


# Mapping wellness to career outcomes: Predictors of career satisfaction and embeddedness in Africa's largest open distance learning institution

**Author:**Nisha Harry<sup>1</sup> **Affiliation:**

<sup>1</sup>Department of Industrial and Organisational Psychology, College of Economic and Management Sciences, University of South Africa, Pretoria, South Africa

**Corresponding author:**

Nisha Harry,  
harryn@uisa.ac.za

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**Background:** The increasing shift toward digital work and remote engagement within Africa's largest open distance learning (ODL) institution highlights the need to understand how employee wellness influences career outcomes in digitally mediated academic environments.

**Objectives:** This study aims to explore how digital, relational, and holistic wellness influence career satisfaction and career embeddedness among staff at a South African ODL institution. While global interest in employee well-being is increasing, there is still a significant lack of empirical research on how multidimensional wellness impacts career retention and satisfaction in African higher education contexts.

**Methods:** A cross-sectional quantitative design was employed, using a stratified random sample of 840 employees. Data were analysed using correlation, multiple regression and Welch's ANOVA to identify key predictors.

**Results:** Employee relations wellness emerged as the strongest predictor of both career satisfaction and career embeddedness, followed by holistic wellness, career meaningfulness, and digital and career wellness. Gender differences were significant, with female employees reporting higher wellness levels across most constructs.

**Conclusion:** Findings offer actionable insights for human resource (HR) practitioners and institutional leaders to enhance wellness strategies and improve staff retention.

**Contribution:** The study presents a validated, context-specific framework linking wellness dimensions to career outcomes in a digitally evolving academic landscape.

**Keywords:** career satisfaction; career embeddedness; digital wellness; holistic wellness; open distance learning; ODL.

## Introduction

The evolution of remote work and digital integration has redefined professional roles and institutional dynamics, especially within higher education, prompting new considerations around employee experience and career sustainability. In Africa's largest open and distance learning (ODL) institution, these changes have necessitated a re-evaluation of how employee well-being influences career outcomes such as satisfaction and embeddedness (Kokt & Seqhobane, 2024). While digital environments offer enhanced flexibility and access, they can also strain interpersonal relationships, psychological wellness, and organisational commitment among academic and support staff (Mishra et al., 2022).

There is growing scholarly interest in employee wellness as a strategic imperative for building sustainable academic work environments (Salas-Vallina et al., 2021b; Takawira et al., 2014). Despite growing interest in employee well-being, institutional approaches often remain compartmentalised, emphasising isolated aspects such as physical or mental health, while overlooking the interconnected and multifaceted nature of wellness in academic environments (Takawira et al., 2014). This is particularly concerning in African contexts, where socio-economic and institutional challenges shape wellness differently (Ngcamu & Teferra, 2015).

Although career satisfaction and embeddedness are recognised as critical indicators of employee retention and institutional resilience (Mitchell et al., 2001), their wellness-related predictors in ODL contexts remain underexplored (Naidoo-Chetty & Du Plessis, 2021). This study addresses that gap by examining the predictive role of digital, relational, and holistic wellness in career sustainability (Benevene et al., 2020).

## Literature review

### Conceptualisation of digital wellness, relational wellness, and holistic wellness

Shifts in how academic work is conducted, driven by digital innovation and remote modalities, have reshaped the concept of wellness, especially within ODL environments. In these settings, wellness is no longer limited to physical or psychological health but extends to digital, relational, and holistic dimensions (Benevene et al., 2020; Myers & Sweeney, 2005). Mishra et al. (2022) emphasise digital wellness as a key component of employee well-being, highlighting the need for healthy engagement with technology to promote psychological resilience and productivity in remote environments.

Digital wellness includes screen-time regulation, digital literacy, and managing online communication channels, aligned with Haythornthwaite's (2005) Media Multiplexity Theory, highlighting the need to sustain meaningful connections in digital environments. In ODL institutions, where asynchronous teaching, learning, and administration dominate, digital wellness becomes essential for sustaining interpersonal connections and professional engagement (Maphalala & Mpofo, 2019).

However, digital fatigue, resulting from cognitive overload, blurred boundaries, and excessive connectivity, can undermine job satisfaction and organisational commitment (Wiederhold, 2020). As Koko and Seqhobane (2024) and Takawira et al. (2014) note, wellness is closely tied to career outcomes such as satisfaction and embeddedness. Thus, this study explores how integrated digital, relational, and holistic wellness predicts career sustainability in Africa's largest ODL institution.

Holistic wellness represents an integrated approach to well-being encompassing physical, emotional, mental, personal and occupational dimensions. Gelencsér et al. (2023) argue that such frameworks foster greater organisational commitment and reduce turnover, key outcomes in high-pressure academic environments. In African contexts, wellness is also shaped by communal and relational factors, necessitating culturally responsive strategies (Ngcamu & Teferra, 2015). Ryff's (1989) Psychological Well-Being Model, featuring autonomy, purpose, personal growth, and positive relationships, offers a theoretical foundation. In the digital era, holistic wellness includes how technology affects emotional resilience and self-development. Digital platforms can both support and challenge employee well-being.

Relational wellness refers to the quality of social interactions and support in the workplace. Grounded in Social Exchange Theory (Blau, 1964), it reinforces psychological safety, belonging and engagement. Gutierrez et al. (2025) and Ozturk and Sumbas (2023) highlight social connection as a key predictor of satisfaction, while Benevene et al. (2020) stress the role of leadership in fostering inclusive climates. In ODL institutions, where work is largely virtual, relational

wellness is essential for maintaining morale and team cohesion. This study proposes a multidimensional wellness framework, integrating digital, relational and holistic dimensions, to examine their predictive role in career satisfaction and embeddedness (Ahmad et al., 2023).

### Career satisfaction and embeddedness in the open and distance learning context

Career satisfaction refers to the extent to which individuals positively evaluate their professional progress, roles and achievements. In the higher education sector, it is closely linked to intellectual stimulation, recognition, value alignment and supportive work relationships. Naidoo-Chetty and Du Plessis (2021) found that academic staff in South African universities derive satisfaction from meaningful engagement, collegiality and institutional alignment with personal values. Within ODL institutions, where work is digitally mediated, career satisfaction is influenced by self-efficacy, goal clarity and resource availability, as explained in Social Cognitive Career Theory (Lent et al., 1994).

Career embeddedness, as conceptualised by Mitchell et al. (2001), encompasses three dimensions: fit (compatibility with the role and culture), links (social connections) and sacrifice (perceived cost of leaving). Lee et al. (2014) later confirmed its predictive value for performance and retention. In ODL contexts, digital wellness, encompassing digital competence, healthy tech use and online engagement, strengthens 'fit', enhancing role clarity and confidence. Relational wellness reinforces 'links' through peer support, collaboration, and identity within virtual communities. Holistic wellness, grounded in Ryff's (1989) model of psychological well-being, supports the 'sacrifice' dimension by nurturing emotional resilience, life purpose, and occupational fulfilment.

Despite their significance, these constructs are underexplored in African ODL environments. The interplay between digital, relational and holistic wellness, supported by Gelencsér et al. (2023), Ngcamu and Teferra (2015), and Benevene et al. (2020), offers a comprehensive lens to understand career satisfaction and embeddedness, ultimately strengthening institutional commitment, retention and long-term success.

In Africa's largest ODL institution, staff must thrive in digital-first environments while maintaining personal and professional well-being. Remote teaching, digital communication and technological change necessitate support for digital competence, inclusive relationships and holistic wellness. Integrated wellness, encompassing digital, relational, and holistic dimensions, has been linked to greater retention and engagement. Salas-Vallina et al. (2021a) highlight that supportive leadership and wellness initiatives reduce turnover. This study addresses the need for a comprehensive wellness approach, building on the frameworks of Ryff (1989), Ngcamu and Teferra (2015), Benevene et al. (2020) and Gelencsér et al. (2023) to explore how wellness predicts career satisfaction and embeddedness.

## Research objective

The objective of the study is to investigate the predictive relationship between digital wellness, employee relational wellness, and holistic wellness on career satisfaction and career embeddedness among academic and administrative staff at Africa's largest ODL institution. The study aims to determine the extent to which these dimensions of wellness contribute to individuals' perceived satisfaction with their careers and their embeddedness within the institution, thereby informing institutional strategies for employee support and retention in the ODL context.

## Research methods and design

A quantitative, cross-sectional approach was adopted to examine how various wellness dimensions influence career satisfaction and embeddedness. The study drew on a convenience sample of 840 staff members, including academic, administrative, and support personnel. Data were collected electronically via institutional email using the Career and Employee Well-being Assessment (CEWA), a validated instrument comprising six constructs: Career Satisfaction (CS), Career Embeddedness (CE), Holistic Wellness (HW), Career Meaningfulness (CM), Digital and Career Wellness (DCW) and Employee Relational Wellness (ERW). Initially piloted at the institution, CEWA was later implemented at scale. Statistical analysis was conducted using Statistical Package for the Social Sciences (SPSS) version 28, including descriptive statistics, reliability testing (Cronbach's  $\alpha = 0.80\text{--}0.91$ ), Pearson's correlations, multiple regression and Welch's analysis of variance (ANOVA) to explore gender-based differences across wellness and career-related variables.

## Research participants

The study employed a stratified random sample of 840 employees from a comprehensive ODL institution in South Africa. The sample was nearly evenly divided between administrative (51%) and academic (49%) staff, reflecting a broad cross-section of the institution's workforce. Participants represented various career stages: early life-career (31–45 years) comprised 39% ( $n = 320$ ), midcareer (46–56 years) 36% ( $n = 296$ ) and late career (57 years and older) 21% ( $n = 190$ ). A smaller group (4%,  $n = 34$ ) was under 30. The gender distribution was predominantly female (65%,  $n = 580$ ), followed by male participants (33%,  $n = 260$ ), with one identifying as non-binary or third gender and four preferring not to disclose. In terms of racial identity, 58% identified as black African, 31% white, 5% coloured, and 4% Indian, while 11 respondents did not disclose. Employment categories also included 7% management ( $n = 33$ ) and 2% ( $n = 7$ ) who were both staff and students.

## Measuring instrument

The CEWA was developed to evaluate six interconnected aspects of employee wellness and career experience. These dimensions include Career Satisfaction (6 items), with items

such as 'I feel positive about my career'; Holistic Wellness (13 items), reflected in statements like 'I like my current career progress within the organisation'; and Career Meaningfulness (3 items), assessed through prompts such as 'My career is a result of my personal choices'. Digital and Career Wellness (8 items) was measured using items like 'I always set boundaries from digital usage to maintain a healthy tech-life balance', while CE (5 items) focused on indicators of organisational fit and retention. Employee Relational Wellness (7 items) includes items such as 'I feel positive about the network of career development support structures offered by my organisation'. Career and Employee Well-being Assessment was first piloted within the Department of Industrial and Organisational Psychology at the ODL university. It was later implemented institutionally, with participation from 840 staff members. Psychometric analyses demonstrated high reliability and validity ( $\alpha = 0.80\text{--}0.91$ ), confirming CEWA as a robust and credible tool. While it is not formally registered with the Health Professions Council of South Africa (HPCSA), CEWA is recognised as a fit-for-purpose instrument for evaluating employee and career well-being.

## Research procedure

This study was conducted at Africa's largest ODL institution to investigate the predictive role of multidimensional wellness constructs in shaping career satisfaction and career embeddedness. A quantitative, cross-sectional survey design was adopted, aligning with established research standards in organisational and psychological inquiry (Creswell & Creswell, 2018). Ethical clearance was secured from the institution, and the survey was distributed electronically to academic, administrative, and professional support staff via institutional email. Participation was voluntary, and informed consent was obtained digitally before survey commencement. A total of 840 valid responses were collected using a secure online platform. Data were initially processed in Microsoft Excel and then analysed using SPSS (Version 28).

The questionnaire comprised six validated scales assessing CS, CE, HW, CM, DCW, and ERW. Descriptive statistics assessed central tendencies and dispersion. Reliability testing using Cronbach's alpha and composite reliability yielded values between 0.80 and 0.91, indicating strong internal consistency (Hair et al., 2010; Nunnally & Bernstein, 1994). Pearson's correlations explored relationships among variables, while multiple regression analyses identified key predictors of CS and CE. Welch's ANOVA was applied to evaluate gender differences, given unequal group variances (Field, 2018). Results were interpreted at a 95% confidence level.

## Ethical considerations

Participants were invited to take part in the study through an electronic survey distributed by the university's Information and Communication Technology (ICT) department, which acted as the official gatekeeper. The survey link was sent from a no-reply institutional email address to ensure

**TABLE 1:** Descriptive statistics, reliability estimates, and bivariate correlations ( $N = 840$ ).

Variable	M	SD	$\alpha$	CR	1. CS	2. HW	3. CM	4. DCW	5. CE	6. ERW
1. CS	3.55	1.44	0.91	0.91	-	-	-	-	-	-
2. HW	3.68	1.44	0.91	0.91	0.494***	-	-	-	-	-
3. CM	4.09	1.59	0.83	0.82	0.454***	0.356***	-	-	-	-
4. DCW	3.44	1.45	0.89	0.89	0.488***	0.434***	0.516***	-	-	-
5. CE	4.01	1.66	0.80	0.80	0.562***	0.414***	0.466***	0.535***	-	-
6. ERW	3.87	1.61	0.85	0.84	0.588***	0.330***	0.340***	0.448***	0.581***	-

M, mean; SD, standard deviation;  $\alpha$ , Cronbach's alpha; CR, composite reliability; CS, career satisfaction; HW, holistic wellness; CM, career meaningfulness; DCW, digital and career wellness; CE, career embeddedness; ERW, employee relations wellness.

\*\*\*,  $p < 0.01$  for all correlation coefficients (2-tailed).

**TABLE 2:** Model fit indices and discriminant validity for the measurement models ( $N = 840$ ).

Goodness-of-fit index	Indices	Acceptable model fit
Chi – Square/ $df$	4.990	Between 1 and 5
CFI	0.957	CFI $\geq$ 0.90 (Good fit)
TLI	0.953	TLI $\geq$ 0.95 (Good fit)
RMSEA	0.071	RMSEA $<$ 0.08 (Good fit)
SRMR	0.076	SRMR $<$ 0.08 (Good fit)

RMSEA, root mean square error of approximation; SRMR, standardised root mean square residual; CFI, comparative fit index; TLI, Tucker-Lewis Index;  $df$ , degrees of freedom.

participant privacy. Data collected from the survey were initially stored in an Excel file and later transferred to the Statistical Package for the Social Sciences (SPSS, Version 2017) for analysis.

Ethical approval and institutional authorisation to conduct this study was obtained from the relevant research ethics bodies. Approval was granted by the University of South Africa's Research Ethics Review Committee (Reference No.: 2024\_RPC\_019) on 03 April 2024, as well as the Senate-level Research Permission Sub-Committee responsible for overseeing research, innovation, and postgraduate activities (Reference No.: 2020\_EMS\_IOP\_024). These approvals confirmed that the study adhered to the institution's ethical guidelines and research governance standards.

## Statistical analysis

The collected data were analysed using IBM SPSS Statistics (Version 28) and SAS or STAT® software version 9.4M5 (2017). Preliminary steps involved data cleaning, screening for missing values, and assessing assumptions of normality, linearity, and homoscedasticity. Descriptive statistics were calculated to examine the central tendencies and dispersion across the six measured constructs: CS, CE, HW, CM, DCW, and ERW. Internal consistency reliability was assessed using Cronbach's alpha ( $\alpha$ ) and composite reliability (CR), with acceptable thresholds set at  $\alpha \geq 0.70$  and  $CR \geq 0.70$ , in line with recommendations by Nunnally and Bernstein (1994) and Hair et al. (2010).

Pearson's bivariate correlation analyses were conducted to assess the strength and direction of relationships between constructs. Multiple linear regression analyses were used to determine the predictive power of HW, CM, DCW, and ERW on CS and CE. Standardised beta coefficients ( $\beta$ ),  $t$ -values, significance levels ( $p$ -values), and 95% confidence intervals (CIs) were reported to

interpret effect sizes and statistical significance. Welch's ANOVA was used to test for gender differences because of unequal group variances, with Games–Howell post hoc comparisons where applicable (Field, 2018). Multicollinearity was examined through the variance inflation factor (VIF) and tolerance values, following Hair et al. (2010). Confirmatory factor analysis (CFA) results supporting construct validity are presented in the measurement model section. All statistical findings were interpreted at a 95% confidence level.

## Results

Across the 840 respondents, all six constructs showed good to excellent internal consistency (see Table 1) (Cronbach's  $\alpha = 0.80$ – $0.91$ ; composite reliability =  $0.80$ – $0.91$ ), and their means clustered around the midpoint of the response scale ( $M = 3.44$ – $4.09$ , standard deviation [SD]  $\approx 1.44$ – $1.66$ ), indicating generally moderate levels of well-being and career outcomes. Bivariate correlations were uniformly positive and statistically significant at  $p < 0.01$ . Career Satisfaction correlated most strongly with Employee Relational Wellness (ERW),  $r = 0.59$ , and CE,  $r = 0.56$ , suggesting that supportive work relationships and a sense of being anchored in one's career are closely tied to satisfaction. Moderate associations also emerged between CS and the remaining predictors, Holistic Wellness ( $r = 0.49$ ), DCW ( $r = 0.49$ ), and Career Meaningfulness ( $r = 0.45$ ). Inter-correlations among the predictors ranged from  $r = 0.33$  (ERW with Holistic Wellness) to  $r = 0.54$  (DCW with CE), implying that, while conceptually distinct, the well-being and career-development variables are moderately interrelated, collectively painting a coherent picture of employees' holistic career experience. Evidence from Table 2 indicates that the measurement model met recommended goodness-of-fit criteria, with all indices reflecting acceptable to strong model performance ( $\chi^2/df = 4.99$ , CFI = 0.957, TLI = 0.953, RMSEA = 0.071, SRMR = 0.076).

The structural model findings in Table 3, Figure 1, reveal that both career satisfaction and career embeddedness are positively and significantly associated with all wellness outcomes ( $\beta = 0.07$ – $0.46$ ,  $p < 0.01$ ). A multiple regression analysis (Table 4 and Table 5) revealed that Holistic Wellness significantly predicted CS,  $\beta = 0.28$ ,  $p < 0.001$ . Career Meaningfulness was also a significant predictor,  $\beta = 0.18$ ,  $p < 0.001$ . Digital and Career Wellness did not reach

significance,  $\beta = 0.07, p = 0.174$ . Employee Relations Wellness emerged as the strongest predictor of CS,  $\beta = 0.45, p < 0.001$ .

Holistic Wellness ( $\beta = 0.14, p < 0.001$ ), CM ( $\beta = 0.17, p < 0.001$ ), DCW ( $\beta = 0.23, p < 0.001$ ), and ERW ( $\beta = 0.46, p < 0.001$ ) each uniquely contributed to CE, with ERW again showing the largest standardised effect.

A simultaneous multiple regression indicated that HW, CM, DCW, and ERW together accounted for a substantial portion of variance in CS,  $F(4, 835) = 295.26, p < 0.001$ , adjusted  $R^2 = 0.59$ . Each predictor made a significant positive unique contribution: HW,  $\beta = 0.27, t(835) = 10.71$ ,

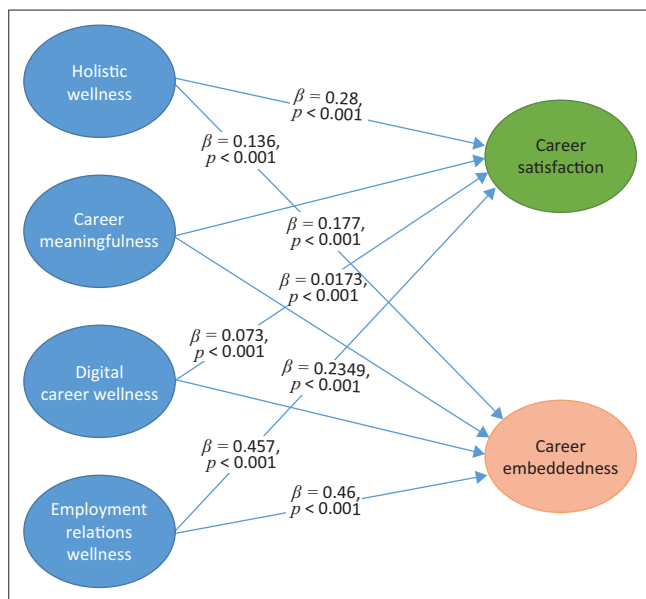
$p < 0.001$  (95% CI: 0.24, 0.30); CM,  $\beta = 0.17, t(835) = 6.52, p < 0.001$  (95% CI: 0.11, 0.20); DCW,  $\beta = 0.12, t(835) = 4.32, p < 0.001$  (95% CI: 0.07, 0.17); and ERW,  $\beta = 0.45, t(835) = 17.69, p < 0.001$  (95% CI: 0.35, 0.46). Employee Relations Wellness emerged as the strongest predictor, followed by HW, CM, and DCW, suggesting that positive ERW exerts the most influential impact on CS, with Holistic Wellness, perceived Career Meaningfulness, and opportunities for DCW also contributing meaningfully.

A simultaneous multiple regression revealed that HW, CM, DCW, and ERW jointly predicted CE, producing a significant model,  $F(4, 835) = 201.72, p < 0.001$ , with an adjusted  $R^2 = 0.49$ , indicating that 49 % of the variance in CE was explained by the four predictors. All predictors contributed uniquely and positively to CE: HW,  $\beta = 0.14, t(835) = 4.81, p < 0.001$ ; CM,  $\beta = 0.19, t(835) = 6.37, p < 0.001$ ; DCW,  $\beta = 0.21, t(835) = 6.67, p < 0.001$ ; and ERW,  $\beta = 0.39, t(835) = 13.89, p < 0.001$ . Among these, ERW emerged as the strongest predictor, followed by DCW, CM, and HW, suggesting that positive employee relations experiences, opportunities for DCW, a sense of Career Meaningfulness, and Holistic Wellness each make significant, incremental contributions to employees' embeddedness in their careers.

**TABLE 3:** Structural equation modelling path estimates.

Dep.	Pred.	Estimate (unstandardised beta)	SE	95% confidence intervals		$\beta$ (standardised beta)	z	p-value
				Lower	Upper			
CS	HW	0.2297	0.0130	0.2043	0.255	0.2801	17.71	<0.001
CS	CM	0.1744	0.0301	0.1155	0.233	0.1779	5.80	<0.001
CS	DCW	0.0627	0.0239	0.0158	0.110	0.0736	2.62	0.009
CS	ERW	0.4867	0.0263	0.4352	0.538	0.4535	18.50	<0.001
CE	HW	0.1501	0.0201	0.1108	0.189	0.1360	7.47	<0.001
CE	CM	0.2291	0.0489	0.1332	0.325	0.1737	4.68	<0.001
CE	DCW	0.2690	0.0402	0.1901	0.348	0.2349	6.68	<0.001
CE	ERW	0.6609	0.0410	0.5805	0.741	0.4575	16.12	<0.001

Dep, department; Pred, predictor; SE, standard error; CS, career satisfaction; HW, holistic wellness; CM, career meaningfulness; DCW, digital and career wellness; CE, career embeddedness; ERW, employee relations wellness.



**FIGURE 1:** Structural equation model.

**TABLE 4:** Results of multiple regression predicting career satisfaction ( $N = 840$ ).

Model 1	Unstandardised coefficients		$\beta$ (standardised coefficients)	t	p-value	95% confidence interval for Bootstrap	
	$\beta$	SE $\beta$				Lower	Upper
HW	0.269	0.025	0.274	10.71	<0.001	0.268	0.024
CM	0.157	0.024	0.174	6.52	<0.001	0.157	0.028
DCW	0.120	0.028	0.123	4.32	<0.001	0.119	0.027
ERW	0.396	0.022	0.450	17.69	<0.001	0.397	0.023

Note: Model info:  $Fp = 295.26$ ; Adjusted  $R^2 = 0.590$ .

HW, holistic wellness; CM, career meaningfulness; DCW, digital and career wellness; ERW, employee relations wellness; SE, standard error.

A Welch's ANOVA as seen in Table 6, was conducted to examine gender differences across six career-related constructs. The results indicated significant differences for Holistic Wellness,  $F(2, 213) = 6.94, p = 0.001$ ; Career Meaningfulness,  $F(2, 206) = 8.40, p < 0.001$ ; DCW,  $F(2, 200) = 3.14, p = 0.045$ ; and CE,  $F(2, 213) = 9.56, p < 0.001$ . Post hoc comparisons revealed that females reported significantly higher scores in Holistic Wellness than males ( $M$  difference =  $-0.6900, p = 0.001$ ) and those who preferred not to disclose their gender ( $M$  difference =  $-0.6015, p = 0.005$ ). Similarly, females scored significantly higher in Career Meaningfulness compared to both males ( $M$  difference =  $-0.8160, p < 0.001$ ) and the 'prefer not to disclose' group ( $M$  difference =  $-0.8692, p < 0.001$ ). For DCW, females scored significantly higher than males ( $M$  difference =  $-0.4700, p = 0.039$ ). In terms of CE, females again outscored both males ( $M$  difference =  $-0.8250, p < 0.001$ ) and the 'prefer not to disclose' group ( $M$  difference =  $-0.9500, p < 0.001$ ). No significant gender differences were found for CS,  $F(2, 215) = 1.53, p = 0.218$ , or ERW,  $F(2, 201) = 2.64, p = 0.074$ .

**TABLE 5:** Results of multiple regression predicting career embeddedness ( $N = 840$ ).

Model 1	Unstandardised coefficients		$\beta$ (standardised coefficients)	t	p-value	95% confidence interval for Bootstrap	
	$\beta$	SE $\beta$				Lower	Upper
HW	0.156	0.032	0.135	4.809	<0.001	0.094	0.218
CM	0.196	0.031	0.187	6.367	<0.001	0.135	0.257
DCW	0.241	0.036	0.211	6.670	<0.001	0.170	0.312
ERW	0.404	0.029	0.391	13.890	<0.001	0.347	0.461

Note: Model info:  $Fp = 201.718$ ; Adjusted  $R^2 = 0.490$ .

HW, holistic wellness; CM, career meaningfulness; DCW, Digital and Career Wellness; ERW, employee relations wellness; CE, career embeddedness; SE, standard error.

**TABLE 6:** Welch's ANOVA and post hoc pairwise comparisons by gender on career constructs ( $N = 840$ ).

Construct	Welch's $F$	$df_1$	$df_2$	$p$ -value	Pairwise comparison	Mean difference	$p$ -value
CS	1.53	2	215	0.218	-	-	-
HW	6.94	2	213	0.001	Female versus male	-0.6900	0.001
					Female versus prefer not to disclose	-0.6015	0.005
CM	8.40	2	206	< 0.001	Female versus male	-0.8160	< 0.001
					Female versus prefer not to disclose	-0.8692	< 0.001
DCW	3.14	2	200	0.045	Female versus male	-0.4700	0.039
CE	9.56	2	213	< 0.001	Female versus male	-0.8250	< 0.001
					Female versus prefer not to disclose	-0.9500	< 0.001
ERW	2.64	2	-	0.074	-	-	-

Note: Gender codes: 1 = Female; 2 = Male; 3 = Prefer not to disclose.

CS, career satisfaction; HW, holistic wellness; CM, career meaningfulness; DCW, digital and career wellness; CE, career embeddedness; ERW, employee relations wellness.

## Discussion

The present study explored the interrelationships among six constructs, CS, CE, HW, CM, DCW, and ERW, in a large sample of employees from Africa's largest ODL institution. The psychometric reliability of all scales was confirmed, with internal consistency and composite reliability coefficients ranging from 0.80 to 0.91, aligning with established guidelines for psychological assessment (American Psychological Association, 2020; Bonett & Stickel, 1992).

Moderate mean scores across constructs suggest that respondents experience average levels of well-being and career-related outcomes, with standard deviations indicating notable variability. Significant positive intercorrelations among all variables support the conceptual overlap between well-being and career development dimensions, consistent with findings that employee well-being is multidimensional and context sensitive (Kiazad et al., 2020; Steindórsdóttir et al., 2021).

Employee Relations Wellness emerged as the strongest predictor of both CS and CE across multiple regression models. This highlights the critical role of collegial support, trust, and inclusive workplace relationships in fostering employee commitment and satisfaction, in line with the social exchange theory (Blau, 1964) and recent organisational behaviour research (Kiazad et al., 2020).

Holistic Wellness and Career Meaningfulness also made significant contributions to CS and CE, underscoring the importance of integrated wellness approaches that encompass mental, emotional, and physical well-being in shaping meaningful and sustainable career outcomes (Myers & Sweeney, 2005). The influence of CM reflects the growing emphasis on purpose and personal value alignment in career satisfaction (Lent & Brown, 2013).

Interestingly, DCW significantly predicted CE but not CS in one regression model, although it reached significance in another model explaining CS with a slightly lower effect size. This nuanced pattern may reflect the context-specific value of digital growth opportunities in promoting future orientation and professional security, as supported by recent research on digital transformation in higher education (Van Zyl & Rothmann, 2022).

Gender-based analyses added depth to the findings. Welch's ANOVA revealed that female respondents reported significantly higher levels of HW, CM, DCW, and CE than male respondents and those who preferred not to disclose their gender. These results resonate with broader trends suggesting that female employees may be more attuned to relational, developmental, and wellness aspects of work environments (Coetzee, 2019; Pillay, 2021), although specific citations could not be retrieved.

The demographic composition of the study sample makes it essential to interpret the findings within South Africa's unique cultural and institutional environment. Prior scholarship indicates that race and ethnicity can shape employees' organisational experiences and career pathways in meaningful ways (Greenhaus, et al, 1990; Pillay, 2022). Recent scholarship further emphasises that staff well-being in higher education is strongly influenced by organisational support structures and job demands, reinforcing the importance of contextualised strategies to promote career satisfaction and embeddedness (Mbabazi, 2024). By considering these dynamics, the link between ERW and career embeddedness may be better understood, as culturally responsive and inclusive practices are likely to strengthen workplace relationships and deepen employee commitment.

Overall, the study supports a multidimensional and integrative model of career well-being, where relational, personal, and developmental resources interact to predict satisfaction and embeddedness. For institutions navigating digital work environments, especially in ODL contexts, these findings emphasise the strategic importance of fostering employee wellness through inclusive relationships, meaningful career engagement, and targeted developmental support.

## Conclusion

This study underscores the vital role of ERW in promoting CS and CE within digitally mediated environments such as ODL institutions. Inclusive communication, trust, and collegial support significantly enhance employee well-being and retention, aligning with findings by Benevene et al. (2020) and Walton et al. (2020).

The predictive influence of HW, CM, and DCW highlights the need for multidimensional, developmentally oriented wellness strategies. This supports integrated frameworks proposed by Coetzee (2022) and Myers and Sweeney (2005),

which emphasise emotional, relational, and professional growth.

## Limitations and future directions

This study's cross-sectional design restricts causal interpretations, while reliance on self-report measures introduces risks of response bias and common method variance (Podsakoff et al., 2003). The use of a random stratified sample from a single ODL institution further limits generalisability to broader educational or organisational contexts.

Future research should employ longitudinal designs to assess causal links and the lasting impact of wellness initiatives (Creswell & Creswell, 2018). Broader sampling across sectors and the integration of qualitative methods could offer deeper insight into employee wellness and career development in remote and hybrid work settings (Lent & Brown, 2013).

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## Competing interests

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## CRedit authorship contribution

Nisha Harry: Conceptualisation, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualisation, Writing – original draft, Writing – review & editing. The author confirms that this work is entirely their own, has reviewed the article, approved the final version for submission and publication, and takes full responsibility for the integrity of its findings.

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## Data availability

The data supporting this study are available within the article and the corresponding author, Nisha Harry, upon reasonable request but are not publicly accessible due to ethical restrictions.

## Disclaimer

The views and opinions expressed in this article are those of the author and are the product of professional research. They

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