

Investigating the impact of work stress on work engagement across selected industries during the Covid-19 pandemic in Namibia

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ABSTRACT


Since the start of the Covid-19 pandemic, many industries faced severe challenges and had to adapt business strategies to ensure their survival. A lot of business operations had to move to an online platform which stressed financial and human resources and interrupted normal operations. Service provision had to proceed as normal therefore causing widespread anxiety and distress. This study aimed to investigate the impact of work stress on work engagement across selected industries during the Covid-19 pandemic in Namibia. Work stress, due to stressful work environments, leads to harmful physical and psychological consequences. Work engagement does not only benefit employees through higher job satisfaction but also the organisation through better performance and quality of work. A quantitative research approach was utilised- using a questionnaire collecting data on the biographical information, work stress and work engagement of employees. The sample consisted of n=431 teachers, Unam staff and medical staff from Namibia. Role ambiguity and work stress reported a positive relationship with work engagement. Stress management and wellness programs may be implemented to help employees manage work stressors and promote work engagement. Counselling services may address employee concerns regarding job insecurity and ease distress and anxiety. Organisations should implement a mentoring system to provide advice and support to employees in order to reduce work stress. Work engagement can be enhanced through leadership development activities for employees. This study adds to the knowledge on work stress and work engagement in the Namibian context.


Keywords: Work Stress, Work Engagement, Covid-19 Pandemic, Job Demands-Resources, Namibia.

JEL Codes : I31

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1. INTRODUCTION

Many people's finances have been negatively affected by Covid-19, and some have faced a substantial loss of income and increased debt (Achou et al., 2020). People live in uncertain times- especially since March 2020 when the first Covid-19 cases were reported in Namibia. Job insecurity is heightened, and it plays a significant role in determining whether one is experiencing work stress.

Work stress or pressure arises when the expectations and requirements of the job do not align with the resources, abilities, and wishes or desires of the employee (Sauter et al., 2014). This can lead to harmful physical and psychological consequences for the employee, affecting their health negatively (Sauter et al., 2014). An employee can experience burnout from high levels of work stress and other health-related problems such as high blood pressure, digestive problems, and heart problems. Work stress can result from two conditions, the work environment, and the personal characteristics of the employee (Sauter et al., 2014). A stressful work environment could be caused by colleagues but also by pressure related to circumstances such as Covid-19.

A positive relationship was reported between role stress, role conflict, role ambiguity, and work stress (Usman et al., 2011). Furthermore, the higher the levels of the employee's work stress, the lower the commitment to the job (Usman et al., 2011). The literature has found that a negative relationship exists between job insecurity and work stress (Yaşlıoğlu et al., 2013). Job insecurity leads to work stress since the employee experiences ambiguity about the future and concerns about the problems related to job loss. Additionally, low job security, a dimension of work stress, is related to lower measures of well-being (Pacheco et al., 2020).

Uncertainties caused by the pandemic can increase employees' stress, and an increase in anxiety and depressive symptoms can be anticipated (Cullen et al., 2020). The pandemic has placed more stress and demands on all employees resulting in lower levels of well-being (Pacheco et al., 2020). The challenges and uncertainties experienced during the pandemic can inhibit employees from flourishing, thus increasing their subjective levels of work stress. It is essential to reduce employees' work stress because work stress can have negative impacts on the organisation. These impacts include reduced productivity, higher turnover, and higher absenteeism as well as negative effects on the employee, such as increased anxiety, depression, poor physical health, and various diseases (VicHealth, 2012).

Work engagement refers to the relationship an employee has with their work (Schaufeli & Bakker, 2010) and arises when employees are in a state of vigour, dedication, and absorption (Bakker & Demerouti, 2008). Vigour means that employees have high levels of energy and mental stamina combined with an energetic affective state, while dedication refers to a sense of challenge and satisfaction employees experience in their work (Bakker & Demerouti, 2008; Shirom, 2010). Absorption means that employees become engrossed in their work and find it difficult to detach from it again (Bakker & Demerouti, 2008). When a work environment is stable, it enables employees to maintain their work engagement (Leiter & Bakker, 2010). Engaged employees enjoy their work more, but they also turn that feeling of satisfaction into effective behaviour at work (Leiter & Bakker, 2010). Work engagement impacts on employees' performance by enabling them to contribute to their job (Leiter & Bakker, 2010). The vigour

employees bring into their focus improves the quality of their work and enables them to intensely focus on their work tasks (Leiter & Bakker, 2010).

This study aimed to explore the impact of work stress on work engagement across industries during the Covid-19 pandemic in Namibia. These employees include teachers, university employees, and medical personnel. There exists a gap in the literature on how work stress impacted the work engagement of employees within these industries in Namibia during the Covid-19 pandemic. This study contributes to the understanding of work stress and work engagement among employees within these industries in Namibia. Moreover, this study will also aid managers in developing interventions and strategies to reduce work stress and increase work engagement of employees after the Covid-19 pandemic and when faced with similar work stressors.

2. LITERATURE REVIEW

2.1. Work stress

Stress is the subjective appraisal that the resources are insufficient for the role expectations (Muhammad & Kishwar, 2019). Work stress can also be defined as any characteristic in the job environment that threatens the individual with immoderate demands or inadequate supplies to satisfy his/her needs. The mismatch between the skills and abilities of an employee compared to the expectations and demands of the job can lead to work stress (Muhammad & Kishwar, 2019).

Many conditions may lead to work stress, for example, *management style* (Sauter et al., 2014). If employees are not allowed to deliver inputs in decision-making, when there is poor communication and no family-friendly policies, it can cause work stress among employees (Sauter et al., 2014).

Job insecurity is another condition known to lead to work stress (Sauter et al., 2014). Therefore, during economic recessions or in organisations where layoffs are high, employees may be inclined to experience higher levels of work stress (Modrek & Cullen, 2013). Many organisations were required to let go of some employees or pay employees less than before to ensure survival during the pandemic.

Environmental *conditions, unfavourable working conditions, and career concerns* are antecedents of work stress (Olukayode, 2017; Sauter et al., 2014). Covid-19 is an environmental condition that causes work stress, unfavourable working conditions, and job insecurity.

Furthermore, three dimensions are considered the major influencing forces of work stress, namely *role ambiguity, role overload, and role conflict* (Ismail et al., 2013). An employee who is unable to deal with role ambiguity, role overload, and role conflict is considered to experience work stress (Ismail et al., 2013). Sauter et al. (2014) found that work roles and responsibilities are related to work stress. Employees were required to stay alive and healthy but at the same time, risk their lives to provide for their families by working.

An *improper work-life balance* can also cause work stress (Ali & Abid, 2015). However, one study concluded that there was no evidence for the argument that negative work-life balance increases work stress (Lokke & Madsen, 2014). *Work-family conflict* has been found to have a positive relationship with work stress (Lokke & Madsen, 2014; Lu et al., 2017; Smith et al., 2018). Moreover, stress and work-family conflict lead to *burnout* (Smith et al., 2018).

The study by Lokke and Madsen (2014) concluded that there is no evidence that **social support** from family and friends reduces the perception of work stress (Lokke & Madsen, 2014). In contrast, Murali et al. (2017) report that **less support from managers** does lead to increased work stress. Another interesting finding from Lokke and Madsen (2014) was that **supportive colleagues** have no influence on stress perceptions. However, Johansen and Cadmus (2016) and Sauter et al. (2014) concluded that interpersonal relationships at work do influence work stress, and a supportive working environment is associated with lower work stress.

Time pressure is also associated with work stress (Murali et al., 2017). Therefore, one can conclude that when employees are pushed to meet unreasonable deadlines, they are likely to experience work stress. This antecedent is also related to **excessive work demands**, which also act as a predictor of work stress (Ali & Abid, 2015). **Long working hours and no control over the work pace** are also related to time pressure, and work stress (Olukayode, 2017). In addition, **workload** and **work overload** are considered major antecedents of work stress (Ismail et al., 2013; Lokke & Madsen, 2014; Olukayode, 2017).

Occupational stress can be very costly to the organisation, leading to **increased absenteeism** and **turnover** intention (Mostert et al., 2008). Thorsteinsson et al. (2014) also found a link between work stress and increased turnover intention.

It was found that work stress, due to lack of communication and feedback within the organisation and lack of job control (autonomy), leads to **reduced organisational commitment** (Mostert et al., 2008). Organisational commitment is vital for work engagement and employee productivity. In addition, once employees feel stressed due to job overload and lack of communication and resources, they also start to **perceive less commitment** from the organisation, leading to **increased turnover intention** (Mostert et al., 2008).

Work stress also has a negative influence on **job satisfaction** (Lu et al., 2014; Usman et al., 2011). Employees spend most of their adult lives at work, and if they are unsatisfied, it can result in poor employee wellbeing, absenteeism, and turnover.

Work stress affects different dimensions of health such as physical and psychological health (Ismail et al., 2013; Lu et al., 2014; Mostert et al., 2008; Romano et al., 2015; Thorsteinsson et al., 2014). **Physical ill health** due to work stress also predicts **absenteeism** at work, which leads to **business loss** for the organisation (Mostert et al., 2008). Work stress also leads to **sick leave** among employees (Romano et al., 2015). Another study found a relationship between work stress and **employee health** (Ismail et al., 2013). A high level of work stress was related to a decreased ability to manage work problems, resulting in decreased employee health (Ismail et al., 2013). Mostert et al. (2008) found an association between work stressors and **psychological ill health**, leading to the conclusion that work overload combined with time pressure, leads to symptoms of **anxiety and depression** among employees (Mostert et al., 2008). These findings are also confirmed by Thorsteinsson et al. (2014) who found that high levels of work stress led to increased psychological ill health, anxiety, depression, and fatigue.

The literature has also found two facets of work stress, time pressure and role ambiguity, to have a negative relation to **employees' performance** and **productivity levels** (Murali et al., 2017). Lu et al. (2014) found work stress to be detrimental to employees' productivity. This might be due to mental health problems and lack of well-being resulting from work stress (Lu et al., 2014). Olukayode (2017) found that work stress was negatively related to **job performance**, which is in line with findings from Ali and Abid (2015).

2.2. Work engagement

Work engagement is defined as the state in which employees are emotionally connected to others at work, physically involved in work, and cognitively attentive (Olivier & Rothmann, 2007). In contrast, when employees are disengaged from work, they are disconnected and keep their real thoughts and feelings hidden when performing work roles (Olivier & Rothmann, 2007). Furthermore, work engagement is also described as an active, lively state in which employees strive toward excellence and feel confident of their success (Naudé & Rothmann, 2006). Work engagement's focus is solely on the work, whereas organisational commitment focuses on the organisation (Olivier & Rothmann, 2007). Engaged employees have high levels of energy, and they are enthusiastic about their work (Leiter & Bakker, 2010). Therefore, employees with work engagement have high vigour, are intensely involved in their work, and they also strongly identify with their work (Leiter & Bakker, 2010). Work engagement also means that employees experience flow and total absorption in their work to minimise distractions (Leiter & Bakker, 2010).

Psychological meaningfulness is an antecedent of work engagement (Hackman & Oldham, 1980; Olivier & Rothmann, 2007). Therefore, if employees perceive their work roles as meaningful, work engagement is more likely to occur. *Psychological availability* is also linked to work engagement (Olivier & Rothmann, 2007). This refers to the available resources an employee has to engage in his/her work at a certain moment, such as physical, cognitive, and emotional resources (Olivier & Rothmann, 2007). The greater the available resources such as strength, flexibility and information processing, the greater the work engagement (Oliver & Rothmann, 2007).

Work-role fit is known to be a predictor of work engagement although this relationship is mediated by psychological meaningfulness and psychological availability (Olivier & Rothmann, 2007). Therefore, even though employees experience work-role fit, the presence of work engagement is reliant on whether they find their work to be meaningful and have the resources to experience work engagement (Olivier & Rothmann, 2007).

Participation in leadership development activities contributes to work engagement (Khoreva & Van Zalk, 2016). These activities shape desirable attitudes worthy of reward within the organisation (Khoreva & Van Zalk, 2016). Availing of training opportunities can be regarded as an indication that the organisation is invested in employee development.

Organisational tenure influences work engagement (Khoreva & Van Zalk, 2016). The higher employees' tenure, the less their subsequent work engagement. This might be due to poor prospects for career advancement (Khoreva & Van Zalk, 2016). Employees with a shorter organisational tenure are more committed and focused on learning their work roles and therefore more engaged (Khoreva & Van Zalk, 2016).

Job resources lead to work engagement (Fillipus & Pieters, 2022; Leiter & Bakker, 2010). These can include social support, feedback about performance, learning opportunities, and autonomy support from supervisors (Leiter & Bakker, 2010). Job resources are beneficial in reducing job demands, physical and psychological strain from the job, and stimulating development in employees (Bakker & Demerouti, 2008). These job resources also satisfy the three basic psychological needs of autonomy, competence and relatedness (Van den Broeck et al., 2008). Job resources work best at attaining work engagement when employees experience high job demands (Leiter & Bakker, 2010). *Colleagues and supervisors* also serve as resources

for work engagement (Leiter & Bakker, 2010). They provide knowledge, materials, and emotional support necessary for work engagement (Leiter & Bakker, 2010). The support provided by colleagues, managers, and supervisors contributes towards the employees' perceived organisational support, in which they know the organisation values them and their well-being and that they are being taken care of (Schaufeli, 2012).

Personal resources influence work engagement (Bakker & Demerouti, 2008; Fillipus & Pieters, 2022). Resources like optimism, positive coping mechanisms, self-efficacy, and resilience play a role in employees' ability to adapt to different work environments and help employees believe that they will achieve success (Bakker & Demerouti, 2008).

Person-environment fit is another antecedent of work engagement (Leiter & Bakker, 2010). When employees experience a strong connection between their values and the values of the organisation, work engagement thrives (Leiter & Bakker, 2010).

One of the outcomes of engaged employees is **higher performance** (Halbesleben, 2010; Olivier & Rothmann, 2007). Olivier and Rothmann (2007) noted that engaged employees often work in high performance units. Shirom (2010) also states that vigour is related to higher job performance and organisational effectiveness. This might be due to the better physical health experienced by vigorous employees (Shirom, 2010).

Furthermore, work engagement is also beneficial for **extra-role performance** (Leiter & Bakker, 2010). Employees may be required, at times, to take initiative and execute duties beyond the scope of their job description (Leiter & Bakker, 2010).

Job satisfaction is a major outcome of work engagement (Keyko et al., 2016). Therefore, employees are more likely to see their jobs as purposeful and meaningful when they are work-engaged (Ariza-Montes et al., 2018). Furthermore, work engagement also influences employees' **interactions with clients and customers** and improves employees' performance in these areas (Leiter & Bakker, 2010). Kazimbu and Pieters (2021) found that intrinsic job satisfaction and organisational commitment are significant predictors of work engagement.

Vigour is related to increased **motivation** for employees (Shirom, 2010). When employees feel vigorous, it leads them to allocate their energetic resources to accomplishing activities at work (Shirom, 2010).

Higher **organisational commitment** is another outcome of work engagement (Halbesleben, 2010; Kazimbu & Pieters, 2021). Furthermore, Petrus and Com (2011) also found organisational commitment to be an outcome of work engagement.

In addition, **better health outcomes** are related to work engagement (Halbesleben, 2010; Shirom, 2010). Halbesleben (2010) and Orgambídez-ramos et al. (2014) found that work engagement is positively associated with positive outcomes at work, which include good health such as lower anxiety and depression.

Reduced turnover intention is another outcome of higher work engagement (Leiter & Bakker, 2010). Laschinger et al. (2012) also found a statistically significant decrease in intention to leave when work engagement is high.

2.3. Model related to work stress and work engagement

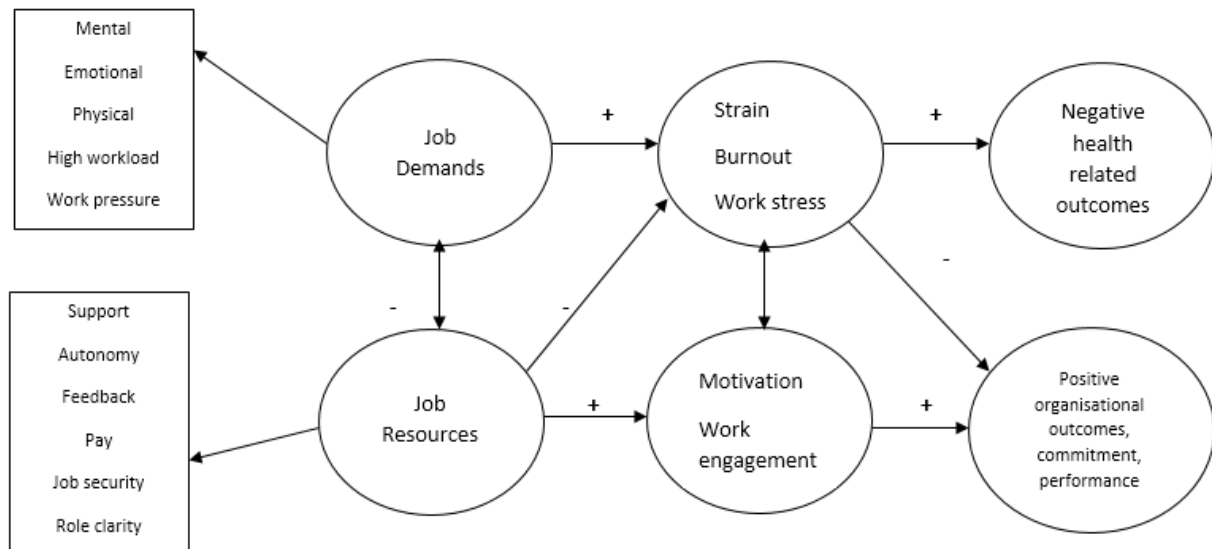
The *Job Demands-Resources Model (JD-R)*, first developed by Bakker and Demerouti (2007), is utilised to explain both work stress and work engagement. The JD-R model explains that job strain results from an imbalance between the demands placed on employees and their available resources (Bakker & Demerouti, 2007). According to the JD-R model, each job has

specific risks related to work stress, and these risk factors can be divided into job demands and job resources (Bakker & Demerouti, 2007; Van der Heijden et al., 2018). Examples of job demands are work pressure or a negative organisational environment (Bakker & Demerouti, 2007). Job demands could lead to pressure and tension when the employee cannot meet the requirements due to the extremely high efforts required (Van der Heijden et al., 2018). Job resources, however, enable employees to manage job demands and reduce the physical and psychological costs of those demands (Bakker & Demerouti, 2007). Job resources also help employees achieve other important tasks and goals of the job, and they can increase motivation levels and help employees grow, learn, and develop (Bakker & Demerouti, 2007; Van der Heijden et al., 2018). Job resources can be located at various levels, such as the organisational level, relating to pay and job security, or at the interpersonal level, relating to supervisor support. Job resources can also be located at the task level and the organisation of work, relating to task identity, autonomy and feedback, role clarity, and inputs in decision-making (Bakker & Demerouti, 2007).

Job demands and resources usually have a negative correlation, meaning that high job demands and a lack of resources usually result in work stress, burnout, and low work engagement (Hakanen & Roodt, 2010). However, when job resources are high, high motivation and work engagement are likely to occur (Bakker & Demerouti, 2007; Hakanen & Roodt, 2010).

The model's foundation also rests on two important psychological processes involved in the development of work stress and motivation (Van der Heijden et al., 2018). The first psychological process is the health-impairment process whereby continuous job demands such as high workload and emotional demands deplete the employees' mental and physical resources and therefore lead to burnout, exhaustion, constant overload, and health issues (Hakanen & Roodt, 2010; Van der Heijden et al., 2018). The second psychological process involves motivation and states that job resources have intrinsic and extrinsic value and lead to good organisational outcomes such as work engagement, high performance, and organisational commitment (Hakanen & Roodt, 2010; Van der Heijden et al., 2018). Work engaged employees are more committed to the organisation that provides them with the resources to achieve their goals and helps them grow and develop (Hakanen & Roodt, 2010). This model is depicted in Figure 1.

Figure 1. The Job Demands-Resources Model (Bakker & Demerouti, 2007; Hakanen & Roodt, 2010; Van der Heijden et al., 2018).



2.4. The relationship between work stress and work engagement

Padula et al. (2012) found a positive association between work stress and work engagement. Mostert and Rothmann (2006) found that low work stress is one of the best predictors of work engagement. Therefore, it can be concluded that the lower employees' work stress, the higher their work engagement. However, Rothmann (2008) found no statistically significant relationship between work stress and work engagement. In addition, a negative relationship was also found between work engagement and job stressors such as high demands, high workload, and lack of organisational support (Van der Colff & Rothmann, 2009).

Based on the literature discussed, the following hypotheses were developed:

H1: Role ambiguity has a negative relationship with work engagement. H2: Workload has a negative relationship with work engagement. H3: Job insecurity has a negative relationship with work engagement. H4: Work stress has a negative relationship with work engagement.

3. METHODOLOGY

3.1. Research design

This study adopted a quantitative research approach and utilised a descriptive research design using the survey method. A quantitative research approach employs deductive reasoning and statistical analysis techniques. A descriptive research design is a non-experimental design that describes individuals, populations, and phenomena as they occur, without manipulating variables.

3.2. Population and sample

Making use of availability sampling, teachers from Rundu, academic and administrative staff from UNAM, and medical personnel from Windhoek formed part of the n=431 sample. The teachers included heads of departments and principals from different schools in Rundu, Kavango East Region. Academic and administrative staff from the University of Namibia were drawn from the campuses in the Khomas Region (Khomasdal Campus; Neudamm Campus,

Hage Geingob Campus and Main Campus). The medical personnel included nurses, medical doctors, physiotherapists, and occupational therapists. The data was consolidated from three smaller research projects (undergraduate and post-graduate research projects). The online and pen-and-paper survey was administered to willing and available employees.

3.3. Research instrument

The following measuring instruments were used in the study: the researchers developed a demographic questionnaire and made use of the Role Conflict and Ambiguity Scale, the Job Demands-Resources Questionnaire, and the Utrecht Work Engagement Scale.

Work stress was measured according to three components, namely role clarity, workload, and job insecurity consisting of 17 items. Role ambiguity was measured by the *Role Conflict and Ambiguity Scale* developed by Rizzo et al. (1970). It consisted of six items where participants had to rate their answers on a 5-point scale ranging from 1 (totally disagree) to 5 (totally agree). An example of an item measuring role ambiguity is: 'I know what my responsibilities are'. Workload and job security were assessed using the *Job Demands-Resources Questionnaire* (Jackson & Rothmann, 2005). Eight items pertained to workload, while three items pertained to job insecurity (Jackson & Rothmann, 2005). An example of an item measuring workload is: 'Do you have to be attentive to many things at the same time?'. An example of an item measuring job insecurity is: 'Do you need to be more secure that you will still be working in one year?'. Respondents were required to rate their answers on a 4-point scale with 1 = never, 2 = some of the time, 3 = most of the time, and 4 = always. The Role Ambiguity Scale ($\alpha = .84$) was found to be a reliable measure (Matanhire & Pieters, 2023). Chitambu and Pieters (2021) found job insecurity and workload to be reliable factors of the Job Demands-Resources Questionnaires, with $\alpha = .91$ and $\alpha = .79$ respectively.

Work engagement was measured by the *Utrecht Work Engagement Scale (UWES-9)* developed by Schaufeli et al. (2002). Work engagement was measured according to three dimensions namely vigour, absorption, and dedication (Schaufeli et al., 2002). The scale consisted of nine statements where participants had to rate their answers on a 7-point scale with 0 = never, 2 = a few times a year or less, 3 = once a month, 4 = a few times a month, 5 = a few times a week and 6 = every day (Bakker et al., 2008). Three items pertained to vigour, three to absorption and three to dedication (Bakker et al., 2008). An example of an item measuring vigour is: 'At my work, I feel bursting with energy'. An example of an item measuring absorption is: 'I am immersed in my work'. An example of an item measuring dedication is: 'I am proud of the work that I do'. The UWES-9 has reported an acceptable reliability .89 (Fillipus & Pieters, 2022).

3.4. Research procedure

The Department of Psychology and Social Work Ethics Committee at the University of Namibia provided ethical clearance for the study. All the companies, schools, and organisations involved in the study were contacted to obtain permission to disseminate the questionnaire among employees. All participants provided their informed consent to be included in the study. Data collection took place over three months (July to September 2021), and electronic reminders were sent out weekly to remind participants to complete the online questionnaire. Due to Covid-19 lockdown restrictions, traveling was restricted with limited in-person interaction. The nature of this project restricted the study primarily to the Khomas and Kavango

East regions. Data were captured on an Excel spreadsheet and then converted and analysed using the SPSS (Version 27) software.

3.5. Data analysis

The Statistical Package of the Social Sciences 27 (SPSS) was used to analyse the dataset. Descriptive statistics and reliability analysis were performed. Pearson's rank order correlation was performed to determine the relationships among the variables.

3.6. Research ethics

Participation in the study was voluntarily, and participants were informed that they were allowed to withdraw from the study without any penalties. No coercion was used to persuade participants to complete the questionnaire. Responses are anonymised, kept confidential, and were not shared with anyone outside of the research project. No names were used in the data collection process. There were no physical or psychological harm or risks to the participant that the researchers were aware of.

4. RESULTS

4.1. Biographical details

The sample consisted of n=431 participants. The majority of the sample were females (n=293, 68%), the majority of the sample were aged between 24-28 years (22.5%, n=97), 14.8% (n=64) of participants were aged between 32-35 years. A total of 19.7% of the sample (n=85) had no dependents, while the majority of the sample were single (49.7%, n=214). The majority of the sample had an Honours degree (34.1%, n=147) and 11.1% (n=48) of the sample had tenure of 11-15 years. A total of 35% (n=151) of the sample worked at the University of Namibia, while 23.4% (n=101) of the sample were teachers. The majority of the sample were medical staff (41.5%, n=179). The rest of the biographical information is depicted in Table 1.

Table 1. Biographical details of the Sample (Fourie & Pieters, 2024)

Category:	Item:	Frequency:	Percentage:
SEX:	Male	138	32.0
	Female	293	68.0
AGE:	Below 24	18	4.2
	24-28	97	22.5
	29-31	71	16.5
	32-35	64	14.8
	36-40	52	12.1
	41-45	46	10.7
	46-50	45	10.4
	51 and older	38	8.8
NUMBER OF DEPENDENTS (children):	None	85	19.7
	1-2	195	45.2
	3-4	120	27.8
	5-6	22	5.1
	7-9	3	0.7
	10 and more	6	1.4

MARITAL STATUS:	Single	214	49.7
	Married	190	44.1
	Divorced	22	5.1
	Widowed	5	1.2
QUALIFICATION LEVEL:	Grade 12	3	0.7
	Certificate	33	7.7
	Diploma	59	13.7
	Degree	82	19.0
	Honours Degree	147	34.1
	Master's Degree	71	16.5
	PhD degree	36	8.4
	TENURE:	Less than 1	22
1-2		45	10.4
3-4		87	20.2
5-6		64	14.8
7-8		55	12.8
9-10		49	11.4
11-15		48	11.1
16 and more		61	14.2
OCCUPATION	Unam staff	151	35.0
	Teachers	101	23.4
	Medical staff	179	41.5
TOTAL		431	100.0

4.2. Descriptive statistics

Table 2 indicates that a mean score of 12.81 were reported for the role ambiguity (WS_RA) dimension of work stress, with a SD=6.29 and Cronbach's Alpha of .92. The *Job Demands-Resources Questionnaire* related to work stress reported a mean of 22.49, SD=4.62 and a Cronbach's Alpha of .78 for the work stress dimension of workload (WS_WL). A mean of 5.61, SD=2.13, and Cronbach's Alpha of .78 were reported for the Job insecurity (WS_JIN) dimension of the *Job Demands-Resources Questionnaire*. A mean of 40.90, SD=8.37 and Cronbach's Alpha of .77 were reported for the combined Work Stress questionnaire (WS_COM). A mean score of 14.06, SD=4.25, and Cronbach's Alpha of .78 were reported for the vigour dimension of work engagement (WE_VIG). A mean of 10.54, SD=2.76, and Cronbach's Alpha of .81 were reported for the dedication dimension (WE_DED) of work engagement. Absorption, as part of work engagement, did not meet the expected reliability standards ($\alpha = .70$) and was thus excluded from any further analysis. A mean of 33.68, SD=8.99 and Cronbach's Alpha of .88 were reported for the combined work engagement scale. The means (M), standard deviations (SD), Cronbach's alpha coefficient, and correlations are recorded in Table 2.

4.3. Inferential statistics

WS_RA reported a positive relationship with WS_WL ($r = 0.09, p < 0.05$, small effect); a negative relationship with WS_JIN ($r = -0.20, p < 0.05$, small effect); a positive relationship with WS_COM ($r = 0.75, p < 0.05$, large effect); a positive relationship with WE_VIG ($r =$

0.11, $p < 0.05$, small effect); a positive relationship with WE_DED ($r = 0.15$, $p < 0.05$, small effect); and a positive relationship with WE_COM ($r = 0.18$, $p < 0.05$, small effect).

WS_WL reported a positive relationship with WS_JIN ($r = 0.24$, $p < 0.05$, small effect); a positive relationship with WS_COM ($r = 0.68$, $p < 0.05$, large effect); a negative relationship with WE_VIG ($r = -0.15$, $p < 0.05$, small effect); a negative relationship with WE_DED ($r = -0.14$, $p < 0.05$, small effect); and a negative relationship with WE_COM ($r = -0.13$, $p < 0.05$, small effect).

WS_JIN reported a positive relationship with WS_COM ($r = 0.23$, $p < 0.05$, small effect); a negative relationship with WE_VIG ($r = -0.08$, $p < 0.05$, small effect); a negative relationship to WE_DED ($r = -0.05$, $p < 0.05$, small effect); and a negative relationship to WE_COM ($r = -0.09$, $p < 0.05$, small effect).

WS_COM reported a negative relationship with WE_VIG ($r = -0.02$, $p < 0.05$, almost no effect); a positive relationship with WE_DED ($r = 0.02$, $p < 0.05$, almost no effect); and a positive relationship with WE_COM ($r = 0.04$, $p < 0.05$, almost no effect).

WE_VIG reported a positive relationship with WE_DED ($r = 0.78$, $p < 0.05$, large effect); and a positive relationship with WE_COM ($r = 0.92$, $p < 0.05$, large effect).

WE_DED reported a positive relationship with WE_COM ($r = 0.90$, $p < 0.05$, large effect).

Table 2: Descriptive statistics and Pearson rank order correlation (Fourie & Pieters, 2024)

Item	Mean	SD	α	1	2	3	4	5	6
1. WS_RA	12.81	6.29	0.92	-					
2. WS_WL	22.49	4.62	0.78	.09*	-				
3. WS_JIN	5.61	2.13	0.78	-.20*	.24*	-			
4. WS_COM	40.90	8.37	0.77	.75 ⁺⁺	.68 ⁺⁺	.23*	-		
5. WE_VIG	14.06	4.25	0.78	.11*	-.15*	-.08*	-.02	-	
6. WE_DED	10.54	2.76	0.81	.15*	-.14*	-.05*	.02	.78 ⁺⁺	-
7. WE_COM	33.68	8.99	0.88	.18*	-.13*	-.09*	.04	.92 ⁺⁺	.90 ⁺⁺

* Statistically significant: $p \leq 0,05$

+ Practically significant correlation (medium effect): $0,30 \leq r \leq 0,49$

++ Practically significant correlation (large effect): $r \geq 0,50$

Key:

WS_RA= Work Stress Role Ambiguity

WS_WL= Work Stress Workload

WS_JIN= Work Stress Job Insecurity

WS_COM= Work Stress Combined

WE_VIG= Work Engagement Vigour

WE_DED= Work Engagement Dedication

WE_COM= Work Engagement Combined

5. DISCUSSION

The main aim of this study was to assess the impact of work stress on the work engagement of employees from different industries in Namibia. This study found a positive relationship between role ambiguity and work engagement. Omar et al. (2015) found that role

ambiguity increases workload, while Matanhire and Pieters (2023) found that workload increases intention to leave. A high level of social support may buffer against the negative influence of role ambiguity on work engagement (Martínez-Díaz et al., 2021). The findings of this study reject *Hypothesis 1*.

In addition, this study found a negative relationship between workload and work engagement, consistent with Tomic and Tomic (2011) thus supporting *Hypothesis 2*. The higher employees perceive their workload to be, the lower their work engagement will be (Tomic & Tomic, 2011).

This study reported a negative relationship between job insecurity and work engagement; this is consistent with findings from De Spiegelaera et al. (2014) thus supporting *Hypothesis 3*. Job insecurity decreases the likelihood that employees will invest in their work with innovative behaviours (De Spiegelaera et al., 2014).

Work stress reported a positive relationship with work engagement in this study; however, this relationship was statistically insignificant. These findings are inconsistent with findings from DeZolina et al. (2019) who found a negative correlation between work stress and work engagement. The findings of this study reject *Hypothesis 4*.

6. CONCLUSION AND RECOMMENDATIONS

Based on the findings of the present study, *Hypothesis 1* was rejected. This study found a positive relationship between role ambiguity and work engagement. This study was carried out during unprecedented times, during a pandemic; the findings may be unique to the specific circumstances surrounding the Covid-19 pandemic. Based on the principles of the General Adaptation Syndrome related to stress, human beings can withstand stress until their resources become depleted. To cope with overwhelming circumstances like the Covid-19 pandemic and altered work requirements, having fewer guidelines may be regarded as a resource and not as a demand. Being required to pay attention to so many new and different things can become overwhelming, and with role ambiguity, having fewer guidelines can preserve limited resources.

Workload and work engagement reported a negative relationship. The more work employees are required to complete, without the needed resources as explained in the Job Demands-Resources model, the it is more likely that they may experience poor health (burnout) and/or become disengaged at work.

Job insecurity reported a negative relationship with work engagement. Being worried about the insecurity of work may cause stress and constant worrying. The cognitive shift from work duties to the lack of job security may reduce the focus and execution of work duties (work engagement).

Work stress reported a positive relationship with work engagement. Despite these findings being statistically insignificant, they highlight the benefit of work stress. Experiencing work stress with the needed job resources fosters growth and excellence at work. One of the key distinctions between employees who experience distress versus eustress is how they respond to it. Work stress can stimulate growth, and the needed resources can advance employees coping abilities.

Gregersen et al. (2016) suggest that leaders should possess the communication skills to promote role clarity for employees. Leaders and managers should also communicate individual

role expectations to employees as specifically as possible, thereby decreasing role ambiguity (Gregersen et al., 2016). During stressful times, it is advised that leaders and managers discuss possible role clarification and guidelines with employees before the implementation of these guidelines. These guidelines should serve their intended purpose, to assist employees and not add to taxing circumstances.

Organisations should support positive work relationships in which individuals can give and receive resources. This will benefit organisations and individuals through higher work engagement and reduced healthcare costs (Colbert et al., 2016). These relationships can be built by openly discussing conflict between employees, thereby boosting morale (Colbert et al., 2016). Enhancing social skills among employees may reduce work stress (Chitambu & Pieters, 2021).

A workplace disaster preparedness plan can significantly reduce employees' job insecurity (Pacheco et al., 2020). A workplace disaster plan can set out the specific procedures and tasks to follow and undertake in disastrous circumstances to ensure that employees will be taken care of. Including such a plan in the workplace policy where it is accessible to all employees or even disseminating it among employees can help reduce both job insecurity and work stress. Informing employees about their work future when bankruptcy occurs or when the business becomes redundant can reduce work stress.

Promoting a platform where employees can openly communicate their concerns regarding Covid-19 can also be useful to validate employees' feelings and decrease their work stress (Pacheco et al., 2020). Organisations can also consider providing free counseling resources and services paid for by the organisation for distressed employees to address job insecurity concerns and improve poor performance (Pacheco et al., 2020). Working in unprecedented situations requires additional measures to be put in place.

Stress management training for employees already experiencing work stress can prevent them from getting sick and also enhance their coping mechanisms (Mostert et al., 2008). Emotional intelligence training was also reported as a resource to reduce work stress during the Covid-19 pandemic (Chitambu & Pieters, 2021). Individual-based interventions focused on setting meaningful goals, fostering optimism and showing acts of kindness can be helpful (Schaufeli & Salanova, 2011).

Since workload increases work stress, it would be wise for organisations to focus on ways to reduce workload for overburdened employees. Chitambu and Pieters (2021) recommended that organisations periodically evaluate employees' workloads by comparing the demands and resources available.

Organisations can increase employees' work engagement by investing in leadership development activities for employees (Khoreva & Van Zalk, 2016). Employees will return this investment to the organisation through high work engagement. Organisational-based interventions can focus on increasing job resources such as social support and providing career development opportunities (Schaufeli & Salanova, 2011). Team-based interventions can increase the efficacy of employees and develop leadership skills (Schaufeli & Salanova, 2011).

The researchers of the present study recommend that more research is needed amongst teachers, university staff, and medical professionals. Qualitative studies may provide additional analysis regarding the relationship between work stress and work engagement. Research on the

causal relationships between these variables may be needed. Researchers are encouraged to further expand on this knowledge and shed light on these variables in Namibia.

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