



# The COVID-19 pandemic: Perspectives on work engagement and work-from-home in a higher education institution



## Authors:

Doret Botha<sup>1</sup>   
Gerda van Dijk<sup>2</sup>   
Amori Marais<sup>3</sup> 

## Affiliations:

<sup>1</sup>Department of Sociology,  
Faculty of Humanities,  
North-West University,  
Potchefstroom, South Africa

<sup>2</sup>School of Public Management  
and Administration, Faculty of  
Economic and Management  
Sciences, University of  
Pretoria, City of Tshwane,  
South Africa

<sup>3</sup>Research Psychologist,  
Research Consultant, Utrecht,  
Netherlands

## Corresponding author:

Doret Botha,  
doret.botha@nwu.ac.za

## Dates:

Received: 04 Oct. 2022

Accepted: 07 Feb. 2023

Published: 14 Apr. 2023

## How to cite this article:

Botha, D., Van Dijk, G., & Marais, A. (2023). The COVID-19 pandemic: Perspectives on work engagement and work-from-home in a higher education institution. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, 21(0), a2131. <https://doi.org/10.4102/sajhrm.v21i0.2131>

## Copyright:

© 2023. The Authors.  
Licensee: AOSIS. This work  
is licensed under the  
Creative Commons  
Attribution License.

## Read online:



Scan this QR  
code with your  
smart phone or  
mobile device  
to read online.

**Orientation:** Globally, the repercussions of the coronavirus disease 2019 (COVID-19) pandemic infiltrated many areas within societies. Like all other institutions, higher education institutions (HEIs) had to migrate to online and blended activities, and work-from-home (WFH) became characteristic of the 'new normal'.

**Research purpose:** The main purpose of the study was to determine the perspectives on work engagement and WFH among employees of an HEI in South Africa during the global COVID-19 pandemic.

**Motivation for the study:** There is limited published research reporting on WFH and work engagement in HEIs.

**Research approach/design and method:** The study employed a quantitative-based cross-sectional design. The target population of this study included all employees an HEI in South Africa who worked from home during the COVID-19 lockdown. A web-based survey was used to collect the data. In total, 399 respondents participated in the research.

**Main results:** The results of the study revealed that the employees were to a great extent engaged in their work because of the organisational support received from the institution. It was also evident that some employees experienced difficulties with establishing a work routine, a lack of sufficient equipment and resources to function at home, work-home interference, increased workload and working hours, isolation and work-life balance issues.

**Practical/managerial implications:** The results of the study are important to inform business decisions regarding the WFH model as an alternative working arrangement to be considered in HEIs.

**Contribution/value-add:** This study contributes to the body of knowledge regarding work engagement and WFH in HEIs in the context of the global COVID-19 pandemic.

**Keywords:** COVID-19 pandemic; employee engagement; higher education; South Africa; work engagement; work-from-home.

## Introduction

### Orientation

The year 2020 will always be associated with the outbreak of the global coronavirus disease 2019 (COVID-19) pandemic. Globally, the repercussions of the pandemic infiltrated many areas within societies. Perhaps the most prominently affected were healthcare systems, which were forced to cater for patients beyond their usual capacity, and of course, the world of work. The pandemic forced institutions, including higher education institutions (HEIs), and society to rethink and restructure everyday operations and established systems. Work-from-home (WFH) became an increasingly appealing alternative to in-person or office-based operations, and therefore characteristic of the 'new normal' during this time (Wang et al., 2021, p. 17). The WFH arrangement was introduced in an attempt to minimise the spread of COVID-19 (Vyas & Butakhieo, 2020, p. 6). While this may seem like the easy option, employees and managers had to adapt to and cope with rapid and radical changes (Carnevale & Hatak, 2020, p. 183).

The COVID-19 pandemic impacted universities at both operational and institutional level (Paterson, 2021). Like all other institutions during the global COVID-19 pandemic, HEIs had to migrate to online and blended activities, which included teaching, learning and institutional

planning (Obadire et al., 2020, p. 16778; Smith, 2020, p. 115). Hedding et al. (2020, p. 1) point out that academic staff at contact universities in South Africa had little experience or training in the pedagogy or delivery of online learning. Furthermore, historically disadvantaged universities may have fewer resources to support staff and students in flexible work and teaching arrangements (Hedding et al., 2020, p. 1). In addition, Zoom or similar communications may encourage multitasking and distractions, which may make participation difficult and may leave workers feeling frustrated, fatigued and complaining of 'Zoom hangovers' (Schulman, 2020, p. 384). Notwithstanding the possible adverse effects of WFH and online operations, it may build capacity in staff, as they are encouraged to try out new technology tools and systems (Marinoni et al., 2020, p. 26). As a result, work engagement may be positively or negatively impacted.

There is no single definition of work engagement; however, it can be broadly viewed as applying high levels of energy, intensity, interest and persistence in work effort (Colquitt et al., 2013, p. 165). Engagement is regarded as important, as it results in positive outcomes for both the individual and the organisation (Admasachew & Dawson, 2010, p. 71; Werner, 2021, p. 423). Engaged employees are believed to be more involved in, satisfied with and enthusiastic about their work (Amos et al., 2016, p. 124; Schaufeli & Bakker, 2004, p. 4), they are more able to deal with the demands of their job (Schaufeli & Bakker, 2004, p. 4), they strongly identify with their jobs and the organisation where they are employed, they demonstrate commitment to the organisation (Werner, 2021, p. 423) and they are more motivated and perform better (Wärnich et al., 2018, p. 260). Consequently, engaged employees benefit the organisation and result in more satisfied and loyal customers, increased profitability and enhanced quality of products and services (Wärnich et al., 2018, p. 260; Werner, 2021, p. 423). According to Rothman and Baumann (2014, p. 516), work-home and home-work interaction can influence levels of work engagement. Therefore, it is expected that working from home may influence the engagement levels of employees.

## Research purpose

Given the background provided here, the purpose of the study was, firstly, to determine the perspectives on work engagement and WFH among employees of an HEI in South Africa during the global COVID-19 pandemic and, secondly, to ascertain the association between selected socio-demographic variables, work engagement and WFH.

## Literature review

### A theoretical framework of work engagement

Scholars, organisations and countries differ in their definitions and conceptualisations of work engagement (Bagram, 2016, p. 125; Sun & Bunchapattanasakda, 2019, pp. 65–68). Two main approaches are used to understand work engagement. The first approach views it as the opposite of burnout. The second approach sees it as a 'positive, fulfilling state of mind, unrelated

to burnout' (Bagram, 2016, p. 125). In view of the latter approach, Kahn's (1990) and Schaufeli et al.'s (2002) conceptualisations of engagement are discussed here.

Kahn (1990, 1992), who first developed the concept of personal engagement, highlights the importance of being present in one's assigned role, as it allows for more effective role performance. Kahn's thoughts on engagement were heavily influenced by the classic sociological book *The presentation of self in everyday life*, written by Goffman (1961). In line with Goffman's theory, Kahn suggests that 'people act out momentary attachments and detachments in role performances' (Kahn, 1990, p. 694). Kahn (1990) defines engagement as 'the harnessing of organisation members' selves to their work roles' and disengagement as 'the uncoupling of selves from work roles' (p. 694). Therefore, Kahn's definition focuses on 'how people occupy and adjust to their work roles' (Schaufeli, 2017, p. 10). According to Kahn (1990, p. 694), 'engaged employees employ and express themselves physically, cognitively and emotionally during role performances'.

Relying on the works of Goffman (1961), Maslow (1970) and Alderfer (1972), Kahn (1990, cited by Shuck & Wollard, 2009, p. 135) suggests that the spheres of 'meaningfulness, safety and availability' are significant in 'understanding why a person becomes engaged'. According to Kahn (1990), meaningfulness is the 'feeling that one is receiving a return on investments of one's self in role performance' (p. 705). Meaningfulness is experienced when people feel useful and valuable and it is influenced by task characteristics (e.g. challenging, clearly demarcated, diverse, creative and somewhat autonomous), role characteristics (e.g. roles that carry status or influence) and work interactions (e.g. rewarding interactions promoting dignity and self-appreciation) (Kahn, 1990, pp. 704–708). Safety is experienced when 'feeling able to show and employ one's self without fear of negative consequences to self-image, status, or career' (Kahn, 1990, p. 705). Safety is influenced by interpersonal relationships (e.g. supportive and trusting), group and intergroup dynamics, management style and process (e.g. supportive, resilient and clarifying) and role performances (consistent with organisational norms) (Kahn, 1990, pp. 708–713). Availability is regarded as the 'sense of possessing the physical, emotional, and psychological resources necessary' to complete one's work (Kahn, 1990, p. 705). Availability is influenced by the depletion of physical energy and strength, the depletion of emotional energy (e.g. emotional labour is tiring), individual insecurity (e.g. about one's work and status) and outside lives (e.g. work-family distractions).

Although Kahn presented a comprehensive theoretical model of psychological presence and although the model was extensively cited, it was critiqued because it lacked an operationalisation of the construct (Schaufeli et al., 2002, p. 74; Weidert, 2011, pp. 10–11).

Schaufeli et al. (2002, p. 74) introduced another approach to work engagement, which focuses on the positive side of workers' well-being (i.e. human strengths and optimal

functioning) instead of the opposite, which is regarded as burnout. Schaufeli et al. (2002) defined engagement as a 'positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption' (p. 74). Vigour implies the application of high levels of energy while working, the willingness to put effort into one's work, and mental resilience and persistence when encountering work-related challenges. Dedication implies that one is strongly involved in work because work is regarded as important and is a source of 'enthusiasm, inspiration, pride and challenge' (p. 74). Absorption refers to being focused on and happily occupied in one's work, whereby one loses one's sense of time and finds it difficult to detach (switch off) from one's work. Based on these definitions, Schaufeli and Bakker (2004) developed the Utrecht Work Engagement Scale (UWES) that measures the three dimensions of work engagement, namely vigour, dedication and absorption. Over the years, the scale has been widely cited and used to measure the engagement levels of employees, and it was also employed in this study.

Kahn (1990) and Schaufeli et al. (2002) agree in their conceptualisations of engagement, as both comprise a 'physical-energetic (vigour), an emotional (dedication), and a cognitive (absorption) component' (Schaufeli, 2017, p. 10).

In addition to the aforementioned, the Job Demands-Resources (JD-R) model explains the factors that may increase or decrease levels of work engagement. The JD-R model was initially developed by Demerouti et al. (2001) to understand the antecedents of burnout (Schaufeli & Taris, 2014, p. 43). The model identified 8 job demands and 13 job resources that may contribute to burnout. According to Demerouti et al. (2001, as cited in Schaufeli & Taris, 2014), job demands are seen as 'those physical, social, or organizational aspects of the job that require sustained physical or mental effort' (p. 45) and when high, may result in physical and psychological costs, for example, continual tiredness or weakness and irritability. Job resources are 'those physical, social, or organisational aspects of the job' that may contribute to realising work goals, decreasing job demands and consequently, the physiological and psychological costs resulting from the demands and inspiring personal growth and development (Demerouti et al., 2001, as cited in Schaufeli & Taris, 2014, p. 45). Job resources include 'feedback, job control and social support' (Schaufeli & Taris, 2014, p. 43). In 2004, Schaufeli and Bakker introduced a revised version of the JD-R model, which not only provides explanations for burnout but also underlines the inherently motivational qualities gained from job resources that contribute to work engagement. Therefore, job resources foster work engagement by providing 'a positive work-related state of mind' through the satisfaction of basic needs and the realising of work goals, resulting in organisational commitment and performance (Schaufeli & Taris, 2014, p. 47).

To enhance the engagement levels of employees, Crim and Seijts (2006, as cited in Amos et al., 2016, pp. 124–126) suggest that managers incorporate the 10 Cs in working environments: Connect (manage to engage employees), Career (provide work

that is meaningful, challenging and stimulating), Clarity (clear communication regarding the vision, strategy and goals of the organisation or relevant division), Convey (clarify expectations of employees and provide feedback), Congratulate (provide recognition and praise immediately and often), Contribute (create understanding of the contribution of employees' jobs to the success of the organisation or relevant division), Control (create opportunities for employees to exert control over their work, to participate in decision making and to take ownership of problems and the solutions thereof), Collaborate (create opportunities to collaborate on individual, group and organisational goals), Credibility (strive to maintain the reputation of the organisation and demonstrate high ethical standards), and Confidence (encourage high ethical and performance standards to create confidence in the organisation).

It is evident that work engagement is a multifaceted construct; it is expected that an abrupt change in a steady work environment brought about by a crisis such as the COVID-19 pandemic may have drastic effects on the stability of an established working relationship and, consequently, the engagement levels of employees.

## Work-from-home

During the COVID-19 pandemic, WFH was introduced as an alternative work arrangement to minimise the risk of COVID-19 infection (Vyas & Butakhieo, 2020, p. 6). The International Labour Organization (ILO, 2020) refers to WFH as 'a working arrangement in which a worker fulfils the essential responsibilities of his or her job while remaining at home, using information and communications technology (ICT)' (p. 5). According to Edgell and Granter (2020), homeworking involves 'undertaking paid work at home, a workplace that is considered to be and still is an atypical spatial location in modern societies' (p. 157). The term 'work-from-home' is often used interchangeably with the following terms: remote work, industrial homeworking, teleworking or telecommuting and virtual work (ILO, 2020; Watson, 2017, pp. 218–219). Although the definitions of the concepts differ slightly, they all refer to flexible working practices that enable employees to work remotely, for example, at home or any other place outside of the traditional corporate office building, using technology to communicate and execute work tasks (ILO, 2020, p. 5; Vyas & Butakhieo, 2020, p. 6).

Neo-Fordist and post-Fordist thoughts on work (industrial and service) agreed that there was a trend away from the standard Fordist model (i.e. permanent full-time employment) of work towards non-standard forms of employment (i.e. impermanent, individually negotiated and spatially variable) (Edgell & Granter, 2020, p. 193). This trend was encouraged because of the demise of Fordism as a production system (Edgell & Granter, 2020, p. 194), globalisation, technological change, being responsive and competitive in the marketplace (Hutchinson, 2017, p. 195; Watson, 2017, p. 215), managerial strategies to enhance

functional (task flexibility) and numerical (i.e. adjusting the labour supply) flexibility and the increased use of ICTs (Edgell & Granter, 2020, p. 148), among other factors.

Flexible working, such as WFH, has positive and negative outcomes for employees and employers (Hutchinson, 2017, p. 196). Proponents of flexible working practices argue that employees tend to prefer flexibility, as it gives them control over how, when and where they work, gives them a sense of empowerment and contributes to a better work–life balance (Hutchinson, 2017, p. 196). Therefore, employees will be more satisfied, motivated and engaged, which will result in higher levels of productivity and performance (Hutchinson, 2017, p. 196).

However, authors such as Felstead and Jewson (as cited in Edgell & Granter, 2020) argue that homeworkers are engaged in a distinctive type of struggle, regularly, regarding ‘the management of the self’ (p. 158). This includes that homeworkers have to organise the space in which they work and their working time, establish social boundaries and supervise themselves to maintain the quantity and quality of their work and enhance their occupational credibility (Edgell & Granter, 2020, p. 159). This applies to low-discretion (i.e. workers who receive low pay and experience poor working conditions) and high-discretion (i.e. workers who receive better pay with superior working conditions and who have greater access to dedicated workspaces and technologies) homeworkers (Edgell & Granter, 2020, p. 159). Felstead and Jewson (as cited in Watson, 2017, p. 219) found that homeworkers often find it challenging to establish a work routine; to manage quality, health and safety standards; and to maintain their relations with both people living in their household and people in the organisation to which they relate (Watson, 2017, p. 219). They also tend to work intensively for long hours (Edgell & Granter, 2020, p. 159). Although for employers, homeworking provides the advantage of numerical flexibility, it is not without challenges, as maintaining control over workers at a distance places a premium on trust and a manager’s skills to delegate and communicate. The technological potential of ICTs seems to be constrained by ideas of how work should be organised, through principles espoused by Taylorism and the ideal bureaucracy (Edgell & Granter, 2020, p. 159). Furthermore, it is more difficult to control and motivate workers at a distance than doing so in a face-to-face situation (Edgell & Granter, 2020, p. 160).

### **Workplace practices in higher education within the COVID-19 context**

As a result of the strict lockdown regulations introduced by governments on a global scale in the early days of the pandemic, HEIs, as most other institutions, had to quickly migrate to online and blended activities (Obadire et al., 2020, p. 16778; Smith, 2020, p. 115). Employees were forced to work from home regardless of their personal preferences, abilities, resources, and the nature and extent of their jobs (Wang et al., 2021, p. 17). Prior to the pandemic, individuals had not had much experience of working in a remote environment, nor

were institutions prepared to support practices of this nature (Wang et al., 2021, p. 17). Primary activities, including teaching, research and community outreaches, were affected, and the shift to virtual operations left employees who were responsible for critical university operations ill-equipped (Agasisti & Soncin, 2021; Piotrowski & King, 2020). Support staff who were operating face-to-face in the physical university space were potentially considered irrelevant, leaving their job security in question (Piotrowski & King, 2020).

Across sectors and organisations, challenges reported regarding the WFH structure include an increase in the experience of work–life conflict, frequent interruptions from family members, a lack of experience with the organisational climate, interruptions in concentration (Chanana, 2020, p. 1), increased work hours and workload (employees reported that they were overworked) (Pathak & Majumdar, 2020), ‘Zoom hangovers’ (Schulman, 2020, p. 384), increased parental demands because of the closure of schools and childcare services, loneliness, a lack of purpose and belonging, and health and well-being issues (Carnevale & Hatak, 2020, p. 183). In highly heteronormative societies, it can be assumed that women’s productivity in particular may have suffered, based on the added strain of childcare and home-schooling, which fell predominantly on their shoulders (Hedding et al., 2020, p. 1). Given the WFH structure, the pandemic caused a so-called double-bind on specific mothers, which may have had definite implications for work engagement during this period (Heggeness, 2020, p. 1053). Similarly, people’s marital status and familial responsibility may have exacerbated issues of gender inequality, which forced women to adopt even more domestic labour in pandemic-related circumstances (Fisher et al., 2020, p. 250). The opposite was also found to be true. In a traditional male–female (heteronormative) relationship, the fact that more men are working from home could also hold certain positive outcomes. The flexible work arrangements present them with a unique opportunity to share in childcare and domestic work (Fisher et al., 2020, p. 250).

The literature review provided a brief overview of work engagement, WFH and workplace practices in higher education within the COVID-19 context and informed the instruments used in this study.

## **Research design**

### **Research approach**

The study used a quantitative-based cross-sectional design. A cross-sectional design is a structured observation that collects data to make inferences from a sample of a population at a single point in time (Bryman, 2012, p. 44).

### **Research method**

#### **Research participants**

The research setting was limited to one HEI in South Africa. The research was conducted in 2021. After President Cyril Ramaphosa announced of the lockdown in South Africa on

23 March 2020, the institution employed a WFH model. The WFH model was kept in place until the end of 2021, with a few exceptions.

The target population of this study comprised all employees of one selected HEI who worked from home during the COVID-19 lockdown. The entire target population was included in the survey, and therefore comprised professional (instruction and research, executive or management and support) and non-professional (technical, administrative, crafts or trades and service) staff. No one was excluded based on gender, age, ethnicity, and employment contract. To be able to complete the questionnaire, participants had to have English language proficiency skills of Grade 12 or above, access to a computer and an Internet connection. As not all employees participated in the research, it resulted in a non-probability sample, thus the respondents were selected using convenience sampling (also referred to as accidental or haphazard sampling). Thus, the sample units consist of those people who are conveniently available to the researcher (Creswell, 2014, p. 204; Sarantakos, 2013, p. 177).

### Measuring instruments

Data were collected through a web-based survey using a coded questionnaire. The questionnaire comprised three sections. Section A contained biographical questions on location, gender, age, marital status, highest qualification, number of years working at the institution, nature of employment and employment contract. For Section B, the 17-item UWES was used to measure employees' levels of work engagement in the organisation. A seven-point Likert-type scale ranging from never (0) to always (every day) (6) was used. The scale consists of six items that measure vigour, five that measure dedication and six that measure absorption (Carnahan, 2013, p. 43). This measurement scale is said to be the most commonly used measure for work engagement (Schaufeli & Bakker, 2004, p. 5). Confirmatory factor analyses showed that the three-factor structure of the UWES fits well to the data of various samples from different countries and that the internal consistency of the three scales is good; in all cases, the values of Cronbach's alpha coefficient were equal to or exceeded the critical value of 0.70 (Schaufeli & Bakker, 2004, p. 7). For Section C, the questionnaire developed by Botha and Coetzee (2022) was adapted to enhance understanding of the individual items and to better fit the purpose and context of the study. The questionnaire consisted of 30 statements aimed to determine employees' perspectives on WFH. A five-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5) was used.

### Statistical analysis

The Statistical Package for the Social Sciences (SPSS Version 27) was used to process the data collected. A confirmatory factor analysis was conducted to verify the factor structure of the work engagement construct and the reliability of the Cronbach's alphas. An exploratory factor analysis was conducted to explore the underlying theoretical structure of WFH. Cronbach's alpha coefficients were used to determine

internal consistency and reliability. In addition, descriptive statistics, independent samples *t*-tests, analysis of variance (ANOVA) tests, Spearman's rank-order correlations, and effect sizes were used to analyse the data.

Descriptive statistics were used to summarise the data set and were interpreted and reported by mean and standard deviation. Spearman's rank-order correlation coefficient was used to measure the strength and direction (positive or negative) of the monotonic relationships between two variables, as suggested by Field (2013, p. 276). According to Cohen (1988), correlations of 0.1, 0.3 and 0.5 can be interpreted as small, medium and large correlations, respectively. *T*-tests and ANOVA tests were used to compare the mean scores of two independent groups and three or more independent groups on a continuous variable (Pallant, 2016, pp. 109, 244). Effect sizes were used to measure the 'magnitude of the intervention's effect' (Pallant, 2016, p. 252), thus how meaningful the difference between group means is and how important the difference is in practice. Cohen's *d*-values were used as effect size statistic and the strength was interpreted as follows: 0.2 = small effect, 0.5 = medium effect and 0.8 = large effect (Cohen, 1988).

### Ethical considerations

The researchers adhered to the following ethical standards (see Babbie & Mouton, 2011, p. 520; Ghauri & Gronhaug, 2002, p. 18; Sarantakos, 2013, p. 19) when conducting the research: voluntary participation, informed consent, privacy, anonymity, confidentiality, objectivity and integrity. Approval to conduct the research was obtained from the Basic and Social Sciences Research Ethics Committee of the HEI under investigation (ethics number: NWU-00648-21-A7).

## Results

### Biographical and demographical information

The Corporate Relations and Marketing division of the university under investigation distributed the web-based survey to the target population via all the relevant e-platforms of the university. In total, 399 responses were received. Table 1 presents the biographical and demographical information of the respondents.

From Table 1 it is evident that more women (72.9%) than men (25.8%) participated in the research. The most responses were received from Campus A (75.7%), followed by Campus B (15.3%) and Campus C (8.3%). The majority of the respondents were between 30 and 59 (82.5%) years old and were married (67.4%). Eighteen per cent of the respondents had a college or university degree, 32.8% a postgraduate degree and 27.6% a PhD degree. In total, 70.7% of the respondents had worked for the university for 6 years and longer. The majority of the respondents were employed in support positions and 37.8% in academic positions. A large majority (90%) of the respondents were employed in full-time contracts. During the research period, most of the respondents (40.4%) had been working from home since the beginning of the lockdown, but came to the office when

**TABLE 1:** Biographical and demographical information.

Item	N	%
<b>Gender</b>		
Female	291	72.9
Male	103	25.8
Gender variant/non-conforming	1	0.3
Transgender male	1	0.3
Prefer not to answer	1	0.3
<b>Location</b>		
Campus A	302	75.7
Campus B	61	15.3
Campus C	33	8.3
<b>Age</b>		
20–29	29	7.3
30–39	125	31.3
40–49	112	28.1
50–59	92	23.1
60 and older	1	9.8
<b>Marital status</b>		
Single or not in a relationship	46	11.5
Unmarried and in a relationship	42	10.5
Widowed	9	2.3
Married	269	67.4
Divorced/Separated	23	5.8
Prefer not to say	8	2.0
<b>Highest qualification</b>		
High (secondary) school graduate	22	5.5
Completed some college education	40	10.0
Undergone technical/vocational training	3	0.8
College/University degree	72	18.0
Completed some postgraduate work	18	4.5
Postgraduate degree	131	32.8
PhD	110	27.6
<b>Number of years working at the university</b>		
7–12 months	12	3.0
1–2 years	33	8.3
3–5 years	69	17.3
6–10 years	100	25.1
11–20 years	123	30.8
More than 20 years	59	14.8
<b>Nature of employment</b>		
Academic	151	37.8
Support	242	60.7
Other	2	2.2
<b>Employment contract</b>		
Full-time contract (permanent)	359	90.0
Fixed-term contract	26	6.5
Temporary	11	2.8
<b>Scenario best describing respondents' working from home since the COVID-19 lockdown came into effect in March 2020</b>		
I have been working from home since the beginning of the lockdown and have not returned to campus.	98	24.6
I have been working from home since the beginning of the lockdown, but come to the office when required (i.e. to attend a meeting and at my own discretion).	161	40.4
I am required by my employer to divide my time between the office and working from home, but I do not feel safe working in the office.	18	4.5
I am required by my employer to divide my time between the office and working from home and I am comfortable with the arrangement.	34	8.5
I have been working from home only during the required COVID-19 lockdown level and returned to the office once I could.	46	11.5
I have been working from home only during the required COVID-19 lockdown level and was instructed to return to the office once COVID-19 lockdown levels permitted.	40	10.0

required and 24.6% who had been working from home had not returned to campus.

## Work engagement

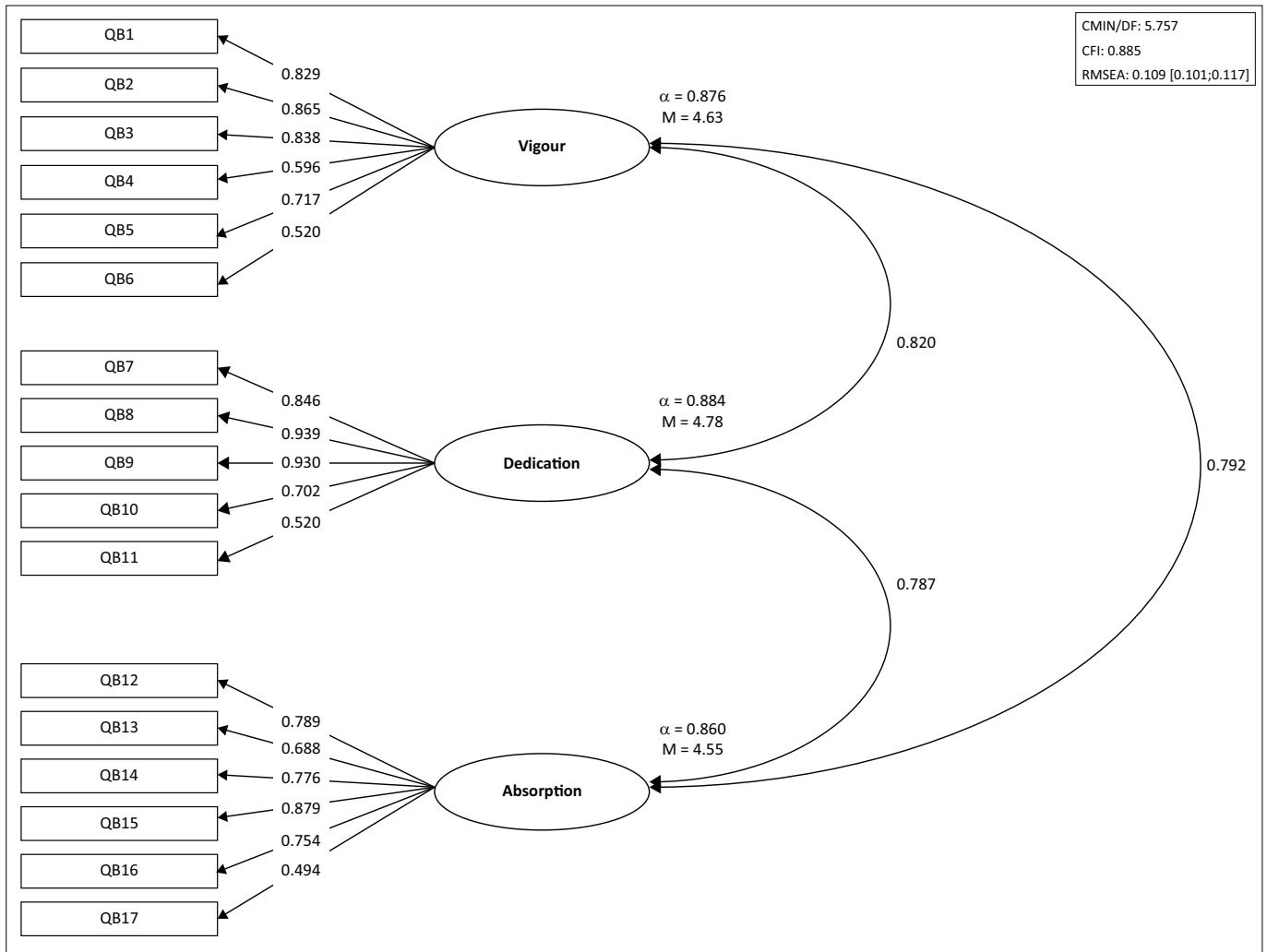
Confirmatory factor analyses showed that the three-factor structure of the UWES fit the sampled data adequately (see Figure 1). The measurement of vigour was supported by six items, of dedication by five items and of absorption by six items. All factor loadings were statistically significant at the 0.05 level. The standardised regression coefficients were interpreted as factor loadings. The factor loadings for vigour ranged from 0.520 to 0.865, for dedication from 0.520 to 0.939 and for absorption from 0.494 to 0.879. According to Field (2009, p. 644), in general, a factor loading with an absolute value of more than 0.3 is regarded meaningful and the significance of a factor loading will depend on the sample size. Field (2009, p. 644) suggests that a factor loading for a sample of 100 should be greater than 0.512, for 200 it should be greater than 0.364, for 300 it should be greater than 0.298, for 600 it should be greater than 0.21 and for 1000 it should be greater than 0.162. The Cronbach's alpha coefficients for vigour, dedication and absorption were 0.8 (see Figure 1), indicating excellent reliability and internal consistency according to Field (2009, p. 675).

The goodness-of-model-fit indices (chi-square statistic divided by degrees of freedom CMIN or DF, the comparative fit index [CFI] and the root mean square error of approximation [RMSEA]) for the work engagement measurement model are presented in Table 2. From the results it is evident that the CMIN or DF (5.757) yielded a value that indicates a close fit between the measurement model and the sampled data. The value obtained for the CFI (0.885) indicates an acceptable model-data fit. However, the value obtained for RMSEA (0.109; 0.101 [low]; 0.117 [high]) indicated not a good fit between the measurement model and the sampled data.

A seven-point Likert scale was used to measure employees' levels of engagement, ranging from 0 (never) to 6 (every day). The mean scores (see Figure 1) for Vigour ( $M = 4.63$ ), Dedication ( $M = 4.78$ ) and Absorption ( $M = 4.55$ ) were above 4, leaning towards the positive side of the scale, although there is much room for improvement.

## Work-from-home

An exploratory factor analysis was conducted on the 30-item WFH scale measuring employees' perceptions regarding working from home. The Kaiser–Meyer–Olkin (KMO) test yielded a value of 0.879, thus the sample size was adequate for factor analysis. According to Field (2005, p. 640), a KMO value between 0.7 and 0.8 is regarded as excellent. The  $p$ -value of Bartlett's test of sphericity was 0.000, showing sufficient correlation between the items (see Field, 2005). Five factors (WFH challenges, Organisational support, Conducive WFH environment, Work–life balance and Social alienation) were extracted through Kaiser's criteria (Field, 2005) that explained 57.21 of the total variance (see Table 3).



CMIN/DF, chi-square statistic divided by degrees of freedom; CFI, comparative fit index; RMSEA, root mean square error of approximation. All factor loadings were statistically significant at the 0.05 level.

**FIGURE 1:** Confirmatory factor analysis results for the work engagement measurement model with standardised regression weights and correlations.

**TABLE 2:** Goodness-of-model-fit indices for the work engagement measurement model.

Index	Decision rule	Author	Model score	Outcome
CMIN/DF	Close to 1; 3–5 still satisfactory	Carmines and McIver (1981) Mueller (1996)	5.757	Close fit
CFI	$\geq 0.9$ (good fit)	Hair et al. (2010) Hu and Bentler (1999) Mueller (1996)	0.885	Acceptable fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre)	Blunch (2008) Brown and Moore (2012) Hu and Bentler (1999) Institute for Digital Research and Education (2021)	0.109 [0.101; 0.117]	Not good fit

CMIN/DF, chi-square statistic divided by degrees of freedom; CFI, comparative fit index; RMSEA, root mean square error of approximation.

The Cronbach's alpha coefficients for all five factors were above 0.7 (WFH challenges:  $\alpha = 0.748$ ; Organisational support:  $\alpha = 0.762$ ; Conducive WFH environment:  $\alpha = 0.885$ ; Work–life balance:  $\alpha = 0.745$ ; Social alienation:  $\alpha = 0.763$ ), showing excellent reliability and internal consistency. Eight items loaded on WFH challenges (ranging from -0.370 to -0.528), five items on Organisational support (ranging from 0.591 to 0.848), eight items on Conducive WFH environment (ranging from 0.449 to 0.823), four items on Work–life balance (ranging from -0.655 to -0.785) and five items on Social alienation (ranging from -0.374 to -0.801). The factors obtained the following mean scores: WFH challenges:  $M = 2.344$ , Organisational support:  $M = 4.427$ ,

Conducive WFH environment:  $M = 4.384$ , Work–life balance:  $M = 3.231$  and Social alienation:  $M = 2.740$ . The WFH scale used a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

### Association of biographical and demographical variables with work engagement and work-from-home

*T*-tests were conducted to determine the association of gender, nature of employment and employment contract with work engagement and WFH; the results of the *t*-tests are presented in Table 4.

**TABLE 3:** Validity, reliability and descriptive statistics of work-from-home.

Q	Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
		WFH CH	O SUP	CON WFH	WLB	SA
29	Keeping a regular schedule prohibits me from functioning effectively while I am working from home.	0.528	-	-0.345	-	-
7	I have access to sufficient Internet data to do my work effectively when working from home, but have to fund it myself.	0.518	-	0.375	-	-
6	I had to acquire adequate equipment (e.g. devices, printer, scanner, etc.) to function from home at my own expense.	0.482	-	-	-	-
28	Anxiety about the impact of the coronavirus on my life prohibits me from functioning effectively while I am working from home.	0.464	-	-	-	-0.295
26	Too many distractions at home prohibit me from functioning effectively while I am working from home.	0.455	-	-0.553	-	-0.286
25	My household responsibilities (e.g. childcare, cleaning, gardening) prohibit me from functioning effectively while I am working from home.	0.449	-	-0.454	-	-
22	I find it difficult to keep focused on work when I am working from home.	0.411	-	-0.369	-	-0.382
27	A lack of clear communication by the organisation prohibits me from functioning effectively while I am working from home.	0.370	-0.324	-	-	-0.345
16	My manager supports me while I am working from home.	-	0.848	-	-	-
12	I feel the organisation trusts me while I am working from home.	-	0.760	-	-	-
13	I am productive in my work because my employer is mindful of COVID-19 realities and my home life.	-	0.704	-	-	-
15	I am in regular contact with my manager.	-	0.596	-	-	0.389
2	My employer supports me when COVID-19 realities necessitate my absence from the office.	-	0.591	-	-	-
4	The physical conditions at my home afford a good working environment (desk and chair, sufficient light, quietness, good monitor, etc.).	-	-	0.823	-	-
3	I have a suitable workspace to work from home.	-	-	0.782	-	-
9	I get time to focus on my work without interruptions from other people when working from home.	-	-	0.764	-	-
8	I am able to manage my time effectively while working from home.	-	-	0.678	-	-
5	I have sufficient physical equipment at home (e.g. devices, printer, scanner, etc.) that contributes to effective functioning while working from home.	-	-	0.663	-	-
10	My family supports me while I am working from home.	-	-	0.610	-	-
1	I enjoy working from home.	-0.299	-	0.470	-	0.439
17	I prefer to continue to work from home.	-0.317	-	0.449	-	0.497
23	I am working more hours than normally when I am working from home.	-	-	-	0.785	-
21	I feel tied to my computer to a greater extent than at my workplace while I am working from home.	-	-	-	0.693	-
11 *R	I have a healthy work–life balance when working from home.	-	-	-	0.683	-
24	I do not get enough exercise when I am working from home.	-	-	-	0.655	-
19	I miss the interactions with my fellow employees.	-	-	-	-	0.801
30	I feel socially isolated when I am working from home.	-	-	-	-	0.752
20	Communication with co-workers is more difficult when working from home.	-	-	-	-	0.715
14 *R	I can maintain a good relationship with my colleagues while I am working from home.	-	0.377	-	-	0.483
18	I am more productive working in an office than working from home.	-	-	-0.356	-	0.374
	Cronbach's alpha	0.748	0.762	0.885	0.745	0.763
	Factor mean	2.344	4.427	4.384	3.231	2.740
	Factor standard deviation	0.720	0.662	0.707	0.996	0.950

WFH, work-from-home; WFH CH, WFH challenges; O SUP, organisational support; CON WFH, Conducive WFH environment; WLB, work–life balance; SA, Social alienation.

\*R: Statement was reversed when reliability was calculated.

The results of the *t*-tests revealed the male ( $M = 4.43$ ) and female ( $M = 4.69$ ) respondents for Vigour ( $p = 0.019$ ); the effect size showed a small effect ( $d = 0.27$ ). Regarding nature of employment, statistically significant differences between the mean scores of academic and support staff were evident for Vigour ( $p = 0.016$ ; Academic:  $M = 4.47$ ; Support:  $M = 4.71$ ), WFH challenges ( $p = 0.000$ ; Academic:  $M = 2.55$ ; Support:  $M = 2.22$ ), Organisational support ( $p = 0.007$ ; Academic:  $M = 4.31$ ; Support:  $M = 4.50$ ), Conducive WFH environment ( $p = 0.016$ ; Academic:  $M = 4.27$ ; Support:  $M = 4.45$ ), Work–life balance ( $p = 0.002$ ; Academic:  $M = 3.42$ ; Support:  $M = 3.10$ ) and Social alienation ( $p = 0.018$ ; Academic:  $M = 2.88$ ; Support:  $M = 2.65$ ). The effect sizes indicated small to medium effects ( $d$  ranging from 0.244 to 0.468). Furthermore, the *t*-tests revealed statistically significant differences between the

mean scores of respondents who were employed full-time ( $M = 4.59$ ) and those who were employed on fixed-term or temporary contracts ( $M = 4.92$ ) for Vigour ( $p = 0.044$ ); the effect size indicated a medium effect ( $d = 0.349$ ).

Analysis of variance tests were conducted to determine the association of location, marital status and WFH scenario with work engagement and WFH. The results revealed no statistically significant differences between the mean scores of the different campuses of the university and the marital status categories; the *p*-values for all the work engagement and WFH factors were above 0.5.

With regard to the WFH scenario, the results indicated statistically significant differences between the mean scores



**TABLE 4:** Association of gender, nature of employment and employment contract with work engagement and work-from-home.

Factor	Independent sample t-test				
	N	Mean	SD	P	Effect size
<b>Gender</b>					
<b>Vigour</b>					
Male	103	4.43	0.98	0.019	0.27
Female	291	4.69	0.95		
<b>Dedication</b>					
Male	103	4.77	1.12	0.962	0.01
Female	290	4.78	1.07		
<b>Absorption</b>					
Male	103	4.40	1.01	0.117	0.18
Female	291	4.59	1.07		
<b>WFH challenges</b>					
Male	103	2.44	0.77	0.109	0.18
Female	288	2.31	0.70		
<b>Organisational support</b>					
Male	103	4.39	0.60	0.555	0.07
Female	288	4.44	0.68		
<b>Conducive WFH environment</b>					
Male	103	4.37	0.76	0.820	0.03
Female	288	4.39	0.69		
<b>Work-life balance</b>					
Male	103	3.32	0.99	0.296	0.12
Female	289	3.20	1.00		
<b>Social alienation</b>					
Male	103	2.76	1.02	0.853	0.02
Female	289	2.74	0.92		
<b>Nature of employment</b>					
<b>Vigour</b>					
Academic	151	4.47	0.98	0.016	0.250
Support	242	4.71	0.94		
<b>Dedication</b>					
Academic	151	4.85	1.00	0.325	0.102
Support	241	4.74	1.12		
<b>Absorption</b>					
Academic	151	4.58	0.98	0.639	0.049
Support	242	4.53	1.11		
<b>WFH challenges</b>					
Academic	151	2.55	0.79	0.000	0.468
Support	239	2.22	0.64		
<b>Organisational support</b>					
Academic	151	4.31	0.65	0.007	0.281
Support	239	4.50	0.66		
<b>Conducive WFH environment</b>					
Academic	150	4.27	0.79	0.016	0.264
Support	240	4.45	0.64		
<b>Work-life balance</b>					
Academic	151	3.42	0.97	0.002	0.324
Support	240	3.10	0.99		
<b>Social alienation</b>					
Academic	151	2.88	1.00	0.018	0.247
Support	240	2.65	0.90		
<b>Employment contract</b>					
<b>Vigour</b>					
Full-time	359	4.5901	0.96846	0.044	0.349
Fixed-term/Temporary	37	4.9234	0.81042		
<b>Dedication</b>					
Full-time	358	4.7637	1.08729	0.327	0.154
Fixed-term/Temporary	37	4.9297	0.95826		
<b>Absorption</b>					
Full-time	359	4.5472	1.05190	0.684	0.070
Fixed-term/Temporary	37	4.6216	1.11361		

Table 4 continues ----&gt;

**TABLE 4 (Continues...):** Association of gender, nature of employment and employment contract with work engagement and work-from-home.

Factor	Independent sample t-test				
	N	Mean	SD	P	Effect size
<b>WFH challenges</b>					
Full-time	356	2.3529	0.71248	0.505	0.115
Fixed-term/Temporary	37	2.2698	0.79747		
<b>Organisational support</b>					
Full-time	358	4.4139	0.67369	0.224	0.216
Fixed-term/Temporary	35	4.5567	0.52854		
<b>Conducive WFH environment</b>					
Full-time	356	4.3762	0.72662	0.487	0.120
Fixed-term/Temporary	37	4.4614	0.49132		
<b>Work-life balance</b>					
Full-time	357	3.2474	1.01307	0.382	0.151
Fixed-term/Temporary	37	3.0968	0.82344		
<b>Social alienation</b>					
Full-time	357	2.7459	0.95158	0.908	0.020
Fixed-term/Temporary	37	2.7270	0.92064		

SD, standard deviation; WFH, work-from-home.

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

of the different categories for Vigour ( $p = 0.008$ ), Absorption ( $p = 0.045$ ), Organisational support ( $p = 0.000$ ), Conducive WFH environment ( $p = 0.000$ ), Work-life balance ( $p = 0.002$ ) and Social alienation ( $p = 0.000$ ). The results of the post hoc tests are elaborated on in the discussion section of the article.

### Correlation of age, highest qualification, years working at the university and period working from home with work engagement and work-from-home

Spearman's rank correlation coefficient was used to measure the linear association between ordinal biographical variables and work engagement and WFH. The results are reflected in Table 5.

The results showed small to moderate positive correlations between age and Vigour ( $p = 0.012$ ,  $r = 0.126$ ), Dedication ( $p = 0.000$ ,  $r = 0.182$ ) and Absorption ( $p = 0.000$ ,  $r = 0.220$ ). Furthermore, small to moderate positive correlations were found between Work-life balance and age ( $p = 0.002$ ,  $r = 0.155$ ), highest qualification ( $p = 0.031$ ,  $r = 0.108$ ) and duration of employment ( $p = 0.000$ ,  $r = 0.181$ ). The results revealed a small to moderate positive correlation between duration working from home and Conducive WFH environment ( $p = 0.000$ ,  $r = 0.260$ ) and a small to moderate negative correlation with Social alienation ( $p = 0.010$ ,  $r = -0.130$ ).

### Correlation between work engagement and work-from-home

Spearman's rank correlation coefficient was used to measure the linear association between work engagement and WFH; the results are displayed in Table 6.

### Correlations between the engagement factors

Large positive correlations were found between the three engagement factors ( $r$  ranged from 0.671 to 0.710);

**TABLE 5:** Correlation of age, highest qualification, duration of employment in the organisation and duration working from home with work engagement, organisational commitment and work-from-home.

Factor	Age	Duration of employment	Highest qualification	Duration of WFH
<b>Vigour</b>				
Correlation coefficient	0.126*	-0.083	-0.020	-0.041
Sig. (2-tailed)	0.012	0.100	0.688	0.410
N	397	396	396	397
<b>Dedication</b>				
Correlation coefficient	0.182**	0.044	0.014	-0.034
Sig. (2-tailed)	0.000	0.381	0.786	0.499
N	396	395	395	396
<b>Absorption</b>				
Correlation coefficient	0.220**	-0.029	0.084	0.027
Sig. (2-tailed)	0.000	0.564	0.093	0.598
N	397	396	396	397
<b>WFH challenges</b>				
Correlation coefficient	-0.055	0.066	-0.084	0.012
Sig. (2-tailed)	0.275	0.191	0.098	0.810
N	394	393	393	394
<b>Organisational support</b>				
Correlation coefficient	0.089	-0.073	0.008	0.047
Sig. (2-tailed)	0.078	0.148	0.873	0.352
N	394	393	393	394
<b>Conducive WFH environment</b>				
Correlation coefficient	0.038	-0.015	0.097	0.260**
Sig. (2-tailed)	0.455	0.772	0.055	0.000
N	394	393	393	394
<b>Work-life balance</b>				
Correlation coefficient	0.155**	0.181**	0.108*	0.035
Sig. (2-tailed)	0.002	0.000	0.031	0.486
N	395	394	394	395
<b>Social alienation</b>				
Correlation coefficient	0.069	0.076	0.010	-0.130**
Sig. (2-tailed)	0.170	0.130	0.846	0.010
N	395	394	394	395

WFH, work-from-home.

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

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

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

therefore, the more the respondents displayed vigour, the more they were dedicated and absorbed in their work, and vice versa.

### Correlations of engagement with work-from-home

Vigour showed small to medium positive correlations with Organisational support ( $p = 0.000$ ,  $r = 0.354$ ) and Conducive WFH environment ( $p = 0.000$ ,  $r = 0.239$ ) and small to medium negative correlations with WFH challenges ( $p = 0.000$ ,  $r = -0.318$ ), Work-life balance ( $p = 0.000$ ,  $r = -0.227$ ) and Social alienation ( $p = 0.000$ ,  $r = -0.219$ ).

Dedication showed a small to medium positive correlation with Organisational support ( $p = 0.000$ ,  $r = 0.246$ ) and a small negative correlation with WFH challenges ( $p = 0.004$ ,  $r = -0.144$ ). Absorption had small to medium positive correlations with Organisational support ( $p = 0.000$ ,  $r = 0.258$ ) and Conducive WFH environment ( $p = 0.002$ ,  $r = 0.154$ ), and a small negative correlation with WFH challenges ( $p = 0.034$ ,  $r = -0.107$ ).

### Correlations between the work-from-home factors

Work-from-home challenges had medium to large positive correlations with Work-life balance ( $p = 0.000$ ,  $r = 0.390$ ) and Social alienation ( $p = 0.002$ ,  $r = 0.523$ ), and small to medium negative correlations with Organisational support ( $p = 0.034$ ,  $r = -0.256$ ) and Conducive WFH environment ( $p = 0.034$ ,  $r = -0.395$ ).

Organisational support showed a medium positive correlation with Conducive WFH environment ( $p = 0.000$ ,  $r = 0.385$ ) and small to medium negative correlations with WFH challenges ( $p = 0.000$ ,  $r = -0.256$ ), Work-life balance ( $p = 0.000$ ,  $r = -0.206$ ) and Social alienation ( $p = 0.000$ ,  $r = -0.194$ ).

Conducive WFH environment showed small to large negative correlations with WFH challenges ( $p = 0.000$ ,  $r = -0.395$ ), Work-life balance ( $p = 0.000$ ,  $r = -0.328$ ) and Social alienation ( $p = 0.000$ ,  $r = -0.566$ ) and a medium positive correlation with Organisational support ( $p = 0.000$ ,  $r = 0.385$ ).

Work-life balance had a medium to large positive correlation with WFH challenges ( $p = 0.000$ ,  $r = 0.390$ ) and Social alienation ( $p = 0.000$ ,  $r = 0.400$ ), and small to medium negative correlations with Organisational support ( $p = 0.000$ ,  $r = -0.206$ ) and Conducive WFH environment ( $p = 0.000$ ,  $r = -0.328$ ).

Social alienation had medium to large positive correlations with WFH challenges ( $p = 0.000$ ,  $r = 0.523$ ) and Work-life balance ( $p = 0.000$ ,  $r = 0.400$ ), and small to large negative correlations with Organisational support ( $p = 0.000$ ,  $r = -0.194$ ) and Conducive WFH environment ( $p = 0.000$ ,  $r = -0.566$ ).

## Discussion

The study aimed to determine the perspectives on work engagement and WFH among employees of an HEI in South Africa.

The confirmatory factor analyses showed that the three-factor structure (Vigour, Dedication and Absorption) of the UWES fit the sampled data adequately. The Cronbach's alpha coefficients of the three factors indicated excellent reliability and internal consistency. The CFI showed an acceptable fit and the CMIN or DF a close fit between the measurement model and the sampled data. Dedication obtained the highest mean score, followed by Vigour and Absorption; all mean scores were above 4.5 (on a seven-point Likert scale), indicating that the respondents were relatively engaged in their work, although there is room for improvement. The results support the view of the proponents of flexible working practices who suggest that flexible working practices might increase the engagement levels of employees (Hutchinson, 2017, p. 196).

The exploratory factor analysis conducted on WFH revealed five factors: WFH challenges, Organisational support, Conducive WFH environment, Work-life balance and Social

**TABLE 6:** Correlation between work engagement and work-from-home.

Factor	VI	DE	AB	WFH CH	O-SUP	CON WFH	WLB	SA
<b>Vigour</b>								
Correlation coefficient	1.000	0.710**	0.677**	-0.318**	0.354**	0.239**	-0.227**	-0.219**
Sig. (2-tailed)	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000
N	397	396	397	394	394	394	395	395
<b>Dedication</b>								
Correlation coefficient	0.710**	1.000	0.671**	-0.144**	0.246**	0.073	-0.093	-0.070
Sig. (2-tailed)	0.000	-	0.000	0.004	0.000	0.148	0.066	0.163
N	396	396	396	394	394	394	395	395
<b>Absorption</b>								
Correlation coefficient	0.677**	0.671**	1.000	-0.107*	0.258**	0.154**	0.023	-0.083
Sig. (2-tailed)	0.000	0.000	-	0.034	0.000	0.002	0.654	0.100
N	397	396	397	394	394	394	395	395
<b>WFH challenges</b>								
Correlation coefficient	-0.318**	-0.144**	-0.107*	1.000	-0.256**	-0.395**	0.390**	0.523**
Sig. (2-tailed)	0.000	0.004	0.034	-	0.000	0.000	0.000	0.000
N	394	394	394	394	392	393	394	394
<b>Organisational support</b>								
Correlation coefficient	0.354**	0.246**	0.258**	-0.256**	1.000	0.385**	-0.206**	-0.194**
Sig. (2-tailed)	0.000	0.000	0.000	0.000	-	0.000	0.000	0.000
N	394	394	394	392	394	392	393	393
<b>Conducive WFH environment</b>								
Correlation coefficient	0.239**	0.073	0.154**	-0.395**	0.385**	1.000	-0.328**	-0.566**
Sig. (2-tailed)	0.000	0.148	0.002	0.000	0.000	-	0.000	0.000
N	394	394	394	393	392	394	394	394
<b>Work-life balance</b>								
Correlation coefficient	-0.227**	-0.093	0.023	0.390**	-0.206**	-0.328**	1.000	0.400**
Sig. (2-tailed)	0.000	0.066	0.654	0.000	0.000	0.000	-	0.000
N	395	395	395	394	393	394	395	395
<b>Social alienation</b>								
Correlation coefficient	-0.219**	-0.070	-0.083	0.523**	-0.194**	-0.566**	0.400**	1.000
Sig. (2-tailed)	0.000	0.163	0.100	0.000	0.000	0.000	0.000	-
N	395	395	395	394	393	394	395	395

WFH, work-from-home; VI, Vigour; DE, Dedication; AB, Absorption; WFH CH, WFH challenges; O SUP, Organisational support; CON WFH, Conducive WFH environment; WLB, Work-life balance; SA, Social alienation.

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

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

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

alienation. The Cronbach's alpha coefficient yielded values above the required 0.7, indicating excellent reliability and internal consistency. The highest mean score was obtained by Conducive WFH environment, followed by Organisational support, Work-life balance, Social alienation and WFH challenges. The mean scores showed that a large majority of the respondents held the view that their conditions at home afforded a conducive work environment. They were also to a large extent satisfied with the support received from the institution while working from home. It was, however, evident that some of the respondents experienced difficulties with maintaining a good work-life balance and experienced social alienation and WFH challenges, although they were in the minority. The results support the view of Felstead and Jewson (as cited in Watson, 2017, p. 219) that working from home is not without difficulties and that homeworkers are subjected to challenges such as work-life balance issues, work-home interferences and working for longer hours. In addition, various authors (Carnevale & Hatak, 2020, p. 183; Chanana, 2020, p. 1; Hedding et al., 2020, p. 1; Pathak & Majumdar, 2020) documented similar challenges experienced by homeworkers during the COVID-19 pandemic.

The *t*-tests revealed that the male respondents, those employed on fixed-term or temporary contracts and those in support positions displayed more Vigour than the female respondents, those employed full time and those in academic positions, respectively. Furthermore, the academic staff respondents were more subjected to WFH challenges, were less positive about the conduciveness of their WFH environments and organisational support received and experienced more difficulties with work-life balance and social alienation than the support staff respondents. Hedding et al. (2020) state that the added strain of childcare and home-schooling, which fell predominantly on women's shoulders during the COVID-19 pandemic, might have implications for their productivity. Similarly, Heggeness (2020) argues that the 'double-bind' on mothers might have implications for their work engagement. The vigour of academic staff and those who were employed full time in permanent contracts might have been influenced by the move to an online and blended teaching and learning approach, as they grappled with the 'unknowns' of this approach and also suffered from increased working hours, workload, Zoom fatigue and increased parental demands, among other factors (Carnevale & Hatak, 2020; Chanana, 2020; Schulman, 2020).

Regarding the respondents' WFH scenario, the results revealed that those who had been working from home since the beginning of the lockdown and had not returned to campus were more absorbed in their work and were more positive about the organisational support received than the respondents who were required by their employer to divide their time between the office and working from home, but did not feel safe working in the office. Furthermore, those who had been working from home only during the required COVID-19 lockdown level and returned to the office once they could were less positive about the conduciveness of their WFH environments. The results further revealed that those respondents who had returned to the office once the COVID-19 lockdown levels permitted and those who had divided their time between office and working at home were less affected by work-life balance issues (e.g. working more hours, feeling tied to their computers, not getting enough exercise) than respondents who had returned to the office once they could. It was also evident that the respondents who had been required by their employer to divide their time between the office and working from home, but did not feel safe working in the office, were less affected by social alienation than those respondents who had willingly returned to the office when required or when they could.

The results revealed moderate positive correlations between age and work engagement; therefore, the older the respondents, the more they displayed vigour, dedication and absorption in their work. Furthermore, the older the respondents, the higher their qualifications and the longer their tenure at the institution, the more they were affected by work-life balance issues. It was also evident that the longer the respondents worked at home, the more they indicated that their WFH environments were conducive and the less they experienced social alienation.

The results showed that the more satisfied the respondents were with the support received from the institution, the higher their levels of vigour, dedication and absorption, and the less they indicated that they were subjected to WFH challenges. Furthermore, the more the respondents regarded their WFH environments as conducive, the higher their levels of vigour and absorption. It was also evident that the less the respondents were affected by work-life balance issues and social alienation, the higher their levels of vigour. The results further showed that the more satisfied the respondents were with the support received from the organisation, the more they regarded their WFH environments as conducive, and the less they indicated that they experienced WFH challenges, work-life balance issues and social alienation.

The results provide support for the JD-R model, as they revealed a positive correlation between work engagement and organisational support, which is regarded as a job

resource, and which may contribute to increasing the engagement levels of employees (Schaufeli & Taris, 2014).

## Limitations and recommendations

A major limitation was that the study was conducted among employees of one HEI in South Africa and therefore the results cannot be generalised to all HEIs in the country. Therefore, it is recommended that similar studies focusing on work engagement and flexible work practices such as WFH be conducted in HEIs, as it is expected that this might become an alternative working arrangement considered by institutions to a great extent in future. Furthermore, a qualitative inquiry could provide new insights and a deeper understanding of the factors influencing work engagement in flexible work practices. Leadership and human resource managers play an important role in ensuring engaged employees, as engaged employees result in positive outcomes for both the individual and the organisation. Therefore, it is important to implement practices such as the 10 Cs recommended by Crim and Seijts (2006, as cited in Amos et al., 2016, pp. 124–126) to enhance employees' levels of engagement.

## Conclusion

The primary purpose of this study was to determine the perspectives on work engagement and WFH among employees of an HEI in South Africa during the global COVID-19 pandemic. The results of the study showed that the employees were to a great extent engaged in their work because of the organisational support received from the institution while working from home. Most employees reported that their WFH environments afforded a conducive space to execute their work tasks effectively. However, the results showed that some of the employees were subjected to challenges such as difficulties in establishing a work routine, a lack of sufficient equipment and resources to function at home, work-home interference, increased workload and working hours, isolation and work-life balance issues, although they were in the minority. The results further showed that socio-demographic variables such as gender, employment contract, nature of employment (academic or support), age, tenure and highest qualification played a role in employees' engagement levels. Furthermore, organisational support as a job source plays a major role in increasing the engagement levels of employees. This study contributes to the body of knowledge regarding work engagement and WFH in the context of flexible work practices, in general, and specifically during the global COVID-19 pandemic.

## Acknowledgements

The authors are grateful for the support received from the higher education institution and its employees who agreed to participate in the research study. They would also like to thank Prof. Suria Ellis, who assisted with the processing of the empirical results and Ms Laetitia Bedeker, who professionally edited the article.

## Competing interests

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

## Authors' contributions

D.B. conducted the literature review as well as the empirical study and wrote up the article. G.v.D. assisted with the empirical study and reviewed the article. A.M. assisted with the literature review.

## Funding information

This research work received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

## Data availability

The data that support the findings of this study are available on request from the author, D.B.

## Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

## References

- Admasachew, L., & Dawson, J. (2010). *Employee engagement: A brief review of definitions, theoretical perspectives and measures*. Aston Business School, Aston University. Retrieved from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/215465/dh\\_129661.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/215465/dh_129661.pdf)
- Agasisti, T., & Soncin, M. (2021). Higher education in troubled times: On the impact of Covid-19 in Italy. *Studies in Higher Education*, 46(1), 86–95. <https://doi.org/10.1080/03075079.2020.1859689>
- Alderfer, C.P. (1972). *Human needs in organizational settings*. New York: The Free Press of Giencoe.
- Amos, T., Pearce, N., Ristow, L., & Ristow, A. (2016). *Human resource management* (4th ed.). Juta.
- Babbie, E., & Mouton, J. (2011). *The practice of social research*. Oxford University Press.
- Bagraim, J. (2016). Motivation and engagement of the South African workforce. In A. Werner, J. Bagraim, P. Cunningham, T. Potgieter, & C. Viedge (Eds.), *Organisational behaviour* (4th ed., pp. 95–132). Van Schaik.
- Blunch, N.J. (2008). *Introduction to structural equation modelling using SPSS and AMOS*. Sage.
- Botha, D., & Coetzee, R. (2022). Covid-19 pandemic: Perspectives on employee engagement, work from home and an employee wellness programme in a Debt Collection Organisation in Gauteng, South Africa. *African Journal of Employee Relations*, 46(1), 1–28. <https://doi.org/10.25159/2664-3731/9235>
- Brown, T.A., & Moore, M.T. (2012). *Confirmatory factor analysis*. Retrieved from [https://www.researchgate.net/profile/Michael-Moore-75/publication/251573889\\_Hoyle\\_CFA\\_Chapter\\_-\\_Final/links/0deec51f14d2070566000000/Hoyle-CFA-Chapter-Final.pdf](https://www.researchgate.net/profile/Michael-Moore-75/publication/251573889_Hoyle_CFA_Chapter_-_Final/links/0deec51f14d2070566000000/Hoyle-CFA-Chapter-Final.pdf)
- Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University Press.
- Carmines, E.G., & McIver, J.P. (1981). Analyzing models with unobserved variables. In G.W. Bohrnstedt & E.F. Borgatta (Eds.), *Social measurement: Current issues* (pp. 65–115). Sage.
- Carnahan, D. (2013). *A study of employee engagement, job satisfaction and employee retention of Michigan CRNAs*. Unpublished doctoral dissertation, University of Michigan-Flint.
- Carnevale, J.B., & Hatak, I. (2020). Employee adjustment and well-being in the era of Covid-19: Implications for human resource management. *Journal of Business Research*, 116, 183–187. <https://doi.org/10.1016/j.jbusres.2020.05.037>
- Chanana, N. (2020). Employee engagement practices during COVID-19 lockdown. *Journal of Public Affairs*, 21(4), e2508. <https://doi.org/10.1002/pa.2508>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum.
- Colquitt, J.A., Lepine, J.A., & Wesson, M.J. (2013). *Organisational behaviour: Improving performance and commitment in the workplace*. McGraw-Hill.
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Sage.
- Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86, 499–512.
- Edgell, S., & Granter, E. (2020). *The sociology of work: Continuity and change in paid and unpaid work*. Sage.
- Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Sage.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Sage.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). Sage.
- Fisher, J., Languilaire, J.C., Lawthom, R., Nieuwenhuis, R., Petts, R.J., Runswick-Cole, K., & Yerkes, M.A. (2020). Community, work, and family in times of COVID-19. *Community, Work & Family*, 23(3), 247–252. <https://doi.org/10.1080/13668803.2020.1756568>
- Ghauri, P., & Gronhaug, K. (2002). *Research methods in business studies: A practical guide* (2nd ed.). Prentice Hall.
- Goffman, E. (1961). *The presentation of self in everyday life*. New York: Anchor-Doubleday
- Hair, J.R., Anderson, R.E., Tatham, R.L., & Black, W.C. (2010). *Multivariate data analysis* (7th ed.). Prentice-Hall.
- Hedding, D.W., Greve, M., Breetzke, G.D., Nel, W., & Jansen Van Vuuren, B. (2020). COVID-19 and the academe in South Africa: Not business as usual. *South African Journal of Science*, 116(7/8), 1–3. <https://doi.org/10.17159/sajs.2020/8298>
- Heggeness, M.L. (2020). Estimating the immediate impact of the COVID-19 shock on parental attachment to the labor market and the double bind of mothers. *Review of Economics of the Household*, 18, 1053–1078. <https://doi.org/10.1007/s11150-020-09514-x>
- Hu, L., & Bentler, P.M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Hutchinson, S. (2017). Flexible working. In G. Rees & P.E. Smith (Eds.), *Strategic human resource management* (2nd ed., pp. 193–229). Sage.
- Institute for Digital Research and Education. (2021). *A practical introduction to factor analysis: Confirmatory factor analysis*. Retrieved from <https://stats.idre.ucla.edu/spss/seminars/introduction-to-factor-analysis/a-practical-introduction-to-factor-analysis-confirmatory-factor-analysis/>
- International Labour Organization. (2020). *An employers' guide on working from home in response to the outbreak of Covid-19*. Retrieved from [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---act\\_emp/documents/publication/wcms\\_745024.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---act_emp/documents/publication/wcms_745024.pdf)
- Kahn, W.A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33, 692–724. <https://doi.org/10.2307/256287>
- Kahn, W.A. (1992). To be fully there: Psychological presence at work. *Human Relations*, 45, 321–349. <https://doi.org/10.1177/001872679204500402>
- Maslow, A.H. (1970). *Motivation and Personality* (2nd ed.). New York: Harper & Row.
- Marinoni, G., Van't Land, H., & Jensen, T. (2020). *The impact of Covid-19 on higher education around the world*. IAU Global Survey Report. IAU. Retrieved from [https://www.iau-aiu.net/IMG/pdf/iau\\_covid19\\_and\\_he\\_survey\\_report\\_final\\_may\\_2020.pdf](https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf)
- Mueller, R.O. (1996). *Basic principles of structural equation modeling: An introduction to LISREL and EQS*. Springer.
- Obadi, O.S., Mashau, T.S., & Misumi, C. (2020). Understanding internationalisation of higher education in the era of Covid-19. *Gender and Behaviour*, 18(4), 16777–16786.
- Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using IBM statistics* (6th ed.). Open University Press.
- Paterson, M. (2021, February 11). COVID-19 and higher education: Damage done, lessons learnt. *University World News*. Retrieved from <https://www.universityworldnews.com/post.php?story=20210211103422612>
- Pathak, K., & Majumdar, R. (2020, May 17). Work from home: Employee benefits set for overhaul as companies redraft rules. *Mint*. Retrieved from <https://www.livemint.com/news/india/work-from-home-employee-benefits-set-for-overhaul-as-companies-redraft-rules-11589720024463.html>
- Piotrowski, C., & King, C. (2020). Covid-19 pandemic: Challenged and implications for higher education. *Education*, 141(2), 61–66.
- Rothman, S., & Baumann, C. (2014). Employee engagement: The effects of work-home/home-work interaction and psychological conditions. *South African Journal of Economic and Management Sciences*, 17(4), 515–530. <https://doi.org/10.4102/sajems.v17i4.419>
- Sarantakos, S. (2013). *Social research* (4th ed.). Palgrave Macmillan.
- Schaufeli, W.B. (2017). General engagement: Conceptualization and measurement with the Utrecht General Engagement Scale (UGES). *Journal of Well-being Assessment*, 1, 9–24. <https://doi.org/10.1007/s41543-017-0001-x>
- Schaufeli, W.B., & Bakker, A. (2004). *UWES: Utrecht Work Engagement Scale. Preliminary manual*. Retrieved from [https://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test\\_manual\\_UWES\\_English.pdf](https://www.wilmarschaufeli.nl/publications/Schaufeli/Test%20Manuals/Test_manual_UWES_English.pdf)
- Schaufeli, W.B., Salanova, M., Bakker, A.B., & Gonzales-Roma, V. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92. <https://doi.org/10.1023/A:1015630930326>
- Schaufeli, W.B., & Taris, T.W. (2014). A critical review of the Job Demands-Resources model: Implications for improving work and health. In G.F. Bauer & O. Hämmig (Eds.), *Bridging occupational, organizational and public health: A transdisciplinary approach* (pp. 43–68). Springer Science and Business Media.

- Schulman, C. (2020, April). I used to shut my windows to New York's noise. Now I long for a honking horn. *Washington Post*. Retrieved from <https://www.washingtonpost.com/outlook/2020/04/09/new-york-silent-coronavirus/>
- Shuck, M.B., & Wollard, K.K. (2009). A historical perspective of employee engagement: An emerging definition. In M.S. Plakhotnik, S.M. Nielsen, & D.M. Pane (Eds.), *Proceedings of the Eighth Annual College of Education & GSN Research Conference* (pp. 133–139). Florida International University. Retrieved from <https://digitalcommons.fiu.edu/cgi/viewcontent.cgi?article=1159&context=sferc>
- Smith, P.A. (2020). Lessons from Yalta: Considerations for post-Covid-19 higher education. *International Journal of Multidisciplinary Perspectives in Higher Education*, 5(1), 113–117. <https://doi.org/10.32674/jimphe.v5i1.2443>
- Sun, L., & Bunchapattanasakda, C. (2019). Employee engagement: A literature review. *International Journal of Human Resource Studies*, 9(1), 63–80. <https://doi.org/10.5296/ijhrs.v9i1.14167>
- Vyas, L., & Butakhieo, N. (2020). The impact of working from home during Covid-19 on work and life domains: An exploratory study on Hong Kong. *Policy Design and Practice*, 4(1), 59–76. <https://doi.org/10.1080/25741292.2020.1863560>
- Wang, B., Liu, Y., Qian, J., & Parker, S.K. (2021). Achieving effective remote working during the Covid-19 pandemic: A work design perspective. *Applied Psychology: An International Review*, 70(1), 16–59. <https://doi.org/10.1111/apps.12290>
- Wärnich, S., Carrell, M.R., Elbert, N.F., & Hatfield, R.D. (2018). *Human resource management*. Cengage Learning, EMEA.
- Watson, T. (2017). *Sociology, work and organisation* (7th ed.). Routledge.
- Weidert, J.M. (2011). *Physiological measurement of employee engagement*. MA dissertation. Colorado State University. Retrieved from <https://mountainscholar.org/handle/10217/47421>
- Werner, A. (2021). Motivation and engagement. In P. Nel & A. Werner (Eds.), *Human resource management* (11th ed., pp. 403–428). Oxford University Press.