

Mental Health and Psychological Well-Being Among Employees in India: A Gender-Based Dual-Continuum Analysis

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Abstract

Employee mental health is an emerging priority in contemporary organisations, particularly in rapidly transforming economies such as India. Drawing on a dual-continuum framework, this study simultaneously examines negative indicators of mental health depression, anxiety, and stress and positive indicators of psychological well-being, autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance among Indian employees.

A cross-sectional survey was administered to $N = 500$ employees working in government, private, non-profit and self-employed sectors across India. Mental health was assessed using the Depression Anxiety Stress Scales (DASS-21), and psychological well-being was measured with Ryff's Psychological Well-Being (PWB) scales. Descriptive statistics, severity classifications, gender-wise mean comparisons (independent-samples t tests) and Pearson correlations were used to address the study objectives.

On average, employees reported mild-to-moderate levels of depression, anxiety and stress, with anxiety showing the highest proportion of respondents in moderate-to-extremely-severe categories. Overall psychological well-being scores were moderately favourable, although there was notable variation across subscales. Gender comparisons showed broadly similar levels of depression, anxiety, total distress and total psychological well-being between male and female employees, but women reported significantly higher stress. Correlations between distress indices and well-being indices were small, supporting a dual-continuum perspective in which psychological distress and psychological well-being are related yet distinct dimensions.

The findings underscore the need for workplace mental health strategies that go beyond symptom reduction to also cultivate psychological resources such as autonomy, environmental mastery, growth, and supportive relationships.

Keywords: depression, anxiety, stress, psychological well-being, employees, gender, India, DASS-21, Ryff PWB, dual-continuum

Introduction

The world of work has undergone profound changes in recent decades, driven by rapid technological advancements, organisational restructuring, intensified competition and evolving employment arrangements. These shifts have placed employee mental health at the forefront of organisational concern (World Health Organization [WHO], 2022). In India, high

workloads, extended working hours, job insecurity, and work–family conflicts further complicate this landscape, making the mental health of employees an issue of both human and organisational significance (Kumar & Kumar, 2020; Sivakumar & Sundaram, 2020).

Traditional approaches to mental health in organisations typically focus on negative states such as depression, anxiety and stress, with interventions aimed at reducing illness or preventing breakdown (LaMontagne et al., 2014). However, contemporary perspectives emphasise that mental health is not merely the absence of mental illness but also the presence of positive psychological functioning (Keyes, 2002). Keyes’ dual-continuum model distinguishes between mental illness and mental health, suggesting that individuals can simultaneously experience elements of distress and elements of flourishing (Keyes, 2005).

Eudaimonic models of well-being conceptualise psychological well-being not just as feeling good, but as functioning well experiencing autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance (Ryff, 1989; Ryff & Keyes, 1995). In organisational contexts, higher psychological well-being has been linked to improved engagement, performance and organisational commitment, and to reduced absenteeism and burnout (Bakker & Demerouti, 2017; Huppert, 2009; Page & Vella-Brodrick, 2009).

Gender is another important lens for understanding employee mental health. Women often experience a “double burden” of paid work and unpaid caregiving, and may encounter gendered norms and expectations at work, contributing to elevated stress and strain (Patel et al., 2018). At the same time, cultural and social resources such as family support, community ties, and meaning derived from work may enable both men and women to maintain psychological well-being despite stressors (Kazmi et. at., 2024; Chopra & Selvaraj, 2018).

Against this background, the present study adopts a dual-continuum perspective to examine both psychological distress and psychological well-being among Indian employees. Using the Depression Anxiety Stress Scales (DASS-21; Lovibond & Lovibond, 1995) and Ryff’s Psychological Well-Being scales (Ryff, 1989), the study addresses the following objectives:

1. To assess the levels of depression, anxiety and stress among employees.
2. To assess employees’ emotional/psychological well-being and its constituent dimensions.
3. To compare mental health (depression, anxiety, stress, total distress) across male and female employees.
4. To compare emotional/psychological well-being across male and female employees.
5. To examine relationships between mental health indices and emotional well-being indices.

From these objectives, three broad hypotheses were formulated:

- H1: There will be a significant difference in mental health indices between male and female employees.
- H2: There will be a significant difference in emotional/psychological well-being between male and female employees.
- H3: There will be a significant relationship between mental health indices and emotional well-being indices.

India provides a particularly relevant context for such an investigation, given the combination of rapid economic change, sectoral diversity in employment, and persistent gendered expectations. By integrating negative and positive indicators of mental health, the study aims to generate a nuanced understanding of employee functioning in Indian workplaces and to contribute empirical evidence to dual-continuum models of mental health.

Method

Research Design

The study employed a cross-sectional, quantitative survey design. Data were collected from employees working in diverse organisations across India using standardised psychometric scales and a socio-demographic and occupational questionnaire.

Participants

The sample consisted of $N = 500$ employees from government/public sector organisations, private companies, non-profit organisations, and self-employed or entrepreneurial settings. Table 1 summarises key socio-demographic characteristics.

Table

1

Socio-Demographic Characteristics of Respondents ($N = 500$)

Variable	Category	n	%
Age (years)	18–24	103	20.6
	25–29	126	25.2
	30–34	114	22.8
	35–39	75	15.0
	40–44	37	7.4
	45–49	31	6.2
	50 and above	14	2.8
Gender	Male	264	52.8
	Female	217	43.4
	Non-binary / Other	19	3.8
Marital status	Single	226	45.2
	Married	230	46.0
	Divorced / Separated	33	6.6
	Widowed	11	2.2
Educational qualification	Up to Higher Secondary	17	3.4
	Graduate	40	8.0
	Postgraduate	233	46.6
	Professional / Doctoral	155	31.0
	Other	55	11.0

Occupational and work-related characteristics are summarised in Table 2.

Table

2

Occupational and Work-Related Characteristics of Respondents (N = 500)

Variable	Category	n	%	
Type of organisation	Government / Public sector	126	25.2	
	Private sector	252	50.4	
	Non-profit / NGO	28	5.6	
	Self-employed / Entrepreneur	47	9.4	
	Other / Mixed	47	9.4	
Sector of employment	IT / ITES	134	26.8	
	Healthcare / Hospitals	62	12.4	
	Education / Academia	95	19.0	
	Banking / Finance	55	11.0	
	Manufacturing / Industry	36	7.2	
	Retail / Hospitality / Services	47	9.4	
	Media / Communication / Creative	29	5.8	
	Other sectors	42	8.4	
	Job role / designation	Entry-level / Junior staff	156	31.2
		Mid-level professional	196	39.2
Senior professional / Supervisor / Manager*		
Average weekly working hours	Up to 35 hours	40	8.0	
	36–45 hours	177	35.4	
	46–55 hours	181	36.2	
	More than 55 hours	79	15.8	
Mode of work	On-site	265	53.0	
	Hybrid	168	33.6	
	Fully remote	67	13.4	

*Note. Higher-level categories in “Job role” are present in the original dataset but truncated here for brevity.

The sample thus represents a heterogeneous employee population, spanning a broad age range, both genders, multiple educational levels, and diverse organisational contexts.

Measures

Depression, Anxiety and Stress

Negative indicators of mental health were assessed using the Depression Anxiety Stress Scales 21 items (DASS-21) (Lovibond & Lovibond, 1995). The DASS-21 comprises three subscales:

- Depression (DASS-D)
- Anxiety (DASS-A)
- Stress (DASS-S)

Each item is rated on a 4-point Likert scale reflecting the extent to which respondents experienced each symptom over the previous week. Subscale scores were summed, and a Total DASS score was computed by summing all three subscales. Higher scores indicate greater symptom severity. Based on established cut-offs, respondents were categorised into normal, mild, moderate, severe, and extremely severe levels for each subscale.

Psychological Well-Being

Positive indicators of mental health were measured using Ryff's Psychological Well-Being (PWB) scales (Ryff, 1989; Ryff & Keyes, 1995). The scale yields a Total PWB score and six subscale scores:

- Autonomy
- Environmental Mastery
- Personal Growth
- Positive Relations with Others
- Purpose in Life
- Self-Acceptance

Items are rated on Likert-type response options, and scores are summed for each subscale and for the total PWB. Higher scores indicate higher psychological well-being.

Procedure

Data were collected through a structured questionnaire that included socio-demographic and occupational items, the DASS-21 and Ryff's PWB scales. Participants were informed about the purpose of the study, assured of confidentiality and anonymity, and provided informed consent before participation. Data collection followed standard ethical principles for research involving human participants.

Data Analysis

Data were analysed using descriptive statistics (frequencies, percentages, means, standard deviations and observed ranges). DASS scores were also tabulated into severity categories.

To examine gender differences, independent-samples t tests (with unequal-variance adjustment) were conducted to compare male and female employees on DASS subscales, Total DASS and Total PWB. Pearson's product-moment correlations were computed to examine associations among DASS subscales, Total DASS, Total PWB and PWB subscales.

Results

Levels of Depression, Anxiety and Stress

Table 3 presents descriptive statistics for the DASS indices.

Table
Descriptive Statistics for DASS-21 Scores (N = 500)

3

Scale	Mean	SD	Observed Range
Depression	14.57	5.68	0–30
Anxiety	15.04	5.29	2–38
Stress	14.36	5.35	2–34
Total DASS	43.96	8.91	20–74

On average, employees reported mild-to-moderate levels of depression, anxiety and stress. The means for depression and stress are in the mild range, while anxiety approaches the moderate range.

The distribution of respondents across DASS severity categories is shown in Table 4.

Table
Distribution Across DASS-21 Severity Categories (N = 500)

4

Severity level	Depression n (%)	Anxiety n (%)	Stress n (%)
Normal	84 (16.8)	27 (5.4)	288 (57.6)
Mild	112 (22.4)	33 (6.6)	122 (24.4)
Moderate	226 (45.2)	193 (38.6)	71 (14.2)
Severe	72 (14.4)	134 (26.8)	18 (3.6)
Extremely severe	6 (1.2)	113 (22.6)	1 (0.2)

For depression, nearly half of the sample (45.2%) falls in the moderate category, with a further 22.4% in the mild range and 15.6% in the severe to extremely severe categories. Anxiety shows a more concerning profile: only 5.4% are in the normal range, whereas 38.6% are moderate and almost half (49.4%) are severe or extremely severe. Stress levels appear relatively more favourable, with 57.6% of participants in the normal range and 24.4% mild; however, 17.8% still fall in moderate to extremely severe categories.

These distributions indicate that while a substantial proportion of employees are not in severe distress, non-trivial subsets are experiencing clinically relevant levels of depression, anxiety and stress, particularly anxiety.

Psychological / Emotional Well-Being

Table 5 summarises descriptive statistics for total psychological well-being and for each PWB subscale.

Table
Descriptive Statistics for Psychological Well-Being Scores (N = 500)

Scale	Mean	SD	Min	Max	Theoretical Range
Total Psychological Well-Being	148.19	8.64	119	175	–
Autonomy	24.92	3.60	13	35	7–42
Environmental Mastery	25.12	3.48	14	37	7–42
Personal Growth	24.22	3.41	16	36	7–42
Positive Relations with Others	25.02	3.50	15	35	7–42
Purpose in Life	24.09	3.44	14	34	7–42
Self-Acceptance	24.82	3.52	13	35	7–42

At the group level, employees report moderately high psychological well-being, with the mean total PWB score of 148.19 and subscale means clustered in the mid-20s. The observed ranges suggest substantial variability, indicating that while many employees feel relatively autonomous, competent, growing, connected, purposeful and self-accepting, others report difficulties in some of these domains.

Gender Differences in Mental Health and Well-Being

Gender-wise comparisons for mental health and well-being indices are presented in Table 6 (non-binary/other-gender respondents were included in descriptive analyses but excluded from t tests due to small numbers).

Table
Gender Differences in DASS and PWB Total Scores

Scale	Mean (Male)	SD (Male)	Mean (Female)	SD (Female)	t	Approx. p
Depression	14.86	5.61	13.95	5.70	1.75	.079
Anxiety	14.95	5.16	14.90	5.32	0.11	.915
Stress	13.73	5.29	14.94	5.39	-2.47	.013
Total DASS	43.55	8.87	43.80	8.80	-0.31	.756
Total PWB	148.30	8.25	148.12	9.23	0.22	.828

The mean depression and anxiety scores are very similar for male and female employees, with no statistically significant differences. In contrast, stress is significantly higher among women ($t = -2.47, p = .013$), indicating that female employees report more stress than their male counterparts. Total DASS and Total PWB scores do not differ significantly by gender.

These results provide partial support for H1: gender differences are evident for stress, but not for depression, anxiety or overall distress. H2 is not supported, as there is no meaningful gender difference in overall psychological well-being.

Relationships Between Mental Health and Psychological Well-Being

Pearson correlations among key mental health and well-being indices are summarised in Table 7.

Table
Pearson Correlations Among Mental Health and Well-Being Indices

7

Variable	DASS_D	DASS_A	DASS_S	DASS_Total	PWB_total
DASS_D	1.000	-0.031	-0.079	0.573	-0.004
DASS_A	-0.031	1.000	-0.052	0.543	-0.064
DASS_S	-0.079	-0.052	1.000	0.520	0.032
DASS_Total	0.573	0.543	0.520	1.000	-0.022
PWB_total	-0.004	-0.064	0.032	-0.022	1.000

Note. Coefficients for PWB subscales (Autonomy, Environmental Mastery, Personal Growth, Positive Relations, Purpose, Self-Acceptance) show modest positive correlations with PWB_total ($r \approx .37-.47$) and near-zero correlations with DASS indices in the original dataset.

The three DASS subscales each show moderate positive correlations with the Total DASS score ($r \approx .52-.57$), confirming that they contribute coherently to an overall distress index. However, intercorrelations among the subscales themselves are small in magnitude ($|r| < .10$), suggesting that depressive, anxious and stress-related symptoms may not overlap strongly in this dataset.

Total PWB is moderately correlated with each PWB subscale ($r \approx .37-.47$), reflecting the coherence of the well-being construct. Cross-domain correlations between DASS indices and PWB indices are generally small and close to zero, indicating that higher distress does not strongly co-occur with lower well-being at the statistical level. This pattern does not support H3 in the sense of strong linear relationships, but it is consistent with a dual-continuum model in which psychological distress and psychological well-being represent related yet largely distinct dimensions of mental health.

Discussion and Conclusion

This study examined mental health and psychological well-being among 500 employees from diverse sectors in India, using the DASS-21 and Ryff's Psychological Well-Being scales within a dual-continuum framework. Five main findings emerge.

First, employees reported mild-to-moderate levels of depression, anxiety and stress, with anxiety appearing particularly elevated. Almost half of the respondents fell into the moderate category for depression, and nearly two-thirds fell into moderate, severe or extremely severe categories for anxiety. Even when not reaching severe levels, such symptom burdens can negatively affect concentration, decision-making, interpersonal functioning and productivity (WHO, 2022).

Second, employees displayed moderately favourable psychological well-being, with the total PWB score and subscale means indicating that many employees experience autonomy, environmental mastery, opportunities for growth, positive relations, purpose and self-

acceptance. However, the wide score ranges suggest heterogeneity: some employees are clearly flourishing, while others may be languishing or struggling in particular domains of functioning (Keyes, 2002; Ryff, 1989).

Third, gender differences in mental health are nuanced rather than uniform. Women report significantly higher stress than men, a pattern consistent with literature on the “double burden” of paid work and unpaid caregiving, and with unequal expectations regarding emotional and organisational labour (Patel et al., 2018). At the same time, no significant gender differences were observed for depression, anxiety or overall distress. This suggests that, in this sample, both male and female employees experience comparable levels of internalised distress, even though women may feel more pressure and tension in managing multiple roles.

Fourth, in terms of positive functioning, no gender difference was observed in total psychological well-being. Despite higher stress, women and men reported similar levels of autonomy, mastery, personal growth, positive relationships, purpose and self-acceptance. This may reflect the mobilisation of psychological and social resources such as family support, peer relationships, and meaning derived from work that enable both genders to sustain well-being, even under stress (Chopra & Selvaraj, 2018; Huppert, 2009).

Fifth, the correlational analyses showed small associations between distress and well-being indices, with near-zero correlations between DASS scores and PWB scores. This pattern indicates that low distress does not automatically imply high well-being, and that individuals can simultaneously exhibit certain symptoms while also experiencing a degree of flourishing in other areas of life.

Taken together, these findings support a dual-continuum perspective (Keyes, 2002, 2005). In this employee population, mental health cannot be fully captured by a single “illness–health” continuum. Instead, psychological distress (depression, anxiety, stress) and psychological well-being (autonomy, mastery, growth, relations, purpose, self-acceptance) appear as distinct but coexisting dimensions.

Theoretical and Practical Considerations

The present results add to the growing literature emphasising that organisational mental health strategies must address both dimensions of mental health:

- Reducing psychological distress (e.g., through workload management, role clarity, fair remuneration, and access to professional help).
- Enhancing psychological well-being (e.g., by fostering autonomy, growth opportunities, supportive relationships and meaningful work) (Bakker & Demerouti, 2017; Huppert, 2009; Page & Vella-Brodrick, 2009).

From a theoretical standpoint, the weak correlations between distress and well-being reinforce the idea that prevention-oriented interventions and positive psychology interventions are complementary rather than interchangeable. A programme that effectively reduces stress may not necessarily increase employees’ sense of purpose or personal growth; conversely, initiatives that build strengths or meaning may not fully address underlying anxiety or depression. The dual-continuum model offers a useful lens for conceptualising such multi-dimensional outcomes.

The gender findings also invite a more gender-sensitive reading of employee mental health. Women's higher stress suggests ongoing challenges in balancing professional and personal roles and perhaps in negotiating organisational cultures that may not be fully inclusive or supportive of their circumstances. At the same time, the parity in overall well-being implies that women draw on substantial internal and external resources, suggesting resilience as well as strain. Policies that enhance flexibility, support caregiving responsibilities and redistribute emotional and administrative labour more equitably could help address this imbalance, while benefitting all employees.

Methodological Reflections and Future Directions

While the study provides a rich quantitative picture of employee mental health and well-being, several methodological points are worth noting when interpreting the results and designing future work.

The cross-sectional design offers only a snapshot in time and does not permit causal inferences about how workplace factors shape distress and well-being. Longitudinal research could track how changes in organisational practices, job roles or life circumstances influence trajectories of mental health and flourishing.

The data rely on self-reports, which can be influenced by social desirability and subjective perceptions. Future studies could complement self-report scales with additional indicators, such as behavioural performance metrics, absenteeism records or clinician-rated assessments, to triangulate findings.

The sample, though diverse in terms of sector and organisational type, is relatively well educated and likely over-represents formal employment. Informal, gig and precarious workers who may face different stressors and resources are underrepresented. Broader sampling across employment types and regions would enhance the generalisability of findings.

Finally, the study focuses on outcomes (distress and well-being) rather than detailed precursors such as job demands, job resources, work-family conflict and organisational climate. Integrating these variables in future models, for instance using the Job Demands-Resources framework (Bakker & Demerouti, 2017), would clarify which aspects of work most powerfully influence both distress and well-being and for whom.

Concluding Remarks

In conclusion, this study demonstrates that Indian employees experience non-trivial levels of depression, anxiety and stress alongside moderately favourable yet varied levels of psychological well-being. Gender differences are modest but notable, with women experiencing higher stress yet maintaining comparable psychological well-being to men. Most importantly, the weak associations between distress and well-being indices underscore that mental health in the workplace cannot be understood solely as the absence of illness.

Organisations seeking to promote sustainable performance and humane work environments must therefore develop integrated approaches that prevent and alleviate distress while simultaneously cultivating flourishing. By aligning workplace structures, cultures and policies with a dual-continuum understanding of mental health, employers can better support

employees not only in avoiding breakdown but in living meaningful, engaged and psychologically rich working lives.

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