



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

## Employee engagement amid and post the Covid-19 pandemic in a South African debt collection organisation

Doret Botha

North-West University, Potchefstroom, South Africa

**Abstract.** *In the post-Covid-19 pandemic era, there is an increasing interest in the implementation of flexible work arrangements such as remote work. Previous research revealed that remote work environments may affect the engagement levels of employees positively or negatively. This article reports on the results of three studies conducted before and post the Covid-19 pandemic, measuring the engagement levels of employees in a debt collection organisation in South Africa. The research results suggest that remote work has the potential to enhance employee engagement levels. Consequently, management should consider maintaining or implementing flexible working arrangements, such as remote work, to foster and sustain employee engagement. Additionally, the findings suggested that factors such as gender, age and educational attainment may influence employee engagement levels. The findings highlight the importance of understanding employee engagement and its contributing factors across various work environments, including flexible work arrangements such as remote and hybrid work.*

**Keywords:** Debt collection organisation, engagement, flexible work arrangements, Covid-19 pandemic, remote work, South Africa

**JEL Codes:** M12, M54

**How to cite:** Botha, D. (2025). Employee engagement amid and post the Covid-19 pandemic in a South African debt collection organisation. *Journal of Economic Development, Environment and People*, 14(2), 65–87. <https://doi.org/10.26458/jedep.v14i2.885>

### 1. Introduction

The Covid-19 pandemic and associated lockdowns introduced worldwide have fundamentally shifted the way in which people work and changed the concepts of work, workplace and workforce (Carnevale & Hatak, 2020; Vidya, 2022). The pandemic challenged the physical construct of a work environment, as during the pandemic, most of the global labour force was required to work remotely from home. While some people find it difficult, over the last years, most have adapted to the new norm, and the remote and hybrid model of working has been normalised (Chitnis, 2022). The International Labour Organization (ILO) (2020a) defines remote work as “situations where the work is fully or partly carried out on an alternative worksite other than the default place of work”. In a hybrid work model, employees are allowed to work a few days from their onsite offices and the remaining days remotely, for example, from home (Varma et al., 2022; Xie et al., 2019). The hybrid work model incorporates the advantages of both onsite and remote working conditions (Bloom et al., 2022). It enhances employee experiences, broadens access to talent,



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

improves productivity at both the individual and team level, reduces operational expenses, and offers increased flexibility (Alexander et al., 2020).

However, after the global pandemic, some organisations implemented an exclusive remote or hybrid work model, while others required their employees to return to their onsite offices (Osibanjo, 2022). For many employees, the requirement to return to the office “feels like a loss of their flexibility and well-being” (Osibanjo, 2022). After the pandemic, employees tended to place more emphasis on purposeful work (McKinsey, as cited in Osibanjo, 2022) related to the new “worth it” equation (Microsoft, 2022, p. 3).

In the post-pandemic era, there is increasing discussion and implementation of exclusive remote or hybrid work. At the organisational level, this requires specific systems and processes to manage work and relationships. At the individual level, leaders and managers need to assist employees in maintaining their organisational identity, enhancing their well-being and maintaining a balance between their work and family life (Varma et al., 2022).

Research revealed that remote work environments may affect employee engagement levels positively or negatively (Adisa et al., 2023; Ariani, 2013; Bartik et al., 2020; Galanti et al., 2021; Lee, 2018). Kahn (1990, p. 694) explains engagement as the “harnessing of organization members” selves to their work roles; in engagement, people employ and express themselves physically, cognitively and emotionally during role performances”. According to Reese and Smith (2017, p. 303), it entails “engaging the heart and soul of the employee when they are at work”. An engaged workforce is desirable for organisations (Gruman & Saks, 2011; Werner, 2021) and results in positive employee outcomes such as increased motivation, job satisfaction, organisational commitment, lowered intention to quit (Amos et al., 2016; Wilton, 2016), less absence, increased productivity (Rothman & Baumann, 2014) and improved profitability (Adhitama & Riyanto, 2020; Gallup, 2024). Gallup’s recent global report titled *State of the Global Workplace* (2024) revealed that engaged employees have lower levels of daily stress, anger, worry, sadness and loneliness. Gallup’s global report further estimated that “low employee engagement costs the global economy 8.9 trillion U.S. dollars, or 9% of global GDP” (Gallup, 2024, p. 2). According to Robinson et al. (cited in Wilton, 2016, p. 37), creating an engaged workforce is problematic; therefore, organisations must “work” to engage their employees.

The need for this research arose from the transformative impact of the global Covid-19 pandemic on various aspects of society, particularly the work environment. The worldwide effect of the Covid-19 pandemic has forced most organisations to change and adapt. This was also true for the organisation in which this research was conducted. The organisation in question employs a significant number of staff in a call centre setting. Anticipating the ramifications of the pandemic, the organisation initiated a work-from-home (WFH) model in February 2020, focusing on technological requirements and employee needs. Despite facing several challenges, the organisation successfully transitioned all staff to remote work by the end of March 2020. However, management required their staff to return to their on-site offices in January 2022. Given the changes that took place worldwide regarding workplace arrangements and practices, the leadership of the organisation needed to review the operational model (onsite office work) as well as the relationship with employees to inform business decisions to keep the organisation moving forward.

The purpose of the article is to report on the results of three studies that were conducted during and post the Covid-19 pandemic that measured the engagement levels of employees in a debt collection organisation in South Africa.



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

## 2. Literature review

### 2.1. The destandardisation-of-work thesis

Neo-Fordist and post-Fordist perspectives on industrial and service work organisations concur that there has been a shift from the traditional Fordist model, characterised by permanent full-time work or employment (i.e., standard work), towards a more varied and flexible pattern of work or employment (i.e., non-standard work) (Edgell & Granter, 2020).

According to Beck (1992) and Castells (2001) (as cited in Edgell & Granter, 2020), the standard form of paid work has shown high levels of standardisation in relation to the employment contract, work location and work hours and is highly regulated (e.g., in terms of hours, pay, health and safety, and benefits). However, these elements are currently undergoing a process of destandardisation, reflecting broader shifts in the labour market and employment relations. Beck (2000) and Castells (2001) (as cited in Edgell & Granter, 2020) conceptualised non-standard work as deregulated, variable in space and time, and impermanent and encompassing part-time work, temporary employment, varied forms of self-employment and homeworking. This trend can be attributed to several interrelated factors: the decline of Fordism as a dominant production system (Edgell & Granter, 2020); globalisation; rapid technological advancements; the pursuit of organisational adaptability in response to intensifying competitive pressures (Hutchinson, 2017; Watson, 2017); the quest for managerial strategies to enhance functional (i.e., task allocation) and numerical flexibility (i.e., the adjustment of labour supply to match the demand for labour); and the increased utilisation of information and communication technologies (ICTs) (Allen et al., 2015; Edgell & Granter, 2020).

ICTs are integral to the process of work destandardisation, enabling employers to restructure the production of goods and services while altering the contractual, spatial and temporal dimensions of labour to foster increased flexibility (Edgell & Granter, 2020). ICTs facilitate spatial destandardisation by enabling remote work, such as homeworking (also referred to as telecommuting from home) (Edgell & Granter, 2020), which has been a significant trend, particularly following the Covid-19 pandemic (Bloom et al., 2022). Teleworking is defined as “working for pay mainly from home using computer and communication technologies” (Edgell & Granter, 2020, p. 207).

The transformation of standard to non-standard spatial work arrangements, such as homeworking or teleworking, affects workers and employers both positively and negatively. The upside is that this work arrangement offers workers higher autonomy (workers gain a degree of freedom over how they organise their work and non-work lives), allowing for time flexibility, reducing commuting costs, and improving the work–life balance of individuals (Edgell & Granter, 2020; Felstead & Henseke, 2017; Liu et al., 2019). The downside is that workers are subjected to isolation and loneliness (Alexander et al. 2020; Edgell & Granter, 2020; Gallup, 2024; Wang et al., 2021), work–home interference (Edgell & Granter, 2020; ILO, 2020b; Wang et al., 2021), negative work–life balance (Chung et al., 2021; Juchnowicz & Kinowska, 2021; Rodríguez-Modroño, 2022), restricted opportunities for forming supportive or quality relationships (Rodríguez-Modroño, 2022; Wöhrmann & Ebner, 2021), and there is a tendency to work intensively for long hours (Chesley, 2010; Edgell & Granter, 2020; Grant et al., 2013). Furthermore, homeworking puts a premium on self-management skills (Edgell & Granter, 2020), as workers need to organise their workspace, their



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

working time, establish social boundaries, and supervise themselves to ensure that the quantity and quality of their work are maintained and their occupational credibility is enhanced (Felstead et al., as cited in Edgell & Granter, 2020).

For employers, homeworkers increase the flexibility of the organisation, provide the advantage of numerical flexibility (e.g., decrease the costs associated with employment in an office) and raise productivity and hence profits (Edgell & Granter, 2020; Liu et al., 2019). However, homeworking poses significant challenges to employers. Maintaining control and motivating workers over a distance puts a premium on trust and the manager's delegation and communication skills. It may also jeopardise teamwork (Edgell & Granter, 2020).

According to Edgell and Granter (2020), the mixed location solution, providing for a combination of home and office working (i.e., hybrid work), has the potential to mitigate the main disadvantages of homeworking.

## 2.2. Employee engagement

Over the past two decades, the term “work engagement” has gained considerable prominence in both academic research and organisational practice. This growing interest is attributed to the observed positive relationships between work engagement and various facets of employee behaviour (Wontorczyk & Roznowski, 2022). Although there is no universally accepted definition of employee engagement, two predominant approaches are commonly used to conceptualise the term. The first approach posits that employee engagement is antithetical to burnout. The second approach characterises it as a positive, fulfilling state of mind, distinct from burnout (Bagrami, 2016). Within the framework of the second approach, Schaufeli and Bakker (2004a, p. 4) defined engagement as a “positive, fulfilling, work-related state of mind that captures feelings of vigour, dedication and absorption rather than monetary value in the workplace”. Vigour refers to the expenditure of high levels of energy during work, the willingness to exert effort in work activities and the mental resilience to endure challenges (Schaufeli et al., 2002). Dedication indicates a profound involvement in work due to its perceived significance, eliciting feelings of enthusiasm, inspiration, pride and challenge (Schaufeli et al., 2002). Absorption entails being deeply engrossed and content in one's work, leading to a loss of sense of time and difficulty detaching from work (Schaufeli et al., 2002).

The Job Demands-Resources (JD-R) model is useful in explaining the factors that may increase or decrease employee engagement levels. The JD-R model exhibits a high degree of flexibility, allowing it to be adapted to a broader range of occupational environments (Schaufeli & Taris, 2014). The JD-R model was initially conceptualised by Demerouti et al. (2001) as a framework to understand the precursors of burnout (Schaufeli & Taris, 2014). Subsequently, three years later, in 2004, Schaufeli and Bakker expanded on this model to not only elucidate the factors contributing to burnout (a negative psychological state) but also to highlight the motivational potential inherent in job resources to foster employee engagement (a positive psychological state). The revised model posits that burnout is primarily a consequence of elevated job demands coupled with insufficient job resources and that a motivational process is activated by the presence of ample job resources (Schaufeli & Taris, 2014). Job demands refer to the social, physical or organisational aspects of a work environment that require the allocation of both mental and physical effort by individuals in order to fulfil their professional responsibilities (Harunavamwe & Kanengoni, 2023). Examples of job demands are unfavourably work conditions, workload, job insecurity, harassment, time



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

pressure, work pressure, work–home conflict, and work overload (Schaufeli & Taris, 2014). Job resources refer to the physical, organisational and social components inherent in a work environment that assist in achieving work-related objectives or goals (Wontorczyk & Rożnowski, 2022). Examples of job resources include autonomy, appreciation, advancement, financial rewards, social support from colleagues and supervisors, and trust in management. Job resources play an intrinsic and extrinsic motivational role (Schaufeli & Taris, 2014). According to the revised model, job resources cultivate a positive work-related state of mind (i.e., work engagement), which is achieved through the satisfaction of basic human needs related to autonomy, belongingness and competence (intrinsic motivations) and the attainment of work-related goals (extrinsic motivations) (Schaufeli & Taris, 2014).

To date, the JD-R model has also incorporated personal resources. Personal resources are defined as psychological attributes or aspects of the self that are typically associated with resilience and instrumental in enabling an individual to exert control over and effectively interact with their environment. These personal resources, like job resources, facilitate the achievement of work-related goals and promote personal growth and development (Schaufeli & Taris, 2014). Examples of personal resources include emotional and mental competencies, hope, optimism, intrinsic motivation and satisfaction of basic human needs (Schaufeli & Taris, 2014).

### **2.3. Work engagement in non-standard spatial arrangements**

Work engagement in remote and hybrid work environments has emerged as a pivotal topic due to the increasing adoption of flexible work arrangements by numerous organisations during and post the Covid-19 pandemic. Literature revealed that flexible work arrangements, such as remote work, telework and work-from-home, can improve work engagement (Botha & Coetzee, 2022; Botha et al., 2023; Cassim et al., 2024; Eng et al., 2024; Hutchinson, 2017; Lee, 2018; Nagata et al., 2021).

Interestingly, Gallup's recent report, titled *State of the Global Workplace – The Voice of the World's Employees*, revealed that, on average, workers who work exclusively remotely are more engaged than those who work hybrid and on-site (Gallup, 2024). Furthermore, the report indicated that workers who work exclusively remotely and on-site tend to thrive more than workers who work hybrid (Gallup, 2024). The report also revealed that the daily stress levels of remote and onsite workers were lower than those of hybrid workers (Gallup, 2024). The report, however, indicated that those employees who worked exclusively remotely experienced more daily loneliness, anger and daily sadness than onsite and hybrid workers (Gallup, 2024). Nonetheless, hybrid workers, followed by those who work exclusively remotely, showed a higher propensity to leave their organisations in comparison to onsite workers (Gallup, 2024). The research upon which the report was based involved a comprehensive analysis spanning 10 distinct regions and 160 countries across the globe.

Rodríguez-Modroño (2022) conducted a cross-sectional study among 35 European countries to examine the different ways in which telework intensity impacted working conditions, including work engagement, by gender. Teleworkers were categorised into four groups: high intensity (working outside office premises several times a week); medium intensity (working outside office premises several times a month); low intensity workers (working outside office premises less often); and those who do not engage in teleworking at all. The findings revealed that high-intensity teleworkers scored the highest on work engagement, but they scored the lowest on working time quality and social environment. Workers who did not engage in teleworking at all scored the lowest on all the working conditions dimensions, including job



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

satisfaction and work engagement. Interestingly, the results revealed that high-intensity female teleworkers scored the highest on work engagement.

Nagata et al. (2021) examined the relationship between the intensity of home-based telework and work engagement and found an association between them; however, this depended on the intensity of telework. Specifically, high-intensity telework (four or more days per week) was not associated with high work engagement, while low-intensity telework (ranging from once per month to once per week) and moderate-intensity telework (two to three days per week) were associated with higher levels of work engagement in the case of both male and female participants.

Research has identified various determinants that may affect the levels of employee engagement within remote work environments. Some studies indicated an increase in employee engagement due to greater flexibility (Golden & Geisler, 2007); (perceived) organisational support<sup>1</sup> (Bonaiuto et al., 2022; Botha & Coetzee, 2022; Botha et al., 2023; Harunavamwe & Kanengoni, 2023); greater control over the work process (Dewett & Jones, 2001; Lee, 2018); improved efficiency (Dewett & Jones, 2001); conducive remote work environment (Botha et al., 2023); and improved work–life balance (Bhat et al., 2023; Palumbo, 2020). Other studies indicated that the following factors may erode employee engagement: work–family conflict or work–home interference (Adisa et al., 2023; Harunavamwe & Kanengoni, 2023; Robinson et al., 2016); online presenteeism<sup>2</sup> (Adisa et al., 2023); technostress<sup>3</sup> (Bonaiuto et al., 2022; Harunavamwe & Kanengoni, 2023); long working hours (Adisa et al., 2023); feelings of isolation and marginalisation (Botha et al., 2023; Lee, 2018); work-related stress (Botha & Coetzee, 2022); and work–life balance issues (Botha et al., 2023).

Given the rapid expansion of digital work and flexible work arrangements, it is essential to monitor their relationship with work engagement. The existing literature on this topic remains limited and inconclusive.

#### **2.4. Work engagement and its relationship with socio-demographic characteristics**

The results of previous studies suggest that socio-demographic characteristics such as gender, age, tenure, educational level and position (or role) in an organisation may affect employee engagement levels.

The global study conducted by Gallup (2024) revealed that females were more engaged than males, younger workers more than older workers, and managers more than individual contributors. However, the report did not mention gender, age and position (role) disparities in relation to working modes (i.e., exclusively remotely, hybrid, or on-site).

In a remote work environment context, mixed findings were revealed concerning the relationship between socio-demographic characteristics (gender, age, tenure, educational level and position [or role] in the organisation) and employee engagement.

---

<sup>1</sup> Perceived organisational support is the individual's perception of the extent to which their organisation attends to their wellbeing and recognises the value of their contributions (Guilbert et al., 2018; Karim et al., 2019).

<sup>2</sup> Online presenteeism is a phenomenon wherein workers feel compelled to maintain constant availability online, responding to work-related tasks (Adisa et al., 2023).

<sup>3</sup> Technostress refers to the stress experienced by employees because of the pervasive and evolving nature of ICTs (Tarafdar et al., 2007, 2019).



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

Concerning gender disparities in employee engagement, Botha et al. (2023) and Rodríguez-Modroño (2022) found that females were more engaged than males; however, Cassim et al. (2024) and Rožman et al. (2021) found that males were more engaged than females. As discussed in the preceding section, Nagata et al. (2021) identified a relationship between remote work and work engagement among both men and women.

Regarding the influence of age on engagement levels, Botha et al. (2023) and Cassim et al. (2024) found that older employees exhibited higher engagement levels than younger employees.

In relation to tenure, Botha et al. (2023) identified no significant relationship between tenure and engagement. Conversely, Cassim et al. (2024) found that employees with longer tenure exhibited higher levels of engagement, suggesting that contextual or industry-specific factors may influence these relationships.

With respect to educational level, Botha et al. (2023) and Cassim et al. (2024) found no significant relationship between educational level and engagement.

Regarding the position or role of individuals in organisations, Cassim et al. (2024) and Rodríguez-Modroño (2022) found that managers were more engaged than non-managers. Gallup (2024) reported that, in organisations recognised for implementing best practices, 75% managers and 70% of non-managerial staff showed high levels of engagement.

### **3. Research design and methodology**

#### **3.1 Research approach**

The three studies were conducted in October 2020, during the period of stringent lockdown measures implemented due to the Covid-19 pandemic; in February 2022, when employees returned to their onsite offices; and in June 2023, approximately one year after employees had resumed working from their offices. The studies used a quantitative research approach and strategy informed by an objectivist ontology and positivist epistemology. All three studies employed a cross-sectional research design.

#### **3.2 Target population and sampling**

The studies were conducted within a single organisation in the financial services sector, specifically focusing on outsourced debt collections. The organisation employs approximately 100 individuals distributed across several departments: administration and client relations; finance; information technology; call centre; field operations; human resources; and marketing. The target population included all employees of the organisation. However, since not all employees participated in the research, a non-probability sample was obtained. Data were collected through convenience sampling, which involved selecting participants who were readily accessible and willing to take part in the study (Sarantakos, 2013:177).

#### **3.3 Data collection**

Data were collected through a web-based survey using Google Forms. A coded standardised questionnaire was used. The first section comprised five biographical questions on gender, age, department employed, years working in the organisation (tenure), and highest qualification. The 17-item Utrecht Work Engagement Scale (UWES) (Schaufeli & Bakker, 2004a) was used to measure employee engagement levels in the organisation. A five-point Likert scale was used. The UWES, the most commonly used measure for employee engagement (Schaufeli & Bakker, 2004a), contains six questions that measure



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

vigour (i.e., employees' levels of energy, resilience, and willingness to invest effort in their work), five that measure dedication (i.e., one's deep involvement in work, characterised by significance, enthusiasm, inspiration, pride and challenge) and six that measure absorption (i.e., a state of full concentration and engagement in work, where time passes quickly and detachment from work becomes difficult) (Schaufeli & Bakker, 2004a). The internal consistency of the scale has been deemed acceptable, with Cronbach alpha values ranging from 0.8 to 0.9 (Schaufeli & Bakker, 2004b; Soane et al., 2012).

### 3.4 Data analysis

The data were processed using the Statistical Package for the Social Sciences (SPSS, Version 28). Confirmatory factor analyses were conducted to validate the factor structure of the constructs pertaining to employee engagement and to evaluate the reliability of the Cronbach alpha coefficients. As advocated by Hancock and Mueller (2010), it is advisable to report multiple fit indices from three broad classes. Therefore, the following goodness-of-fit indices were employed: the chi-square statistic divided by degrees of freedom (CMIN/DF); the comparative fit index (CFI); and the root mean square error of approximation (RMSEA) with its 90% confidence intervals. Cronbach's alpha coefficients were used to ascertain internal reliability.

Additionally, descriptive statistics, Spearman's rank-order correlations, independent samples t-tests, ANOVAs (analysis of variance) and effect sizes were employed to analyse the data. Spearman's rank-order correlation assisted in ascertaining the relative strength of the relationship between two ordinal variables (Field, 2024). Independent samples t-tests facilitated the comparison of means between two independent samples (Pallant, 2016). ANOVAs were applied to determine the differences between two or more means or components via significance tests (Pallant, 2016). Effect sizes were employed to quantify the strength of the relationship between two variables, with larger effect sizes indicating a stronger relationship (McLeod, 2019). Cohen's d-values were used to determine the practical significance of mean differences, where  $d = 0.2$  is considered a small effect,  $d = 0.5$  a medium effect, and  $d = 0.8$  a large effect (Cohen, 1988). Cohen (1988) recommends interpreting correlations of 0.1, 0.3 and 0.5 as small, medium and large, respectively.

### 3.5 Ethical considerations

In accordance with Clark et al. (2021) and Sarantakos (2013), the researcher upheld the following ethical principles during the research process: maintaining transparency regarding the study's objectives, methods and goals; ensuring that participation was entirely voluntary and based on informed consent; and safeguarding the participants' privacy by ensuring anonymity and confidentiality. The research was conducted with the approval of the Basic and Social Sciences Research Ethics Committee (BaSSREC), under the assigned ethics number NWU 01060-20-A7-01.

## 4. Research design and methodology

The empirical results of the three studies are presented below.

### 4.1 Biographical information

Table 1 provides a detailed overview of the respondents' demographic characteristics across the three studies.





**Table 1: Respondents' biographical information**

		<b>Biographical information</b>					
		2020		2022		2023	
Item	Category	N	%	N	%	N	%
<b>Gender</b>	Male	31	32.6	31	34.4	16	27.1
	Female	64	67.4	59	65.6	43	72.9
<b>Age</b>	Younger than 20	0	0	1	1.1	1	1.7
	20–29	50	52.6	39	43.3	22	36.7
	30–39	33	34.7	37	41.1	25	41.7
	40–49	10	10.5	10	11.1	12	20.0
	50–59	2	2.1	2	2.2	0	0.0
	60 and older	0	0.0	1	1.1	0	0.0
<b>Tenure</b>	Less than 1 year	41	43.2	23	25.6	16	27.1
	1–3 years	36	37.9	42	46.7	19	32.2
	4–6 years	11	11.6	16	17.8	15	25.4
	7–8 years	2	2.1	4	4.4	3	5.1
	Longer than 8 years	5	5.3	5	5.6	6	10.2
<b>Highest qualification</b>	Partially completed high school	0	0	2	2.2	1	1.7
	Successfully completed high school	1	1.1	49	54.4	27	45.0
	Completed some college education	48	50.5	21	23.3	20	33.3
	Undergone technical/vocational training	28	29.5	4	4.4	0	0.0
	College/university degree	5	5.3	11	12.2	9	15.0
	Completed some postgraduate work	10	10.5	1	1.1	2	3.3
	Postgraduate degree	2	2.1	1	1.1	1	1.7
	PhD	1	1.1	1	1.1	0	0.0
<b>Work department</b>	Call centre	76	80	73	81.1	44	73.3
	Other	19	20	17	18.9	16	26.7

(Source: Author's own compilation)

In 2020, data were collected from 95 respondents, of whom 32.6% (n=31) were male and 67.4% (n=64) were female. Most of the respondents fell in the 20–39 age group (87.3%; n=83) and worked for the organisation for three years or less (81.1%; n=77). Most of the respondents (80%; n=76) completed some college education (50.5%; n=48) and underwent technical/vocational training (29.5%; n=28) and worked in the call centre (80%; n=76).

In 2022, 90 respondents participated in the research: 34.4% (n=31) were male and 65.6% (n=59) were female. The age of most of the respondents was between 20 and 39 (84.4%; n=76), and they worked for the organisation for three years or less (72.3%; n=65). Most of the respondents (77.8%; n=70) successfully completed high school (54.5%; n=49) and some college education (23.3%; n=21), and worked in the call centre (81.1%; n=73).

In 2023, only 59 respondents participated in the research: 16 males (27.1%) and 43 females (72.9%). Most of the respondents belonged to the 20–39 age group (78.4%; n=47) and had worked for the



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

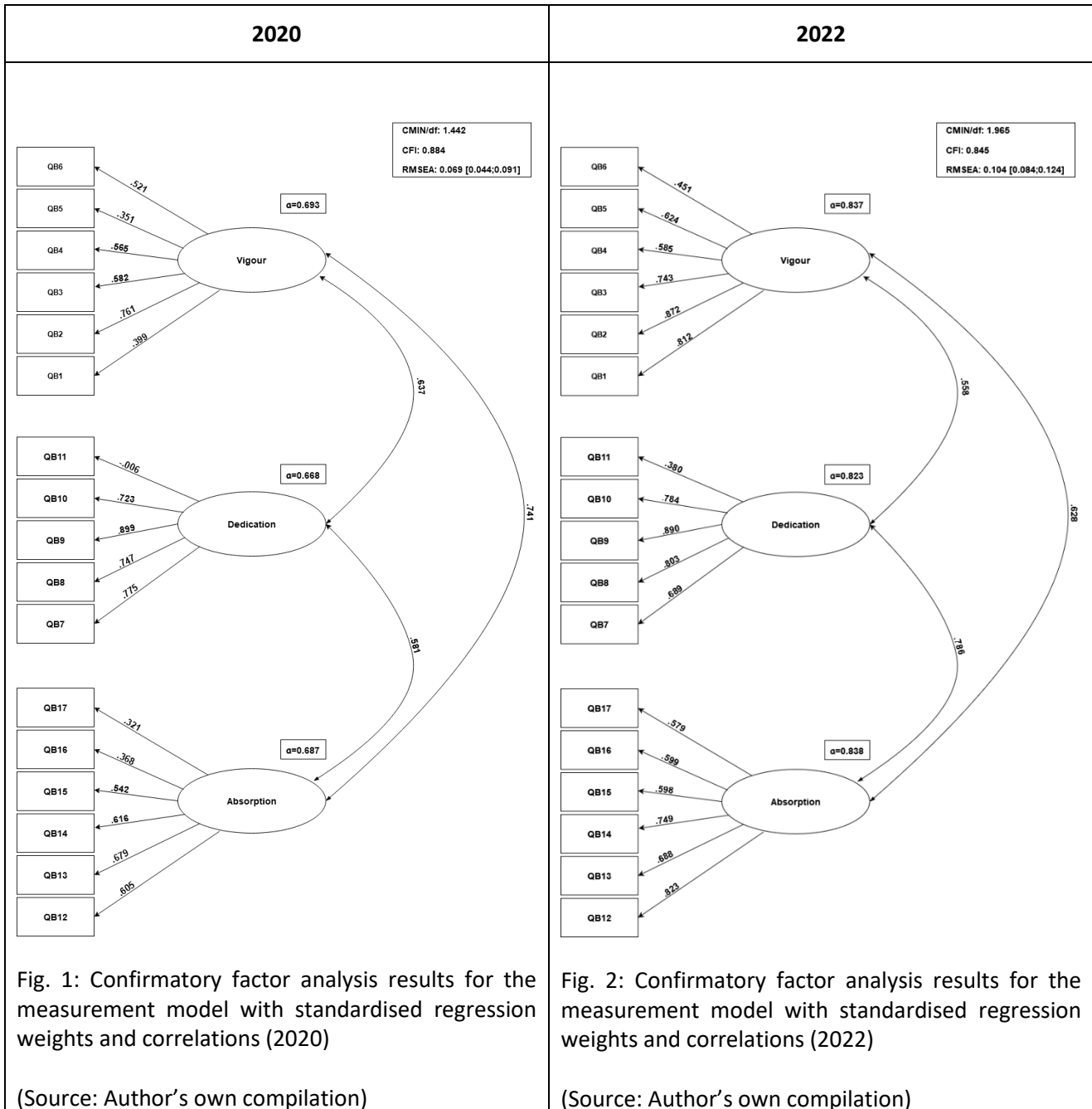
e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

organisation for three years and less (59.3%; n=35). Most of the respondents (78.3%; n=47) successfully completed high school (45%; n=27) and some college education (33.3%; n=20), and worked in the call centre (73.3%; n=44).

#### **4.2 Employee engagement**

The original UWES was employed to measure employee engagement levels in the organisation. The UWES contains 17 questions designed to measure vigour (six items), dedication (five items) and absorption (six items). In 2020 and 2022, confirmatory factor analyses were conducted to confirm the factor structure of the employee engagement construct. In 2023, the sample size was too small to conduct factor analyses; therefore, the questions were grouped based on empirical grounds. Thus, the questions were organised based on patterns and relationships observed in previous studies (Schaufeli & Bakker, 2004a, b). The reliability of each group was then calculated using Cronbach's alpha to determine the internal consistency and reliability of the items within each group.

Confirmatory factor analyses showed that the three-factor structure of the UWES appropriately fit the data from the 2020 and 2022 samples (see Figure 1 and Figure 2). All the factor loadings were statistically significant at the 0.05 level and obtained factor loadings well above 0.3, except for one item (I find my job challenging;  $p = 0.957$ ) that did not load sufficiently on the dedication factor in the 2020 sample. Field (2024) posits that a factor loading with an absolute value exceeding 0.3 is considered significant. The standardised regression coefficients were interpreted as factor loadings.



The Cronbach alpha coefficients for vigour, dedication and absorption showed an acceptable reliability in 2020 (0.693, 0.668 and 0.687, respectively) and exceeded 0.7 in 2022 and 2023 (see Table 2), demonstrating good reliability and internal consistency, according to Field (2024). Field (2024) suggests that Cronbach's alpha should ideally be above 0.7. However, he also acknowledges that Cronbach's alpha could



realistically be below 0.7 (Field, 2005). The number of items in a scale can influence the value of Cronbach’s alpha. Cortina (as cited in Field, 2009) notes that a larger number of statements increases the likelihood of a higher Cronbach alpha, whereas a smaller number of statements could result in a lower Cronbach alpha (Field, 2009).

**Table 2: Reliability of employee engagement**

Characteristic Factor	Reliability		
	2020 Cronbach’s alpha	2022 Cronbach’s alpha	2023 Cronbach’s alpha
Vigour	0.693	0.837	0.873
Dedication	0.668	0.823	0.863
Absorption	0.687	0.838	0.861

(Source: Author’s own compilation)

Hancock and Mueller (2010) suggest that it is considered good practice to report multiple fit indices, typically from three broad classes. Consequently, the following three goodness-of-model-fit indices were used: the chi-square statistic divided by degrees of freedom (CMIN/DF); the comparative fit index (CFI); and the root mean square error of approximation (RMSEA) along with its 90% confidence intervals. From Table 4, it is evident that all three fit indices in 2020 (CMIN/DF: 1.442; CFI: 0.884; RMSEA: 0.069) and two of the fit indices in 2022 (CMIN/DF: 1.965; CFI: 0.845) showed an acceptable fit between the measurement model and the sample data. The results obtained in 2020 and 2022 are presented in Table 3.

**Table 3: Goodness-of-model-fit indices for employee engagement**

Goodness-of-model-fit indices					
Index	Decision rule	2020 Model score	Outcome	2022 Model score	Outcome
CMIN/DF	Close to 1; 3–5 still satisfactory (Carmines & McIver, 1981; Mueller, 1996)	1.442	Good fit	1.965	Good fit
CFI	≥ 0.9 (good fit) (Hair et al., 2010; Hu & Bentler, 1998, 1999; Mueller, 1996)	0.884	Acceptable fit	0.845	Acceptable fit
RMSEA	0.01 (excellent) 0.05 (good) 0.08 (mediocre) ≥ 0.10 should not be accepted (Blunch, 2008; Brown &	0.069 [0.044;0.091]	Acceptable fit	0.104 [0.084;0.124]	Not a good fit



Goodness-of-model-fit indices					
Index	Decision rule	2020 Model score	Outcome	2022 Model score	Outcome
	Moore, 2012; Hu & Bentler, 1998, 1999)				

(Source: Author’s own compilation)

The following response categories were used to determine respondents’ levels of engagement: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; and 5 = strongly agree. The mean scores for Vigour, Dedication, and Absorption were above 3 on a five-point Likert scale across the three years (see Table 5). The highest mean scores for Vigour, Dedication, and Absorption were recorded in 2020, when the employees worked exclusively from home during the Covid-19 pandemic lockdown period. The lowest mean scores for Dedication and Absorption were recorded in 2023, and for Vigour in 2022. Across all three years, Dedication obtained the highest mean scores. The mean scores are reflected in Table 4.

**Table 4: Descriptive statistics of employee engagement**

Descriptive statistics									
Factor	2020			2022			2024		
	N	Mean	*SD	N	Mean	*SD	N	Mean	*SD
Vigour	95	3.82	0.52	89	3.40	0.74	60	3.45	0.76
Dedication	95	4.18	0.52	89	3.85	0.71	60	3.67	0.81
Absorption	95	3.72	0.57	89	3.41	0.74	59	3.26	0.86

\*SD: Standard deviation

(Source: Author’s own compilation)

Independent samples t-tests were conducted to determine the relationship between gender and employee engagement, and between work department and employee engagement. The results, as reflected in Table 5, showed no statistically significant differences between the mean scores of the male and female respondents regarding employee engagement across the three years. However, the results showed statistically significant differences between the mean scores of the work department categories for all three employee engagement dimensions in 2022 and 2023. The respondents who worked in the call centre displayed less vigour, dedication and absorption than the respondents who worked in the other departments (i.e., administration and client relations, finance, information technology, field operations, human resources, and marketing).



**Table 5: Relationship between gender and employee engagement, and between work department and employee engagement**

Gender								
		Male			Female			
2020	N	Mean	SD	N	Mean	SD	p-value*	
Vigour	31	3.82	0.57	64	3.82	0.50	0.984	
Dedication	31	4.16	0.54	64	4.19	0.51	0.776	
Absorption	31	3.64	0.66	64	3.77	0.52	0.316	
		Male			Female			
2022	N	Mean	SD	N	Mean	SD	p-value*	
Vigour	31	3.48	0.77	58	3.35	0.73	0.455	
Dedication	31	3.79	0.52	58	3.88	0.79	0.539	
Absorption	31	3.32	0.71	58	3.47	0.76	0.381	
		Male			Female			
2023	N	Mean	SD	N	Mean	SD	p-value*	
Vigour	16	3.65	0.64	43	3.38	0.80	0.233	
Dedication	16	3.71	0.65	43	3.64	0.87	0.754	
Absorption	15	3.47	0.53	43	3.16	0.92	0.223	
Work department								
		Call centre			Other			
2020	N	Mean	SD	N	Mean	SD	p-value*	
Vigour	76	3.81	0.55	19	3.86	0.42	0.721	
Dedication	76	4.17	0.53	19	4.24	0.47	0.582	
Absorption	76	3.70	0.58	19	3.82	0.53	0.395	
		Call centre			Other			
2022	N	Mean	SD	N	Mean	SD	p-value*	
Vigour	72	3.33	0.73	17	3.69	0.72	0.070	
Dedication	72	3.76	0.72	17	4.24	0.49	0.011	
Absorption	72	3.32	0.76	17	3.83	0.48	0.009	
		Call centre			Other			
2023	N	Mean	SD	N	Mean	SD	p-value*	
Vigour	44	3.31	0.77	16	3.84	0.60	0.015	
Dedication	44	3.53	0.87	16	4.04	0.41	0.004	
Absorption	43	3.07	0.90	16	3.77	0.43	0.000	

(Source: Author's own compilation)



Spearman's rank-order correlation coefficient was used to measure the linear association between employee engagement and the biographical variables of age, highest qualification and tenure in the organisation. The results (see Table 6) showed no association between tenure and employee engagement. However, a medium positive correlation between age and absorption ( $p = 0.049$ ,  $r = 0.202$ ) was found in 2020, and a small to medium positive correlation between highest qualification and dedication ( $p = 0.010$ ,  $r = 0.328$ ) and absorption ( $p = 0.044$ ,  $r = 0.264$ ) in 2023.

**Table 6: Correlation of age, highest qualification and tenure with employee engagement**

		<b>Age</b>		
Factor		2020	2022	2023
Vigour	Correlation coefficient	0.109	-0.036	0.012
	Sig. (2-tailed)	0.293	0.737	0.927
	N	95	88	60
Dedication	Correlation coefficient	-0.025	0.083	0.043
	Sig. (2-tailed)	0.810	0.441	0.742
	N	95	88	60
Absorption	Correlation coefficient	0.202	0.059	0.101
	Sig. (2-tailed)	0.049	0.586	0.447
	N	95	88	59
		<b>Tenure</b>		
Factor		2020	2022	2023
Vigour	Correlation coefficient	-0.155	-0.149	-0.143
	Sig. (2-tailed)	0.134	0.165	0.279
	N	95	88	59
Dedication	Correlation coefficient	-0.001	0.020	-0.027
	Sig. (2-tailed)	0.993	0.856	0.839
	N	95	88	59
Absorption	Correlation coefficient	0.136	-0.050	-0.013
	Sig. (2-tailed)	0.190	0.642	0.921
	N	95	88	58
		<b>Highest qualification</b>		
Factor		2020	2022	2023
Vigour	Correlation coefficient	0.030	-0.020	0.125
	Sig. (2-tailed)	0.772	0.850	0.340
	N	95	89	60
Dedication	Correlation coefficient	0.020	-0.124	0.328
	Sig. (2-tailed)	0.844	0.246	0.010
	N	95	89	60
Absorption	Correlation coefficient	0.092	-0.002	0.264
	Sig. (2-tailed)	0.373	0.988	0.044
	N	95	89	59



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

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

(Source: Author's own compilation)

## 5. Discussion

The research results revealed that, across all three phases, the mean scores for Vigour, Dedication, and Absorption were above 3 on a five-point Likert scale, thus on the positive side of the scale. However, the highest mean scores were reported during November 2020, when the employees worked exclusively remotely during the Covid-19 pandemic. The results of this study align with existing research, confirming that employees who worked exclusively remotely (Gallup, 2024) and those engaged in high-intensity telework (Rodríguez-Modroño, 2022) exhibited higher levels of engagement compared to onsite workers. This conclusion is supported by multiple authors who assert that flexible work arrangements have a positive impact on work engagement (Cassim et al., 2024; Eng et al., 2024; Hutchinson, 2017; Lee, 2018; Nagata et al., 2021).

Furthermore, the results revealed that socio-demographic characteristics such as age, educational levels and department may affect the engagement levels of employees. The results showed that, in 2020, when employees worked exclusively remotely due to the Covid-19 lockdown, older employees showed higher levels of engagement compared to their younger counterparts, confirming the results of studies conducted by Botha et al. (2023) and Cassim et al. (2024). Older employees often have more work experience and established social and professional networks, and they might be better equipped to manage their selves and stay focused and motivated, which are important requirements to function effectively in a remote work environment. They might also place a higher value on the work–life balance benefits that remote work can offer. These factors could all have played a role in enhancing the engagement levels of older employees.

The results also revealed that employees with higher levels of education showed increased levels of engagement during on-site office work. Employees with higher educational levels often occupy positions that require greater responsibility; therefore, they might benefit more from direct onsite resources and collaboration and interaction with colleagues, enhancing their engagement levels. Botha et al. (2023) and Cassim et al. (2024) reported no significant correlation between educational level and levels of engagement during remote work.

Additionally, it was found that employees working in the call centre were less engaged than those employed in other departments during onsite office work. However, no significant difference was found between the engagement levels of these employees during remote work during the Covid-19 pandemic lockdown. This result suggests that the physical and social work environment had a notable impact on the engagement levels of call centre employees compared to employees in other departments. Job demands such as those suggested by Schaufeli and Taris (2014) and additional factors might have played a role in lowering their engagement levels during onsite office work, for example, unfavourable work conditions, workload (e.g., high call volumes), time pressure, work pressure, limited job variety, or perceived organisational and leadership support. During remote work, these workers might have received more job resources such as autonomy, social support from colleagues and leadership, enhanced work–life balance,





(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

and trust in management (Schaufeli & Taris, 2014), enhancing their engagement to the same level as employees in other departments.

## 6. Limitations

The most significant limitation of this study lies in its focus on a single organisation within South Africa's financial services sector that focuses on outsourced debt collections. Hence, the findings cannot be generalised to debt collection organisations at large. Furthermore, the study only focused on measuring the engagement levels during and post the Covid-19 pandemic, without considering potential factors, such as job demands and resources, which could have influenced these levels across the distinct periods.

## 7. Managerial Implications and Recommendations

The findings suggest that remote work can positively influence the engagement levels of employees. Therefore, managers should consider maintaining or offering flexible work arrangements such as remote work to support employee engagement. The findings also revealed lower levels of engagement among employees working in the call centre; therefore, management needs to develop specific interventions (e.g., workload, job design, and support mechanisms) to encourage their engagement levels. The engagement levels of employees should be continuously monitored, and any disparities should be addressed proactively.

## 8. Conclusions

The findings emphasised the significance of understanding employee engagement and associated factors within flexible work arrangements, such as remote and hybrid settings. Given the sustained relevance of flexible work structures in contemporary and future employment contexts, further research should investigate engagement levels and dynamics within these environments to refine and support flexible work as a sustainable model in evolving workplace settings.

## 9. Acknowledgements

The researcher expresses gratitude to the organisation and its employees for their active participation, which was instrumental in facilitating the completion of this study.

## 10. References

Adhitama, J., & Riyanto, S. (2020). Maintaining employee engagement and employee performance during Covid-19 pandemic at PT Koexim Mandiri Finance. *Journal of Research in Business and Management*, 8(3), 6–10.

Adisa, T. A., Ogbonnaya, C., & Adekoya, O. D. (2023). Remote working and employee engagement: a qualitative study of British workers during the pandemic. *Information Technology & People*, 36(5), 1835–1850.



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

<https://doi.org/10.1108/ITP-12-2020-0850>

Alexander, A., De Smet, A., & Mysore, M. (2020). *Reimagining the postpandemic workforce pandemic-style working from home may not translate easily to a “next normal” mix of on-site and remote working.*

<https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/reimagining-the-postpandemic-workforce>

Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16, 40–68.

Amos, T., Pearse, N., Ristow, L., & Ristow, A. (2016). *Human resource management* (4th ed.). Juta & Company Ltd.

Ariani, D. W. (2013). The relationship between employee engagement, organisational citizenship behaviour and counterproductive work behaviour. *International Journal of Business Administration*, 4(2), 46–56.

<http://dx.doi.org/10.5430/ijba.v4n2p46>

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* (pp. 95–132). Van Schaik.

Bartik, A. W., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). *What jobs are being done at home during the Covid-19 crisis? Evidence from firm-level surveys.* National Bureau of Economic Research working paper, 27422.

<https://www.nber.org/papers/w27422>

Bhat, Z. H., Yousuf, U., & Saba, N. (2023). Revolutionizing work-life balance: Unleashing the power of telecommuting on work engagement and exhaustion levels, *Cogent Business & Management*, 10(2), 2242160.

<https://doi.org/10.1080/23311975.2023.2242160>

Bloom, N., Han, R., & Liang, J. (2022). *How hybrid working from home works out.* In NBER Working Paper Series, 30292. [https://www.nber.org/system/files/working\\_papers/w30292/w30292.pdf](https://www.nber.org/system/files/working_papers/w30292/w30292.pdf)

Blunch, N. J. (2008). *Introduction to structural equation modelling using SPSS and AMOS.* Sage.

Bonaiuto, F., Fantinelli, S., Milani, A., Cortini, M., Vitiello, M. C., & Bonaiuto, M. (2022). Perceived organizational support and work engagement: The role of psychosocial variables. *Journal of Workplace Learning*, 34(5), 418–436.

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>

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>

Brown, T. A., & Moore, M. T. (2012). *Confirmatory factor analysis.* [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)

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.

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.



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

<https://doi.org/10.1016/j.jbusres.2020.05.037>

Cassim, N., Botha, C. J., Botha, D., & Bisschoff, C. (2024). Employee engagement at private higher education institution during the COVID-19 pandemic. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, 22(0), a2300. <https://doi.org/10.4102/sajhrm.v22i0.2300>

Chesley, N. (2010). Technology use and employee assessments of work effectiveness, workload, and pace of life. *Information, Communication & Society*, 13, 485–514.

Chitnis, A. (2022). *Adapting to the 'New Normal' - Reshaping the future of workplace post-pandemic*. <https://www.outlookindia.com/outlook-spotlight/adapting-to-the-new-normal-reshaping-the-future-of-workplace-post-pandemic-news-228793>

Chung, H., Birkett, H., Forbes, S., & Seo, H. (2021). COVID-19, flexible working, and implications for gender equality in the United Kingdom. *Gender & Society*, 35(2), 218–232.

Clark, T., Foster, L., Bryman, A., & Sloan, L. (2021). *Bryman's social research methods*. Oxford University Press.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum.

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.

Dewett, T., & Jones, G. R. (2001). The role of information technology in the organisation: a review, model, and assessment. *Journal of Management*, 27(3), 313–346.

Edgell, S., & Granter, E. (2020). *The sociology of work: Continuity and change in paid and unpaid work*. Sage.

Eng, I., Tjernberg, M., & Champoux-Larsson, M. (2024). Hybrid workers describe aspects that promote effectiveness, work engagement, work-life balance, and health. *Cogent Psychology*, 11(1), 2362535. <https://doi.org/10.1080/23311908.2024.2362535>

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. <https://doi.org/10.11648/j.ajtas.20160501.11>

Felstead, A., & Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. *New Technology, Work, and Employment*, 32(3), 195–212.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). Sage.

Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Sage.

Field, A. (2024). *Discovering Statistics Using IBM SPSS Statistics* (6th ed.). Sage.

Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021). Work from home during the COVID-19 outbreak: Impact on employees' remote work productivity, engagement and stress. *Journal of Occupational and Environmental Medicine*, 63(7), 426–432. <https://doi.org/10.1097%2FJOM.0000000000002236>

Gallup. (2024). *State of the global workplace: The voice of the world's employees*. <file:///C:/Users/10147284/Downloads/state-of-the-global-workplace-2024-download.pdf>

Golden, A. G., & Geisler, C. (2007). Work–life boundary management and the personal digital assistant. *Human Relations*, 60(3), 519–551.



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

- Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human Resource Management Review*, 21, 123–136.
- Guilbert, L., Carrein, C., Guenole, N., Monfray, L., Rossier, J., & Priolo, D. (2018). Relationship between perceived organisational support, proactive personality, and perceived employability in workers over 50. *Journal of Employment Counseling*, 55(2), 58–71.
- Hair, J. R., Anderson, R. E., Tatham, R. L., & Black, W. C. (2010). *Multivariate data analysis* (7th ed.). Prentice-Hall.
- Harunavamwe, M., & Kanengoni, H. (2023). Hybrid and virtual work settings; the interaction between technostress, perceived organisational support, work-family conflict and the impact on work engagement. *African Journal of Economic and Management Studies*, 14(2), 252–270. <https://doi.org/10.1108/AJEMS-07-2022-0306>
- Hancock, G. R., & Mueller, R. O. (2010). *The reviewer's guide to quantitative methods in the social sciences*. Routledge.
- 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.
- International Labour Organization (ILO). (2020a). *COVID-19: Guidance for labour statistics data collection*. [file:///C:/Users/10147284/Downloads/wcms\\_747075.pdf](file:///C:/Users/10147284/Downloads/wcms_747075.pdf)
- International Labour Organization (ILO). (2020b). *Managing work-related psychosocial risks during the COVID-19 pandemic*. [https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed\\_protect/@protrav/@safework/documents/instructionalmaterial/wcms\\_748638.pdf](https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_protect/@protrav/@safework/documents/instructionalmaterial/wcms_748638.pdf)
- Juchnowicz, M., & Kinowska, H. (2021). Employee well-being and digital work during the COVID-19 pandemic. *Information*, 12, 293. <https://doi.org/10.3390/info12080293>
- 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>
- Karim, D. N., Baset, M. A., & Rahman, M. M. (2019). The effect of perceived organisational support on intention to stay: the mediating role of job involvement. *The Jahangirnagar Journal of Business Studies*, 8(1), 21–30.
- Lee, A. M. (2018). *An exploratory case study of how remote employees experience workplace engagement* (Doctoral dissertation). Walden University, Minneapolis, MN.
- Liu, P., Wang, X., Li, A., & Zhou, L. (2019). Predicting work–family balance: A new perspective on person–environment. *Frontiers in Psychology*, 10, 1804. <https://doi.org/10.3389/fpsyg.2019.01804>
- McLeod, S. (2019). What does effect size tell you? *Simply Psychology*. <https://www.simplypsychology.org/effect-size.html>
- Microsoft. (2022). *Work Trends Index: Annual Report. Great expectations: Making hybrid work work*. [https://news.microsoft.com/wpcontent/uploads/prod/sites/631/2022/03/WTI\\_AnnualReport\\_Extended\\_.pdf](https://news.microsoft.com/wpcontent/uploads/prod/sites/631/2022/03/WTI_AnnualReport_Extended_.pdf)
- Mueller, R. O. (1996). *Basic principles of structural equation modeling: An introduction to LISREL and EQS*. Springer.
- Nagata, T., Nagata, M., Ikegami, K., Hino, A., Tateishi, S., Tsuji, M., Matsuda, S., Fujino, Y., & Mori, K. (2021). Intensity



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

of home-based telework and work engagement during the COVID-19 Pandemic. *Journal of Occupational and Environmental Medicine*, 63(11), 907–912.

Osibanjo, R. (2022). *The post-pandemic office: How to win employees back*.

<https://www.forbes.com/sites/richardosibanjo/2022/06/30/the-post-pandemic-office-how-to-win-employees-back/?sh=2aa2f7ca7495#open-web-0>

Pallant, J. (2016). *SPSS survival manual: A step by step guide to data analysis using IBM statistics* (6th ed.). Open University Press.

Palumbo, R. (2020). Let me go to the office! An investigation into the side effects of working from home on work-life balance. *International Journal of Public Sector Management*, 33(6/7), 771–790. <https://doi.org/10.1108/IJPSM-06-2020-0150>

Reese, G., & Smith, P. E. (2017). *Strategic human resource management: An international perspective* (2nd ed.). Sage Publications Ltd.

Robinson, L. D., Magee, C., & Caputi, P. (2016). Burnout and the work-family interface: a two-wave study of sole and partnered working mothers. *Career Development International*, 21(1), 31–44.

Rodríguez-Modroño, P. (2022). Working conditions and work engagement by gender and digital work intensity. *Information*, 13, 277. <https://doi.org/10.3390/info13060277>

Rožman, M., Sternad Zabukovšek, S., Bobek, S., & Tominc, P. (2021). Gender differences in work satisfaction, work engagement and work efficiency of employees during the COVID-19 pandemic: the case in Slovenia. *Sustainability*, 13, 8791. <https://doi.org/10.3390/su13168791>

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.

Sarantakos, S. (2013). *Social research* (4th ed.). Palgrave Macmillan.

Schaufeli, W., & Bakker, A. (2004a). *UWES: Utrecht work engagement scale*. Preliminary manual.

[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., & Bakker, A. B. (2004b). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *The International Journal of Industrial, Occupational and Organisational Psychology and Behavior*, 25(3), 293–315.

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.

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.

Soane, E., Truss, C., Alfes, K., Shantz, A., Rees, C., & Gatenby, M. (2012). Development and application of a new measure of employee engagement: the ISA Engagement Scale. *Human Resource Development International*, 15(5), 529–547.

Tarafdar, M., Cooper, C. L., & Stich, J. F. (2019). The technostress trifecta: Techno eustress, techno distress and design: theoretical directions and an agenda for research. *Information Systems Journal*, 29(1), 6–42.



(online) = ISSN 2285 – 3642

ISSN-L = 2285 – 3642

*Journal of Economic Development, Environment and People*

Volume 14, Issue 2, 2025

URL: <http://jedep.spiruharet.ro>

e-mail: [office\\_jedep@spiruharet.ro](mailto:office_jedep@spiruharet.ro)

Tarafdar, M., Tu, Q., Ragu-Nathan, B. S., & Ragu-Nathan, T. S. (2007). The impact of technostress on role stress and productivity. *Journal of Management Information Systems*, 24(1), 301–328.

Varma, A., Jaiswal, A., Pereira, V., & Kumar, Y. L. N. (2022). Leader member exchange in the age of remote work. *Human Resource Development International*, 25(2), 219–230. <https://doi.org/10.1080/13678868.2022.2047873>

Vidya, S. (2022). *How Covid-19 has changed the concept of work, workplace and workforce.*

<https://www.businesstoday.in/magazine/30th-anniversary-special/story/how-covid-19-has-changed-the-concept-of-work-workplace-and-workforce-321740-2022-02-07>

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>

Watson, T. (2017). *Sociology, work and organization* (7th ed.). Routledge.

Werner, A. (2021). Motivation and engagement. In P. Nel & A. Werner (Eds.), *Human resource management* (11th ed., pp. 403–428). Oxford University Press.

Wilton, N. (2016). *An introduction to human resource management* (3rd ed.). Sage publications Ltd.

Wöhrmann, A. M., & Ebner, C. (2021). Understanding the bright side and the dark side of telework: An empirical analysis of working conditions and psychosomatic health complaints. *New Technology, Work and Employment*, 36(3), 348–370.

Wontorczyk, A., & Roźnowski, B. (2022). Remote, hybrid, and on-site work during the SARS-CoV-2 pandemic and the consequences for stress and work engagement. *International Journal of Environmental Research and Public Health*, 19, 2400. <https://doi.org/10.3390/ijerph19042400>

Xie, J. L., Elangovan, A. R., Hu, J., & Hrabluik, C. (2019). Charting new terrain in work design: A study of hybrid work characteristics. *Applied Psychology*, 68(3), 479–512. <https://doi.org/10.1111/apps.12169>