leadership is a multi-faceted management concept that includes a range of styles and methods, including transformational, transactional, servant, and *laissez-faire* leadership styles.

Transformational leadership

Transformational leadership is a leadership approach that focuses on the capability of leaders to inspire and encourage employees to work towards a common objective or goal (Yukl & Gardner, 2020). These types of leaders are generally described to be visionaries, inspirators with charismatic personalities, and are involved in the encouragement of positive and energetic work cultures to afford employees the best chance of success in achieving organizational tasks (Avolio & Yammarino, 2013; Yukl & Gardner, 2020). Transformational leadership is regularly utilised in businesses that experience transformation or innovative change, as it accommodates creating and maintaining a shared vision and purpose (Northouse, 2021). Jeff Bezos, the founder of Amazon, is a widely known example of a transformational leader. He is recognized for influencing and encouraging his employees to relentlessly innovate and ensure customer satisfaction (Gradinaru *et al.*, 2020).

Transactional leadership

Transactional leadership is another leadership style that regards utilising a rewards and punishment system in the workplace to motivate employees to complete required tasks (Northouse, 2021). The approach assumes that employees will be more productive and efficient if rewarded for superior productivity levels and punished for negligence or inferior performance. Transactional leaders are generally regarded as task-oriented leaders whose prime focus is ensuring employees achieve their performance goals (Goleman *et al.*, 2013). The former Chief Executive Officer (CEO) of Microsoft, Bill Gates, was known to be a transactional leader due to his aggrieved management approach to leadership and focus on achieving results from employees (Entrepreneur, 2023). He is also known for creating a performance system that incentivizes employees to meet productivity goals and for punishing employees through dismissals for not performing up to the required standard (Northouse, 2021).

Servant leadership

Servant leadership is a third approach to leadership that considers the role of a leader to be a 'servant' to their employees/ followers (Greenleaf, 2002). The approach is based on the premise that leaders are responsible for meeting the daily work needs of their employees for a conducive and positive work environment to be developed rather than focusing on their personal goals and objectives (Avolio & Yammarino, 2013; Yukl & Gardner, 2020). Servant leaders are regarded generally as those that possess humility, compassion, and empathy, and deliberate on fostering positive relations with staff (Greenleaf, 2002). An example of a servant leader is a well-known CEO of Starbucks, Howard Schultz. He was commended for his emphasis on maintaining healthy work climates and his continuous commitment to respectfully and dignity handling staff (Dimitrakaki, 2023). Servant leadership was also noted within his management capacity, where he developed and implemented a series of policies and procedures that provide due consideration for the well-being of staff, including aspects such as healthcare, ownership options, and professional development opportunities for staff (Greenleaf, 2002).

Laissez-faire leadership

Laissez-faire leadership requires a more hands-off approach, whereby leaders provide minimal supervision and oversight to employees (Yukl & Gardner, 2020). This leadership approach is premised on the idea that workers should be self-motivated and able to carry out their duties efficiently without constant management and supervision (Yukl & Gardner, 2020). *Laissez-faire* leaders are generally calm and casual, allowing workers flexibility and autonomy (Goleman *et al.*, 2013). Warren Buffet, CEO of Berkshire Hathaway, is an excellent example of a *laissez-faire* leader. He is known for his hands-off approach to leadership, allowing workers to work autonomously with minimum direction provided to staff (Sorkin, 2011).

In summary, leadership is a multi-faceted concept that has evolved in its definitional characteristics over time, indicating shifts in the social, economic, and political landscapes in which leadership operates. These transitions in the concept gave rise to differing approaches to leadership, mainly transformational, transactional, servant and *laissez-faire* (aka passive avoidant) leadership. The approaches, as noted, vary in their manner of engaging staff and how outcomes of work tasks are achieved.

Leadership outcomes

Gonzalez *et al.* (2022) maintain that top management commitment is critical to implementing and adopting green practices. Support from senior personnel is perceived as one of the primary internal drivers of business practices that are environmentally responsible (Li *et al*., 2016). The lack of green management personnel who can guide and supervise the process of green practices in any organization is also a contributing factor. According to Hossain *et al.* (2020), the inconvenience of finding available green expertise also stops most organizations from practicing green, as they cannot simply start implementing green practices without the guidance of professionals or consultants (Ikudayisi *et al.*, 2022). Top management's commitment is critical in realizing an organization's mission in practice; this is also true for the drive towards a more environment-friendly university. Hence, the successful accomplishment of all organizational goals (including green initiatives) depends on top management's commitment (Sulich *et al.*, 2021).

Leadership is an essential component of any profitable organization. The leadership outcomes are discussed next.

Job satisfaction

One of the primary outcomes of leadership is employee job satisfaction. In their study, Yusof *et al.* (2014) found that greater levels of employee job satisfaction were reported in instances where workers found their leaders to show greater care and support towards their work and personal lives. Supportive leaders promote positive work climates that create a sense of belonging and community among staff (Northouse, 2021). Supportive leaders are also known to provide employees with the requirements and resources to perform their tasks to their optimum, thereby enhancing job satisfaction, reducing employee burnout and stress, and ultimately maintaining a work-life balance (Yusof *et al.*, 2014).

Organizational productivity

Organizational productivity is the second most important outcome of effective leadership. A study by Khan *et al.* (2020) that focused on the impact of leadership on organizational performance during the COVID-19 pandemic demonstrated that leadership correlated positively to an organization's productivity. These researchers found that transformational leadership was positively related to organizational productivity, as transformational leaders are in a better position to inspire and motivate employees to achieve individual and overall organizational goals, thereby enhancing organizational productivity (Khan *et al.*, 2020). This is also because transformational leaders create an environment where employees hold a shared organizational vision and purpose, allowing employees to be clear on their roles and objectives in that vision (Yukl & Gardner, 2020).

Employee engagement

Employee engagement is a third important outcome of effective leadership, as supportive leaders enhance workers' engagement (Northouse, 2021). A study by DeCuypere and Schaufeli (2021), investigating the impact of leadership styles on engagement, revealed that transformational leadership was positively associated with higher levels of employee engagement. Transformational leaders, as stated, create positive work climates with a shared purpose and afford employees autonomy in their work, providing them with ownership, responsibility, and decision-making capabilities (Yukl & Gardner, 2020). This enhances motivation, an essential component of employee engagement (Northouse, 2021).

Employee retention

Employee retention is an additional outcome of effective leadership. Achen *et al.* (2019) found that servant leadership was positively related to employee retention. Servant leaders are known for prioritizing the needs and welfare of staff, creating a sense of loyalty and dedication among staff (Goleman *et al.*, 2013). This results in greater employee satisfaction and commitment to the organization, thereby positively impacting retention rates, as workers are more likely to remain with an organization that values their input and supports their personal career growth and development (Achen *et al.*, 2019).

Innovation

Lastly, innovation, particularly within and post the COVID-19 pandemic, is a critical outcome of leadership. Lei *et al.* (2021), who conducted a study looking at leadership influences innovation, found that transformational leadership fostered innovation in the workplace. Because transformational leaders create organizational environments based on trust and

transparency, employees are encouraged to share their ideas. They were able to take further risks related to innovation (Lei *et al.*, 2021). This results in enhanced innovative agendas within organization, as workers are more likely to ideate and experiment with new concepts in the workplace and feel empowered to do so (Yukl & Gardner, 2020).

In summary, effective leadership is indispensable for achieving positive outcomes in the workplace (Khan *et al.*, 2020). Job satisfaction, organizational performance, employee engagement, employee retention, and innovation were the predominant factors that served as outcomes of effective leadership (Achen *et al.*, 2019; Khan *et al.*, 2020). Transformational leadership is the most beneficial leadership style for achieving these outcomes. Transformational leaders create positive work environments, thus inspiring workers to be motivated and giving due consideration to worker well-being (Northouse, 2021).

Leadership and WFH

The COVID-19 pandemic has resulted in unprecedented changes in the world of work, with many employees being mandated to WFH. The WFH shifted how workers function and perform their task and how leaders manage their teams in a virtual setting (Collings *et al.*, 2021). The most impactful consequence on leadership due to WFH is how leaders adapt to new regimes of communication with staff (i.e., new communication methods). What was once a traditional face-to-face communication method has now been replaced with virtual mediums with widely known tools such as Microsoft Teams, Zoom, and Skype, to mention a few (Bussin & Swart-Opperman, 2021; Tuatz *et al.*, 2022). This, however, has resulted in new challenges for leadership, as leaders had to swiftly adapt to be effective in their management skills through these channels (Bussin & Swart-Opperman, 2021). Leaders were now expected to make conscious efforts to ensure that their staff members are constantly communicated with so that they feel connected and engaged to the organization and their work, as WFH is known to decrease interaction that could lead to feelings of isolation and disengagement (Zhang & Tian, 2022).

Furthermore, because leaders no longer share a physical setting (i.e., office) with staff, leaders were now required to trust their team members, as physical monitoring and evaluation were no longer possible (Collings *et al.*, 2021). Given the lack of monitoring tools for remote work, leaders had to trust staff members would work well independently and deliver on tasks. With this, leaders needed to focus on the outcomes of tasks rather than micromanaging team members (Fernandez & Shaw, 2020). As the pandemic has brought about a series of psychological impacts in employees' lives, leaders were now required to assist employees in managing the stress and uncertainties of the pandemic (Fernandez & Shaw, 2020; Zhang & Tian, 2022). Leaders who were found to be good listeners and providers of emotional support, for example, found that their team members felt more connected and engaged, thus resulting in higher productivity and satisfaction levels (Collings *et al.*, 2021).

The shift to WFH has also identified the need for leaders to be more agile and adaptable. With the blurring of the lines between work-life and home life, leaders were faced with the challenges of adapting to the new nature of work to be able to understand the needs of team members from both work and personal perspectives (Bussin & Swart-Opperman, 2021; Tuatz *et al.*, 2022). For example, leaders needed to adapt to concepts of hybrid work and flexible working hours so that employees could resolve domestic responsibilities such as childcare (Collings *et al.*, 2021). Finally, the move to WFH has also emphasized the need for the digital literacy skills of leaders to be improved, as many businesses had to undergo a digital

transformation of business operations to sustain and continue business operations during the pandemic (Fernandez & Shaw, 2020).

In conclusion, the COVID-19 pandemic has profoundly affected the nature of leadership, particularly within the WFH period. Leaders were now required to swiftly adapt to new communication methods, trust their team members, show empathy and understanding, be more flexible and adaptable, and have strong digital literacy skills (Bussin & Swart-Opperman, 2021; Collings *et al.*, 2021; Tuatz *et al.*, 2022). These changes were challenging and detrimental to the business continuity.

Leadership considerations during WFH

During the COVID-19 pandemic, leaders were required to make critical adjustments to their styles of leading to consider new characteristics of remote work and sustain the productivity and motivation of their teams (Costin *et al.*, 2023). This section reviews a few considerations for effective leadership during WFH.

While communication may be overstated in WFH research, it remains a key consideration for effective leadership during WFH (Richard *et al.*, 2022; Uhl-Bien, 2021). WFH has impacted how employees and teams communicate, shifting the reliance on communication to virtual means using tools such as Microsoft Team, Zoom Meetings, and Skype, as previously mentioned (Bussin & Swart-Opperman, 2021). Leaders ought to ensure that teams are versatile with digital communications channels to promote effective and clear lines of communication during WFH (Richard *et al.*, 2022). An important step in the management of communication is for leaders to conduct regular check-ins with staff to avoid any communication barriers and to promote open communication where team members are provided with a platform to raise any concerns (Venz & Boettcher, 2022).

A second consideration for effective leadership is teamwork or the cohesion of teams. It has already been established that one of the negative effects of WFH is worker alienation or isolation, as workers no longer have social relations with colleagues as they did in a physical work setting (Venz & Boettcher, 2022). This implicitly affects worker productivity as teams can no longer efficiently work with each other. Leaders were expected to host events such as virtual team building, counselling sessions and psychosocial training workshops to foster collaboration and maintain healthy team dynamics within the virtual workspace to overcome this challenge (Costin *et al.*, 2023).

Mental health is another key consideration for leaders in a virtual world (Uhl-Bien, 2021). Due to anxieties and uncertainties about the future of work and worker isolation, WFH during the pandemic has been known for the advent of worker stress and has negative implications on worker well-being (Venz & Boettcher, 2022). Leaders should be cognizant of team members' challenges and ensure that effective social support, resources, and work flexibility measures are provided to teams.

Related to this is the issue of productivity, as WFH has resulted in complexities within work-life balance and other productivity challenges such as communication means, conducive workspaces, and team cohesion, to mention a few (Richard *et al.*, 2022). Leaders need to explore mechanisms that would enhance employees' productivity by ensuring that the necessary information technology (IT) and physical workspace requirements of team members are sought and promote training on maintaining productivity and work-life balance in this new

era of work (Uhl-Bien, 2021). Setting clear objectives, regular and consistent feedback, and incentive and reward schemes could also assist (Costin *et al.*, 2023).

In summary, the pandemic has profoundly impacted leadership, requiring leaders to adapt their leadership style by considering the abovementioned mechanisms. Leaders are required to rearrange work priorities, pivot organizational management models, reform policies and operating procedures and enhance worker support through appropriate workshop and training activities to promote the productivity, adaptability, well-being and team cohesion of workers in a WFH setting (Costin *et al.*, 2023; Uhl-Bien, 2021). Through meaningful consideration of these factors, leaders can promote and engage a productive team amidst the impacts of the pandemic.

Leadership, WFH and higher education

The pandemic has significantly altered how team members interact with one another and impacted global business practices. Higher education institutions globally were no exception (Nugroho *et al.*, 2021). With dramatic alterations to teaching, learning and assessment, the pandemic has presented multiple challenges for leaders within the higher education space (Farnell *et al.*, 2021). This section briefly considers a few of these challenges and assesses solutions for leaders in higher education.

The predominant challenge for higher education globally is to remain a provider of quality higher education to students during the pandemic (Nugroho *et al.*, 2021). With the shift to virtual teaching, learning and assessment, institutions across the globe were required to swiftly adapt their pedagogies to maintain the efficacy of learning using teaching and learning technologies that would ensure that any disruption to the continuation and quality of teaching has been eradicated (Siddiquei & Kathpal, 2021). The challenge for leaders in higher education in this regard was to ensure that they promote flexibility and innovation in their leadership styles and constantly enhance collaboration amongst faculty and other academic personnel to determine new and effective strategies for teaching and learning in a virtual world (Nugroho *et al.*, 2021; Siddiquei & Kathpal, 2021).

Another challenge that higher education leaders faced was the maintenance of staff morale. As workers in organizations globally faced WFH challenges, such as adjustments to WFH, work-life balance issues, and personal and home care issues, employees at higher education institutions were no exception (Farnell *et al.*, 2021). Higher education leaders' challenge was demonstrating understanding and empathy towards these trials through effective support mechanisms while maintaining the efficiency and quality of remote teaching and learning (Farnell *et al.*, 2021, Karakose, 2021).

From a business sustainability perspective, higher education leaders have also faced the challenge of maintaining financial viability as the pandemic has been found to impact student enrolment (Menon & Shireen, 2021). Many higher education institutions globally have noted declining student enrolment and student fees (i.e., revenue), resulting in leaders affecting budget cuts, layoffs, and innovative financial mechanisms to remain competitive (Menon & Shireen, 2021). Leaders were required to balance the narrative between financial difficulties and maintaining the requisites to sustain the offering and quality education to students (Nugroho *et al.*, 2021).

However, strategies are devised to overcome the leadership mentioned above challenges. As a first step, leaders in higher education should provide conducive support and resources to assist

their personnel in adapting to remote teaching and learning to maintain productivity (Karakose, 2021). This includes workshops on remote teaching tools, pedagogies, and mental coaching to promote staff well-being (Farnell *et al.*, 2021). Leaders could also develop student engagement strategies to promote communication between students and academic and administrative staff. This would promote a seamless transition to online teaching and learning as all parties would be kept in the loop on changes to the regime and afforded a platform to provide constructive feedback on their student experience (Siddiquei & Kathpal, 2021). In addition, higher education leaders should also devise long-term strategies to manage the financial viability of their institutions. This could include alternate revenue streams, lean management principles, cost-saving measures, and contingency arrangements to mitigate future risks (Menon & Shireen, 2021).

In summary, the pandemic has resulted in many leadership challenges for higher education that are like the challenges that businesses worldwide have experienced (Farnell *et al.*, 2021). With the appropriate mechanisms, leaders in higher education could demonstrate proper management of these challenges and emerge as institutions that offer uninterrupted and quality higher education.

RESEARCH METHODOLOGY

The research methodology and approach is a positivist paradigm. Positivism is generally based on the use of data that is quantifiable, which helps researchers to analyze and categorize the data collected through statistical techniques (Bryman *et al.*, 2021; Dawson, 2019), as well as to identify patterns that emerge in the data and devise conclusions about the population that has been studied (Vithal & Jansen, 2019). The positivist paradigm is well acquainted with the quantitative research methodology used in this study.

Population and sampling

A series of employees from a private higher education institution in South Africa with various employment levels, including management, academic and support (administrators) staff, conferred the study's participants. Since all these employees were involved in the institution's academic activities, they are regarded as academic personnel. A total of 133 academic personnel comprising 16 supervisors, 27 academics, and 90 support staff, were included in the study. Important to note that this is the total population of academic personnel employed at the institution. Thus, total population sampling, a kind of purposive sample that uses the entire population based on specific criteria, was utilized in the study (Dawson, 2019). A response rate of 79% (N=133; n=105) realized.

Data collection

An online survey tool used a structured questionnaire to collect the data from respondents. Data was collected during the COVID-19 lockdown in late 2021 when the institution requested that staff work from their homes instead of their offices.

The questionnaire comprised two sections. The first section includes 11 questions on the participants' socio-demographic information such as gender, age, department, years of experience in the organization, highest educational level, country of residence, nationality, marital status, employment type, duration working from home since the start of the pandemic in 2020, and current WFH situation. For the second section, the 45-item Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 2004) was used to determine employees' perceptions of

the leadership styles used in the institution during WFH amid the COVID-19 pandemic. The questionnaire consists of 36 items assessing leadership styles and nine measuring leadership outcomes. A 5-point Likert-type scale ranged from "Not at all" (0) to "Frequently, if not always" (4). The MLQ questionnaire measures perceptions of transformational leadership (20 items measure how leaders show behaviors that provide inspiration and motivation to followers), transactional leadership (eight items that measure if there is an exchange relationship that exists between leaders and followers where followers are rewarded and punished), passive avoidant leadership (eight items that measure if passive avoidant techniques were demonstrated in leadership approaches), and leadership outcomes (ten items that measure if the outcomes of leadership related to extra effort, satisfaction and effectiveness were achieved) (Bass & Avolio, 2004). The MLQ questionnaire has been used in various studies and produced reliable data with high internal consistency (Bass & Avolio, 2004).

Data analysis

The participants' data were analysed using various statistical methods, including descriptive, inferential, and multivariate analysis techniques. To carry out these techniques, the SPSS AMOS software 27 was used. Cronbach's coefficient alpha tested the internal reliability of the data. Descriptive statistics summarized the sample characteristics, frequencies, means, and standard deviations. Independent samples t-tests and one-way ANOVAs assessed the mean scores of the different groups and determined if there were any significant differences in the measured dependent variable. Effect sizes determined the practical significance of the findings beyond their statistical significance (t-tests). Cohen's d-values denoted the effect size, with $d = 0.2$ representing a small effect, $d = 0.5$ representing a medium effect, and $d = 0.8$ representing a large effect (Cohen, 1988). Lastly, Spearman's rank-order correlation coefficient evaluated the strength and direction of the association between ranked variables.

Ethical considerations

All ethical considerations of research were diligently addressed. A permission letter was obtained from the private higher education institution under investigation, granting permission to conduct the study. Regarding informed consent, the first page of the online survey provided participants with information on the study, including the purpose of the study, the risks and benefits, and the respondents' rights. Participants were requested to provide their consent to continue with the survey. Anonymity and confidentiality were provided to participants as their identities were safeguarded. The study also received ethics approval from the Economic and Management Sciences Research Ethics Committee (EMS-REC) at North-West University (Ethics number: NWU-01253-21-A4).

Empirical results

The results consist of the socio-demographics and perceptions on leadership styles.

Socio-demographic information

Table 1 exhibits the socio-demographic data of the participants collected through the survey.

Table 1: Socio-demographic information

Biographical information			
Question	Category	N	%
With which gender do you identify yourself?	Female	66	62.9
	Male	38	36.2
	Prefer not to answer	1	1.0
In which country do you reside?	South Africa	102	97.0
	Other	3	3.0
What is your nationality?	South African	99	94.3
	Other	6	5.7
What is your age in years?	20–29	26	24.8
	30–39	52	49.5
	40–49	16	15.2
	50–59	8	7.6
	60 and older	3	2.9
What is your marital status?	Single or not in a relationship	25	25.3
	Unmarried and in a relationship	21	21.2
	Widowed	4	4.0
	Married	47	47.5
	Divorced/Separated	2	2.0
What is your highest qualification?	High (secondary) school graduate	23	22.3
	Completed technical/vocational training	6	5.8
	College/University degree	43	41.7

	Postgraduate degree	26	25.2
	PhD	5	4.9
How long have you been working at the institution?	0–6 months	16	15.2
	7–12 months	6	5.7
	1–2 years	14	13.3
	3–5 years	33	31.4
	6–10 years	24	22.9
	More than 10 years	12	11.4
What is the nature of your employment at the institution?	Management	18	17.1
	Academic (i.e. teacher, lecturer, researcher, postdoctoral fellow, etc.)	20	19.0
	Support (i.e. administrative, technical, etc.)	49	46.7
	Other	18	17.2
How long have you been WFH since the COVID-19 pandemic started in 2020?	0–3 months	24	25.0
	4–7 months	37	38.5
	8–11 months	25	26.0
	12 months and longer	10	10.4
Which scenario best describes your current work situation since the COVID-19 pandemic started in 2020?	I have been WFH since the beginning of the pandemic, but come to the office occasionally (i.e., to attend a meeting and at my own discretion)	11	10.8
	I work remotely a few days a week as directed by management	16	15.7
	I am working from the office most of the time	30	29.4

	I am working from the office all the time	45	44.1

The respondents involved in the study were predominantly South African (94.3%) and comprised a young adult population, where over 65% of respondents being 20 and 39 years of age. With regards to the length of service, results varied in terms of how long respondents worked at the institution, ranging from 6 months to over ten years, and interesting to note is that most respondents were female (i.e., 62.9%). The sample also represented all employment levels, including managers, academic and support staff. Support staff was expected to form the larger population of the study as the South African higher education expected ratio of support staff is 30:1, where there should be a support staff for every 30 students (Kosie, 2022). Regarding qualification, most respondents held a bachelor's or postgraduate degree (i.e., 72%), and it was also evident that about half were married (47%). Regarding WFH, all the respondents indicated that they were working from home during the data collection phase of this study, indicating that they are in a good position to provide valuable insights for this study.

Leadership style measurement model

A confirmatory factor analysis was conducted to validate the factor structure of the Leadership style measurement model. All the statements, except four, loaded satisfactorily on the leadership style factors with factor loadings above 0.3 (Field, 2017). The factor loading of question 6 was 0.296 on the Idealized Behavior factor, of question 8 was 0.141 on the Intellectual Stimulation factor, of question 4 was 0.273 on the Management by Exception (Active) factor, and of question 17 was 0.027 on the Management by Exception (Passive) factor. The factor loadings were statistically significant at 0.05, except for questions 8 ($p = 0.162$) and 17 ($p = 0.800$). However, the items were retained to keep the measurement model's factor structure, and the factors' reliability and consistency were calculated using Cronbach's coefficient alpha; Table 2 shows these results. Cronbach's coefficient alpha should preferably exceed 0.7 (Field, 2017).

Regarding the 9-factor model, Cronbach's coefficient alpha of all the factors was above 0.7, except for transactional leadership (MBEA: Mgmt by Exception (Active)) ($\alpha=0.676$) and Passive Avoidant (MBEP: Mgmt by Exception (Passive) ($\alpha=0.531$). Rounded off, MBEA has acceptable reliability and MBEP low reliability. Field (2017) mentioned that Cronbach's alpha could realistically be below 0.7 and that a small number of statements could result in a lower alpha (Field, 2017). Regarding the 3-factor model, the Transformation and passive avoidant factors had Cronbach's alphas above 0.7. However, Cronbach's coefficient alpha of the transactional factor was 0.426, indicating that the factor is unreliable.

Table 2: Reliability and descriptive statistics of Leadership style factors

Reliability			Descriptive statistics				
Characteristic	Scale abbreviation and name	Cronbach's alpha	N	*Min	*Max	Mean	*SD
Transformational	IA: Idealized Attributes	0.801	103	0.00	4.00	2.6804	0.96289
Transformational	IB: Idealized Behaviors	0.742	103	0.00	4.00	2.6092	0.86579
Transformational	IM: Inspirational Motivation	0.865	103	0.00	4.00	2.8835	0.85418
Transformational	IS: Intellectual Stimulation	0.723	104	0.00	4.00	2.4367	0.87597
Transformational	IC: Individual Consideration	0.750	103	0.00	4.00	2.3366	0.94259
Transactional	CR: Contingent Reward	0.813	104	0.00	4.00	2.5393	0.99615
Transactional	MBEA: Mgmt by Exception (Active)	0.676	102	0.00	4.00	1.9036	0.92586
Passive Avoidant	MBEP: Mgmt by Exception (Passive)	0.531	104	0.00	4.00	1.2252	0.86532
Passive Avoidant	LF: *Laissez-Faire*	0.765	103	0.00	4.00	0.9191	0.89741
Outcomes of Leadership	EE: Extra Effort	0.719	101	0.00	4.00	2.7063	0.90834
Outcomes of Leadership	EFF: Effectiveness	0.905	102	0.00	4.00	2.7492	1.00839
Outcomes of Leadership	SAT: Satisfaction	0.846	101	0.00	4.00	2.7376	1.06910
	Transformational	0.932	104	0.00	4.00	2.5998	0.80530
	Passive Avoidant	0.783	104	0.00	3.50	1.0677	0.80013
	Transactional	0.426					
	Valid N (listwise)		100				

*Min = Minimum; *Max = Maximum; *SD = Standard deviation

The mean scores of the transformational factors ranged between 2.34 (Individual Consideration) and 2.68 (Idealized Attributes) on a five-point Likert scale ranging from Not at all (0) to Frequently, if not always (4). This means that, on average, respondents believed that leaders show transformational leadership behaviors sometimes to fairly often, where respondents are motivated and inspired to perform their tasks.

The mean scores of the transactional factors were 1.9 for Management by Exception - Active and 2.53 for Contingent Reward. This implies that leaders often provided respondents with clarity on their work expectations and recognized efforts by rewarding staff when work goals were met. Occasionally, they punished respondents for errors and deviances to specified compliance standards.

The mean scores of the passive avoidant factors ranged between 0.91 (*Laissez-Faire*) and 1.2 (Management by Exception Passive), indicating that leaders, once in a while, utilize passive avoidant techniques, which implies that respondents felt that leadership is actively involved in operations and do not only intervene in times of crises. Specifically, these findings indicate that leaders (occasionally) avoided involvement in important issues, were absent when needed, failed to intervene until work issues became severe, and adopted a 'do not fix it unless it is broken' attitude. Overall, the mean scores indicate that respondents believed that the institution's leadership demonstrated transformational leadership behaviors and avoided transactional and passive avoidant approaches to leadership.

The mean scores of the Outcomes of Leadership factors ranged between 2.70 (Extra Effort) and 2.73 (Satisfaction), which revealed that respondents believed that leaders fairly often achieve the outcomes of leadership in their approach to leadership. Specifically, respondents felt that leaders showed extra effort (M = 2.70), which refers to the leader's ability to motivate staff to do more, and effectiveness (M = 2.74) which implies that leaders are effective in fulfilling the job requirements of staff and were able to utilize methods that respondents were satisfied with, i.e., satisfaction (M = 2.73). The factors revealed the highest mean scores were Transformation Leadership: Inspirational Motivation (M = 2.88) followed by Outcomes of Leadership: Effectiveness (M = 2.74), indicating that the leadership style used within the institution during WFH was fit for purpose as leaders were able to inspire respondents by demonstrating characteristics that provided meaning to respondents' work. Respondents also believed that the leadership they received during WFH was effective.

Three goodness-of-model-fit indices from three broad classes were utilized in this study to determine how well the sample data fit the measurement model: the CMIN/DF (chi-square statistic divided by degrees of freedom), the CFI, and the RMSEA (root mean square error of approximation). A ratio of one is needed for the CMIN/DF model to be accurate (Bollen & Jackman, 1993). If a CMIN/DF score is lower than one, it indicates a poor fit between the data sampled and the model used (Shadfar & Malekmohammadi, 2013). In addition, ratios smaller than three would mean an acceptable fit (Kline, 1998). In addition, Shadfar and Malekmohammadi (2013) indicated that ratios between 2 and 5 are conducive fits. Bentler (1990) identified that a CFI score of one would indicate a perfect fit, while scores lower than 0.95 are poor fits. Hair *et al.* (2010) also suggested that CFI scores above 0.9 are good fits between data that has been sampled and the measurement model. Regarding the RMSEA, a perfect fit has a zero value, while a value below 0.05 is a good fit. Steiger (1990) mentioned that RMSEA scores between 0.05 and 0.08 are acceptable, while values greater than 0.10 represents a poor fit. Table 3 displays goodness-of-model-fit indices for the 3-factor and 9-factor models.

Table 3: Goodness-of-model-fit indices for Leadership style

Goodness-of-model-fit indices						
Fit index	Rule	Author	Model score: 9-factor	Result	Model score: 3-factor	Result
CMIN/DF	Close to 1; 3–5 still satisfactory	Mueller (1996), Paswan (cited by Shadfar & Malekmohammadi, 2013), Bollen & Jackman (1993), Kline (1998)	1.909	Good fit	2.180	Good fit
CFI	≥ 0.9 (good fit)	Hair *et al*. (2010), Mueller (1996), Bentler (1990)	0.781	Close fit	0.957	Good fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre) ≤ 0.10 (still satisfactory)	Hu and Bentler (1999:1), Blunch (2008), Bentler (1990), Steiger (1990)	0.094 [0.085; 0.102]	Acceptable fit	0.107 [0.067; 0.146]	Not good fit

The CMIN/DF revealed good fits for both the 3-factor and 9-factor models (2.180 and 1.909). The CFI indicates a good fit for the 3-factor model (0.957) and a close fit for the 9-factor model (0.781). The RMSEA revealed not a good fit for the 3-factor model (0.107; 0.067 [low]; 0.146 [high]) and an acceptable fit for the 9-factor model (0.94; 0.085 [low]; 0.102 [high]).

Association between socio-demographic variables and leadership style

Independent sample t-tests were conducted to determine whether there are significant differences between the group means of the gender categories on the different leadership styles and outcomes factors. The results are reflected in Table 4.

Table 4: Association of gender with leadership style

Group statistics					Independent sample t-test	
	Gender	N	Mean	SD	P-value	Effect size
Transformational IA: Idealized Attributes	Male	37	2,6712	0,85028	0.789	0.06
	Female	65	2,7231	0,98833		
Transformational IB: Idealized Behaviors	Male	37	2,5270	0,78347	0.385	0.18
	Female	65	2,6808	0,89433		
Transformational IM: Inspirational Motivation	Male	37	2,7748	0,76625	0.281	0.22
	Female	65	2,9641	0,89219		
Transformational IS: Intellectual Stimulation	Male	37	2,4820	0,82100	0.694	0.081
	Female	66	2,4104	0,91688		
Transformational IC: Individual Consideration	Male	37	2,3851	0,77861	0.833	0.04
	Female	65	2,3449	0,99411		
Transactional CR: Contingent Reward	Male	37	2,5135	0,80352	0.704	0.07
	Female	66	2,5846	1,07163		
Transactional MBEA: Mgmt by Exception (Active)	Male	37	1,9685	0,88352	0.701	0.08
	Female	64	1,8958	0,93175		
Passive Avoidant MBEP: Mgmt by Exception (Passive)	Male	37	1,5113	0,73313	0.003	0.62
	Female	66	1,0227	0,82593		
Passive Avoidant LF: *Laissez-Faire*	Male	37	1,0541	0,95222	0.179	0.28
	Female	65	0,8103	0,82660		
Outcomes of Leadership	Male	37	2,7477	0,73872	0.708	0.07

Group statistics					Independent sample t-test	
	Gender	N	Mean	SD	P-value	Effect size
EE: Extra Effort	Female	64	2,6823	0,99811		
Outcomes of Leadership	Male	37	2,7860	0,89657	0.782	0.06
EFF: Effectiveness	Female	65	2,7282	1,07300		
Outcomes of Leadership	Male	37	2,8108	0,95997	0.603	0.11
SAT: Satisfaction	Female	64	2,6953	1,13255		
Transformational	Male	37	2,5680	0,72196	0.659	0.09
	Female	66	2,6407	0,83744		
Passive Avoidant	Male	37	1,2827	0,73336	0.017	0.49
	Female	66	0,9104	0,75773		

* SD = Standard deviation; d = 0.2: small effect size; d = 0.5: medium effect size; d = 0.8: large effect size

The results of the independent samples t-test revealed significant differences between the mean scores of the different genders (i.e. male and female) for the Management by Exception (Passive) (MBEP) factor (p = 0.003) and for the passive avoidant dimension (p = 0.017), where males (MBEP: M = 1.51; passive avoidant: M = 1.28) scored higher than females (MBEP: M = 1.02; passive avoidant: M = 0.91); the effect sizes was medium (d = 0.62; d = 0.49). This implies that the males (more than the females) believed that passive avoidant techniques were used.

The ANOVA's revealed no significant differences between the group means of the marital status, nature of employment and WFH situation categories on the different leadership style and outcomes factors.

Spearman's rank-order correlation was used to determine the linear relationship of age, highest qualification, years working at the university and period WFH with the leadership style and outcomes factors. The results are indicated in Table 5.

Table 5: Correlation of age, highest qualification, years working at the university and period WFH with leadership style

		Age	Highest qualification	Years working at university	Period WFH
Transformational IA: Idealised Attributes	Correlation coefficient	-0,111	-0,160	-0,147	-0,165
	Sig. (2-tailed)	0,264	0,111	0,138	0,112
	N	103	101	103	94
Transformational IB: Idealised Behaviors	Correlation coefficient	-0,062	-0,125	-0,186	-0,141
	Sig. (2-tailed)	0,532	0,212	0,060	0,175
	N	103	101	103	94
Transformational IM: Inspirational Motivation	Correlation coefficient	-0,060	-0,145	-0,110	-0,162
	Sig. (2-tailed)	0,546	0,148	0,269	0,118
	N	103	101	103	94
Transformational IS: Intellectual Stimulation	Correlation coefficient	-0,038	-0,063	-0,110	-0,105
	Sig. (2-tailed)	0,702	0,531	0,266	0,313
	N	104	102	104	95
Transformational IC: Individual Consideration	Correlation coefficient	-0,047	-0,119	-0,077	-0,073
	Sig. (2-tailed)	0,639	0,237	0,440	0,482
	N	103	101	103	94
Transactional CR:	Correlation coefficient	-0,155	-0,181	-0,091	-0,126
	Sig. (2-tailed)	0,116	0,068	0,358	0,222

		Age	Highest qualification	Years working at university	Period WFH
Contingent Reward	N	104	102	104	95
Transactional MBEA: Mgmt by Exception (Active)	Correlation coefficient	0,098	-0,048	0,034	-0,076
	Sig. (2-tailed)	0,327	0,635	0,731	0,470
	N	102	100	102	93
Passive Avoidant MBEP: Mgmt by Exception (Passive)	Correlation coefficient	.230*	0,127	0,167	.203*
	Sig. (2-tailed)	0,019	0,204	0,089	0,049
	N	104	102	104	95
Passive Avoidant LF: *Laissez-Faire*	Correlation coefficient	.317**	0,097	0,173	0,086
	Sig. (2-tailed)	0,001	0,334	0,081	0,411
	N	103	101	103	94
Outcomes of Leadership EE: Extra Effort	Correlation coefficient	-0,090	-0,089	-0,026	-0,096
	Sig. (2-tailed)	0,370	0,380	0,795	0,363
	N	101	99	101	92
Outcomes of Leadership EFF: Effectiveness	Correlation coefficient	-0,106	-0,143	-0,081	-0,143
	Sig. (2-tailed)	0,288	0,156	0,418	0,173
	N	102	100	102	93

		Age	Highest qualification	Years working at university	Period WFH
Outcomes of Leadership SAT: Satisfaction	Correlation coefficient	-0,129	-0,197	-.202*	-0,186
	Sig. (2-tailed)	0,200	0,051	0,043	0,076
	N	101	99	101	92
Transformational	Correlation coefficient	-0,060	-0,134	-0,112	-0,145
	Sig. (2-tailed)	0,543	0,178	0,258	0,161
	N	104	102	104	95
Passive Avoidant	Correlation coefficient	.282**	0,141	0,186	0,193
	Sig. (2-tailed)	0,004	0,157	0,058	0,061
	N	104	102	104	95

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); (a) small effect: r = 0.1, (b) medium effect: r = 0.3 and (c) large effect: r > 0.5

Spearman's rank-order correlation coefficient revealed a significant small positive correlation between age and the passive avoidant dimension (p = 0.004, r = 0.282). Thus, the older the employees, the more they believed leaders avoided involvement in important issues, were absent when needed, and failed to intervene until work issues became severe.

A small negative correlation was found between years working at the university and Outcomes of leadership: satisfaction (p = 0.043, r = -0.202), implying that the longer academic personnel were employed at the university, the less satisfied they were with their leaders (i.e., satisfaction refers to employees' satisfaction with how their leader/s works with them, i.e. uses methods that are acceptable to staff).

A significant small positive correlation exists between periods WFH and passive avoidant: Management by exception (p = 0.049, r = 0.203), indicating that the longer the respondents worked from home, the more they held the view that leaders were not actively involved in issues that staff experienced during WFH, and only intervened when problems became severe.

Table 6 shows the correlations between the transformational, transactional, and passive avoidant leadership styles and leadership outcomes.

Table 6: Correlation between transformational, transactional and passive avoidant leadership styles and outcomes of leadership

		Outcome Extra Effort	Outcome Effectiveness	Outcome Satisfaction
Transformational leadership	Correlation coefficient	.788**	.814**	.818**
	Sig. (2-tailed)	0,000	0,000	0,000
	N	101	102	101
Passive avoidant leadership	Correlation coefficient	-.302**	-.390**	-.425**
	Sig. (2-tailed)	0,002	0,000	0,000
	N	101	102	101
Transactional leadership Contingent Reward	Correlation coefficient	.698**	.719**	.721**
	Sig. (2-tailed)	0,000	0,000	0,000
	N	101	102	101
Transactional leadership Management by Exception (Active)	Correlation coefficient	.223*	.205*	.200*
	Sig. (2-tailed)	0,026	0,039	0,046
	N	100	101	100

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed); (a) small effect: r = 0.1, (b) medium effect: r = 0.3 and (c) large effect: r > 0.5

The correlation analysis below considers how leadership outcomes were affected by transformational leadership and passive avoidant leadership. However, because transactional leadership did not form a reliable factor, the independent factors of transactional leadership (i.e., Contingent rewards (CR) and Management by Exception – Active (MBEA)) will be assessed individually for correlations with the outcomes of leadership.

From Table 6 it is evident that the transformational factors have large positive correlations with the outcomes factors, indicating that transformational leadership was the leadership style that was fit for purpose as the more leaders displayed transformational behaviors, the more academic personnel believed that the leadership approach was to their satisfaction, was effective in meeting their work needs, and held the view that leaders made an extra effort to get staff to do more.

Both passive avoidant factors have small to medium negative correlations with the outcomes factors, indicating that passive avoidant techniques were not conducive to WFH as the correlations show that the more passive avoidant leadership is used (although these were used rarely), the less respondents perceived leadership as effective in meeting respondents work

requirements, the less satisfied they would be with the manner of leadership received, and lastly, they would perceive leadership as not attaining extra effort from staff.

Finally, transactional leadership (Contingent Reward) has s significant large positive correlations with the outcome factors, indicating that the more leaders clarified expected work outcomes and rewards based on those outcomes, the more respondents believed that leadership was effective in meeting their work needs, were they satisfied with the manner of leadership received and the more they felt that leaders managed to get staff to go the extra mile (extra efforts). The mean score for Contingent Reward (M = 2.53) indicates that this technique was used sometimes to fairly often. Given its sizeable positive correlation with leadership outcomes, there is certainly room for improvement in using Contingent Reward. Contrary to the case with transactional leadership (Management by Exception – Active) where small positive correlations exist with leadership outcomes, respondents believed that although used occasionally, the more respondents were rectified for errors and deviances to specified compliance standards, the more the leadership outcomes would be achieved.

DISCUSSION

The study attempted to determine personnel's view of the leadership styles used by their leaders during the WFH period within private higher in South Africa.

The goodness-of-fit indices revealed that the model of measurement fits the data sampled in this study reasonably well on the 3-factor and 9-factor measurement models. Seven of the nine leadership style factors showed high reliability and internal consistency. The reliability and internal consistency of the transactional leadership (MBEA) factor were acceptable, and the passive avoidant (MBEP) factor was low.

The descriptive statistical analysis revealed that, on average, the personnel believed that leaders demonstrated transformational leadership during the WFH period, as the average mean score of transformational leadership was the highest of the leadership styles assessed. Transformational leadership, as noted in the literature review, refers to leaders' ability to inspire and encourage workers towards a common purpose, and are regarded as leaders that are visionaries with charismatic personalities that premise their leadership style on the promotion of positive work cultures (Yukl & Gardner, 2020).

Research conducted during the WFH period in the context of the COVID-19 pandemic revealed that transformational leadership had positive effects on engagement, the performance of employees, work culture, employee satisfaction (Sabaruddinsah & Asiah, 2022), and employee and organizational productivity (Khan *et al.*, 2020; Sabaruddinsah & Asiah, 2022). On the other hand, Meiryani *et al.* (2022) noted that transformational leadership does not significantly affect worker performance during WFH. Remote work, or WFH itself, was a driver of employee performance. These authors believe that a leader possesses the authority to assign tasks. Transformational leadership must be implemented strategically to influence employee performance positively (Collings *et al.*, 2021; Meiryani *et al.*, 2022). Regardless of these findings, there has been evidence to show that transformational leadership positively influences employee and worker productivity, employee engagement and job satisfaction during WFH, and therefore it can be concluded that personnel within this study were positively affected by the transformational leadership approach utilized by their leaders.

The comparison tests showed that leadership styles and outcomes are affected by gender, age, tenure and period of WFH.

Concerning gender, the independent sample t-test revealed that more male than female respondents believed leaders used passive avoidance leadership styles. This implies that more males believed leaders were reactive rather than proactive and only intervened when work issues became critical.

Spearman's correlation established a positive correlation between age and passive avoidance, indicating that the older the personnel were, the more they believed that leaders displayed passive avoidance traits. A study by Cheung *et al.* (2017) on Chinese aging workers found that age was related to perceptions of leadership style. The study found that the older the workers were, the more they perceived their leaders to be transactional leaders, as they believed that this was related to occupational and not personal growth. The study also found that passive avoidance (*laissez-faire*) leadership styles were negatively correlated with age, implying that older employees did not perceive leaders to show passive avoidance traits (Cheung *et al.*, 2017). The findings of Cheung *et al.*'s (2017) study opposes the results of this study, as this study found that the older employer is, the more they perceive their leaders to be absent when needed, avoids making decisions and delays responding to urgent matters (i.e., Passive Avoidance – Laissez -Faire) (Rowold, 2005).

A small negative correlation was revealed between years working at the institution and outcomes of leadership (satisfaction), where the longer academic personnel worked at the institution, the more they were satisfied with how leadership was received. A study supporting the correlation between tenure and leadership outcomes (satisfaction) could not be located and should be investigated further in future studies.

Spearman's rank-order correlation test revealed correlations between leadership styles (transformational leadership and passive avoidant) and leadership outcomes. It was revealed that the more transformational leaders were in their approach, the easier it would be to achieve the leadership outcomes (i.e., satisfaction, effectiveness and extra effort). In contrast, leadership outcomes would not be met if leaders opted to be passive avoidant. This can be explained by Rowold (2005), who argued that transformational leadership implies that employees believed that their leaders communicated with them optimistically regarding the future of the organization, were concise and encouraging regarding tasks that needed to be achieved and showed confidence in them about their ability to achieve those tasks (Rowold, 2005). This implies that leaders could give due attention to considerations of leadership required during the WFH during the global pandemic. This can be explained further by Uhl-Bein (2021), who referred to the challenge of effective leadership where appropriate, clear and concise communication is required from leaders for employees to be productive and engaged during WFH to meet leadership outcomes. Costin *et al.* (2023) indicated the need for leaders to consider the new characteristics (i.e., transformational leadership) of the WFH model to devise strategies to motivate and inspire workers during the pandemic to meet the objectives/outcomes of leadership. It can be assumed reasonably from the correlations that academic personnel received appropriate leadership (i.e., transformational leadership) during the WFH period that was effective in communication, inspiration and vision.

In conclusion, the study's primary results established that personnel held positive perceptions of the leadership they received during the WFH period amid the global COVID-19 pandemic. Despite the leadership challenges presented by the pandemic, leaders seem to have inspired and motivated workers remotely, allowing leadership outcomes to be achieved. The only concerns to note are the correlations related to how the leadership styles ranked by academic personnel were influenced by gender and age. In summary, however, it can be inferred that academic personnel were positive about the leadership they experienced through the pandemic

and could work succinctly with leaders to continue achieving the leadership outcomes of satisfaction, effectiveness and extra effort. However, it should be noted that due to respondents' belief that transformational leadership was utilized 'sometimes to fairly often,' there is undoubtedly room for improvement as it is regarded as the leadership approach conducive to WFH.

PRACTICAL IMPLICATIONS

The study, particularly the primary results, contributes positively to the knowledge surrounding leadership styles used during WFH within the context of South African private higher education. Private higher education in South Africa could utilize the findings of this study to understand the leadership needs during WFH and the recommendations below on strategies to enhance transformational leadership during WFH.

LIMITATIONS

This study was based on a single private higher education institution in South Africa, implying that the conclusions should not be generalized to higher education.

RECOMMENDATIONS

Although it was established that the leadership styles used within private higher education in South Africa during the WFH period were fit for purpose, the following enhancements could positively contribute to the successful remote leadership of academic personnel:

1. ***New communication regimes***. Leaders in remote work must adapt to new communication formats, given the virtual environment that higher education institutions operate in. Virtual mediums, such as Zoom, Microsoft Teams, and Skype should be promoted. Leaders ought to ensure that staff are appropriately trained in these mediums to enhance their comfort level in utilizing these technologies and have greater absorption rates. The challenge here is for leaders to be able to promote their leadership skills through these mediums. Conscious efforts must be made to ensure that staff members are communicated constantly to eradicate any negative effects of WFH. A feeling of connectedness with the organization and identifying positive work climates could be outcomes of conducive communication.
2. ***Enhancement of transformational leadership***. It has been established that transformational leadership is the approach succinct to the virtual world of work. Hence, institutions should ensure that leaders are constantly trained with personal development programs to enhance transformational leadership styles to inspire, motivate and satisfy employees within higher education. Institutions should provide development opportunities for leaders via online training sessions and workshops that provide leaders with the requisite skillset to lead in the 21st-century higher education environment.
3. ***Promotion of trust***. Although trust may be regarded as a social consideration, it is a key consideration of remote leadership. Given the lack of physical contact, leaders must demonstrate trust in team members as physical monitoring of employees is no longer available. Trust has been identified to be a crucial change required in remote leadership and would allow leaders to motivate their teams to achieve goals.
4. ***Emergent leadership***. Given the lack of physical contact and communication among peers, it would be difficult for leaders to be available to all staff in a virtual environment. Hence, leaders should adopt an emergent leadership mindset, whereby they identify candidates within their pool of staff who can be leaders to increase leadership presence in a remote world.

5. ***Agility and adaptability***. With the radical and fast-paced changes that the pandemic has brought to the operation of higher education, leaders need to be self-aware of their agility and adaptability to adapt to changing circumstances efficiently and effectively, which will allow leaders a deeper understanding of their team's personal and work needs. This may include digital literacy initiatives, new hybrid work models, and flexible work arrangements, to mention a few.

CONCLUSION

In summary, the COVID-19 pandemic has created a series of leadership challenges for both institutions and organization. Higher education was impacted rapidly by leadership challenges the WFH model brought about. These challenges required institutions to respond to the remote leadership needs of institutions progressively. The study set out to understand the perceptions of academic personnel surrounding the leadership styles or approaches that they experienced during the WFH period and concluded that academic personnel were positive about the leadership received and mentioned that their predominant experience from leaders was transformational leadership, which was identified in the literature as the appropriate style of leadership required to manage remote workers. Hence, despite the leadership challenges brought about by the pandemic and WFH specifically, the private higher education space in South Africa managed to thrive and overcome the leadership challenges, allowing the outcomes of leadership (particularly effectiveness and satisfaction) to be achieved. As noted previously, however, due to the results obtained from the primary study, there was room for improvements, particularly in the more frequent use of transformational leadership.

ACKNOWLEDGEMENTS

The researcher is immensely thankful for the support received by the supervisors of this study: Proff CJ Botha, CA Bisschoff and D Botha. Acknowledgement is also due to the higher education institution that partook in this study, the managers, academics, and support staff who formed the study's population.

COMPETING INTERESTS

The authors declare that no financial or personal relationship(s) of this study could have adversely influenced them in producing this article.

AUTHOR CONTRIBUTIONS

N.C. was responsible for conducting the literature review, the empirical study, and the article. C.B., D.B. and C.B. were responsible for supervising and reviewing the article. DB was the WFH topic specialist.

FUNDING

This study is self-funded (by the author and the author's institution of employment). There has been no other funding acquired for the study.

DATA AVAILABILITY

The data supporting this study's findings are available on request from the authors.

DISCLAIMER

The authors declare that the views expressed in this article are their own. It does not portray any official position of the institution under investigation.

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CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This is the concluding chapter of this study. The doctoral thesis consists of six chapters, whereby four of these chapters (i.e., Chapters 2, 3, 4 and 5) are stand-alone articles. Chapter 1 introduced and provided the context and aim of the study.

This final chapter, however, is the concluding chapter as it will draw on conclusions of each of the four sub studies (i.e., four articles) within this grand study and provide recommendations for the proposed integrated framework of the study. Due to the article format of this thesis, each article's main conclusions and recommendations are repeated in this chapter. By doing so, the chapter highlights how each article's primary objectives are met and then how they culminate in a final integrated framework for working from home (WFH) at a private higher education institution.

The chapter begins with an overview of the study and summarises the primary findings of each article. It presents the integrated framework, conclusions, and recommendations on the research methodology and findings. The chapter concludes with an indication of areas for further research and a study summary.

6.2 OVERVIEW OF THE STUDY

The primary intention of this study was to establish a conceptual framework for managing WFH within private higher education in South Africa. The following four antecedents were observed to develop this framework: 1) Perceptions of WFH, 2) Employee engagement, 3) Organisational commitment, and 4) Leadership styles. The rationale surrounding the observation of these antecedents was that these areas were highlighted within the literature as key considerations or critical success factors of WFH, particularly within the COVID-19 period. Hence, the study utilised this notion to measure these antecedents within the private higher education sector in South Africa and concluded, through appropriate statistical techniques, that these areas are also key considerations for private higher education in South Africa. The review of related literature and the primary findings collected from respondents related to the four antecedents allowed the establishment of a conceptual framework for managing WFH within private higher education in South Africa. Along with the framework, the study also provided recommendations for each of the observed antecedents for the

implementation and sustainability of WFH. A summary of each of the contributions made by the articles is presented below.

6.2.1 Chapter 2 (Article 1)

The primary objective of this article was to understand academic personnel's sentiments of WFH during the COVID-19 pandemic within private higher education in South Africa. The secondary objectives of this article focused on an exploration of existing WFH approaches, an analysis of academic personnel sentiments on WFH, and the provision of recommendations to overcome or maintain the WFH experience of academic personnel in private higher education in South Africa.

Private higher education has been identified as a solution to overcome the oversubscription of higher education in South Africa. However, given the radical shift to WFH during the pandemic due to the sudden announcement of the country's lockdown, prohibiting businesses and institutions from functioning from the office, higher education was faced with the paradox of continuing teaching and learning in an online (WFH) format that many institutions were unprepared for. Literature suggested that exploring employee perceptions was important in reaping the benefits of WFH. However, the article highlighted the absence of research surrounding exploring these perceptions within private higher education in South Africa. The article plugged this gap and revealed (through the exploratory factor analysis) that the conduciveness of WFH environments, WFH challenges, management and organisational support and social WFH challenges were imperative factors ascertained through understanding academic personnel perception of WFH. Although a general level of comfort was found through statistical analyses within these factors (except for social challenges experienced by academic personnel), which were all attributed to the institution's preparedness for WFH, these factors are still regarded as important and included in the proposed framework. As a result, article one identified employee perception of WFH as an important antecedent for the framework, comprising four factors for consideration (i.e. conduciveness of WFH environment, WFH challenges, management and organisational support and social challenges).

6.2.2 Chapter 3 (Article 2)

The primary objective of this study was to analyse the levels of engagement of academic personnel WFH during the COVID-19 period. This was achieved by assessing the levels of

engagement of these personnel, determining associations between selected variables, and recommending solutions to enhance the levels of engagement of these personnel.

The COVID-19 pandemic's solution of WFH has been found to impact employees' engagement levels positively and negatively, depending on how well the new work arrangement was executed. An analysis of the literature revealed, however, that there are no present studies that assess the engagement levels of academic personnel in private higher education in South Africa, the area of research that Article 2 contributed to. The Utrecht Work Engagement Scale (UWES) questionnaire was utilised to collect data on academic personnel engagement levels, and the confirmatory factors analysis revealed that the factors, vigour, dedication, and absorption, were important considerations of academic personnel engagement during WFH within the pandemic. The descriptive statistical analyses revealed that academic personnel could cope with the challenges of WFH and maintain healthy levels of engagement within the vigour, dedication, and absorption they exhibited towards their work. The article explains why the observed levels of engagement were displayed, which can collectively be an attestation of the appropriate way WFH was implemented by the private higher education institution under study. This refers to the positive work experiences of these personnel, such as autonomy, psychosocial safety, convenience, social unions, and organisational support. Nevertheless, more importantly, the article identified employee engagement as an important antecedent comprised of three observed factors (i.e., vigour, dedication and absorption) as key considerations for the conceptual framework of WFH for private higher education in South Africa. The article also recommends how these factors can be appropriately managed and enhanced in a WFH context.

6.2.3 Chapter 4 (Article 3)

The purpose of Article 3 was to investigate the levels of organisational commitment of academic personnel within private higher education in South Africa that have been WFH during the COVID-19 pandemic. This was achieved in this article by determining relationships between certain demographic variables and organisational commitment, drawing on conclusions from the literature review and empirical results on organisational commitment, and proposing recommendations to private higher education on enhancing organisational commitment during WFH.

Due to the impacts of the COVID-19 pandemic, literature has highlighted the effect that WFH has on organisational commitment. However, no study has highlighted the impact of WFH on the private higher education space in South Africa. Through various descriptive, inferential

and multivariate analyses, this study specifically demonstrated that academic personnel displayed acceptable levels of affective and normative commitment, indicating that personnel held an emotional connection with the institution and stayed within their portfolios as they believed it was morally correct to do so. However, due to personnel being neutral on continuous commitment, they believed their resignation would not negatively affect the institution. Regardless, personnel were found to be committed to the institution, and this was attributed to the effectiveness and conduciveness of WFH implementation during the pandemic. The article suggests that the Three-Component Model contained observed variables to serve as three antecedents (i.e. affective, normative and continuous commitment) for the framework for WFH within private higher education in South Africa. In addition, the article proposed recommendations for enhancing organisational commitment within private higher education.

6.2.4 Chapter 5 (Article 4)

The primary purpose of Article 4 was to ascertain the perception of academic personnel regarding the leadership styles of their leaders during the WFH period within private higher education in South Africa. This was achieved by assessing academic personnel's perceptions of leadership styles during WFH, identifying leadership challenges, and establishing relations between demographic variables and leadership during WFH.

The article highlighted the fundamental shift in leadership globally, as the pandemic has impacted business operations, thus requiring leaders to adapt to the new norm of remote leadership. However, the study highlighted that no research could be located that looked at academic personnel's perception of leadership received during WFH and aimed to overcome that gap. The Multifactor Leadership Questionnaire was used to determine personnel's perception of leadership. The findings of the study suggested that personnel held the view that the leadership received primarily surrounded aspects of transformational leadership, which was found to be fit for purpose and to positively impact worker satisfaction as the outcomes of leadership (i.e., achieving effectiveness, satisfaction and extra effort). The study also found that leaders did not utilise passive avoidant techniques, which literature has found to be an inhibiting leadership style during the pandemic. In addition, the article identified transformational leadership, passive avoidant leadership, transactional leadership and leadership outcomes as important antecedents for a framework for WFH within private higher education. The article concluded with recommendations on enhancing transformational leadership for private higher education in South Africa to realise leadership outcomes during WFH.

6.3 AN INTEGRATED FRAMEWORK TO MANAGE WFH AT SOUTH AFRICAN PRIVATE HIGHER EDUCATION INSTITUTIONS

This study aimed to establish an integrated framework for WFH within private higher education in South Africa. Establishing an integrated model comprises three steps (Tshivhase, 2023). These steps are:

Step 1: Identifying antecedents and their factors

Step 2: Confirming or validating these antecedents and factors

Step 3: Integrating the individual validated antecedents and their criteria into a final model.

6.3.1 Steps 1 and 2: Identifying and validating antecedents and factors

Regarding Steps 1 and 2, the study utilised identified antecedents from the previous four articles to establish a framework for WFH (as summarised in Figure 6.1). The framework comprised four antecedents (*Perceptions of WFH, Employee engagement, Organisational commitment and Perceptions of leadership styles*).

The final proposed framework comprises the four antecedents (as shown in Figure 6.1) and their respective factors (see Figure 6.2). The four antecedents are cumulatively explained by 13 factors for consideration during the successful rollout of WFH in private higher education in South Africa. All thirteen factors are highly reliable ($\alpha \leq 0.7$), as measured by the Cronbach alpha coefficient, and important ($\dot{x} \geq 0.60$) (Field, 2017). Confirmatory factor analysis validated and confirmed these factors for each antecedent, and the models possess good model fit metrics (see Figure 6.2). Because all 13 factors are valid, reliable, and important, the framework uses their mean values to rank them in order of declining importance. This means managers can identify and address the more important factors first to realise the highest return on their managerial interventions.

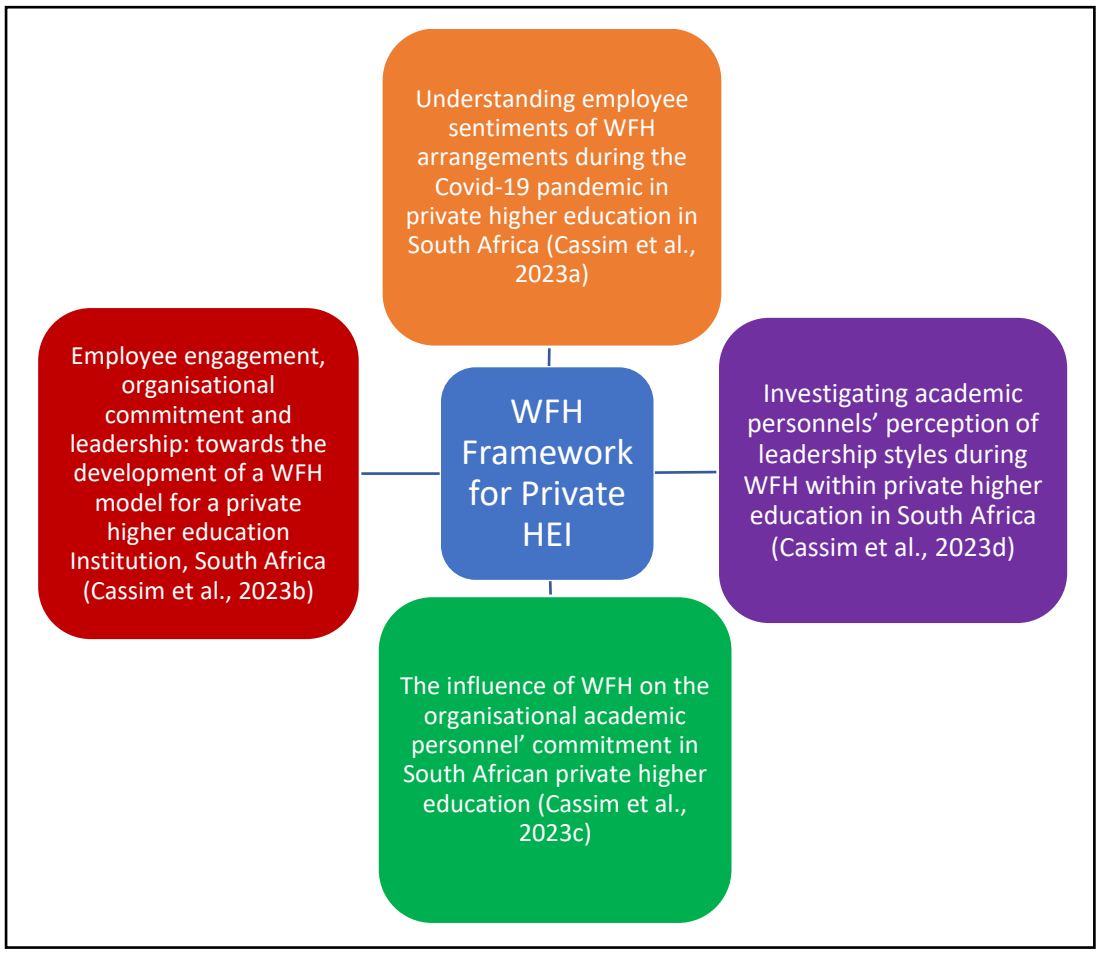
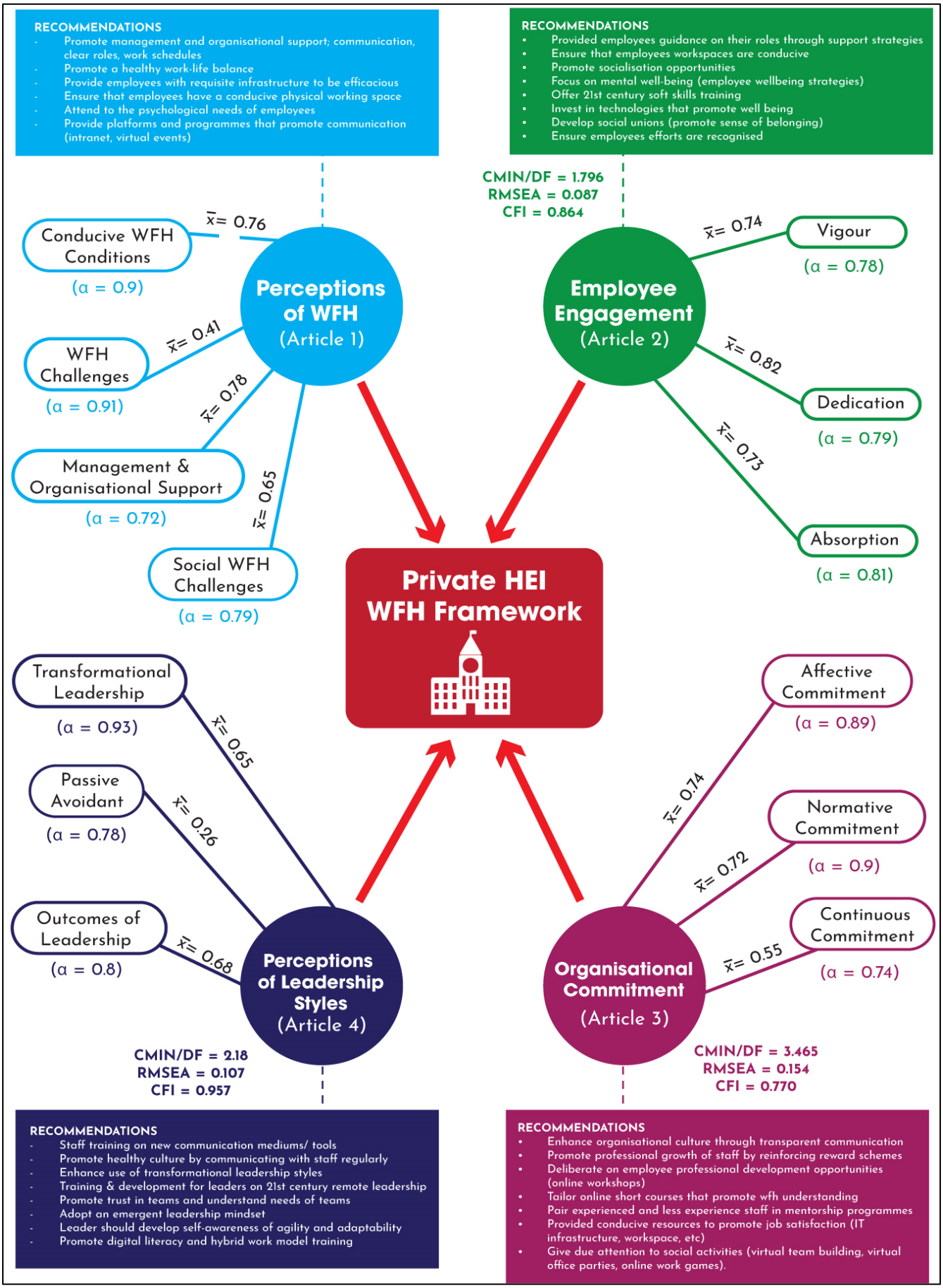


Figure 6.1: Antecedents in the WFH framework

In practice, this means that management should concentrate on the factors: *Establish strategies to sustain the dedication* ($\dot{x}$ = 0.82), *Appropriate management and organisational support is offered to staff during WFH* ($\dot{x}$ = 0.78), *Enhance vigour* ($\dot{x}$ = 0.74), *Sustain absorption levels* ($\dot{x}$ = 0.73), and *promote the establishment of Conducive WFH environments for staff* ($\dot{x}$ = 0.76). Likewise, managers should avoid activities associated with the least important factors. In this regard, managers should *Avoid passive avoidance leadership techniques in managing remote staff* ($\dot{x}$ = 0.26) and not over-concentrate on the *WFH challenges* ($\dot{x}$ = 0.41).

Figure 6.2: An integrated private HEI WFH Framework



6.3.2 Step 3: Integrating the individual validated antecedent models

Research indicates that an existing framework for WFH of higher education in Indonesia exists, but no framework could be located for South Africa. The Indonesian framework (developed by Afrianty *et al.,* 2022) confirms that management support and IT infrastructure are important considerations for a higher education framework but fail to consider psychosocial aspects of leadership, employee engagement, organisational commitment and WFH environments and challenges, which have all been identified previously as critical success factors (Afrianty *et al.*, 2022). A second existing framework proposed for the construction sector before the pandemic, developed by Saludin *et al.* (2013), seems to be a more inclusive framework for WFH. Their framework suggests that aspects such as working space, management styles, working hours, communication and organisational culture be considered to implement WFH successfully. Another pre-COVID-19 WFH framework, developed by Campbell and McDonald (2009), also proposes a more detailed approach to WFH by highlighting the need for management to consider IT support, organisational support, worker job satisfaction, competition and regulation, communications strategies, and work flexibility, for effectiveness in WFH models (Campbell & McDonald, 2009). While these models are more suited to the framework proposed by this study, they still negate WFH's social and psychological requirements (i.e., this could be attested to the frameworks proposed before the advent of COVID-19).

The New Jersey Department of Children and Families developed a fourth existing framework in the United States. The framework emphasises the need for management to prioritise organisational support, policy review, technology infrastructure and staff development for the effective rollout of WFH (Department of Children and Families, 2023). However, the framework focuses on the social governance wing of the public sector and excludes the higher education space. Regardless, the framework also lacks the focus on the social aspects of WFH (identified as a key consideration during the pandemic) (Department of Children and Families, 2023).

The lack of focused studies for higher education necessitates an integrated WFH model. As such, executing Step 3 became inevitable in this study. In Step 3, the four individual models for the identified antecedents are combined into one model. All these factors (see Figure 2) have been validated per individual antecedent (see Articles 1-4 in Chapters 2-5 for details). However, Step 3 also involves the inter-relationships within the integrated framework between individual factors of an antecedent and between the factors from different antecedents. The significant inter-relationships have been identified with Spearman’s rank correlation coefficient and validated using confirmatory factor analysis. In each case, the significance ($p \leq 0.05$) and

the strength of the relationships were determined using the standardised regression weights. The inter-relationship model fit was determined with the CMIN/DF, CFI and RMSEA (Arbuckle, 2020). The following internal models and relationships were identified and validated in the integrated model.

6.3.2.1 Model 1: Organisational commitment

Several factors and one antecedent *(Employee* engagement) showed significant relationships with the factor *Organisational commitment* at the 95% confidence level ($p \leq 0.05$). Table 1 shows these variables and their relationships.

Table 6.1: Organisational commitment

Independent variables	**Relationship**
Employee engagement	.738
Leadership outcome: Satisfaction	.509
Leadership outcome: Effectiveness	.444
Leadership outcome: Extra Effort	.431
Transactional leadership style	.391
Management & Organisational Support	.367
Social WFH challenges	.244
Passive avoidant leadership style	.237

6.3.2.2 Model 2: Conducive WFH environment

The second model deals with the Conducive WFH environment and its relationships with significant independent variables. Table 2 shows these variables and their relationships.

Table 2: Conducive WFH Environment

Independent variables	**Relationship**
WFH challenges	-.621
Social challenges	-.337
Management and organisational support	.267

The Conducive WFH environment, as expected, correlated negatively with the challenges when working from home. The variable WFH challenges (r=-.621) has a strong and significant negative relationship with the Conducive WFH environment, while the Social challenges has a medium significant negative relationship (r=-.337). Interestingly, managerial and

organisational support only has a weak significant positive relationship with the Conducive WFH environment (r=.267).

6.3.2.3 Model 3: Leadership outcomes

The third model deals with Leadership outcomes and their relationships with significant independent variables. Table 3 shows these variables and their relationships.

Table 3: Leadership outcomes

Independent variables	**Relationship**
Extra effort	.929
Satisfaction	.923
Efficiency	.912
Commitment	.175
Social challenges	.117
Passive avoidant	-.268
Management and organisational support	.022
Leadership	.784

Table 3 shows that Leadership outcomes have strong, significant positive relationships ($r \geq 0.5$) with Leadership, Extra effort, Efficiency and Satisfaction ($p \leq 0.05$) (Field, 2017; Pallant, 2020). Interestingly, Transactional leadership did not show a significant relationship with Leadership outcomes regarding WFH. The other significant relationships in Table 3 are low ($r \leq 0.3$) and have little practical implications on Leadership outcomes. The Passive avoidant leadership style has a small significant negative relationship with Leadership outcomes ($r=-0.268$; $p \leq 0.05$) regarding WFH.

6.3.2.4 Model metrics

The three models' fit indices and reliability are discussed in Table 4 below.

Table 4: Model fit and reliability

Model	**CMIN/DF**	**CFI**	**RMSEA**	**Alpha**
Model 1: Organisational commitment	1.978	.818	.097	.567
Model 2: Conducive WFH Environment	1.869	.873	.091	.899
Model 3: Leadership outcomes	1.849	.877	.090	.426

Table 4 shows satisfactory fit indices. RMSEA is below the required 0.10 but not below the ideal index of 0.08. Likewise, the CFI exceeds 0.80 but does not achieve the desired 0.90 index. However, the CMIN/DF is excellent and well below the ideal value of three (Arbuckle, 2020). Although all the indices are not ideal, they are satisfactory because this study is exploratory. In addition, these three models are internal models generated within the integrated framework's main structural models. The internal models are useable and can be operationalised in practice.

Model 2 shows excellent reliability (α≥0.70), while Model 1's reliability is bordering the lower levels of acceptable reliability (α≥0.57) (Field, 2017, Cortina, 1993). Model 3 is not reliable but useable (α≥0.29) (Cortina, 1993). In practice, this means that although Model 3 is unlikely to represent itself in repetitive studies, it is still important to this specific study and the private higher institution under investigation.

6.4 CONTRIBUTION OF THE INTEGRATED FRAMEWORK

This study extends beyond the previously proposed transactional frameworks and provides a comprehensive framework that considers surrounding factors impacting the success of WFH in private higher education. Although antecedents were of differing priorities, the framework comprises a practical modality for senior management of private higher education to consider for the effective implementation and continuity of WFH for academic personnel. The framework has been established utilising contemporary literature and primary findings, thereby allowing private higher education to remain competitive in the ever-evolving educational landscape occupied by the complexities of digital transformation.

These antecedents are cumulatively explained by 13 factors for consideration during the successful rollout of WFH in private higher education in South Africa. These factors have been confirmed and validated by confirmatory factors analysis, and all the models have good fits.

The proposed framework was also compared to existing WFH frameworks, and it concluded that it could be regarded as a more holistic and comprehensive framework for WFH for private higher education in South Africa. Previous frameworks did not consider managing the psychosocial aspects of WFH. Hence, this study makes a fundamental and viable contribution to the management of WFH because its framework considers antecedents and factors overlooked or omitted by other researchers in their models and frameworks. In addition, the study is the first to propose a WFH framework for private higher education in South Africa.

6.5 CONCLUSIONS AND RECOMMENDATIONS

This section summarises the main conclusions and recommendations of the study. While specific conclusions and recommendations on specific factors were provided within each article, this section considers this study's overall methodological and primary conclusions. In addition, each conclusion is followed by a corresponding recommendation. As an example, *Conclusion 1* is followed by *Recommendation 1.*

Conclusion 1:

The literature review included the most recent studies and afforded a conducive and solid foundation for the theoretical underpinning of the study. The literature review identified the variables that affect the study, the identification of gaps within the existing body of knowledge, the theoretical foundation of the study, and the confirmation of the variables used in this study. As a result, the researcher was confident in measuring WFH in a private higher education context, as the literature review illustrated that most recent factors affecting work-from-home related to the antecedents of perception, engagement, commitment and leadership.

Recommendation 1:

It is recommended that future research utilise a similar approach to provide rigour to their studies through the appropriation of a sound theoretical approach. Considering the generic nature of WFH, it is recommended that the approach be used in sectors outside of private higher education in South Africa.

Conclusion 2:

Relating to conclusion 1, the rigour displayed in the literature review allowed for validating the data collection instrument. The literature review identified factors that existed in the adapted measuring instrument, thereby identifying the instrument as fit for purpose. The conclusion is that the rigour of the literature reviewed allowed for confidence in adapting the research instrument.

Recommendation 2:

As a recommendation, it is strongly advised that a sound literature review be performed as a basis of a measuring instrument for further studies. In other words, a solid literature review would be able to advise researchers of their intended data collection instrument in terms of conduciveness and suitability. This would be valuable in both instances, i.e., advising researchers of variables to measure without an existing instrument and advising researchers of the appropriateness of existing instruments.

Conclusion 3 (Article 1)

Article 1 concluded that academic personnel working from home during the pandemic could sustain productivity and work satisfaction as they could overcome the anxieties and challenges of the pandemic and the WFH arrangement. More specifically, the article concluded that there are four factors, derived from an exploratory factor analysis, that management should consider for effective management of WFH within private higher education in South Africa. These were conducive WFH environments, WFH challenges, Organisational and Management Support, and Social Challenges. The statistical analyses found that academic personnel within private higher education in South Africa demonstrated comfort in these areas and held positive sentiments about the WFH arrangement. However, personnel did indicate that they experienced social challenges due to the disruption in their work and personal routines and the lack of communication with their colleagues.

Recommendation 3

It is recommended that a similar study be conducted in the public higher education sector in South Africa to ascertain the relationship with the variables regarding the perception of WFH. It is also recommended that a further literature review and primary study be conducted after the COVID-19 lockdown to determine if academic personnel still withhold similar sentiments to WFH and if any of the sentiments regarding the issue of social challenges, for example, still exist.

Conclusion 4 (Article 2)

The conclusion of article 2 was that despite the challenges of WFH, brought about through the radical shift to the new work arrangement, academic personnel could sustain high levels of engagement. It was concluded that the sustenance of engagement was due to positive drivers such as work autonomy, psychosocial safety, convenience, social union, and the most important driver, management and organisational support. As a result, personnel displayed high levels of vigour, dedication and absorption. The article also concluded that these are the three factors that should be regarded in managing engagement during WFH within private higher education in South Africa.

Recommendation 4

It is recommended that a longitudinal study be conducted on the engagement levels of academic personnel in private higher education. As many higher educational institutions will continue to teach and assess online, the WFH was considered a viable arrangement for the foreseeable future. Hence, it would be beneficial to ascertain employee engagement levels

post the COVID-19 lockdown on personnel who are still WFH (i.e. to determine fluctuations in engagement levels, if any). It would be plausible to conduct studies on private institutions that are no longer WFH to determine if there are differences in staff engagement levels. This would assist in advising on the suitable work arrangement conducive to employee engagement.

Conclusion 5 (Article 3)

Article 3 concluded that academic personnel displayed strong levels of organisational commitment during the WFH period. Due to the complexities of the pandemic, compounded by the radical shifts to WFH, organisational commitment levels were anticipated to decline. However, Article 3 concluded that the organisational commitment of academic personnel was sustained, particularly regarding affective and normative commitment. The study further concluded that the sustained commitment of personnel was ascribed to positive work factors such as social support, work resources, job satisfaction, communication and organisational support. The study also established a good fit with the Three-component Model (TCM) of employee commitment, which implied the need for considering affective, normative and continuance commitment as factors for a framework for managing WFH in private higher education.

Recommendation 5

Like recommendation 4, it is strongly recommended that a follow-up study be conducted on academic personnel's commitment levels post the COVID-19 WFH period. Because this study was done during the COVID-19 pandemic, the results could have been influenced by the struggles and uneasiness of the pandemic. Hence, despite the positive commitment levels found in academic personnel, it would be interesting to note any variations in these levels of commitment, indicating the influence of the pandemic on commitment. It is also recommended that a study be conducted in public higher education to determine if the sentiment and experience of organisational commitment were similar.

Conclusion 6 (Article 4)

The article concluded that the leadership styles utilised during the WFH period, within the pandemic, were conducive to the WFH arrangement. Academic personnel held strong sentiments that the leadership received was transformational rather than transactional or passive avoidant and expressed that the leadership outcomes have been met. It is concluded that the leadership received from the institution was fit for purpose, as literature highlighted that transformational leadership was the appropriate approach required during WFH. The findings of other articles that showed high levels of engagement and organisational commitment could also testify to the appropriateness of transformational leadership within

private higher education as a solution to the leadership challenges of the pandemic. The article further concluded that four factors should be included in the framework for WFH in private higher education.

Recommendation 6

Unlike previous recommendations, for Article 4, it is recommended that a qualitative study be conducted to understand the fundamentals of leadership sentiment shared by academic personnel. Through open-ended interviews, staff could provide in-depth accounts of their leadership experiences. As leadership is a diverse and ever-evolving concept constantly affected by many variables, it would be useful to ascertain in-depth experiences and opinions of leadership. This could also be extended to individuals in leadership positions as a reflection of their leadership capacity and approach. The outcome of this exercise could be the development of a leadership framework for WFH within private higher education, as this gap exists in research.

Conclusion 7 (Final framework – see 6.3)

The conclusion is that there was a need for a WFH framework for private higher education in South Africa, as no framework existed. The article concluded that four antecedents comprised 13 factors were proposed as a framework for WFH in private higher education. In addition, the article added that due to the lack of or misalignment of existing WFH frameworks, the framework proposed by this article is considered a more holistic approach that would assist private higher education in effectively managing WFH. Additionally, due to the generic nature of WFH, the framework could be assessed for public higher education and sectors outside of higher education in general.

Recommendation 7

Although referred to the versatility of the framework (i.e., its suitability for other sectors), it is recommended that a similar literature study be conducted for other sectors for insight into the required antecedents of managing WFH. In this respect, a comprehensive framework can be established for WFH, despite the sector, as commonalities were found in the factors affecting WFH between other sectors and private higher education. It is a reasonable assumption that this proposed framework should be investigated as a point of departure. It could be adapted or changed, if necessary, to act as a framework for managing WFH across industries.

6.6 AREAS FOR FURTHER RESEARCH

This study proposes the following broad areas for further research:

- An in-depth comparative study could be done where the study is extended to public higher education in South Africa to determine the suitability of the WFH framework for higher education in general, in South Africa.
- Considering the factors affecting WFH are generic and could be extended to sectors other than higher education, the study could be conducted in other industries within South Africa (such as in the supply chain or in agriculture, to name a few) to determine the suitability and fit of the framework for managing WFH in these industries.
- A follow-up study could serve as a longitudinal study to gain insight into the identified antecedents within the framework, post the COVID-19 WFH arrangement, to determine if the factors within the antecedents are still observed or if there were amendments to these factors that would impact the proposed framework.
- A qualitative study of a similar nature could be conducted to probe and acquire more insight into the identified variables of the study. The richness of data gathered from a qualitative study could more holistically explore the impact of each of these variables.
- Finally, the demographic differences found within each article serve as interesting studies, where, for example, the research could determine how tenure impacts the perception of WFH or organisational commitment during WFH. These studies on demographic variables could provide more insight to be included in the framework proposed by this study.

6.7 SUMMARY

COVID-19 has brought about unprecedented changes to how people work within private higher education in South Africa. The abrupt shift to remote work (i.e. WFH) has created new challenges for academic personnel in maintaining engagement, perception of work, organisational commitment, and leadership styles. The pandemic has mandated traditional contact with higher education institutions into e-learning and digital teaching and learning for the continuation of teaching, learning and assessment during the pandemic. Private higher education institutions, like higher education institutions in general, were required to acclimate to this era of complexity and ensure that students still receive quality higher education.

The study set out to develop a WFH framework for private higher education in South Africa. Through the investigation of key antecedents that were found to be affected by WFH (i.e. employee perceptions, employee engagement, organisational commitment and leadership styles), the study was able to establish a framework comprised of 13 factors that are

categorised into these four antecedents. In doing so, the study has contributed to overcoming crucial gaps within the current body of knowledge. This is mainly related to the absence of research surrounding these antecedents within private higher education in South Africa and the lack of WFH frameworks for private higher education in the country. The results of this study have provided meaningful insights into the effects of remote work on academic personnel and informed best practices for supporting these personnel during the ongoing pandemic and beyond, intending to provide a framework for WFH in private higher education. This study is critical to ensuring that academic personnel in private higher education institutions in South Africa continue to thrive professionally and personally in the face of ongoing challenges posed by the COVID-19 pandemic and beyond.

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ANNEXURE 1: INFORMATION LEAFLET AND CONSENT FORM

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

You are invited to participate in a research study titled **Employee engagement, WFH, organisation commitment and leadership styles in a higher education institution, South Africa**. This study will be conducted by Mr Nadeem Cassim, a PhD student at North-West University (NWU).

Please take some time to read the information presented here, which explains the details of this study. Please ask the researchers any questions about any part of this study that you do not fully understand. You must fully understand what this research is about and how you could be involved.

This study has been approved by the Economic and Management Sciences Ethical Committee (EMS-REC) (NWU-01253-21-S4). It might be necessary for the Research Ethics Committee members or relevant authorities to inspect the research records to ensure that the researcher is conducting research ethically.

What is this research study all about?

This research aims to determine the perceptions of employees regarding engagement, organisational commitment and leadership styles and to ascertain how they are affected by WFH during the COVID-19 pandemic.

Who will be taking part in the study?

You can participate in this study if you are a staff member who worked or is still WFH during the COVID-19 pandemic. Therefore, employees with full-time, fixed-term and temporary employment contracts will be included. Inputs are required from all staff members for a comprehensive view of engagement levels, WFH, organisational commitment and leadership styles during the COVID-19 pandemic. No one will be excluded based on age, gender or ethnicity. To be able to complete the questionnaire, participants should have English language proficiency skills of Grade 10 or above, access to a computer and an Internet connection.

Do I have to participate?

Your participation is entirely voluntary, and you can refuse to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you agree to take part. You may also withdraw the data you generated before publication of the study's results (or the point where publication is in process).

How will the data be collected?

A short electronic survey will be used to obtain information, and it will take approximately 20 minutes of your time to complete the survey online.

Are there risks involved in participating in this research and how will these be managed?

This study has been classified as minimum risk, and you are only asked to provide about 20 minutes of your time to complete the electronic survey. If you experience any discomfort, you can skip a question you do not want to answer or do not feel uncomfortable answering. You can withdraw from the study at any time. Furthermore, the information provided by you in this questionnaire will not be used in any manner that would allow identification of your responses. The findings will be reported anonymously as group findings, not individual ones. The data gathered will be captured in a database, statistically analysed, and used for research purposes.

What will happen to the data?

The data will be analysed and written up by the researchers for submission to accredited scientific journals for publication. These publications will be available on the University's repository in the library catalogue and online on the respective publishers' sites.

Who can I contact for more information or to ask questions?

Should you require any further information about any aspect of this study and/or want feedback on the study, please contact Mr Nadeem Cassim.

INFORMED CONSENT:

- I understand the purpose and nature of this study, and I am participating voluntarily.
- I understand that I can withdraw from the study any time, without any penalty or consequences.
- I agree that the information that I provided may be used for research purposes.

I agree	
I do not agree	

ANNEXURE 2: QUESTIONNAIRE

The *Multifactor Leadership Questionnaire questionnaire* is copyright-protected and may not be published.

ANNEXURE 3: LETTER FROM LANGUAGE EDITOR

Dynamic Language & Translation Specialists

Antoinette Bisschoff
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Potchefstroom
Tel: 018 293 3046
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Language@dlts.co.za
CC No: 1995/017794/23

Monday, 28 August 2023

To whom it may concern

Re: Confirmation of language edit, typography and technical precision

The PhD thesis **"A work-from-home framework for the South African private higher education institutions"** by **Nadeem Cassim** (40838773) was edited for language and technical precision. Citation and reference list guidelines in Chapters two to five comply to the specific journal guidelines, while Chapters one and six adhere to the NWU guidelines as per the 2020 Post-graduate manual.

Final, last-minute corrections remain the responsibility of the author.

Antoinette Bisschoff

BA Languages (UPE – now NMU); MBA (PU for CHE – now NWU); Translation and Linguistic Studies (NWU)

Officially approved language editor of the NWU since 1998
Member of SA Translators Institute (no. 100181)

Precision ... to the last letter

ANNEXURE 4: STATISTICAL TABLES

ARTICLE 1 TABLES

TABLE 1: KMO and Bartlett's test of sphericity

KMO and Bartlett's test		
KMO measure of sampling adequacy		0.849
	Approx. chi-square	1845.161
	df	378
	Sig.	0.000

TABLE 2: Total variance explained

	Initial eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings[a]
Component	Total	% of variance	Total	Total	% of variance	Cumulative %	Total
1	10.008	35.744	35.744	10.008	35.744	35.744	8.134
2	3.302	11.794	47.538	3.302	11.794	47.538	7.356
3	2.211	7.896	55.434	2.211	7.896	55.434	2.825
4	1.859	6.640	62.075	1.859	6.640	62.075	3.747

Table 3: Pattern matrix[a] of WFH

	Work from home				
	Item	**Factor 1**	**Factor 2**	**Factor 3**	**Factor 4**
		CON WFH	**WFH CH**	**O & M SUP**	**SOC CH**
C4	The physical conditions at my home afford a good working environment (desk and chair, sufficient light, quietness, good monitor, etc.).	0.848			
C9	My family supports me while I am working from home.	0.791			
C6	I have access to sufficient internet data to do my work effectively when working from home.	0.782			
C15	I prefer to continue to work from home.	0.749			
C8	I have sufficient time to focus on my work without interruptions from other people when working from home.	0.743			
C1	I enjoy working from home.	0.743			
C3	I have a suitable workspace to work from home.	0.723			
C7	I am able to manage my time effectively while working from home.	0.718			
C5	I have sufficient physical equipment at home (e.g. devices, printer, scanner, etc.) that contributes to effective functioning while working from home.	0.690			
C10	I have a health ywork–life balance when working from home.	0.628			
*C16	I am more productive working in an office than working from home.	-0.398			
C26	Anxiety about the impact of the coronavirus on my life prohibits me from functioning effectively while working from home.		0.875		
C24	Too many distractions at home prohibit me from functioning effectively while I am working from home.		0.769		
C20	I find it difficult to keep focused on work when I am working from home.		0.751		
C23	My household responsibilities (e.g. childcare, cleaning, gardening) prohibit me from functioning effectively while I am working from home.		0.750		
C27	Keeping a regular schedule prohibits me from functioning effectively while I am working from home.		0.712		
C28	I feel socially isolated when I am working from home.		0.610		

C14	My manager supports me while I am working from home.			0.865	
C11	I feel the organisation trusts me while I am working from home.			0.687	
C13	I am in regular contact with my manager.			0.665	
C2	I have the support from the organisation to work from home.			0.662	
C21	I am working more hours than normal when I am working from home.				0.846
C19	I feel tied to my computer to a greater extent than at my workplace while I am working from home.				0.844
C22	I do not get enough exercise when I am working from home.				0.634
C17	I miss the interactions with my fellow employees.				0.508
	Cronbach's alpha	0.919	0.910	0.723	0.795
	Factor mean	3.825	2.099	3.935	3.261
	Factor standard deviation	0.805	0.815	0.712	0.899

*C16 was reversed scored when reliability was calculated.

CON WFH = Conducive WFH environment; WFH CH = WFH challenges, O & M SUP = Organisational and management support, and SOC CH = Social challenges)

Source: Authors' own compilation (2023)