



# The impact of remote and hybrid work and psychological wellbeing on organisational citizenship behaviour: The moderating effect of psychological capital



#### Authors:

Desere Kokt<sup>1</sup> Mothepane Seqhobane<sup>1</sup>

#### Affiliations:

<sup>1</sup>Department of Business Management, Faculty of Management Sciences, Central University of Technology, Bloemfontein, South Africa

#### Corresponding author:

Desere Kokt, koktd@cut.ac.za

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# Read online:

Scan this QR code with your smart phone or mobile device to read online. **Orientation:** In a highly competitive and complex world of work, the voluntary inputs or organisational citizenship behaviours from employees are increasingly important for sustained performance. This is especially pertinent because of the prevalence of remote and hybrid work and the need to enhance psychological wellbeing.

Original Research

**Research purpose:** This study examined the impact between perceived experiences related to remote and hybrid work and psychological wellbeing on organisational citizenship behaviour, while also exploring the moderating effect of psychological capital.

**Motivation for the study:** As a result of the prevailing impact of the coronavirus disease 2019 (COVID-19) pandemic and other global challenges, organisations need to consider ways to improve organisational citizenship behaviour.

**Research design, approach and method:** The study adheres to positivism employing a quantitative research approach. A structured questionnaire was administered to 402 formally employed individuals in South Africa, using QuestionPro. Partial least squares structural equation modelling (PLS-SEM) was applied to determine the relationships between the variables.

**Main findings:** Findings show that psychological wellbeing and psychological capital have a strong predictive power towards organisational citizenship behaviour. In addition, remote and hybrid work benefits and psychological capital have a strong predictive power towards psychological wellbeing.

**Practical or managerial implications:** To enhance organisational citizenship behaviour in remote and hybrid work environments, managers need to proactively support employees' mental health and resilience while also promoting the development of psychological capital.

**Contribution or value-add:** This research has significant practical implications for organisations aiming to enhance employee wellbeing and foster organisational citizenship behaviour within remote and hybrid work settings. It is paramount for management to foster trusting relationships with employees through open communication and leading by example.

**Keywords:** remote and hybrid work; psychological wellbeing; organisational citizenship behaviour; psychological capital; self-efficacy; resilience; hope; optimism.

#### Introduction

The coronavirus disease 2019 (COVID-19) pandemic has not only disrupted all industries worldwide but also triggered a surge in remote and hybrid work. This transformation has become the new universal norm, necessitating organisations to adapt and change their operations to ensure sustainability (Grabarek 2018). Remote work implies work that is not performed at the official workplace, but in another locality, and can include telecommuting, teleworking, flexible work, virtual work, distributed work, or distance work. Hybrid work grants employees the flexibility to alternate working from home and the official workplace (Fernandes 2021).

While it might be an exciting prospect for employees who seek flexibility, remote and hybrid work could result in psychological wellbeing challenges for others (Grabarek 2018). Russell (2019) states that working from home may cause feelings of isolation and loneliness for some employees, especially if they experience a lack of support from management and colleagues. Grabarek (2018)

further argues that remote and hybrid work has the potential to result in 'no work boundaries', poor communication, and increased conflict, all of which could lead to stress, depression, and anxiety.

Psychological capital is proposed as a higher-order construct that embodies four factors, namely resilience (the ability to recover from challenges or failure), hope (the motivation to succeed in a goal or task), optimism (the expectation of positive outcomes), and self-efficacy (the confidence in one's ability to achieve something and overcome difficulties). Van Nistelrooij (2016) observes that employees who feel they have psychological support have the potential to experience, among other things, enhanced organisational citizenship behaviour. Organisational citizenship behaviour is defined as going above and beyond one's scope of work, including actions such as voluntarily taking on additional work responsibilities, contributing to the community, developing skills beneficial to the organisation, working overtime, adhering to organisational rules even when no one is watching, promoting and protecting the organisation, and maintaining a positive attitude towards the organisation and its activities (Thiruvenkadam & Durairaj 2017).

As a result of the prevailing influence of the COVID-19 pandemic (e.g. increased cost of living, heightened business innovation) and the continuous expansion of information and communication technology (ICT), remote and hybrid work has become more prolific. It is thus necessary to reflect on formally employed individuals' perceptions of remote and hybrid work and psychological wellbeing and its impact on their organisational citizenship behaviour. The study further investigated psychological capital as moderating variable.

#### Literature review

#### Remote and hybrid work

Remote work constitutes a flexible work arrangement that allows employees to work from home away from their central offices, whereas hybrid work allows employees to work between the office and home according to their needs. With remote and hybrid work, employees do not have physical contact with their colleagues but use online and/or mobile connections (notably the internet, 4G and 5G connectivity) (Janza 2021).

Reports (see Fernandes 2021; McCarthy 2021) on South Africa indicate that 21% of professionals had worked from home prior to the COVID-19 pandemic, while the number increased to 79% during and just after the pandemic. In many European countries, only 5% of employees had worked from home prior to the pandemic, increasing to more than 50% post the COVID-19 pandemic. The United States, on the other hand, was already familiar with the remote work concept, with about 3.9 million employees working from home before the pandemic (Wang et al. 2020).

Encouraging a culture that recognises the benefits of remote and hybrid work would help to boost employee and team

creativity, satisfaction, and collaboration. According to Chamorro-Premuzic and Berg (2021), organisational leaders can strengthen organisational culture by creating a digital workplace that enables all employees to collaborate from any location. A digital workspace may reduce feelings of isolation and uncertainty, and promote fairness, which, in turn, would enhance cooperation between remote and home-based employees.

Brower (2021) distinguishes 3 types of hybrid models: (1) the split-week model, which implies working from home 2 to 3 days a week and the rest at the official workplace; (2) shift employment, which permits employees to work a morning shift at home and an afternoon shift at the workplace or vice versa; and (3) week by week, which allows employees to split their time between working from home and the office on a weekly basis.

#### **Psychological wellbeing**

As a result of the challenges faced by both organisations (e.g. remote work arrangements, management adaptation to remote work, etc.) and employees (e.g. isolation, work-life balance, motivation, etc.) during the COVID-19 pandemic, a greater emphasis was placed on the psychological wellbeing of employees (Family Safety & Health 2020). Psychological wellbeing can be explained as a person's pleasant emotions, feelings of happiness, meaningful social relationships, and overall positive functioning (Avey, Luthans & Youssef 2010).

Psychological wellbeing consists of six dimensions: selfacceptance (to view oneself as a whole person, irrespective of flaws and failures), purpose in life (having aims and goals), environmental mastery (a sense of competence and control over one's environment), positive relations (maintaining engaging relationships with others), autonomy (to take responsibility for one's own advancement), and personal growth (improving one's life and wellbeing) (Alvi 2017). Morin (2020) contends that an individual's interpersonal relationships and decision-making, both personally and professionally, are greatly influenced by their psychological wellbeing. Oakman et al. (2020) concur by stating that working from home could be associated with several psychological impediments such as stress, depression, and anxiety. Similarly, research by Janza (2021) revealed that 82% of remote employees admitted to experiencing depression, and 40% indicated that working from home put pressure on them to deliver better work and make greater contributions.

Aetna International (2020) conducted a survey on employees and employers to ascertain how psychological wellbeing is related to remote working. The results showed that 32% of employees had high stress levels, 74% were impacted by poor psychological health management, and 61% desired to return to the office full-time. Moreover, 40% of employers were concerned that a lack of social interaction among employees might have a long-term negative impact on their psychological wellbeing.

#### Organisational citizenship behaviour

Early in the 1980s, the term 'organisational citizenship behaviour' was coined to explain how employees behave in various organisational social systems. The concept was initially perceived as independent individual behaviour that supports the efficient operation of the business (Çavus & Kapusuz 2015). Although organisational citizenship behaviour was once considered to be a collective phenomenon, it is now viewed as an individual behaviour that positively impacts organisations (Yaakobi & Weisberg 2020).

When organisational citizenship behaviour was first introduced, it consisted of two dimensions, namely (1) general compliance (performing employee duties as expected) and (2) altruism (assisting colleagues) (Ndoja & Malekar 2020). These dimensions evolved, and in 1988, the following were added: courtesy (consulting others before acting), sportsmanship (not complaining about trivial matters), conscientiousness (complying with norms), and civic virtue (keeping up with important affairs within the organisation).

#### **Psychological capital**

The notion of 'psychological capital' originated from positive psychology and was introduced in the late 1990s by Seligman. Psychological capital can be explained as an individual's ability to positively value daily life events and increase their chances of success by relying on perseverance and effort (Seligman 2018). As alluded to before, psychological capital involves a positive state of individual psychological development characterised by dimensions including hope, self-efficacy, optimism and resilience (Luthans et al. 2007). Psychological capital also stimulates the cognitive, emotional, cognitive, and social systems that contribute to individual psychological wellbeing. Psychological capital thus denotes positive behaviours needed to enhance organisational citizenship behaviour (Manzano-García & Ayala 2017).

The following research hypotheses were formulated:

- H<sub>1</sub>: There is a statistically significant relationship between remote and hybrid work benefits and psychological wellbeing (SRQ1).
- H<sub>2</sub>: There is a statistically significant relationship between remote and hybrid work disadvantages and psychological wellbeing (SRQ2).
- H<sub>3</sub>: There is a statistically significant relationship between psychological capital and psychological wellbeing (SRQ3).
- H<sub>4</sub>: There is a statistically significant relationship between remote and hybrid work benefits and organisational citizenship behaviour (SRQ4).
- H<sub>5</sub>: There is a statistically significant relationship between remote and hybrid work disadvantages and organisational citizenship behaviour (SRQ5).

- H<sub>6</sub>: There is a statistically significant relationship between psychological wellbeing and organisational citizenship behaviour (SRQ6).
- H<sub>7</sub>: There is a statistically significant relationship between psychological capital and organisational citizenship behaviour (SRQ7).
- H<sub>8</sub>: There is a statistically significant moderating effect of psychological capital on the relationship between:
  - Remote and hybrid work benefits and psychological wellbeing (SRQ8a).
  - Remote and hybrid work disadvantages and psychological wellbeing (SRQ8b).
  - Remote and hybrid work benefits and organisational citizenship behaviour (SRQ8c).
  - Remote and hybrid work disadvantages and organisational citizenship behaviour (SRQ8d).
  - Psychological wellbeing and organisational citizenship behaviour (SRQ8e).

#### Research methods

#### Research paradigm and approach

This study adhered to the ontological position of objectivism and the epistemological position of positivism. A quantitative approach was followed to generate objective and empirical data.

#### **Participants**

The unit of investigation for this study was formally employed South Africans across multiple industries who were affected by remote and hybrid work during and after the COVID-19 pandemic. The study population consisted of 795 adult learners who had completed either a Baccalaureus Technologiae in Human Resource Management and/or an Advanced Diploma in Human Resource Management as part of the Central University of Technology, Free State's (CUT) Maccauvlei project. According to Israel (1992), for any population of more than 700, a sample size of 255 is sufficient. The researcher gathered 402 responses that were used for analysis.

Based on the demographic composition of the respondents, 54% were female, most had an honours or equivalent degree (40%), and the majority worked in the education sector (23%), followed by the public sector (11%).

#### Measuring instrument

Consistent with a quantitative approach, a structured questionnaire was administered to gather data from participants. A 6-point Likert scale was used ranging from strongly disagree (1) to strongly agree (6). The questionnaire consisted of 5 sections. Section A captured the demographic profile of respondents (gender, qualification, and sector of employment). Section B recorded perceptions related to the benefits of remote and hybrid work (7 scale items), and the disadvantages of remote and hybrid work (9 scale items) based on the research of Ingusci et al. (2022).

Section C focused on psychological wellbeing based on the work of Sham et al. (2021). Twenty scale items were tested. Section D focused on organisational citizenship behaviour dimensions based on the work of Kane (2014) and Sharma and Jain (2014), testing 15 scale items. Section E captured responses related to psychological capital based on Solomon (2014) and Malone (2008) testing 15 items.

#### Research design

The study followed a descriptive research design, using a survey to capture responses. All respondents were formally employed South Africans across different industries that were affected by remote and hybrid work during and after the COVID-19 pandemic.

#### **Ethical considerations**

An application for full ethical approval was made to the Central University of Technology, Free State Faculty Research and Innovation Committee and ethics consent was received in 2016. The ethics approval number is FMSEC01/22.

Respondents were approached to take part in the study through email and/or WhatsApp, which included a link to the questionnaire on QuestionPro. Informed consent was obtained and respondents were ensured of their anonymity and the confidentiality of their responses.

#### **Main findings**

Variables were assessed for normality by applying the Shapiro–Wilk test. The results revealed that all data variables significantly deviated from a normal distribution. As it does not require data to be normally distributed, partial least squares structural equation modelling (PLS-SEM) was

deemed appropriate to utilise for purposes of the study (Laerd Statistics 2019).

For PLS-SEM to be applicable, the minimum sample size of the study should be equal to the larger of the following: (1) 10 times the largest number of formative indicators used to measure one construct; or (2) 10 times the largest number of structural paths directed at a particular construct in the structural model (Hair et al. 2017). For this study, the maximum number of structural paths (four) were directed at organisational citizenship behaviour. Therefore, the minimum required sample size for the PLS-SEM analysis was 33.45 or 40. Four hundred and two (402) respondents completed the questionnaire. The research model is displayed in Figure 1.

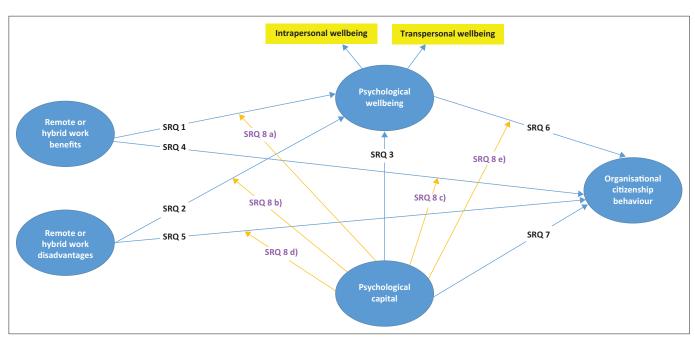
#### Assessment of the partial least squaresstructural equation modelling model

The SEM model was evaluated in a two-stage process. The first stage included assessing the outer model while the second stage involved assessing the inner model.

#### Outer measurement model assessment

To assess the reliability and validity of the measurement model, the indicator reliability, internal consistency reliability, convergent validity, and discriminant validity were assessed (Janadari et al. 2016). This is explained next.

According to Bless et al. (2016), indicator reliability refers to the portion of the indicator variance explained by the latent variable. Table 1 details the indicator loadings of remote and hybrid work benefits, remote and hybrid work disadvantages, interpersonal wellbeing and transpersonal wellbeing, organisational citizenship behaviour, and psychological capital.



SRQ denotes the hypotheses for the study.

FIGURE 1: An illustration of the research model.

TABLE 1: Indicator loadii

TABLE 1: Indicator loadings.						
Indicators	Intra-personal wellbeing	Organisational citizenship behaviour	Psychological capital	Remote or hybrid work benefits	Remote or hybrid work disadvantages	Trans-personal wellbeing
I can focus on what I am doing. (PWB_IP_03)	0.790	-	-	-	-	-
I feel lively. (PWB_IP_04)	0.864	-	-	-	-	-
I feel calm. (PWB_IP_05)	0.859	-	-	-	-	-
I can manage my everyday life with my physical strength. (PWB_IP_06)	0.749	-	-	-	-	-
I can live with life's ups and downs and let go of unpleasant experiences. (PWB_IP_07)	0.759	-	-	-	-	-
I have a healthy body. (PWB_IP_08)	0.786	-	-	-	-	-
I feel satisfied with my life. (PWB_IP_09)	0.810	-	-	-	-	-
I feel energetic. (PWB_IP_10)	0.857	-	-	-	-	-
I create a healthy and cheerful workplace environment. (OCB_01)	-	0.683	-	-	-	-
I am motivated and motivate co-workers to achieve the organisational objectives. (OCB_02)	-	0.712	-	-	-	-
I participate in activities and meetings that could enhance my career. (OCB_08)	-	0.768	-	-	-	-
If I see something I don't like, I fix it. (OCB_09)	-	0.749	-	-	-	-
I am always looking for better ways to do things. (OCB_10)	-	0.820	-	-	-	-
I excel at identifying opportunities. (OCB_11)	-	0.789	-	-	-	-
I defend my organisation when others criticise it. (OCB_12)	-	0.826	-	-	-	-
I offer ideas to improve the functioning of the organisation. (OCB_13)	-	0.846	-	-	-	-
l attend non-compulsory functions and help improve the organisational image. (OCB_14)	-	0.784	-	-		-
I keep up with the organisation developments. (OCB_15)	-	0.832	-	-	-	-
When things are uncertain for me at work, I remain positive. (PC_03)	-	-	0.764	-	-	-
There are various ways of solving problems. (PC_05)	-	-	0.732	-	-	-
I am able to think of multiple ways to reach my work goals. (PC_06)	-	-	0.767	-	-	-
I see myself as successful at work. (PC_08)	-	-	0.747	-	-	-
I am confident in presenting information to a group of colleagues. (PC_09)	-	-	0.820	-	-	-
I am optimistic about what will happen to me in the future, especially if it pertains to work. (PC_10)	-	-	0.749	-	-	-
I approach my job with confidence and knowledge. (PC_11)	-	-	0.806	-	-	-
I feel confident analysing a long-term problem to find a solution. (PC_12)	-	-	0.832	-	-	-
I always choose to consider the positive aspects regarding my job. (PC_15)	-	-	0.719	-	-	-
I am able to coordinate work–family balance and/or to meet family needs in an appropriate way while working from home. (RWB_01)	-	-	-	0.797	-	-
I save on commuting costs while working remotely. (RWB_02)	-	-	-	0.610	-	-
Through remote working I have sufficient time to myself and endure less stress. (RWB_03)	-	-	-	0.772	-	-
I comprehensively plan my work schedule and concentrate better while working from home. (RWB_04)	-	-	-	0.869	-	-
I have positive relations with colleagues and supervisors while working remotely. (RWB_05)	-	-	-	0.822	-	-
I have adequate access to business-related IT resources while working from home. (RWB_06)	-	-	-	0.759	-	-
With remote working I encounter a lack of recognition of my own work. (RWD_03)	-	-	-	-	0.838	-
I experience difficulty in accessing work-related information and documents from colleagues while working remotely. (RWD_04)	-	-	-	-	0.819	-
I encounter challenges in scheduling my work while working from home. (RWD_05)	-	-	-	-	0.824	-
While working from home, there is less access to professional training and a lack of career progression. (RWD 06)	-	-	-	-	0.814	-
I am distracted and disturbed by domestic duties while working from home. (RWD_08)	-	-	-	-	0.756	-

Table 1 continues on the next page→

TABLE 1 (Continues...): Indicator loadings.

Indicators	Intra-personal wellbeing	Organisational citizenship behaviour	Psychological capital	Remote or hybrid work benefits	Remote or hybrid work disadvantages	Trans-personal wellbeing
I am not involved in work decision-making processes while I work from home. (RWD_09)	-	-	-	-	0.750	-
I care about what is happening in society. (PWB_TP_02)	-	-	-	-	-	0.719
I am grateful to people around me for all they have done for me. (PWB_TP_03)	-	-	-	-	-	0.803
I treat others with kindness. (PWB_TP_04)	-	-	-	-	-	0.842
People (of different age or gender) should have equal opportunities. (PWB_TP_05)	-	-	-	-	-	0.765
I am part of society. (PWB_TP_06)	-	-	-	-	-	0.800

OCB, organisational citizenship behaviour; PC, psychological capital; PWB-TP, psychological wellbeing (transpersonal); PWB-IP, psychological wellbeing (intrapersonal); RWB, remote working benefits; RWD, remote working disadvantages.

Based on guidelines provided by Hulland (1999), indicators with loadings less than 0.50 were excluded from the measurement model. These indicators were PWB\_IP\_01, PWB\_IP\_02, OCB\_03, OCB\_04, OCB\_05, OCB\_06, OCB\_07, PC\_01, PC\_02, PC\_04, PC\_07, RWD\_01, RWD\_02, RWD\_07, and PWB\_TP\_02. The remaining indicator loadings were all above the 0.5 threshold and were statistically significant (p < 0.001) (Table 1). Therefore, the measurement model exhibits indicator reliability.

The indicator loadings for psychological wellbeing were calculated separately. The intrapersonal wellbeing loading was 0.640, while transpersonal wellbeing was 0.851. Therefore, both loadings of intrapersonal wellbeing and transpersonal wellbeing were above the 0.5 threshold and thus statistically significant (p < 0.001). The indicator reliability of the psychological wellbeing construct was also considered satisfactory (Hulland 1999).

Internal consistency reliability relates to how effectively a test measures what it intends to measure. Internal consistency reliability can be assessed using the composite reliability (CR) of a construct. Gefen, Straub and Boudreau (2000) found that the CR of a construct should be greater than 0.7 to indicate adequate internal consistency reliability. The CR of the constructs of the study were as follows: remote and hybrid work benefits 0.865, remote and hybrid work disadvantages 0.889, intrapersonal wellbeing 0.887, transpersonal wellbeing 0.845, organisational citizenship behaviour 0.929, and psychological capital 0.915. The CR of all constructs was above the 0.70 threshold, and it displayed an acceptable level of internal consistency reliability.

Convergent validity is the extent to which a measure correlates positively with alternative measures of the same construct (Hair et al. 2017). Convergent validity is assessed using the average variance extracted (AVE), which is a variance shared between a construct and its measures (Janadari et al. 2016). According to Bagozzi and Yi (1988) and Fornell and Larcker (1981), the AVE should be greater than 0.5. The findings of this study show that the AVE for remote and hybrid work benefits was 0.601, for remote and hybrid work disadvantages 6.41, for intrapersonal wellbeing 0.816, for transpersonal wellbeing 0.619, for organisational

citizenship behaviour 0.612, and for psychological capital 0.595. This confirms that all constructs showed convergent validity.

Discriminant validity is the extent to which scores on the scale measuring a particular construct are distinct from scores on the scales measuring other constructs (Hair et al. 2017). According to Janadari et al. (2016), the heterotrait—monotrait ratio (HTMT) of correlations is the most accurate way to evaluate discriminant validity. Hair et al. (2017) affirm that the HTMT ratio should not exceed 0.9. Table 2 indicates that the HTMT ratios of the scales measuring all constructs did not exceed the 0.9 threshold, thus indicating that the measurement model exhibits discriminant validity.

#### Inner (structural) model assessment

The assessment of the structural model of the study was conducted in 5 steps: (1) examining the model for collinearity; (2) assessing the significance and relevance of the structural model relationships; (3) assessing the level of  $R^2$ ; (4) determining the effect size ( $f^2$ ); and (5) assessing the moderating relationships.

#### Step 1: Examine the model for collinearity

In this step, it is critical to ensure that there are no strong correlations between the constructs because such correlations might result in methodological and interpretation challenges (Hair & Alamer 2022). The PLS-SEM cannot effectively estimate models with two predictor constructs that are highly correlated. Hence, the proposed measure of collinearity is the variance inflation factor (VIF). The VIF measures the correlation among independent variables in least squares regression models. A VIF score of 5 or more suggests concerns with collinearity between predictor constructs, whereas VIF values below 3 imply no collinearity, and values between 3 and 5 are considered acceptable (Sarstedt et al. 2019). The VIF matrix of all constructs outlines that all values were below 3, indicating no collinearity concerns in the SEM model (Table 3).

### Step 2: Assess the significance and relevance of the structural model relationships

The direct effects of all the hypothesised relationships were evaluated by utilising bootstrapping analysis.

TABLE 2: Heterotrait-monotrait ratio of constructs.

Constructs	HTMT
Organisational citizenship behaviour <-> Intrapersonal wellbeing	0.240
Psychological capital <-> Intrapersonal wellbeing	0.343
Psychological capital <-> Organisational citizenship behaviour	0.748
Psychological wellbeing <-> Organisational citizenship behaviour	0.601
Psychological wellbeing <-> Psychological capital	0.688
Remote or hybrid work advantages <-> Intrapersonal wellbeing	0.332
Remote or hybrid work advantages <-> Organisational citizenship behaviour	0.090
Remote or hybrid work advantages <-> Psychological capital	0.121
Remote or hybrid work advantages <-> Psychological wellbeing	0.285
Remote or hybrid work disadvantages <-> Intrapersonal wellbeing	0.256
Remote or hybrid work disadvantages <-> Organisational citizenship behaviour	0.077
Remote or hybrid work disadvantages <-> Psychological capital	0.123
Remote or hybrid work disadvantages <-> Psychological wellbeing	0.221
Remote or hybrid work disadvantages <-> Remote or hybrid work advantages	0.453
Transpersonal wellbeing <-> Intrapersonal wellbeing	0.191
Transpersonal wellbeing <-> Organisational citizenship behaviour	0.508
Transpersonal wellbeing <-> Psychological capital	0.584
Transpersonal wellbeing <-> Remote or hybrid work advantages	0.137
Transpersonal wellbeing <-> Remote or hybrid work disadvantages	0.072

HTMT, heterotrait-monotrait ratio.

TABLE 3: Variance inflation factor matrix.

Constructs	VIF
Psychological capital -> Organisational citizenship behaviour	1.796
Psychological capital -> Psychological wellbeing	1.187
Psychological wellbeing -> Intrapersonal wellbeing	1.000
Psychological wellbeing -> Organisational citizenship behaviour	1.779
Psychological wellbeing -> Transpersonal wellbeing	1.000
Remote or hybrid work advantages -> Organisational citizenship behaviour	1.249
Remote or hybrid work advantages -> Psychological wellbeing	1.204
Remote or hybrid work disadvantages -> Organisational citizenship behaviour	1.285
Remote or hybrid work disadvantages -> Psychological wellbeing	1.279

VIF, variance inflation factor.

Bootstrapping is a resampling technique that draws many subsamples from the original data (with replacement) and estimates models for each subsample (Sarstedt et al. 2019). The standardised beta and *t*-values were calculated by the bootstrapping procedure with a resample of 10 000 (Hair et al. 2017). The results of the path model analysis of the SEM model (as shown in Table 4) can be used to answer the subsidiary research questions of the study.

#### Step 3: Asses the level of R<sup>2</sup>

The  $R^2$  measures the proportion of variance in a latent endogenous construct that is explained by other exogenous constructs expressed as a percentage (Chin 1988). The  $R^2$  value of organisational citizenship behaviour was 0.506. This means that psychological wellbeing and psychological capital collectively explain 50.6% of the variance in organisational citizenship behaviour. In addition, the  $R^2$  value of the psychological wellbeing was 0.416, which implies that remote and hybrid work benefits and psychological capital collectively explain 41.6% of the variance in psychological wellbeing.

The  $R^2$  values of 0.12 or below indicate a low effect size, values between 0.13 and 0.25 indicate a medium effect size, and values of 0.26 and above indicate a high effect size (Hair et al. 2017). Following these guidelines, it is evident that a combination of psychological wellbeing and psychological capital have a high predictive power towards organisational citizenship behaviour. On the other hand, remote and hybrid work benefits and psychological capital have a high predictive power towards psychological wellbeing.

#### Step 4: Assess the effect size $(f^2)$

The assessment of the effect size of a construct evaluates whether one construct has a substantive impact on another construct. This is also known as the effect size of the exogenous latent variable on the model. The assessment of this effect size follows Cohen's (1992) guideline, which is  $0.02 \le f^2 < 0.15$ : weak effect;  $0.15 \le f^2 < 0.35$ : moderate effect and  $f^2 > 0.35$ : strong effect.

In this study, psychological wellbeing had a weak effect size in the prediction of organisational citizenship behaviour, with an  $f^2$  value of 0.038. Likewise, remote and hybrid work benefits had a weak effect size in the prediction of psychological wellbeing, with an  $f^2$  value of 0.018. In contrast, psychological capital had a strong effect size in the prediction of organisational citizenship behaviour ( $f^2 = 0.395$ ) and psychological wellbeing ( $f^2 = 0.468$ ).

## Step 5: Assess the moderating effects in the structural equation modelling model

The significance of the interaction term is the main consideration when interpreting the findings of a moderation analysis (Hair et al. 2021). The moderator has a considerable moderating influence on the link between two constructs when the interaction term's effect on the endogenous construct is significant. To assess the moderating effects in the model, the significance of the interaction terms was investigated. This is reflected in Table 5.

The moderating effect of the psychological capital on the relationship between remote and hybrid work benefits and psychological wellbeing was negative. This means the moderation effect indicated an inverse moderating effect. The findings reveal that the lower the level of psychological capital, the stronger the positive relationship between remote and hybrid work benefits and psychological wellbeing. In contrast, the higher the level of psychological capital, the weaker the positive relationship between remote and hybrid work benefits and psychological wellbeing. Figure 2 displays the relationships among the variables.

#### Discussion

According to Oakman et al. (2020), there is a significant relationship between remote work and several health outcomes, self-reported health, safety, wellbeing, stress, depression, fatigue, quality of life, strain, and happiness. Similarly, the findings of this study identified no positive correlation between remote and hybrid work disadvantages

TABLE 4: Path model results of structural equation modelling model.

Relationship	Std beta	Std error	t	p	Decision
Remote or hybrid work benefits -> Psychological wellbeing	0.113	0.052	2.253	0.024	Accepted
Remote or hybrid work disadvantages -> Psychological wellbeing	-0.053	0.045	1.171	0.242	Rejected
Psychological capital -> Psychological wellbeing	0.570	0.044	12.765	< 0.001	Accepted
Remote or hybrid work benefits -> Organisational citizenship behaviour	-0.024	0.041	0.577	0.564	Rejected
Remote or hybrid work disadvantages -> Organisational citizenship behaviour	0.025	0.042	0.589	0.556	Rejected
Psychological wellbeing -> Organisational citizenship behaviour	0.183	0.052	3.418	< 0.001	Accepted
Psychological capital -> Organisational citizenship behaviour	0.592	0.053	11.121	< 0.001	Rejected

Std beta, standard beta; Std error, standard error.

TABLE 5: Path model results for moderating effects.

Relationship	Std beta	Std error	t	p	Decision
Psychological capital × Remote or hybrid work benefits -> Psychological wellbeing	-0.113	0.050	2.275	0.023	Accepted
Psychological capital × Remote or hybrid work disadvantages -> Psychological wellbeing	-0.098	0.052	1.874	0.061	Rejected
Psychological capital × Remote or hybrid work benefits -> Organisational citizenship behaviour	-0.060	0.033	1.795	0.073	Rejected
Psychological capital × Remote or hybrid work disadvantages -> Organisational citizenship behaviour	-0.047	0.041	1.152	0.250	Rejected
Psychological capital × Psychological wellbeing -> Organisational citizenship behaviour	0.018	0.023	0.793	0.428	Rejected

Std beta, standard beta; Std error, standard error.

and psychological wellbeing. Authors such as Crawford, MacCalman and Jackson (2011) found a moderate relationship between remote work and psychological wellbeing.

In contrast, this study found a statistically significant relationship between remote work benefits and psychological wellbeing. This is contrary to Lee (2018), who found that working remotely often resulted in a lack of resources, frustration, inadequate decision making, a lack of contribution towards work schedules, and poor interaction. This study found that the participants had adequate access to business-related IT resources, comprehensively planned their work schedule, and concentrated better while working from home. Moreover, they were involved in work decision-making processes while working remotely.

The study further found that respondents maintained positive relations with colleagues and supervisors while working from home. Research conducted by Eddleston and Mulki (2017) found a positive link between remote work and the inability to disengage from work. This implies that working from home may cause remote employees to overwork, which could interfere with family time. In contrast, the current findings revealed that respondents were able to coordinate work-family balance and meet family needs in a satisfactory way. Al-Habaibeh et al. (2021) found that remote workers saved money on travel expenses, which enhanced productivity but inhibited the establishment of good work-life boundaries. This was affirmed by the current study.

Gupta et al. (2017) conducted research to establish the impact of psychological capital on organisational citizenship behaviour, exploring the mediating role of work engagement. They established that organisational citizenship behaviour and psychological capital have a positive and significant association. Likewise, this study found a positive statistically significant relationship between psychological capital and organisational citizenship behaviour.

Respondents reported that they were able to create a healthy and cheerful workplace environment, and they were motivated to achieve organisational goals. Respondents defended their organisations when others criticise them and they generally kept up with the organisational developments such as product expansion or increased profits. Findings of this study further revealed that psychological wellbeing and psychological capital collectively explain 50.6% of the variance in organisational citizenship behaviour. Therefore, psychological wellbeing and psychological capital collectively have a high predictive power towards organisational citizenship behaviour. Moreover, remote and hybrid work benefits and psychological capital collectively explain 41.6% of the variance in psychological wellbeing, which indicates high predictive power (Figure 2).

The findings also showed that remote and hybrid work disadvantages did not have an impact on organisational citizenship behaviour. Thus, despite the challenges of remote and hybrid work, organisational citizenship behaviour was not affected. In fact, the findings demonstrated that remote and hybrid work benefits impacted positively on organisational citizenship behaviour. It therefore seems that remote and hybrid work benefits, such as positive relations with colleagues, flexibility, and improved work-life balance, can influence employee willingness to engage in discretionary behaviours that benefit the organisation. Perceived organisational support contributes positively to the relationship between remote and hybrid work benefits, psychological capital, and psychological wellbeing.

Employees may feel more supported by their organisations when they encourage and adopt advantages related to remote and hybrid work. Perceived support is linked to positive wellbeing outcomes (Chamisa, Mjoli & Mhlanga 2020). This study provided evidence of a positive statistically significant relationship between psychological capital and organisational citizenship behaviour. This suggests that fostering psychological capital in employees is associated with increased levels of organisational citizenship behaviour.

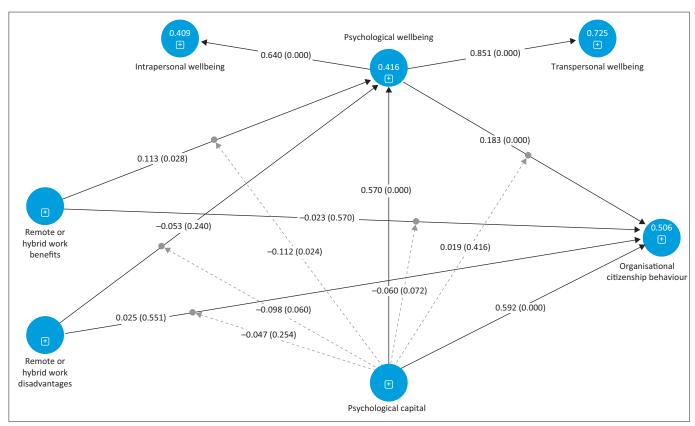


FIGURE 2: The impact of remote and hybrid work benefits and disadvantages and psychological wellbeing on organisational citizenship behaviour. Also shows the moderating effect of psychological capital.

Therefore, individuals with higher levels of psychological capital are more likely to engage in behaviours that go beyond their formal job requirements. This finding is supported by research conducted in public hospitals in the Eastern Cape Province of South Africa, which revealed a positive association between psychological capital and organisational citizenship behaviour (Chamisa et al. 2020).

#### Limitations

The research was conducted in one country and the study's findings can, therefore, not be generalised to other countries. Moreover, the socioeconomic disparity in South Africa makes it difficult to generalise the study's findings to all demographic groups, industries, and organisations. For example, remote and hybrid work may have different implications for employees with varying levels of access to resources, technology, and a conducive home working environment. Furthermore, only an online survey instrument was employed to collect quantitative data. Respondents were not given the opportunity to express their feelings and opinions qualitatively. Additional studies aimed at gathering data from other sources could address this limitation.

#### Recommendations

Based on the findings of the study, the following recommendations are presented for organisations:

- Continuous training and development programmes should characterise the organisation. This includes managerial training as well as soft and hard skills training for all staff (Riasudeen & Singh 2020).
- Employers need to create a supportive environment that fosters open communication and creates a culture of innovation, teamwork, and collaboration. Staff also need to have the resources to perform their jobs (Lee 2018).
- Management needs to lead by example. When management exhibits admirable traits that transcend their official responsibilities, they can contribute to an environment wherein going above and beyond is valued (Riasudeen & Singh 2020).

The following recommendations pertain to remote and hybrid employees: remote and hybrid workers need to care for their personal wellbeing. This can include building resilience, setting clear goals, participating in projects aimed at personal development, seeking support from colleagues and/or management, engaging in learning opportunities, utilising counselling services, when necessary, among others (Oakman et al. 2020).

#### **Conclusions**

This study explored the complex interplay between employees' perceptions of the benefits and disadvantages of remote and hybrid work, psychological wellbeing, organisational citizenship behaviour, and the moderating effect of psychological capital. Remote and hybrid work, enabled by technology, has become a prevalent mode of work, especially following the COVID-19 pandemic. Thus, with the global proliferation of remote and hybrid work and its profound effect on employees' work experiences, it becomes critical to understand its impact on employee wellbeing and its implications for organisational success.

The study found that psychological wellbeing and psychological capital are strong predictors of organisational citizenship behaviour and remote and hybrid work benefits. Psychological capital has a high predictive power towards psychological wellbeing. The study's findings show that psychological capital only has a positive moderating effect on the relationship between remote and hybrid work benefits and psychological wellbeing, with no moderating effect on other tested relationships. The results further indicate that the lower the level of psychological capital, the stronger the positive relationship between remote and hybrid work benefits and psychological wellbeing. In contrast, the higher the level of psychological capital, the weaker the positive relationship between remote and hybrid work benefits and psychological wellbeing.

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#### **Competing interests**

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

#### **Authors' contributions**

D.K. conceptualised the study, refined and edited the final manuscript. M.S. wrote the first draft and was responsible for data gathering.

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#### Data availability

The data that support the findings of this study are available from the corresponding author, M.S., upon reasonable request.

#### Disclaimer

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