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

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Abstract.

The Covid-19 pandemic has transformed the nature of work, with the implementation of the Work from Home (WFH) arrangement. This change has implied a series of considerations for business operations, including leadership. The purpose of this study is to ascertain academic personnel's view on the leadership received during the WFH period, to assess the leadership styles used, as well as measure the achievement of the outcomes of leadership. The study was conducted within private higher education in South Africa. Whilst some studies assess the leadership styles during the WFH period, no study could be located that assesses this phenomenon within higher education, as well as private higher education in South Africa, to be specific. The study utilised a quantitative research methodology with a cross-sectional design and a positivist research paradigm. The target population included all academic personnel within the 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 give due consideration to the leadership suggestions recommended in this study, to ensure that leadership approaches are conducive to WFH. This study contributes to literature surrounding the concept of leadership within the WFH period, within private higher education.

Keywords: work-from-home, WFH, education, teaching, leadership

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1. Introduction

The COVID-19 pandemic had a worldwide impact on the nature of business, forcing The Covid-19 pandemic has transform the nature of work, with the implementation of the Work from Home (WFH) arrangement. This change has implied a series of considerations for business operations, including leadership. The purpose of this study is to ascertain academic personnel's view on the leadership received during the WFH period, to assess the leadership styles used, as well as measure the achievement of the outcomes of leadership. The study was conducted within private higher education in South Africa. Whilst some studies assess the leadership styles during the WFH period, no study could be located that assesses this phenomenon within higher education, as well as private higher education in South Africa, to be specific. The study utilised a quantitative research methodology with a cross-sectional design and a positivist research paradigm. The target population included all academic personnel within the 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 give due consideration to the leadership suggestions recommended in this study, to ensure that leadership approaches are conducive to WFH. This study contributes to literature surrounding the concept of leadership within the WFH period, within private higher education.

Organisations, 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 utilising 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



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(Kiziloglu, 2022). Subsequently, organisations were exposed to dynamic challenges that 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 the successful implementation and continuation of WFH are agility and adaptability (Tautz *et al.*, 2022). Specifically, organisations 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 that are 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 the continuation of teaching and learning, as well as for 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 organisational 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 utilised during the Covid-19 WFH period and whether the leadership outcomes were achieved.

2. 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' perceptions of the leadership styles



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adopted, and third, based on the literature review and empirical results to suggest recommendations for effective leadership during WFH.

3. Literature review

3.1 Defining leadership

Leadership is regarded as a complex and multi-faceted organisational 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 utilising one's authority, the charisma of a leader, subject knowledge and skillset, which gives rise to the types of leadership that organisations experience (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 organisational objective (Bass & Riggio, 2006).

One commonly used way of conceptualising the term leadership is by viewing it as a series of traits or criteria connected to conducive leadership. This approach assumes that 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 scrutinised and criticised for its inability to include situational factors that play a crucial role in shaping the behaviours of leadership (Northouse, 2018).

A second approach to conceptualising leadership is to view leaders as individuals with specific behaviours and implement actions associated with qualitative leadership (Avolio & Yammarino, 2013). This approach suggests that a leader's ability is learned behaviour, and it is a set of characteristics that can be developed, as opposed to the previous conceptualisation, which believed that leadership is solely an outcome of innate behaviours 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 conceptualising 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 behaviours (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



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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 characteristics of leadership from the medieval periods towards the early modern times, 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 emphasised 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 conceptualisation 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.

3.2. 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.

3.2.1. 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 organisational 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 recognised for influencing and encouraging his employees to relentlessly innovate and ensure customer satisfaction (Gradinaru *et al.*, 2020).



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3.2.2. Transactional leadership

Transactional leadership is another style of leadership that regards the incentives of 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 that 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 incentivized employees to meet productivity goals and for punishing employees through dismissals for not performing up to the required standard (Northouse, 2021).

3.2.3. 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 focussing on their personal goals and objectives (Avolio & Yammarino, 2013; Yukl & Gardner, 2020). Servant leaders are regarded generally as those who 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 handling staff respectfully and with dignity (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).

3.2.4. 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 pronounced as calm and casual, allowing workers a sense of 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 regarded as a multi-faceted concept that has evolved in its definitional characteristics over time, indicating shifts in the social, economic, and political



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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.

3.3. Outcomes of leadership

Leadership is an essential component of any profitable organisation. The outcomes of leadership 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 allow them 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).

Organisational productivity. Organisational 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 organisational performance during the Covid-19 pandemic demonstrated that leadership was correlated positively to the productivity of an organisation. These researchers found that transformational leadership was positively related to organisational productivity, as transformational leaders are in a better position to inspire and motivate employees to achieve individual and overall organisational goals, thereby enhancing organisational productivity (Khan *et al.*, 2020). This is also because transformational leaders create an environment where employees hold a shared organisational 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 DeCuyper 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. A study by Achen *et al.* (2019) found that servant leadership was positively related to employee retention. Servant leaders are known for prioritising the needs and welfare of staff, which in turn creates a sense of loyalty and dedication among staff (Goleman *et al.*, 2013). This results in greater employee satisfaction and commitment to the organisation, thereby positively impacting



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retention rates, as workers are more likely to remain with an organisation 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 organisational 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 organisations, 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, organisational 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).

3.4. Leadership and WFH

The Covid-19 pandemic has resulted in unprecedented changes in the world of work, with many employees being mandated to WFH. Not only did the WFH shift how workers function and perform their tasks, but also how leaders manage their teams in a virtual setting (Collings *et al.*, 2021). By far, 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 being 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 organisation 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



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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 a work and personal perspective (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 emphasised 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.

3.5. 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.

Whilst 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 communication 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



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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 cognisant 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 organisational 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.

3.6. 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



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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 organisations globally faced WFH challenges, such as adjustments to WFH, work-life balance issues, 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 whilst 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.

4. Research methodology



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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 analyse and categorise 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.

4.1. 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 utilised in the study (Dawson, 2019). A response rate of 79% (N=133; n=105) was realised.

4.2. 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 organisation, 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 behaviours 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,



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2004). The MLQ questionnaire has been used in various studies and produced reliable data with high internal consistency (Bass & Avolio, 2004).

4.3. Data analysis

The data obtained from participants was put through various statistical methods, which included 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 summarised 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. Lastly, Spearman's rank-order correlation coefficient evaluated the strength and direction of the association between ranked variables.

4.4. Ethical considerations

All ethical considerations of research were diligently addressed in this study. 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 (i.e., ethics number NWU-01253-21-A4).

5. Empirical results

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

Socio-demographic information

The respondents involved in the study were all South African 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



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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.

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



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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



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How long have you been working from home 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 working from home 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

6. 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 as Field (2017) suggested. The factor loading of question 6 was 0.296 on the Idealised Behaviour 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 the 0.05 level, 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, the 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
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Characteristic	Scale abbreviation and name	Cronbach's alpha	N	*Min	*Max	Mean	*SD
Transformational	IA: Idealised Attributes	0.801	103	0.00	4.00	2.6804	0.96289
Transformational	IB: Idealised Behaviours	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 (Idealised 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 behaviours 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 recognised efforts by rewarding staff when work goals were met.



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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, occasionally, utilise 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 held the view that the institution's leadership demonstrated transformational leadership behaviours 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 utilise 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 utilised 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 (comparative fit index), 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, a smaller than three ratios 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 1 would indicate a perfect fit, whilst 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 value of zero, while a value below 0.05 is a good fit. Steiger (1990) mentioned that RMSEA scores between 0.05 and 0.08 are acceptable, whilst 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



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Goodness-of-model-fit indices

Fit index	Rule	Author	Model score: Nine-factor	Result	Model score: Three-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 <i>et al.</i> (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]).

7. 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.



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TABLE 4: Association of gender with leadership style

Group statistics					Independent sample t-test	
	Gender	N	Mean	SD	P-value	Effect size
Transformational IA: Idealised Attributes	Male	37	2,6712	0,85028	0.789	0.06
	Female	65	2,7231	0,98833		
Transformational IB: Idealised Behaviours	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 EE: Extra Effort	Male	37	2,7477	0,73872	0.708	0.07
	Female	64	2,6823	0,99811		
Outcomes of Leadership	Male	37	2,7860	0,89657	0.782	0.06
	Female	65	2,7282	1,07300		



Group statistics					Independent sample t-test	
	Gender	N	Mean	SD	P-value	Effect size
EFF: Effectiveness						
Outcomes of Leadership	Male	37	2,8108	0,95997	0.603	0.11
	Female	64	2,6953	1,13255		
SAT: Satisfaction	Male	37	2,5680	0,72196	0.659	0.09
	Female	66	2,6407	0,83744		
Transformational	Male	37	1,2827	0,73336	0.017	0.49
	Female	66	0,9104	0,75773		
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 working from home 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 working from home with leadership style

		Age	Highest qualification	Years working at the university	Period working from home
Transformational	Correlation coefficient	-0,111	-0,160	-0,147	-0,165



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		Age	Highest qualification	Years working at university	Period working from home
IA: Idealised Attributes	Sig. (2-tailed)	0,264	0,111	0,138	0,112
	N	103	101	103	94
Transformational IB: Idealised Behaviours	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: Contingent Reward	Correlation coefficient	-0,155	-0,181	-0,091	-0,126
	Sig. (2-tailed)	0,116	0,068	0,358	0,222
	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



		Age	Highest qualification	Years working at university	Period working from home
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
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 working from home 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: $r > 0.5$



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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 behaviours, 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 rarely used), 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 a 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 and given the sizeable positive correlation it has with the outcomes of leadership, 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 the outcomes of leadership, 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.

8. 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



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score of transformational leadership was the highest of the leadership styles assessed. Transformational leadership, as noted in the literature review, refers to focuses on 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 organisational 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 utilised by their leaders.

The comparison tests showed that leadership styles and outcomes are affected by gender, age, tenure and period of working from home. Concerning gender, the independent sample t-test revealed that more male respondents than female respondents believed that leaders used passive avoidance leadership styles. This implies that more men 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 ageing 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 oppose the results of this study, as this study found that the older employers are, the more they perceive their leaders to be absent when needed, avoid making decisions and delay 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



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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 organisation, were concise and encouraging regarding tasks that need 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 the 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 utilised 'sometimes to fairly often,' there is undoubtedly room for improvement as it is regarded as the leadership approach conducive to WFH.

9. Practical implications, limitations and recommendations

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



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Limitations: This study was based on a single private higher education institution in South Africa, implying that the conclusions should be generalised to something other than 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:

New communication regimes. Leaders in remote work must adapt to new formats of communication, given the virtual environment in which higher education institutions operate. 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 utilising these technologies and 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 organisation and identifying positive work climates could be outcomes of conducive communication.

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 programmes 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.

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.

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.

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.

10. Conclusion



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In summary, the Covid-19 pandemic has created a series of leadership challenges for both institutions and organisations. 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 improvement, particularly in the more frequent use of transformational leadership.

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12. Competing interests

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

13. 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.

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Data availability

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

14. 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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