

The COVID-19 pandemic: A well-being model for public servants



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Orientation: The coronavirus disease 2019 (COVID-19) pandemic impacted several facets of society, with public sector employees particularly hard hit. Supporting public servants' crisis-resilience became imperative. This study presents a well-being model based on positive psychology that is specifically designed for public servants. According to the model, optimal function is achieved when all the key components of well-being, drawing from both organisational and individual well-being, are considered.

Research purpose: To create a well-being model that promotes a healthy work environment for public employees during the COVID-19 pandemic.

Motivation for the study: COVID-19 intensified concerns about workplace well-being. However, limited research exists on public servants' well-being in non-human service roles in South Africa, highlighting the need for a new model to enhance well-being during uncertain times.

Research approach/design and method: A cross-sectional, quantitative research design was employed. Data were collected via questionnaires from a convenience sample of 218 South African public sector employees. Descriptive, correlational, hierarchical moderated analyses and structural equation modelling were conducted.

Main findings: A significant positive relationship was found between individual and organisational well-being. Public servants with high-rated well-being components demonstrated optimal functioning, while those with low-rated components exhibited reduced well-being.

Practical/managerial implications: The study identifies the need to support both individual and organisational well-being as interdependent contributors to public servants' resilience during crises.

Contribution/value-add: This article promotes a systems-based approach grounded in positive psychology and transformational leadership to enhance public servant well-being during and beyond crises.

Keywords: employee well-being; COVID-19; subjective well-being; objective well-being; positive coping behaviour; leadership; attitudes; perceptions; organisational support.

Introduction

The coronavirus disease 2019 (COVID-19), an unprecedented global health crisis, significantly transformed the work environment and employee well-being. Its impact on employee well-being, particularly at both the individual and organisational levels, became an area requiring extensive study and understanding (Zacher & Rudolph, 2024). Coronavirus disease 2019 has significantly impacted employee well-being, causing changes in traditional organisational functioning (Ennam, 2024) and affecting well-being across both levels.

At the individual level, employees had to deal with objective factors such as the risk of being directly affected by the pandemic and subjective factors such as psychological and emotional experiences (Barbour & Van Meggelen, 2024; Quadros et al., 2021). This raised the question of how the well-being of public servants can be supported and enhanced in a way that they continue to strive for excellence and meaningfulness in their jobs amid the changes brought by the pandemic.

At the organisational level, organisations faced challenges in promoting employee well-being, with leadership, positive coping behaviours (PCBs) and perceived organisational support (POS) being identified as crucial determinants (Balogun et al., 2024; Bhochhibhoya et al., 2024; Browne & Tie, 2024; Georgiadou et al., 2024; Katsaros, 2024; Pham et al., 2024). However, COVID-19 has

impacted these constructs, highlighting the need for improved strategies and interventions. This raised serious concerns about how organisations will pursue and promote a state of well-being in the workplace if most of the well-being factors (behaviour, coping, leadership, attitudes, perceptions and organisational support) of ensuring a healthy workplace have been impacted and to some extent changed as a result of COVID-19.

Public servants, as employees of government institutions, experienced the COVID-19 pandemic differently compared to those employed by private sector organisations. Despite being exempt from severe stressors such as job loss and COVID-19 regulations, they still faced increased workloads, frontline duties and mental health strain, requiring tailored approaches for well-being. Existing literature on public servant well-being primarily focuses on human service occupations such as healthcare, social work and education (Gray et al., 2019; Marange et al., 2024). However, there is a significant gap in research on non-human service public servants, particularly during and after the COVID-19 pandemic, presenting opportunities for understanding their unique well-being challenges. The study highlights the need for a holistic well-being model for public servants in non-human service occupations, considering the unique circumstances of the pandemic, to ensure optimal functioning during and after the pandemic.

Several government interventions and policies during the pandemic followed the traditional psychological approach, focusing on protecting people through human distancing, hygiene, social isolation and lockdowns (South African Government, 2024). However, there was a lack of research and policy focus on promoting character strengths, virtues and positive conditions that contribute to high levels of well-being (Helliwell et al., 2021). Research in positive psychology highlights that focusing solely on mitigating risks, without fostering positive psychological resources, can limit resilience and long-term recovery (Seligman, 2011). The proposed well-being model, therefore, utilises a positive psychology approach, distinctively focusing on two levels of well-being (individual and organisational levels), which were identified as interrelated and equally contributing towards a healthy working environment for public servants during the COVID-19 pandemic. It emphasises thriving during normal times for survival during crises, applicable in the post-COVID-19 new normal.

Research purpose and objectives

The study proposes an employee well-being model for public servants in non-human service occupations during the period of a pandemic. The holistic well-being model could augment the capacity of public servants to survive well-being challenges but ultimately thrive, living fulfilling lives (Marx & Liebenberg 2019). The model provides a post-COVID-19 framework for public servants to thrive in uncertain times, focusing on individual and organisational well-being at both individual and

organisational levels. It does this by, firstly, aiming to understand well-being from an individual level (objective well-being [OWB] and subjective well-being [SWB]) and organisational level (leadership, POS and PCBs) in the context of the COVID-19 pandemic for public servants. And secondly, by developing a well-being model for public servants during the COVID-19 pandemic.

Literature review

The COVID-19 epidemic severely interrupted all industries and created serious health issues for public employees, including those in non-human service professions. Employees in these occupations had to cope with increased workloads, uncertainty and mental stress despite often not having direct contact with the public (Molloy, 2021). To encourage optimal functioning both during and after uncertain times, this study suggests a comprehensive model of employee well-being for public servants during pandemics that integrate organisational and individual aspects. The model reflects the dynamic interactions between organisational and individual characteristics as well as the well-being of public servants during pandemics, as illustrated in Figure 1.

Well-being at the individual level

In this study, well-being at the individual level is understood as a holistic concept that integrates psychological (SWB), health, financial and social (objective) well-being while also emphasising PCB as a crucial factor influencing both emotional and material aspects of well-being, particularly in times of crisis.

Subjective well-being

Subjective well-being has been widely explored in both psychological and organisational research. Diener et al. (1999) define SWB as individuals' cognitive and affective evaluations of their lives, including life satisfaction, positive affect and negative affect. Ryan and Deci (2001) further differentiate between hedonic well-being (focused on pleasure attainment and pain avoidance) and eudaimonic well-being (centred on realising personal potential). In addition, the World Health Organization (WHO, 1948) defines health as 'a state of complete physical, mental, and

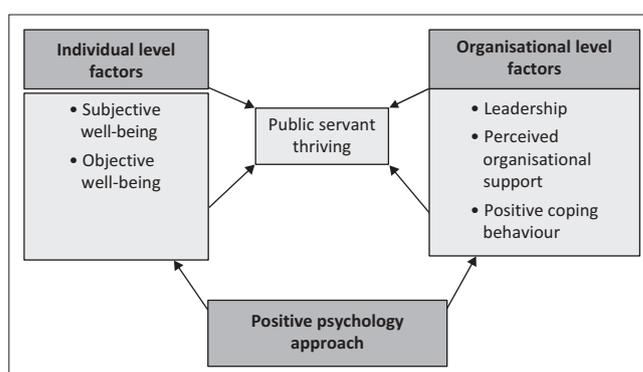


FIGURE 1: A holistic model integrating individual and organisational factors to predict public servants thriving during pandemics.

social well-being, and not merely the absence of disease or infirmity'. Subjective well-being as used in this study refers to the emotional and psychological conditions that influence happiness, life satisfaction and quality of life. Understanding SWB is identified as crucial for understanding public employees' well-being in uncertain and stressful situations, such as the COVID-19 pandemic.

Objective well-being

Objective well-being is generally regarded as the measurable quality of life, based on externally verifiable indicators. In contrast to subjective perceptions, OWB focuses on tangible life conditions and social realities (Alkire, 2002; Diener & Suh, 1997). It includes both material and social indicators:

- *Material indicators* refer to physical resources such as income, food security, safe housing, employment status and access to basic amenities (Western & Tomaszewski, 2016; Sen, 1999).
- *Social indicators* encompass factors such as education, physical and mental health, political participation, social capital, interpersonal networks and community engagement (Stiglitz, Sen, & Fitoussi, 2009; Western & Tomaszewski, 2016).

This study's model of well-being integrates these dimensions of OWB, ensuring that public servants' objective needs, related to health, education, financial security, work conditions and social connectedness are met. Addressing these needs is critical for enhancing physical and mental health, career development, resilience and overall life satisfaction, especially during crises such as the COVID-19 pandemic.

Impact of COVID-19 on well-being

The COVID-19 pandemic challenged the personal resources of employees globally. Subjective well-being was threatened by health anxieties, financial insecurity and social isolation, with Diener's SWB components, especially positive affect and life satisfaction, disrupted during lockdowns and remote work conditions (Diener et al., 1999). Objective well-being factors, such as physical health and financial stability, also became precarious, directly impacting mental resilience and coping capabilities.

As illustrated in Figure 1, this study aims to develop a comprehensive model that integrates both organisational and individual factors, reflecting the complexity of well-being. By grounding this model in foundational theories of SWB and OWB, the research provides a robust framework for understanding employee well-being during crises.

Well-being at the organisational level

Perceived organisational support

Organisational environments play a pivotal role in shaping employees' ability to cope with crises. A key factor influencing this is POS, as theorised by Eisenberger et al. (1986). Perceived organisational support refers to workers' perceptions that the

organisation appreciates their work and is concerned about their welfare. According to research, POS can improve resilience, promote commitment and mitigate the negative effects of job stress, especially during unpredictable times such as pandemics (Sihag & Dhoopar, 2023; Zhou et al., 2021). Perceived organisational support helps to maintain the emotional and mental well-being of employees by providing a sense of security and assistance in times of need (Chatzittofis et al., 2021). By offering a sense of safety and support during emergencies, POS contributes to preserving workers' emotional and psychological health.

Multifactor leadership

Leadership plays a crucial role in enhancing the health and well-being of organisations, especially during challenging times such as the COVID-19 pandemic (Pham et al., 2024). While many studies have highlighted the importance of leadership in promoting employee well-being, various leadership styles have been suggested to improve organisational effectiveness (Geddada & Chauhan, 2021; Mathende & Karim, 2022). Some researchers have explored new leadership styles suited to the pandemic context (Basir & Rahman, 2021; Mirčetić et al., 2021), while others recommend integrating multiple leadership approaches as a solution (Van Jaarsveld et al. 2019). Multifactor leadership, which considers mission, strategy, culture and performance, is seen as essential for public servants' well-being (Haricharan, 2023). This model encourages leaders to use different strategies such as idealised influence, inspirational motivation, individualised consideration and intellectual stimulation (Rowold, 2005). The study also suggests that leaders adopt an open system perspective to effectively respond to the transformative effects and operational changes brought on by the pandemic.

According to Bass's (1996) theory of transformational leadership, inspiring, intellectually stimulating and individually considerate leaders create a positive work environment. This atmosphere fosters a culture of stability, empathy and trust, all of which are critical for advancing well-being. Transformational leaders give clear direction and vision during times of crisis, which is essential for employees to thrive (Njaramba, 2024). The maintenance of employees' psychological and emotional resources also depends on organisational strategies such as open communication, adaptability and employee appreciation, all of which are fuelled by effective leadership.

Positive coping behaviour

Another organisational well-being factor that is identified as important in this study is PCB. Positive coping behaviour are proactive techniques that promote resilience and improve an individual's capacity to adjust to difficulties according to Ferreira et al. (2021b). Positive coping behaviour entails the creation of tools that enable people to react to stressful situations positively (Marx 2017). Positive coping behaviour during uncertain times assists employees in adjusting to

stressful life events, reducing stress and anxiety and improving efficiency and productivity (Coetzee et al., 2017; McCabe et al., 2024). Implementing PCBs in organisations during the pandemic could lead to increased work engagement, job satisfaction, productivity, well-being and lower turnover intentions (Ferreira et al., 2021a). Research shows that during the pandemic, organisations that fostered PCB reported higher work engagement, job satisfaction, productivity and lower turnover intentions (Ferreira et al., 2021a). The proposed well-being model positions PCB as vital for creating supportive environments that strengthen resilience. Public sector organisations should prioritise developing PCB and positive psychology interventions to equip employees with effective stress management skills during crises.

Overall, these factors constitute the second critical pillar of the well-being model proposed in this study. As depicted in the conceptual model (Figure 1), organisational factors are central to supporting employee thriving, particularly during times of uncertainty such as the COVID-19 pandemic. The well-being of employees is intricately tied to these supportive structures, highlighting the need for robust leadership and institutional support.

Well-being at the organisational level during crisis

Beyond individual well-being, the broader organisational context significantly influences how employees experience, respond to and recover from stressors. This is especially true during crises such as the COVID-19 pandemic. The well-being model developed in this study recognises that organisational well-being encompasses various constructs, including leadership, POS and strategies for employee support. However, the pandemic highlighted the significant impact that crises can have on these constructs, underscoring the need for organisations to strengthen these areas to ensure the well-being of their workforce. Research indicates that factors such as work conditions, management practices and organisational support were all dramatically affected by the COVID-19 pandemic, leading to a profound impact on employee well-being (Balogun et al., 2024; Bhoohibhoya et al., 2024; Browne & Tie, 2024; Georgiadou et al., 2024; Katsaros, 2024; Pham et al., 2024).

A positive psychology approach to well-being at individual and organisational levels

The proposed model is grounded in the positive psychology paradigm, which focuses on enhancing quality of life through positive experiences, strengths and civic virtues (Csikszentmihalyi et al., 2014; Seligman, 2002). It moves beyond reactive crisis responses and promotes ongoing resilience, optimism and well-being development. At the individual level, SWB and positive traits, such as hope, optimism and strong relationships, are seen as active forces that enhance resilience, mental health and performance (Cherry, 2022; Duradoni et al., 2021). Building these capacities proactively ensures that individuals can thrive even during crises.

At the organisational level, positive leadership, managerial support and PCBs are key pillars. Organisations should embed well-being into their structures rather than responding only when disruptions arise to sustain employee engagement, creativity and adaptability (Ferreira et al., 2021a). This proactive, strength-based approach is particularly vital for public servants, whose ability to deliver essential services depends on their psychological readiness and resilience (Black et al., 2022). The proposed model, therefore, offers a comprehensive, forward-looking strategy for promoting lasting individual and organisational optimal functioning.

Gaps in existing models

Existing well-being models tend to focus either narrowly on individual well-being or on organisational practices in isolation (Verywell Mind, 2023; Wilcox & Koontz, 2022). There is a lack of integrated models that capture the dynamic interplay between individual and organisational factors in the context of pandemics (Bennett, 2018; Gauer, 2024; Gray et al., 2019; Marange et al., 2024). Furthermore, few models are specifically tailored to the experience of public servants outside of human service fields. Addressing these gaps, this study aims to develop a holistic well-being model that supports public servants in surviving challenges and thriving during uncertain times.

Conceptual model

A conceptual model that demonstrates the dynamic links between organisational and individual characteristics and the well-being of public servants during pandemics is provided in Figure 1.

Figure 1 illustrates the dynamic relationships between individual well-being factors (SWB and OWB), organisational factors (leadership, POS and organisational coping strategies) and the thriving of public servants during pandemics. This model emphasises the interaction between organisational support and personal resilience, which together enhance public servant engagement, psychological health and crisis performance.

Research design

Research approach

The research approach adopted in this study was a cross-sectional, quantitative methodology that used a survey strategy to collect data using questionnaires. This approach investigated the dynamics of well-being of public servants at an individual and organisational level during the period of the COVID-19 pandemic. The research was underpinned by the positivist research philosophy. Focus of this approach was on empirical methodology that produces data, which is free of bias and does not depend on human interpretation (Saunders et al., 2019), and was conducted using instruments that have been validated and deemed reliable (Terre Blanche et al., 2006).

Research method

Research participants

This study focused on South African public sector employees outside the human services, including blue- and white-collar employees, managers and directors. A non-probability sampling method was chosen for convenience, cost-effectiveness and time efficiency. A total of 1447 employees from the Public Services Departments were surveyed, with 252 participating. However, only 218 completed questionnaires were included in the analysis. Table 1 summarises the age, race, gender and years of service of the research participants. The distribution of years of service indicates that 22.5% of the participants had less than 5 years of service, while 25.4% had between 5 and 10 years of service. Those with 10 years to 15 years of service accounted for 21.6%, and 18.8% had between 15 years and 20 years of service. The smallest group, comprising 11.7% of participants, had more than 20 years of service. In terms of gender, 59.0% of the sample were female, while 41.0% were male. The racial composition was dominated by black African participants, who made up 70.6% of the sample. Coloured participants accounted for 11.0%, Indian participants for 6.9% and white and Asian participants each represented 0.5% of the sample. The age distribution revealed that 12.0% of the participants were born between 1997 and 2004, 40.9% between 1987 and 1998 and 32.2% between 1986 and 1978. The smallest group, comprising 14.9%, was born between 1957 and 1977. In addition, 12.0% of the participants did not indicate their age.

Measuring instruments

The psychometric battery for this study comprised the following six measuring instruments:

Psychological Well-being Scale: The Psychological Well-being Scale (PWBS) was used to measure SWB. It comprises 18 item scales. It is a self-report inventory focusing on six subscales: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance. It has a very good internal consistency rating,

with a Cronbach's alpha internal consistency rated between 0.86 and 0.93. Test-retest reliability coefficients ranged from 0.81 to 0.88 over 6 weeks (Klainin-Yobas et al., 2020).

Positive Coping Behaviours Inventory: The Positive Coping Behaviours Inventory (PCBI) was used to measure the organisational PCBs. The PCBI is a 41-item inventory developed by Marx (2017), which uses a 6-point Likert-type scale (1 = definitely agree; 6 = definitely disagree). According to Coetzee et al. (2017), the reported internal reliability coefficients of the PCBI are above 0.79 for all four subscales. Regarding reliability, previous research shows acceptable threshold values ranging from 0.82 to 0.95 for the internal consistency coefficients of the PCBI (Coetzee et al., 2017).

Multifactor Leadership Questionnaire: The Multifactor Leadership Questionnaire (MLQ) was used to measure leadership. It consists of 36 items on leadership styles and 9 items on leadership outcomes. The MLQ is a 360-degree-rater instrument, meaning that the leader's self-assessment is considered alongside the assessments of their peers, subordinates and others (Rowold, 2005). It also has a leader (self) form that can be completed separately to assess leadership; however, the validity is much lower than the multi-rater method (Rowold, 2005). The validity of the MLQ is reported at $p < 0.001$ (Rowold, 2005). In terms of reliability, the internal consistencies for all subscales were reported at α 0.61 (lowest) and α 0.85 (highest) (Rowold, 2005).

Survey of Perceived Organisational Support: The Survey of Perceived Organisational Support (SPOS) was used to measure POS. This survey comprises six items that cover six dimensions, namely employees' concerns, employees' goals and values, overall employee satisfaction, employees' opinion, performance and their well-being (Zandi et al., 2020). This survey uses a 6-point Likert scale, ranging from 0 (Strongly Disagree) to 6 (Strongly Agree), in which the respondents rate their perceptions concerning how much their contribution is valued by the employer as well as the extent to which the organisation is concerned about their well-being. The Cronbach's alpha of the SPOS is reported to be 0.97, and the item-total correlation is between 0.42 and 0.83 (Worley et al., 2009).

Objective Well-being Indicators Survey: The Objective Well-being Indicators Survey (OWIS) was developed by Western and Tomaszewski (2016) and was used to measure seven OWB indicators: income, financial difficulty, material deprivation, free time, family and friend contact and health. It served as a gauge in the current investigation to assess how the OWB components vary across different groups (Western & Tomaszewski, 2016). Instead of evaluating only how pleased or content the respondents are with their status, which would be assessing SWB, it was crucial to describe the respondent's status. The instrument uses different scales, such as direct answer, yes or no response and Likert-type scales. Item 1 and Item 4 required direct answers from the participants, and Item 2 entailed ticking the relevant box.

TABLE 1: Summary of demographic data distribution.

Category	Group	%
Years of service	< 5	22.5
	5–10	25.4
	10–15	21.6
	15–20	18.8
	> 20	11.7
Gender	Female	59.0
	Male	41.0
Race	African people	70.6
	Coloured people	11.0
	Indian people	6.9
	Asian people	0.5
	White people	0.5
Age groups	1997–2004	12.0
	1987–1998	40.9
	1986–1978	32.2
	1957–1977	14.9
	Missing (system)	12.0

Item 3 was a Likert-type question ranging from 1 (not afforded) to 4 (afforded). The fifth item was also a Likert type with a survey statement that ranged from poor to excellent. Lastly, the survey statements for the sixth and seventh items went from 1 (low contact) to 6 (high contact).

Biographical questionnaire: The researcher obtained the biographical details (age, race, gender and years of service) by including a biographical questionnaire in the instruments. Collecting this information was important because demographic variables have been shown to significantly influence employees' experiences of well-being (Schaufeli, 2017). Factors such as age, race, gender and tenure can shape individuals' perceptions of organisational support, access to resources, exposure to stressors and coping mechanisms. Understanding these demographic influences allows for a more nuanced interpretation of the well-being results and helps identify specific groups that may require targeted interventions.

Data cleaning, missing data, normality and outliers

To ensure the integrity and validity of the dataset, a comprehensive preliminary data screening process was conducted prior to analysis. Of the 252 survey responses received, 218 fully completed questionnaires were included in the final analysis. Thirty-four partially completed questionnaires were excluded because of missing responses that could compromise the reliability of the analysis. Within the retained cases, there were no item-level missing data, as participants were required to complete all items before submission. The response rate of 15.1% reflected the voluntary nature of participation and logistical challenges posed during the COVID-19 pandemic. To check for assumptions of normality, skewness and kurtosis values were assessed, with thresholds within the acceptable range of ± 2 and ± 3 , respectively (George & Mallery, 2024; Kline, 2005). Multivariate normality was examined through univariate checks, bivariate scatterplots and standardised regression residuals. Outliers were investigated using z-scores (values exceeding ± 3) and Mahalanobis distance to detect multivariate outliers (Babbie & Mouton, 2011; Hayes, 2018). In addition, assumptions of linearity, homoscedasticity, multicollinearity and singularity were assessed using scatterplots, Levene's test, tolerance values, variance inflation factors (VIF), eigenvalues and condition indices. These procedures ensured that the data met the necessary assumptions for multivariate analyses, enhancing the robustness and credibility of the statistical inferences.

Research procedure

The University's Research Ethics Committee granted permission for the study to be conducted. The researcher also received approval from the Director General of the Public Services Department to request that staff members participate in the study. The researcher sent an email to the Public Services Department (with a Lime Survey link attached) requesting willing participants to complete it, which was forwarded to all employees. The survey was in the form of a link

(Lime Survey); the participants opened the link, completed the study and clicked on submit at the end. The survey was automatically submitted to the researcher. Participation was voluntary. All ethical requirements by the Health Professions Council of South Africa and the *Protection of Personal Information (POPI) Act* were adhered to. The survey included a cover letter, consent form, biographical questionnaire and five questionnaires (MLQ, PCBI, SPOS, PWBS and OWIS) to gather information on various aspects of the participants. Participants' confidentiality and anonymity were guaranteed, and psychometric tools adhered to fairness and objectivity. They were advised to report unethical behaviour or human rights violations to the Health Professionals Council of South Africa (HPCSA) or the University of South Africa (UNISA) Research Ethics Committee.

Statistical analysis

The researcher used surveys with Likert scale question types. The questionnaire responses were saved on the Lime Survey. The Lime Survey allowed the researcher to assign attributes to questions, such as numeric values or codes to facilitate scoring. The Lime Survey allowed the researcher to create, distribute and collect responses to surveys via the Internet. Scoring was managed within the Lime Survey platform and was accessible through the online interface. Once the respondents have completed the survey, the Lime Survey provides options for exporting response data in various formats, such as a Comma-Separated Values (CSV) file or Excel. Data were exported in Excel. The researcher used external software, namely Statistical Package for the Social Sciences (SPSS), for further analysis, such as calculating aggregate scores, generating reports or conducting statistical analysis. Hierarchical moderated regression analysis (IBM Corp., 2021; Hayes, 2018) was applied to assess the extent to which the biographical variables (age, race, gender and years of service) significantly moderate the relationships between the individual level (OWB and SWB) and organisational level (leadership, POS and organisational coping behaviours) (Zwane, 2025). Moreover, the significance levels of the interaction effects, additionally with the differing values of the moderator variable, were explained using bootstrapping bias-corrected 95% lower level (LLCI) and upper level (ULCI) confidence interval levels, which exclude zero (Zwane, 2025).

Justification of statistical techniques

A combination of statistical techniques was used to explore and validate the relationships between individual and organisational levels of well-being among public servants. Pearson correlation analysis was employed to examine associations among continuous variables, with significance reported at $p < 0.01$ and $p < 0.05$. Multiple regression analysis was conducted to identify the strongest organisational predictors of individual well-being. Hierarchical moderated regression was used to assess whether demographic factors (age, gender, race and years of service) moderated these relationships, using interaction terms and simple slope interpretations where significant.

Finally, structural equation modelling tested the overall fit of the proposed well-being model, using indices such as root mean square error of approximation (RMSEA) (< 0.06), comparative fit index (CFI) and Tucker–Lewis index (TLI) (> 0.90) to confirm model adequacy and theoretical alignment. This integrated approach ensured both depth and rigour in developing a strengths-based well-being model tailored to public service contexts.

Ethical considerations

Ethical approval to conduct this study was obtained from the University of South Africa (UNISA) College of Economic and Management Sciences (CEMS) / Department of Industrial and Organisational Psychology (IOP) Research Ethics Review Committee (22/CEMS/IOP/011).

Results

RASCH summary statistics and internal consistency reliability coefficients

Table 2 presents a summary of key psychometric properties for several psychological scales, including the PCBI, SPOS, PWBS, MLQ, OWIS-Financial Hardship (FH) and OWIS-Material Deprivation (MD). Table 2 provides values for the Cronbach's alpha, person reliability, person separation, item reliability, item separation, as well as the infit and outfit Mean Square Fit Statistic (MNSQ) range. Table 2 presents the following key findings:

- The PCBI and SPOS demonstrate strong internal consistency (Cronbach's alpha = 0.93 and 0.94, respectively), with high person reliability and separation values.

- The PWBS and MLQ also show good internal consistency and item reliability, with MLQ exhibiting the highest person separation at 5.99, indicating its excellent ability to differentiate between individuals.
- The OWIS-FH and OWIS-MD scales have lower person reliability and separation values but still show reasonable reliability for measuring financial hardship and material deprivation, respectively.

In summary, Table 2 presents a comparative view of the psychometric properties for each scale, helping to assess the quality of the measurements and the suitability of the scales for use in various research contexts.

Reporting on the descriptive statistics

Table 3 provides descriptive statistics indicating generally high levels of PCBs, POS and psychological well-being (PWB) across all demographic groups. Participants, regardless of years of service, gender, race or age, reported strong use of constructive coping strategies during the pandemic. Notably, PWB scores were consistently high, suggesting that individuals maintained a strong sense of purpose, autonomy and personal growth despite external stressors. Perceived organisational support was also rated positively, with male participants and those with longer service years reporting slightly higher levels of support. While leadership was perceived moderately across groups, female participants tended to rate leadership slightly more positively than males. Financial hardship was reported as low across all demographics although some racial and age groups reflected slightly more variability. Material deprivation remained moderate and fairly consistent, with minor differences across

TABLE 2: Reliability of measures: Rasch analysis and Cronbach's alpha coefficients.

Scale	Cronbach's alpha	Person reliability	Person separation	Item reliability	Item separation	Infit MNSQ range	Outfit MNSQ range
PCBI	0.93	0.96	4.75	0.75	1.73	0.02 4.97	-0.02 4.97
SPOS	0.94	0.79	1.92	0.88	2.69	0.04 5.23	-0.04 5.60
PWBS	0.90	0.75	1.75	0.95	4.36	0.14 4.36	-0.13 4.89
MLQ	0.95 (derived)*	0.93	3.55	0.97	5.99	1.01 1.06	-1.04 1.48
OWIS-FH	0.70 (derived)*	0.24	0.56	0.86	2.44	0.87 1.02	-0.87 0.87
OWIS-MD	0.85 (derived)*	0.82	2.15	0.95	4.47	0.95 0.98	-0.98 0.98

PCBI, positive coping behaviours inventory; SPOS, survey of perceived organisational support; PWBS, psychological well-being scale; MLQ, multifactor leadership questionnaire; OWIS-FH, objective well-being indicators survey-financial hardship; OWIS-MD, objective well-being indicators survey-material deprivation.

*, $p \leq 0.05$ = statistically significant.

TABLE 3: Descriptive statistics by demographic variables.

Variable	(PCBI) (M ± SD)	(SPOS) (M ± SD)	(PWBS) (M ± SD)	(MLQ) (M ± SD)	(OWIS-FH) (M ± SD)	(OWIS-MD) (M ± SD)
Years of service	4.32–4.61 ± 1.06–1.28	3.75–4.10 ± 0.95–1.32	4.40–4.88 ± 0.68–0.97	3.16–3.53 ± 0.60–0.71	0.65–1.00 ± 1.07–1.50	3.10–3.35 ± 0.62–0.73
Gender						
Male	4.59 ± 1.13	4.17 ± 1.03	4.58 ± 0.89	3.28 ± 0.61	0.70 ± 1.12	3.26 ± 0.67
Female	4.38 ± 1.20	3.67 ± 1.05	4.64 ± 0.82	3.36 ± 0.64	0.74 ± 1.25	3.21 ± 0.66
Race	4.45–4.69 ± 1.12–1.40	3.75–4.01 ± 1.04–1.38	4.61–4.72 ± 0.82–0.92	3.15–3.33 ± 0.58–0.68	0.33–1.00 ± 0.72–1.44	3.20–3.56 ± 0.48–0.76
Age	4.33–4.64 ± 1.07–1.42	3.88–3.99 ± 0.97–1.17	4.47–4.73 ± 0.74–0.93	3.20–3.45 ± 0.54–0.72	0.61–1.00 ± 1.02–1.50	3.20–3.30 ± 0.66–0.75

Note:
 = HTML line break tag.

PCBI, positive coping behaviours inventory; SPOS, survey of perceived organisational support; PWBS, psychological well-being scale; MLQ, multifactor leadership questionnaire; OWIS-FH, objective well-being indicators survey-financial hardship; OWIS-MD, objective well-being indicators survey-material deprivation; SD, standard deviation; M, Mean.

categories. Overall, the findings suggest that despite the challenges posed by the pandemic, most participants demonstrated resilience, supported by organisational efforts and internal psychological resources.

Table 4 presents the overall descriptive statistics for the key study variables. The mean scores indicate that participants reported high levels of PCBs ($M = 4.45$, standard deviation [SD] = 1.19), PWB ($M = 4.61$, SD = 0.86) and POS ($M = 3.84$, SD = 1.07). Leadership was perceived moderately positively ($M = 3.32$, SD = 0.63). Reports of financial hardship were low ($M = 0.72$, SD = 1.19), while material deprivation was moderate ($M = 3.25$, SD = 0.67). Skewness and kurtosis values suggest that the data for most variables were approximately normally distributed, except for financial hardship, which showed positive skewness (1.65) and high kurtosis (2.43), indicating a non-normal distribution with most participants reporting very low levels of financial difficulty.

Reporting on the Pearson's correlation coefficients and scale and subscales

Table 5 presents Pearson's correlation coefficients between the study variables, indicating significant positive relationships between PCBI and both PWBS ($r = 0.556$, $p \leq 0.01$) and MLQ ($r = 0.602$, $p \leq 0.01$), while OWIS-FH demonstrates a strong negative correlation with PWBS ($r = -0.421$, $p \leq 0.01$) and MLQ ($r = -0.333$, $p \leq 0.01$).

As the data were parametric, the inter-relationships between the variables were computed using Pearson's product-moment correlations as reflected in Table 2 (Levin et al., 2016; Zwane, 2025). These correlations allowed the researcher to identify the direction and strength of the relationship between each variable (Zwane, 2025). The results indicate that the

TABLE 4: Descriptive statistics for key study variables.

Variable	M	SD	Skewness	Kurtosis
PCBI	4.45	1.19	-0.84	0.31
SPOS	3.84	1.07	-0.47	-0.62
PWBS	4.61	0.86	-0.66	-0.03
MLQ	3.32	0.63	-0.33	-0.58
OWIS-FH	0.72	1.19	1.65	2.43
OWIS-MD	3.25	0.67	-0.09	-0.81

Note: All skewness and kurtosis values are within acceptable thresholds for normality (± 2), based on Kline (2016).

PCBI, positive coping behaviours inventory; SPOS, survey of perceived organisational support; PWBS, psychological well-being scale; MLQ, multifactor leadership questionnaire; OWIS-FH, objective well-being indicators survey-financial hardship; OWIS-MD, objective well-being indicators survey-material deprivation; M, Mean; SD, standard deviation.

TABLE 5: Pearson's correlations coefficients and scale/subscales ($N = 321$).

Variable	PCBI	SPOS	PWBS	MLQ	OWIS-FH	OWIS-MD
PCBI	-	-	-	-	-	-
SPOS	0.186**	-	-	-	-	-
PWBS	0.556**	0.262**	-	-	-	-
MLQ	0.602**	0.050	0.517**	-	-	-
OWIS-FH	-0.319**	-0.064	-0.421**	-0.333**	-	-
OWIS-MD	0.266**	0.153*	0.318**	-0.217**	-0.615**	-

PCBI, positive coping behaviours inventory; SPOS, survey of perceived organisational support; PWBS, psychological well-being scale; MLQ, multifactor leadership questionnaire; OWIS-FH, objective well-being indicators survey-financial hardship; OWIS-MD, objective well-being indicators survey-material deprivation.

*, $p \leq 0.05$ – statistically significant; **, $p \leq 0.01$ – statistically significant.

overall PCBI had a strong positive correlation with SPOS, PWBS, MLQ and OWIS-MD and a negative but significant relationship with OWIS-FH. This means that the participants' proactivity during challenging goals was positively correlated with their perception of their organisations, adaptability to COVID-19, effective leadership styles, adequate material resources and meeting financial demands.

In terms of SPOS, the results show that SPOS had a strong positive correlation with PCBI, PWBS and OWIS-MD. Organisations' perception of valuing contributions and well-being positively correlates with proactivity, adaptability to COVID-19 and adequate material resources. Regarding PWBS, the results indicate that PWBS had a strong positive correlation with PCBI, SPOS, MLQ and OWIS-MD and a negative but significant relationship with OWIS-FH. This denotes that the participants' positive psychological adaptation to COVID-19 was significantly correlated with increased proactivity, positive perception of their organisations, effective leadership styles, adequate material resources and fewer financial problems.

The results reveal that overall, the MLQ has a strong positive correlation with PCBI, PWBS and OWIS-MD, and a negative but significant relationship with OWIS-FH. This means that the participants' positive consideration of leadership styles during the pandemic positively correlated with increased proactivity, psychological adaptation, adequate material resources and fewer financial problems. The results illustrate that overall OWIS-FH had a significant negative correlation with PCBI, PWBS, MLQ and OWIS-MD. This signifies that the participants' financial problems during the pandemic were negatively correlated with positive efforts to enhance proactivity, psychological adaptation to COVID-19, effective leadership styles and adequate material resources.

Lastly, the results indicate that the overall OWIS-MD had a significant positive correlation with PCBI, PWBS and MLQ and a negative but significant relationship with OWIS-FH. This suggests that the participants reported adequate material resources during the pandemic, which positively correlated with proactivity, psychological adaptation, effective leadership styles and reduced financial problems.

Moderated regression analyses

Table 6 presents a summary of how demographic factors – age, gender, race and years of service – moderate the relationship between individual well-being outcomes (OWB: FH and MD and SWB: PWB) and organisational factors (leadership, POS and organisational coping behaviours), particularly PCB. The key findings include:

Race as a moderator

For FH and MD, PCB was a significant predictor. However, race did not significantly moderate these relationships although there were slight, non-significant variations across race categories (Coloured, Indian, White).

Gender as a moderator

For PWB, PCB again emerged as a significant predictor. However, gender did not significantly moderate this relationship.

Race and psychological well-being

Similarly, race did not significantly moderate the link between PCB and PWB although positive coping remained a strong predictor.

Across all models, the interaction effects of the demographic moderators were statistically insignificant, indicating that PCB consistently predicts well-being outcomes, but this effect does not vary significantly by gender or race.

Structural equation modelling

Structural equation modelling (RStudio 2023.06.0 + 421) was conducted to test whether the theoretically conceptualised PWB model has a good fit with the empirically manifested structural equation model (Zwane, 2025). Table 7 indicates that Model 1 obtained the best fit with CFI = 0.952; normed fit index (NFI) = 0.905; RMSEA = 0.060 and standardised root mean squared residual (SRMR) = 0.078. Overall, the results provided evidence that the empirical model data are a good fit for the proposed theoretical well-being model for public servants from an individual and organisational level during the COVID-19 pandemic (Zwane, 2025).

After the structural model with the optimal fit had been identified, standardised path coefficients were assessed to determine the magnitude and direction of the regression

pathways. According to Kline (2005), the regression estimates, as they represent the path coefficient from the indicator to the construct, must be 0.30 or more to be significant.

The path coefficients indicated in Table 8 reveal that FH was significantly and negatively explained by multifactor leadership ($\beta = -0.205; p < 0.029$). Psychological well-being had the strongest and a significant positive link with multifactor leadership ($\beta = 1.036; p < 0.001$), followed by PCBs ($\beta = 0.639; p < 0.002$). Lastly, PCBs again had a significant positive link with MD ($\beta = 0.150; p < 0.012$).

A relationship was evident between the predictor variables (MLQ and PCBI) and the outcome variables (PWB, FH and MD). Therefore, this model could be utilised in an organisational context to help public servants improve their employee well-being. In terms of this aim, the structural equation model illustrated in Figure 2 indicates that a theoretically conceptualised employee well-being model does have a moderately good fit with the empirically manifested structural model (Zwane, 2025). Several goodness-of-fit models were tested, and the best model fit revealed that SWB (PWB), OWB (FH and MD) were significantly influenced by organisational dimensions of well-being (PCBs and multifactor leadership) (Zwane, 2025).

Discussion

The primary purpose of this study was to develop a well-being model tailored specifically for South African public servants, with the goal of fostering a healthier and more resilient working environment during the COVID-19 pandemic. Public servants faced extraordinary pressures

TABLE 6: Summary of the moderated regression analysis.

Predictor variable	Outcome variable	Moderator	Model significance (p)	R ²	Significant interaction?	Key finding
PCBI	FH	Race	< 0.001	0.126	No (all p > 0.28)	PCBI negatively predicts FH; race does not moderate
PCBI	MD	Race	0.001	0.110	No (all p > 0.18)	PCBI positively predicts MD; race does not moderate
PCBI	PWB	Gender	0.001	0.341	No (p = 0.804)	PCBI positively predicts PWB; gender does not moderate
PCBI	PWB	Race	< 0.001	0.319	No (all p > 0.17)	PCBI positively predicts PWB; race does not moderate

PCBI, positive coping behaviours inventory; PWB, psychological well-being; FH, financial hardship; MD, material deprivation.

TABLE 7: Structural equation modelling results: Model fit statistics.

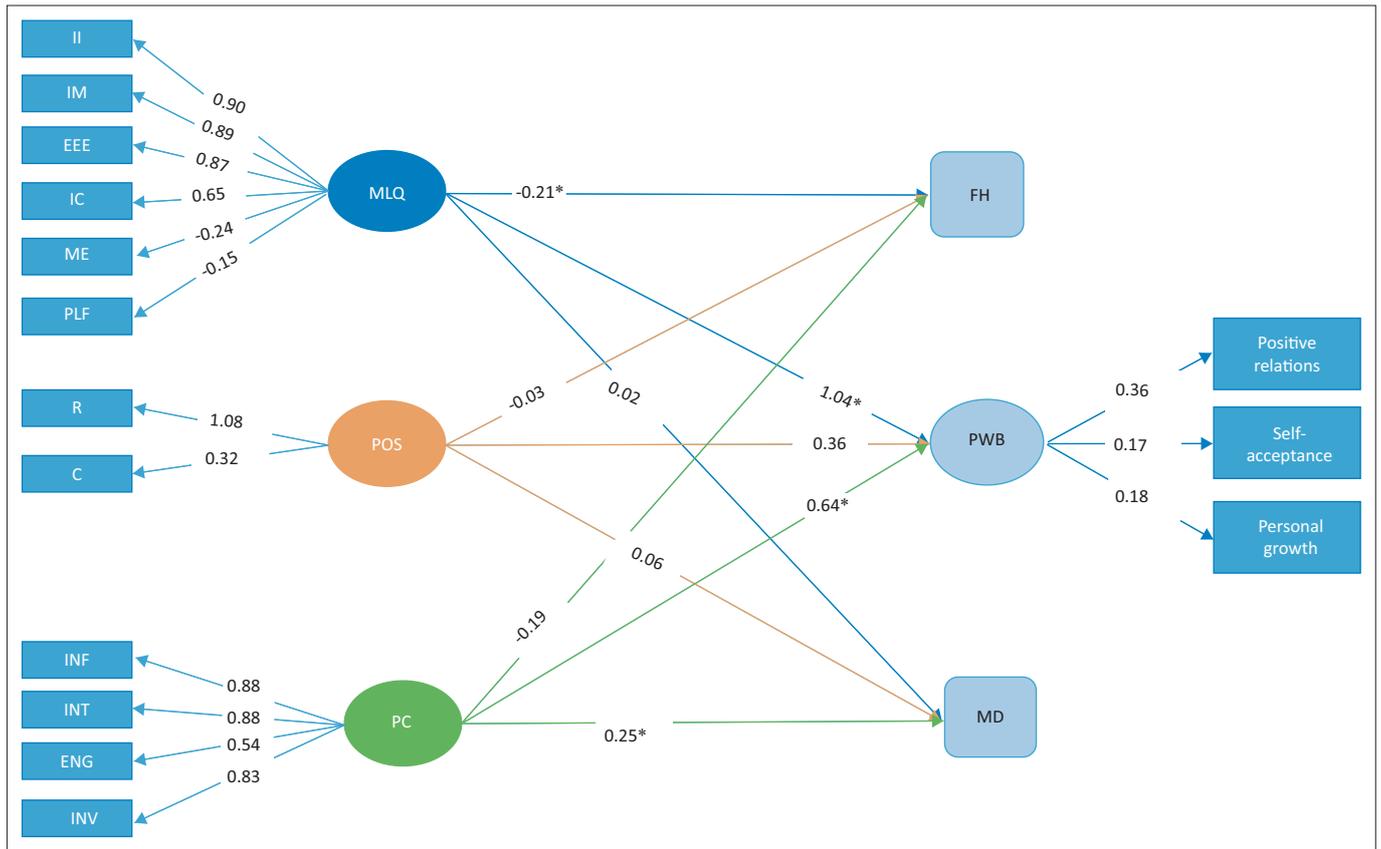
Mode	AIC	df	χ^2	p	NFI	RFI	TLI	CFI	$\Delta\chi^2$	RMSEA	SRMR
1	9391.282	103	195.917	< 0.001	0.905	0.874	0.936	0.952	195.917	0.064	0.070

CMIN(χ^2), Chi-square; df, degrees of freedom; p, significance level; NFI, Bentler-Bonett normed fit index; RFI, relative fit index; TLI, non-normed fit index; CFI, comparative fit index; RMSEA, root mean-square error of approximation; SRMR, standardised root mean squared residual; AIC, Akaike Information Criterion.

TABLE 8: Path coefficients for the hypothesised structural equation model.

Predictor	Outcome	Estimate	SE	z-value	p	Lower	Upper	Standardised estimate
PCBI	FH	-0.196	0.102	-1.930	0.054	-0.396	0.003	-0.185
POS_	FH	-0.022	0.052	-0.424	0.672	-0.124	0.080	-0.027
MLQ_	FH	-0.339	0.155	-2.187	0.029	-0.643	-0.035	-0.205
PCBI	MD	0.150	0.060	2.527	0.012	0.034	0.267	0.250
POS_	MD	0.027	0.034	0.805	0.421	-0.039	0.094	0.059
MLQ_	MD	0.017	0.090	0.193	0.847	-0.159	0.193	0.019
PCBI	PWB_	0.248	0.080	3.087	0.002	0.091	0.406	0.639
POS_	PWB_	0.106	0.078	1.369	0.171	-0.046	0.259	0.355
MLQ_	PWB_	0.625	0.119	5.259	< 0.001	0.392	0.857	1.036

PCBI, positive coping behaviours inventory; SPOS, survey of perceived organisational support; PWBS, psychological well-being scale; MLQ, multifactor leadership questionnaire; OWIS-FH, objective well-being indicators survey-financial hardship; OWIS-MD, objective well-being indicators survey-material deprivation; POS, perceived organisational support; SE, standard error.



II, Idealised influence; IM, Inspirational motivation; EEE, Extra effort and effectiveness; IC, Individualised consideration; ME, Management-by-Exception; PLF, Passive, laissez faire; INF, Influential coping behaviour; INT, Intentional coping behaviour; INV, Inventive coping behaviour; ENG, Engaging coping behaviour; MLQ, Multifactor Leadership Questionnaire; POS, perceived organisational support; PC, Positive coping; FH, Financial Hardship; PWB, psychological well-being; MD, Material Deprivation; R, Recognition; C, concern.

FIGURE 2: Structural equation model for well-being of public servants.

during this period, which strained their ability to deliver services and significantly impacted their psychological, emotional and organisational well-being. Grounded in a positive psychology framework, this study sought to address those challenges by designing a holistic, strength-based model that supports well-being at both the individual and organisational levels. The model was developed to be responsive not only to the immediate demands of a global crisis but also to offer long-term value beyond the pandemic context, enhancing daily well-being, building resilience and preparing public servants for future uncertainties.

This study makes several important contributions to the existing body of knowledge. Firstly, it fills a critical gap in research by focusing on the well-being of public servants in non-human service roles – a group often overlooked in South African studies. Secondly, it shifts the focus from deficit-based models of stress and burnout to a more empowering, strengths-based approach that highlights positive functioning and thriving. Thirdly, it offers a practical, empirically informed framework that can be used to guide well-being interventions in the public sector, particularly in times of crisis. Fourthly, by demonstrating the interconnectedness between individual and organisational well-being, the study reinforces the importance of cultivating both personal and structural resources to support employee functioning and institutional effectiveness.

Insights from the Literature

This study conducted a comparative analysis of SWB and OWB, specifically examining how both dimensions were impacted by the COVID-19 pandemic in the context of public service work. While SWB refers to how individuals personally evaluate their lives – encompassing cognitive judgements such as life satisfaction and emotional experiences such as happiness or stress (Diener, 1984) – OWB refers to the tangible conditions that support quality of life, such as income, job security, housing and healthcare (Sen, 1999; Western & Tomaszewski, 2016).

The findings highlight that during the COVID-19 pandemic, both forms of well-being were significantly strained for public servants. On the subjective level, public servants reported increased emotional distress, burnout and a decrease in job satisfaction because of heightened workload, isolation and grief (Giauque et al., 2022; Rothmann & Grobler, 2020). The psychological burden was particularly severe among healthcare workers but also extended to non-healthcare roles, illustrating a decline in day-to-day positive affect and overall life satisfaction (Brunetto et al., 2022). On the objective level, although many public servants maintained employment and income stability during lockdowns – especially when compared to private sector workers – their access to resources such as healthcare, social support systems and safe working conditions became increasingly constrained (Eagle Hill, 2024;

South African Government, 2021). These objective stressors – ranging from inadequate protective equipment to overwhelming workloads – exacerbated SWB issues and exposed the interdependence of the two dimensions.

By examining both subjective experiences and objective conditions, the study emphasises that improving public servants' well-being requires an integrated approach. Structural interventions addressing workplace conditions, leadership and organisational support must be paired with efforts to promote positive emotional and psychological resources. This dual focus aligns with contemporary models of well-being that view individual happiness and life satisfaction as being both personally felt and socially constructed within enabling environments (Petermans & Cain, 2019). Overall, this comparative analysis supports the use of a holistic well-being model – one that bridges subjective and objective domains – to address the multifaceted and long-term effects of the pandemic on public servants' lives.

Outline of the empirical results

The study had two primary objectives: firstly, to explore the components of individual and organisational well-being among public servants during the COVID-19 pandemic, and secondly, to develop a holistic well-being model to support optimal functioning in this context and beyond. The findings successfully addressed both aims. At the individual level, public servants demonstrated high levels of SWB – including attributes such as satisfaction, self-acceptance and personal growth – as well as OWB in areas such as financial stability, physical health and strong social networks. These findings reflect a thriving workforce despite the pandemic's challenges, with the majority of participants exhibiting resilience and adaptability. However, a smaller portion of the sample reported lower well-being scores, experiencing material deprivation and poor health – suggesting an imbalance in well-being elements that hindered optimal functioning. This variation highlighted the necessity of an integrative well-being model that accounts for both subjective and objective dimensions of wellness. At the organisational level, the results indicated that leadership, POS and PCBs were positively interrelated and significantly predicted both PWB and OWB. The model developed through this study illustrates these relationships and promotes a systems-thinking approach that recognises how organisational factors, such as transformational leadership and a supportive work climate, can enhance or inhibit individual well-being. Ultimately, the model encourages a balanced, strengths-based strategy that integrates individual and organisational wellness components, ensuring that public servants are better equipped to cope during times of crisis while continuing to thrive in post-pandemic contexts.

Contextual discrepancies: Literature findings with empirical results

The literature paints a consistently severe picture of the pandemic's impact on public servants, highlighting

widespread emotional strain, burnout and reduced job satisfaction because of increased workloads, grief and isolation (Brunetto et al., 2022; Giauque et al., 2022; Rothmann & Grobler, 2020). From an objective perspective, although many public servants retained employment, access to healthcare, social support and safe working conditions became constrained, further exacerbating SWB issues (Eagle Hill, 2024; South African Government, 2021). This body of research, often drawn from across diverse sectors of the public service, largely focuses on human services occupations such as healthcare, education and social work, where professionals had direct, emotionally intensive interactions with the public throughout the pandemic.

By contrast, the empirical findings of this study, drawn from a single, non-human service public organisation, present a more nuanced and less distressing reality. This organisation is primarily office based and diplomatic in nature, with minimal direct contact with the public. Within this context, many public servants reported relatively high levels of both SWB, including satisfaction, self-acceptance and personal growth and OWB related to financial stability, physical health and supportive social environments.

While a minority of participants did face material hardship and health concerns, the majority demonstrated resilience and adaptability. Organisational-level factors, such as transformational leadership, POS and constructive coping behaviours, also emerged as significant predictors of well-being – patterns not as strongly emphasised in the broader literature.

This mismatch between literature and empirical data is partly attributable to the contextual specificity of the present study. While the literature generalises across the public sector – often skewed by crisis-ridden human service contexts – the current findings derive from a unique organisational environment that was structurally shielded from some of the most intense stressors. This highlights the importance of contextualised analysis in well-being research and calls for models that can accommodate sectoral and occupational differences within the public service.

Practical implications

To support public servants in thriving during and after COVID-19, the suggested holistic well-being model emphasises the necessity of addressing issues at the individual and organisational levels. Individual resilience and preparedness for future challenges are increased when both SWB and OWB are balanced across psychological, physical, financial and social dimensions using a positive psychology approach. At the organisational level, public sector organisations ought to adopt positive psychology interventions, encourage positive thinking and cultivate constructive coping mechanisms. Leaders are encouraged to implement radical changes to task requirements,

management techniques, organisational structures and policies. Improving positive perceptions and organisational support can lessen psychological stress and negative affect, which will ultimately improve employee well-being, encourage long-term engagement and help the organisation succeed.

Limitations and recommendations

The study on public servant well-being is specific to a non-human services department, limiting its generalisability. The sample size of 218 employees may not reflect other government departments' cultures, leadership dynamics and operational structures.

Another limitation is the reliance on self-report measures. Self-report measures have limitations because of social desirability bias, recall bias and response style bias. Cultural and language differences may also affect results. Despite these, self-report measures are helpful when paired with validated instruments and other data sources. Mixed methods approaches are recommended to strengthen future studies. In addition, the study's cross-sectional design has limitations, as it cannot establish causality or capture changes over time, which could overlook the evolution of well-being during the pandemic, necessitating future research using longitudinal designs.

The study also introduced a well-being model developed during the pandemic, which remains applicable beyond this period. It highlights the need for organisations to adopt holistic strategies informed by positive psychology and open systems theories to address the diverse well-being needs of employees. For future research, incorporating biographical factors and exploring the interplay between individual and organisational well-being in a broader context would enhance generalisability and practical applicability.

The research, conducted within a single National Service Department in [Pretoria], South Africa, primarily focused on non-human services support staff during strict COVID-19 lockdown levels. This focus may have amplified stress and anxiety among employees, potentially skewing the findings. To address these limitations, future studies should include non-human services departments and examine the well-being of public servants across different sectors. In addition, combining quantitative and qualitative approaches would provide a richer understanding of well-being dynamics, enabling industrial psychologists to develop more effective strategies for promoting employee well-being. By addressing these limitations and expanding the scope of future research, this study contributes to a growing body of knowledge on public servants' well-being and offers practical insights for improving organisational support during uncertain times.

Conclusion

The model provided a post-COVID-19 framework for public servants to thrive in uncertain times, focusing on individual and organisational well-being at both individual and organisational levels. The results of the study revealed important interrelations between the well-being components at the individual level and well-being factors at the organisational level. The results indicated that these components are all to be prioritised because of the lack of focus on one contributes to an overall reduced level of well-being. The study also highlighted that optimal functioning and thriving are conducive within the positive psychology approach and openness to multiple leadership styles and open systems. Following the proposed well-being model can enhance public servants to pursue optimal functioning during and after the COVID-19 pandemic successfully. The principles established in the study may be applied daily in practice as they are a buildup to daily thriving and achieving fulfilling work and lives.

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Competing interests

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Authors' contributions

N.N.Z. is the primary author of this article, having drafted the manuscript as part of the requirements for her thesis completion at the University of South Africa. R.M.O. provided supervision and guidance throughout the process, contributing valuable feedback and insights during the research and drafting stages. Both authors have read and approved the final manuscript.

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Data availability

The data that support the findings of this study are available from the corresponding author, N.N.Z., upon reasonable request. Restrictions do apply to the availability of these data, which were used under licence for the current study.

Disclaimer

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