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Work-Life Balance and Mental Well-Being among Banking Employees: Effects of Emotional Intelligence, Social Media Use and Natural Health-Based Interventions

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ABSTRACT: High-performance demands, high customer contact, a rapid pace of technological change, and high levels of overlap between occupational and personal life characterize banking work. This investigation aimed to examine the association between emotional intelligence and two different social media usage patterns with work-life balance and mental health, and to evaluate a structured nature-based program for bank employees. Phase I involved a three-wave survey of 512 public and private bank employees in India, with 438 providing complete longitudinal data for analysis. A total of 160 employees participated in the eight-week randomized study with an active comparison condition in Phase II. Confirmatory factor analysis and structural equation modelling were used to test survey hypotheses, while intention-to-treat linear mixed-effects models were used to analyse intervention outcomes. Emotional intelligence was positively related to work-life balance ($\beta = .38, p < .001$) and mental well-being ($\beta = .22, p < .001$), and work-life balance was positively related to mental well-being ($\beta = .41, p < .001$). Problematic social media use was negatively associated with work-life balance ($\beta = -.29$) and mental well-being ($\beta = -.18$), and functional use was positively associated with mental well-being ($\beta = .17$). Participants in the nature-based condition improved more than those in the active control on both outcomes. The results collectively suggest the importance of emotional resources, conscious digital behaviors, and opportunities for recovery at work.

1. INTRODUCTION

In digitally intensive service environments, where workers are expected to be available at all times, manage performance, and interact with customers emotionally, mental health is becoming a growing occupational-health concern. These pressures are particularly evident in the banking sector, where employees regularly deal with customer demands, financial responsibilities, technological processes, performance metrics, and interpersonal dynamics. Vinod and Ambatipudi (2024) found significant levels of stress and burnout among 282 bank employees in South India and found working time and job-related factors to be relevant correlates. This evidence suggests that work-life balance may be a significant pathway for employees to conserve psychological resources and function in both work and non-work roles.

Work-life balance is a measure of how well an employee can perform in both their work and personal roles without constant conflict between the two. In today's banking environment, this balance can be disrupted as work communication is often outside of the normal working hours, via email, messaging systems, enterprise social media and mobile systems. In a systematic review of extended work-related availability, Renk and Sutter (2026) found that continued availability was associated with increased work-family conflict and negative health outcomes such as stress, burnout, and reduced well-being. Banking research also suggests that work-life conflict can negatively impact well-being and, in turn, performance, satisfaction, citizenship behavior, and turnover intentions (Nguyen & La, 2026).

Emotional intelligence (EI) is a psychological ability that could be helpful for employees to manage these demands as it relates to the recognition, interpretation, use, and regulation of emotions. In a comprehensive meta-analysis, Chen et al. (2025) found significant relationships between EI and organizational outcomes, satisfaction, social support, and stress-related measures. Indian studies also link work-life balance with mental health and find EI as a relevant tool in managing the work-life interface (Begum, 2024). Using the Wong and Law Emotional Intelligence Scale, Hemade et al. (2025) further showed that work-life balance can help explain how EI is associated with work outcomes.

Social media can be a resource or a strain, depending on how it is used. Information sharing, work coordination, networking, social connection and emotional support can be supported by purposeful use. Intrusive or compulsive involvement, on the other hand, can lead to greater distraction, overload, boundary violation, and attention and energy depletion. Bodhi et al. (2024) discovered that psychological and social well-being were positively linked to work-related and social-oriented social media use among knowledge-intensive service employees. On the other hand, Gao and Shao (2024) found that problematic social media use is a new risk factor for employee and psychological outcomes. Song and Kim (2026) also found that high levels of enterprise social media use can lead to communication overload and boundary-management stress, which are associated with exhaustion and reduced well-being.

Activities related to nature are a potentially modifiable source of recovery that can be facilitated by organizations. Based on 64 systematic reviews, Shrestha et al. (2025) found that NbIs have potential for mental health and well-being, but the impact depends on the type of intervention and context. McDonnell and Strayer (2024) found experimental evidence that a low-intensity walk in a natural setting resulted in higher positive affect and distinct attentional-restoration responses compared to a similar walk in an urban setting. Similarly, in the workplace, Valor et al. (2024) reported that exposure to indoor nature was linked to job and overall well-being via restorative energy or vigor.

While all of these areas have evolved, they are not often studied in tandem in banking research. Much of the banking literature focuses on stress and burnout, not positive mental health; social media is often viewed as a single exposure, when there can be both positive and negative patterns; and observational studies rarely involve an intervention to test a practical recovery strategy. The present study aims to overcome these limitations by integrating a time-lagged structural model with a randomized, active-controlled nature-based intervention.

1.1 Objectives of the Study

- To examine how work-life balance is associated with the mental well-being of employees working in the banking sector.
- To determine the direct effect of emotional intelligence on mental well-being and its indirect effect through work-life balance.
- To differentiate functional social media use from problematic social media use and examine whether these two forms of use are differently related to employee well-being.
- To assess whether work-life balance serves as a mediating pathway between emotional intelligence, problematic social media use, and mental well-being.
- To examine whether emotional intelligence reduces the adverse influence of problematic social media use on employees' work-life balance.
- To evaluate whether participation in an eight-week nature-based intervention results in greater improvements in work-life balance and mental well-being compared with an active-control condition.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Theoretical Foundation

The study combines Job Demands-Resources (JD-R) theory, Conservation of Resources (COR) theory, work-family boundary perspectives, and restorative-environment theory. According to JD-R theory, employee functioning is determined by the balance between the demanding aspects of work and the resources that enable people to achieve goals, learn, cope, and recover (Bakker & Demerouti, 2017). COR theory also emphasizes the acquisition and protection of valued resources and suggests that strain arises when valued resources are threatened, lost, or not replenished adequately (Hobfoll et al., 2018).

In the proposed framework, EI is considered a personal resource, work-life balance is considered an effective distribution of resources across life domains, and contact with nature is considered a contextual recovery resource. Social media is conceptualized as a two-sided digital factor, with functional use potentially providing informational and relational resources, and problematic use potentially generating demands through repeated checking, interruption, overload, and expectations of availability outside of work hours. Boundary theory (Clark, 2000) can be used to understand how digitally mediated demands can cross over from the occupational to the personal domain, and attention-restoration theory (Kaplan, 1995) can be used to understand how natural settings can replenish directed attention and reduce mental fatigue. These proposed pathways and directions are summarized in Figure 1.

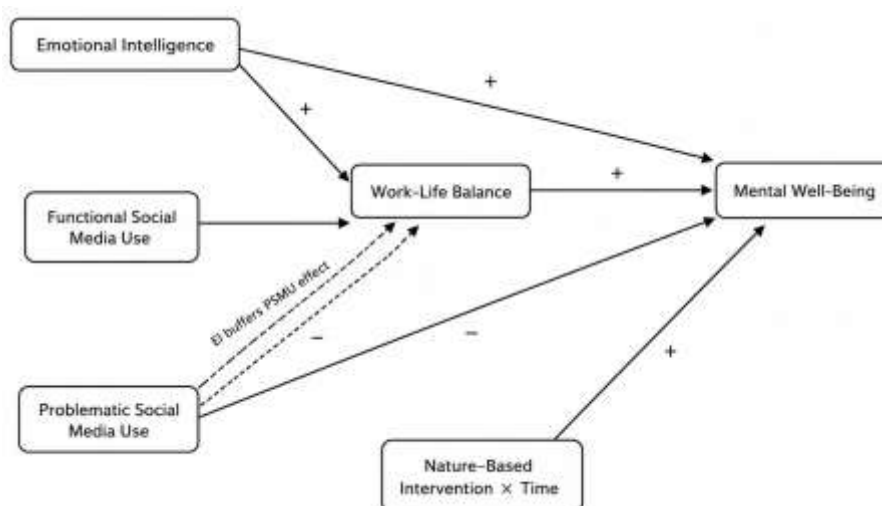


Figure 1: Integrated conceptual model

Note. EI = emotional intelligence; PSMU = problematic social media use.

2.2 Work-Life Balance and Mental Well-Being

Work-life balance can safeguard time, energy and opportunities for recovery, family life, health activities and social engagement. Instead, frequent work encroachments on non-work time can lead to role conflict, poor psychological detachment, fatigue, and reduced positive well-being. Nguyen and La (2026) identified work-life conflict among bank employees as a factor associated with reduced well-being and job outcomes, and Begum (2024) identified positive relationships between work-life balance and mental-health indicators among Indian managers. These results support the notion that good balance conserves resources for healthy psychological functioning.

H1: There is expected to be a positive relationship between work-life balance and mental well-being of banking employees.

2.3 Emotional Intelligence, Work-Life Balance and Mental Well-Being

Those who are more emotionally intelligent may be better able to identify stress early on, manage their response to stress more effectively, deal with interpersonal stress more constructively, and minimize the transfer of negative work experiences into their personal lives. The findings of the meta-analysis conducted by Chen et al. (2025) corroborate the relevance of EI as a generic occupational resource, while Begum (2024) highlights the relevance of EI in the context of work-life balance and mental health

of Indian managers. Hemade et al. (2025) also found that dimensions of work-life balance mediated the association between EI and job satisfaction, providing additional support for a work-life pathway.

H2: There is expected to be a positive relationship between emotional intelligence and work-life balance.

H3: Emotional intelligence is expected to show a positive relationship with mental well-being.

H4: It is hypothesized that part of the positive relationship between emotional intelligence and mental well-being will be mediated by work-life balance.

2.4 Functional and Problematic Social Media Use

A key aspect of this study is that it differentiates between the quantity of social media use and the quality and/or purpose of social media use. Functional use is defined as intentional communication, information exchange, professional help, networking, and supportive social interaction. Bodhi et al. (2024) discovered that work-oriented and socially oriented use can be beneficial for psychological and social well-being. Experimental studies on social-media microbreaks also indicate that short-term social media use can have context-dependent recovery effects, but it does not necessarily replenish depleted resources (Grobelny et al., 2024).

Problematic social media use is different because it is intrusive, compulsive, or difficult to control and disrupts important aspects of life. Gao and Shao (2024) provided an overview of the evidence of negative employee and psychological consequences of such use. Song and Kim (2026) found that communication overload and boundary-management strain are workplace mechanisms by which enterprise social media can negatively impact well-being. In line with this, Renk and Sutter (2026) discovered that longer digital access to work is associated with work-family conflict and negative health outcomes.

H5a: Positive relationship is expected between functional social media use and mental well-being.

H5b: Problematic social media use is hypothesized to be negatively associated with work-life balance.

H5c: Mental well-being is expected to be negatively related to problematic social media use.

H6: The relationship between problematic social media use and mental well-being is hypothesized to be partially mediated by poorer work-life balance.

Those who have higher EI may be more likely to control frustration that comes from digital communication, to not be impulsive in checking, and to keep emotional spillover in check. Based on this, it is expected that EI will decrease, but not necessarily eliminate, the negative relationship between problematic social media use and work-life balance.

H7: The relationship between problematic-social-media-use and work-life-balance is expected to be less negative at higher levels of emotional intelligence.

2.5 Nature-Based Health Intervention

Natural environments can aid recovery by providing a change of focus, reducing stress, enhancing positive emotions, and providing psychological disconnection from work. Shrestha et al. (2025) conducted an evidence review of NbS approaches and highlighted that effectiveness can vary based on factors like dose, setting, and participant characteristics. McDonnell and Strayer (2024) conducted a randomized study that revealed that a 40-minute walk in nature resulted in greater increases in positive affect and distinct executive-attention responses compared to an urban walk. In a two-wave panel study, Valor et al. (2024) also found that workplace nature exposure was associated with employee well-being via vigor.

The intervention therefore views exposure to nature as an opportunity for recovery, which can be structured and supported by an organization, but not as a substitute for appropriate workload, staffing, or boundary-management practices.

H8a: Nature-based condition employees are expected to show greater improvement in mental well-being than active-control condition employees.

H8b: It is expected that employees in the nature-based condition will make greater progress in work-life balance than employees in the active-control condition.

Table 1 brings together the study hypotheses and the predicted direction of each effect.

Table 1. Summary of hypotheses

Hypothesis	Proposed relationship	Expected direction
H1	Work-life balance → Mental well-being	Positive
H2	Emotional intelligence → Work-life balance	Positive
H3	Emotional intelligence → Mental well-being	Positive
H4	EI → WLB → Mental well-being	Positive indirect
H5a	Functional social media use → Mental well-being	Positive
H5b	Problematic social media use → WLB	Negative
H5c	Problematic social media use → Mental well-being	Negative
H6	Problematic SMU → WLB → Mental well-being	Negative indirect
H7	EI × Problematic SMU → WLB	Buffering
H8a	Intervention × Time → Mental well-being	Positive
H8b	Intervention × Time → Work-life balance	Positive

3. MATERIALS AND METHODS

3.1 Research Design

The research was conducted in two stages. Phase I involved three survey waves at different time points to test the proposed relationships between EI, social media behavior, work-life balance, and mental well-being. Demographic and occupational data, EI, functional social media use, and problematic social media use were collected at Time 1, work-life balance was assessed at Time 2, and mental well-being was measured at Time 3. The measures were split between occasions, which decreased reliance on a single concurrent self-report measure. Phase II was a two-group, randomized, active control, 8-week intervention with pre-, post-, and 4-week follow-up assessments.

3.2 Study Setting

The participants were selected from the bank branches of public and private banks in urban and semi-urban areas of India. The branch mix was selected to reflect variations in ownership, seniority, customer-facing roles, and organizational context, while still focusing on banking employees.

3.3 Study Population and Eligibility

For Phase I, eligible participants were full-time employees aged at least 18 years who had worked in a participating bank for six months or longer. Phase II also stipulated that workers be able to safely engage in low to moderate intensity walking. Those who were not able to walk were not included in that component unless they had medical clearance.

3.4 Sample Size and Sampling Technique

The sampling was done using a stratified multistage sampling technique that involved employees from public and private banks and managerial and non-managerial positions. A total of 560 employees were invited to participate, with 523 agreeing to participate and 512 returning valid Time-1 questionnaires (91.4% baseline response rate). The number of participants at Time 2 was 474 and at Time 3 was 451, with 438 employees remaining after linkage and quality screening. A total of 160 eligible employees were randomly assigned to the nature-based program ($n = 80$) and active control ($n = 80$) in Phase II. The intention-to-treat analysis included all randomized subjects.

3.5 Measures

EI was measured using the Wong and Law Emotional Intelligence Scale (WLEIS) (Wong & Law, 2002), which includes 16 items on appraisal of one's own emotions, appraisal of others' emotions, use of emotion, and emotion regulation. Work-life balance was assessed using Hayman's (2005) instrument which included work interference with personal life, personal-life interference with work, and enhancement between work and personal roles. Positive mental well-being was assessed with the five-item WHO-5 Well-Being Index, which was converted to a 0-100 scale with higher scores reflecting greater well-being (Topp et al., 2015). The Bergen Social Media Addiction Scale (Andreassen et al., 2017) was used to assess problematic social media use. Functional social media use was measured using purpose-oriented items based on recent organizational social-media research (Bodhi et al., 2024) that included work communication, information sharing, professional support, networking, and supportive interaction. An overview of the measures and their analytical roles is given in Table 2.

Table 2. Measurement framework

Construct	Measure/operationalization	Role
Emotional intelligence	Wong and Law Emotional Intelligence Scale (16 items)	Personal resource/predictor
Work-life balance	Hayman Work-Life Balance Scale	Mediator and intervention outcome
Mental well-being	WHO-5 Well-Being Index (0–100)	Primary outcome
Problematic social media use	Bergen Social Media Addiction Scale	Digital-demand predictor
Functional social media use	Purpose-focused organizational SMU items	Digital-resource predictor
Occupational covariates	Bank type, job level, tenure, weekly hours, commute	Controls

3.6 Nature-Based Intervention

The nature-based program consisted of three sessions per week for 8 weeks for employees assigned to the program. Each session consisted of approximately 5 minutes of breathing or attentional orientation to nature, 25-30 minutes of low to moderate walking in a green environment, and 5 minutes of quiet observation or recovery. The active-control group walked in similar built environments as the active-intervention group, but the walking was not structured to include the nature-attention component. This comparison was designed to distinguish the impact of natural surroundings from the impact of walking, social

interaction, and the advantage of a planned break. The protocol was based on recent reviews and randomized evidence on nature-based walking (McDonnell & Strayer, 2024; Shrestha et al., 2025).

3.7 Intervention Fidelity and Safety

Monitoring implementation was done by attendance, session length, adherence, perceived naturalness of the setting, potential contamination between conditions, participant satisfaction, and adverse events. Participants were instructed to refrain from using their smartphones during sessions to prevent digital activity from interfering with the intended recovery period. All health problems that arose during a session were recorded and dealt with in accordance with the study safety procedures.

3.8 Data Management and Confidentiality

The analysis data set was de-identified, and repeated survey responses were linked using coded identifiers. Contact information needed for follow-up was stored separately from questionnaire responses. Results were only presented in summary format and no individual responses were given to bank managers. The social-media component was based on self-reported patterns and purposes of use and indicators of problematic engagement; no social-media account passwords, credentials, private messages, or message content were collected.

3.9 Statistical Analysis

Initial analyses included evaluation of missing data, attrition, unusual observations, distributional characteristics, descriptive statistics, and pairwise associations. Confirmatory factor analysis, standardized item loadings, Cronbach's alpha, McDonald's omega, composite reliability (CR), average variance extracted (AVE), and heterotrait-monotrait (HTMT) ratios were used to assess the measurement model.

Covariance-based structural equation modelling was used to estimate the hypothesized structural relationships. Standardized direct and indirect coefficients were presented with standard errors, exact p values, and 95% confidence intervals. 5,000 bootstrap samples were used to test indirect effects. Moderation by EI was evaluated from the interaction between centered EI and problematic social media use, followed by simple-slope estimates at one standard deviation below the EI mean, at the mean, and one standard deviation above it.

The intention-to-treat principle was used to analyse intervention outcomes using linear mixed-effects models with fixed effects for group, assessment time, and the group by assessment time interaction. Estimated marginal means, adjusted between-group differences, 95% confidence intervals, p values, and standardized effect sizes were used to summarize results.

4. RESULTS AND DISCUSSION

4.1 Participant Demographic and Occupational Characteristics

At baseline, the survey included 512 banking employees whose mean age was 36.84 years (SD = 8.41). The sample was split fairly evenly between men and women, and included workers from both public and private banks. The mean job tenure was 9.26 years (SD = 6.74), the mean number of hours worked per week was 47.30 (SD = 6.80), and the mean number of hours spent on social media per day was 2.71 (SD = 1.34). The complete demographic and occupational description is provided in Table 3.

Table 3. Participant demographic and occupational characteristics (N = 512)

Characteristic	Category/statistic	n	%
Age (years)	Mean $\pm$ SD	36.84 $\pm$ 8.41	—
Gender	Male	256	50.0
	Female	250	48.8
	Other/prefer another description	6	1.2
Marital status	Married	329	64.3

Characteristic	Category/statistic	n	%
	Unmarried/other	183	35.7
Dependents	Yes	301	58.8
	No	211	41.2
Bank ownership	Public sector	278	54.3
	Private sector	234	45.7
Job level	Managerial	181	35.4
	Non-managerial	331	64.6
Job tenure (years)	Mean $\pm$ SD	9.26 $\pm$ 6.74	—
Weekly working time (hours)	Mean $\pm$ SD	47.30 $\pm$ 6.80	—
Daily social-media use (hours)	Mean $\pm$ SD	2.71 $\pm$ 1.34	—

4.2 Descriptive Statistics and Correlations

Correlations were in the expected direction. Higher EI was related to higher work-life balance and mental well-being, while higher problematic social media use was related to lower scores on both outcomes. Smaller positive correlations were found between functional social media use and work-life balance and mental well-being. The descriptive values and the correlation of the five main constructs are presented in Table 4.

Table 4. Descriptive statistics and correlations among focal constructs (n = 438)

Variable	M	SD	1	2	3	4	5
1. Emotional intelligence	4.92	.83	—				
2. Work-life balance	3.32	.62	.46**	—			
3. Mental well-being	57.8	15.4	.43**	.52**	—		
4. Functional SMU	3.68	.76	.21**	.18**	.24**	—	
5. Problematic SMU	2.41	.81	-.19**	-.39**	-.36**	.10*	—

Note. * $p < .05$. ** $p < .01$. SMU = social media use. [Clarification: Mental well-being is presented as the WHO-5 transformed score on a 0–100 metric; all remaining constructs are reported using their own scale-specific scoring.]

4.3 Reliability and Measurement Model

The five-construct measurement model showed acceptable fit, $\chi^2(449) = 823.41$, CFI = .952, TLI = .946, RMSEA = .044, 90% CI [.040, .048], and SRMR = .044. Standardized factor loadings were between .66 and .87. All reliability estimates were above .84, CR values were above .86, and AVE values were above .55. The highest HTMT value was .78, which is considered satisfactory separation between the constructs. The results of reliability and convergent validity are presented in Table 5.

Table 5. Reliability and convergent validity

Construct	α	ω	CR	AVE	Loading range
Emotional intelligence	.91	.92	.92	.60	.69–.86
Work-life balance	.88	.89	.89	.58	.67–.84
Mental well-being	.86	.87	.88	.59	.71–.85
Functional social media use	.84	.85	.86	.55	.66–.82
Problematic social media use	.89	.90	.90	.61	.72–.87

4.4 Hypothesis Testing

The model accounted for 42% of the variability in work-life balance ($R^2 = .42$) and 48% of the variability in mental well-being ($R^2 = .48$). Direct paths, mediated effects, and the interaction test are summarized in Table 6.

Table 6. Structural model and hypothesis tests

H	Relationship	β	SE	95% CI	p	Decision
H1	WLB $\rightarrow$ Mental well-being	.41	.05	[.31, .51]	< .001	Supported
H2	EI $\rightarrow$ WLB	.38	.05	[.28, .47]	< .001	Supported
H3	EI $\rightarrow$ Mental well-being	.22	.05	[.12, .32]	< .001	Supported
H4	EI $\rightarrow$ WLB $\rightarrow$ Mental well-being	.16	.03	[.10, .23]	< .001	Supported
H5a	Functional SMU $\rightarrow$ Mental well-being	.17	.05	[.07, .27]	.001	Supported

H	Relationship	β	SE	95% CI	p	Decision
H5b	Problematic SMU $\rightarrow$ WLB	-.29	.05	[-.39, -.19]	< .001	Supported
H5c	Problematic SMU $\rightarrow$ Mental well-being	-.18	.05	[-.28, -.08]	< .001	Supported
H6	Problematic SMU $\rightarrow$ WLB $\rightarrow$ Mental well-being	-.12	.03	[-.18, -.07]	< .001	Supported
H7	EI $\times$ Problematic SMU $\rightarrow$ WLB	.14	.05	[.04, .24]	.006	Supported

4.5 Work-Life Balance and Mental Well-Being

H1 was supported as work-life balance was a significant positive predictor of mental well-being ($\beta = .41$, 95% CI [.31, .51], $p < .001$). This effect implies that the capacity to control work and non-work demands can save time and energy for recovery and psychological disengagement. This aligns with banking evidence showing that work-life conflict is linked to reduced well-being (Nguyen & La, 2026) and with Indian studies that found better work-life balance is correlated with better mental-health outcomes (Begum, 2024).

4.6 Emotional Intelligence: Direct and Indirect Effects

EI significantly predicted both work-life balance ($\beta = .38$, $p < .001$) and mental well-being ($\beta = .22$, $p < .001$), supporting H2 and H3. The bootstrapped pathway from EI to mental well-being via work-life balance was also significant ($\beta = .16$, 95% CI [.10, .23], $p < .001$), supporting H4. So, EI was linked to well-being both directly and indirectly via improved work and personal role management. This interpretation is in line with the EI meta-analysis reported by Chen et al. (2025) and mediation evidence from Hemade et al. (2025).

4.7 Functional and Problematic Social Media Use

Functional social media use was positively related to mental well-being ($\beta = .17$, $p = .001$), providing support for H5a. This coefficient was lower than the one for work-life balance and EI, but it suggests that there is a difference between purposeful digital engagement and dysfunctional use. This finding aligns with Bodhi et al. (2024), who found positive well-being pathways for work- and social-oriented social media use, and with experimental research indicating that the recovery value of brief social-media microbreaks is context-dependent (Grobelyny et al., 2024).

H5b and H5c were supported as problematic social media use predicted lower work-life balance ($\beta = -.29$, $p < .001$) and lower mental well-being ($\beta = -.18$, $p < .001$). A significant indirect effect through work-life balance was also observed ($\beta = -.12$, 95% CI [-.18, -.07], $p < .001$), supporting H6. These findings align with the findings of Gao and Shao (2024) in their review of negative employee outcomes and with Song and Kim (2026) in their description of communication overload and boundary-management stress as mechanisms that can negatively impact well-being. They also align with findings that work-related availability is associated with work-family conflict and reduced health outcomes when it is experienced over a longer period of time (Renk & Sutter, 2026).

4.8 Moderating Role of Emotional Intelligence

H7 was supported as the interaction between EI and problematic social media use became significant ($\beta = .14$, SE = .05, 95% CI [.04, .24], $p = .006$). Simple-slope estimates revealed the most negative association with work-life balance when EI was low

($\beta = -.40$, $p < .001$), a significant association when EI was average ($\beta = -.29$, $p < .001$), and a weaker association when EI was high ($\beta = -.17$, $p = .018$). EI thus diminished, but did not remove, the negative correlation. This trend warns against relying solely on individual emotional competencies to make up for unhealthy organizational digital behaviors.

4.9 Nature-Based Intervention Outcomes

All 160 randomized employees were included in the intention-to-treat analysis. Immediate post-intervention outcome data were collected from 152 participants (95.0%) and follow-up outcome data were collected from 149 (93.1%). The baseline scores were similar for both groups. Table 7 shows group means for each time point and the adjusted group-by-time effects.

Table 7. Intervention outcomes by group and assessment point

Outcome	Group	Baseline M $\pm$ SD	Post M $\pm$ SD	Follow-up M $\pm$ SD	Adjusted group $\times$ time	95% CI	p	Effect
Mental well-being	Nature	52.4 $\pm$ 14.1	65.8 $\pm$ 13.5	63.9 $\pm$ 13.8	8.90	[5.40, 12.40]	< .001	d = .67
	Active control	53.1 $\pm$ 13.8	57.2 $\pm$ 13.7	56.4 $\pm$ 13.9	—	—	—	—
Work-life balance	Nature	3.04 $\pm$.58	3.52 $\pm$.55	3.45 $\pm$.57	.33	[.19, .47]	< .001	d = .58
	Active control	3.08 $\pm$.61	3.19 $\pm$.59	3.17 $\pm$.60	—	—	—	—

In the nature-based group, mental well-being rose from 52.4 (SD = 14.1) at baseline to 65.8 (SD = 13.5) after the program and remained at 63.9 (SD = 13.8) at follow-up. The active-control group showed less improvement. The adjusted group $\times$ time contrast was 8.90 points, 95% CI [5.40, 12.40], $p < .001$, $d = .67$, supporting H8a. Work-life balance in the nature condition increased from 3.04 (SD = .58) to 3.52 (SD = .55) and was 3.45 (SD = .57) at follow-up; the adjusted interaction effect was .33, 95% CI [.19, .47], $p < .001$, $d = .58$, supporting H8b. Figures 2 and 3 show the change over time in mental well-being and work-life balance, respectively.

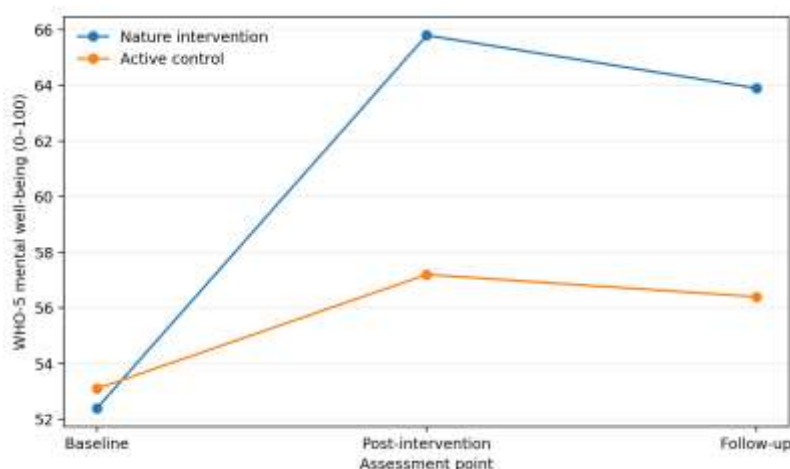


Figure 2: Mental well-being across the intervention period

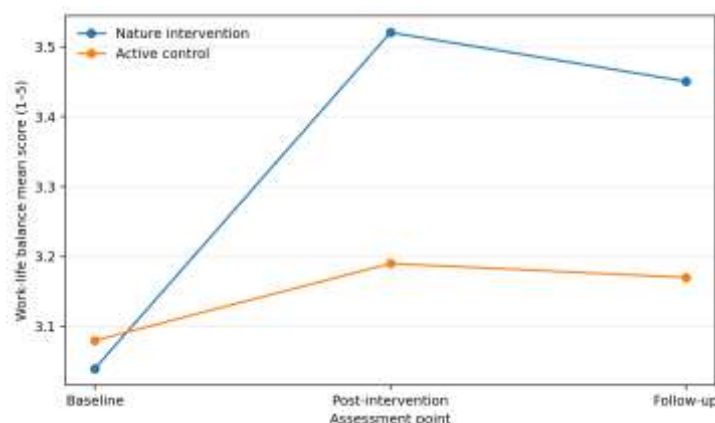


Figure 3: Work-life balance across the intervention period

The intervention outcomes align with the overall nature-based literature. Shrestha et al. (2025) identified nature-based interventions as a promising approach to mental health and well-being, and McDonnell and Strayer (2024) conducted an experimental study that revealed that walking in nature led to higher positive-affect recovery compared to walking in an urban environment. Valor et al. (2024) also connected nature exposure at work to well-being via vigor. The present study extends this reasoning to the banking sector, where workers might be especially likely to benefit from planned recovery, given the cognitive and interpersonal demands of their work.

4.10 Integrated interpretation of major findings

Combined, the results indicate a resource-based explanation of well-being among bank workers. The focal association with mental well-being was greatest with work-life balance, indicating that the process of managing competing work and personal roles is a significant psychological process and not just a lifestyle choice. EI was also a personal resource that was linked to balance and well-being, and some of its connection with well-being was mediated by work-life balance. The social-media outcomes were not homogeneous. Intentional, practical use was correlated with greater well-being, and problematic use was correlated with worse work-life balance and mental well-being. This trend counters the idea of digital exposure being viewed through the prism of screen time. In the case of banks, it means maintaining helpful communication and cooperation and minimizing intrusive, compulsive, and boundary-destroying connectivity patterns. The model is supplemented by the randomized intervention that introduces a practical recovery strategy. The employees who were put in the nature-based program made more improvements than the active walking condition, which means that the environmental context might have more benefits than movement and a scheduled break. Nevertheless, reasonable workloads, adequate staffing, supportive management, and clear expectations regarding after-hours communication should be supplemented by nature-based activities rather than substituted.

4.11 Theoretical Implications

The results indicate that digital communication is not necessarily good or bad from a JD-R perspective but rather depends on the purpose and pattern of use. Functional engagement can provide informational and relational resources, while problematic engagement can result in interruption, overload, and pressure at the work-life boundary.

The findings also reveal that work-life balance is a link between personal and digital factors and positive mental health. This interpretation is in line with COR theory, as balance allows employees to conserve and allocate scarce resources like time, emotional energy, and opportunities for recovery.

EI served two functions in the model: it was directly linked to desirable outcomes, and it buffered the negative problematic-social-media-use effect. Furthermore, the intervention results relate to the restorative-environment theory and demonstrate how an environmental recovery resource can be integrated into workplace health practice.

4.12 Practical implications for banking organizations

Banks can minimize digital stress by establishing clear expectations around response times, unnecessary communication outside of work hours, and how managers disconnect. The findings of Renk and Sutter (2026) and Song and Kim (2026) suggest that accessibility and the inability to control digital boundaries are occupational-health issues.

EI training can be part of leadership development, customer-service training, conflict-management programs, and other employee-development programs. It is important to focus on identifying emotions, managing responses, considering others' points of view, and adopting positive coping mechanisms, instead of viewing EI as a fixed trait.

Organizations can also consider planned breaks in green spaces, safe outdoor walking paths, green recovery spaces, workstations that look out onto green spaces, and brief nature-attention exercises. Previous studies indicate that biophilic workplace elements and direct exposure to nature can positively influence employee well-being (McDonnell & Strayer, 2024; Shrestha et al., 2025; Valor et al., 2024).

These individual and environmental strategies should be complemented by appropriate staffing, workload distribution, supportive supervision, and confidential access to mental-health services. Individual coping programs should not be used as an excuse for continuing to overload workloads or to expect constant availability.

5. CONCLUSION

This paper unites work-life balance, EI, functional and problematic types of social media use, and a nature-based intervention within a single framework of understanding mental well-being among bank employees. Work-life balance was a robust positive predictor of well-being; EI was directly and indirectly related to well-being via balance; and problematic social media use was associated with worse well-being, in part due to its negative association with work-life balance. In contrast, functional social media use demonstrated a small positive correlation with well-being.

The social-media findings suggest that the effects of digital use are contingent on how and why it is used and not on the use itself. Explicit boundary practices can help banks promote purposeful, professionally useful, and socially supportive communication and reduce unnecessary after-hours messaging, repeated checking, and communication overload. Social media can also help employees to save recovery time by being more mindful of their use and distinguishing between non-urgent work communication and personal time.

The nature-based program offers another organizational alternative, with participants experiencing more improvements in mental well-being and work-life balance compared to those who underwent the active walking control. In a broader sense, long-term employee well-being seems to be a matter of personal resources, healthier digital norms, supportive work design, safeguarded time off work, and available recovery opportunities.

5.1 Main Research Contribution

The primary contribution of the study is the assessment of personal resources (EI), digital resources and demands (functional and problematic social media use), work-life balance as an explanatory pathway, and a testable restorative intervention in the same design. The integration of these factors allows more integrated organizational inferences than methods that focus on one risk factor or rely on cross-sectional relationships.

5.2 Consequences for Banking Staff and Mental Health in the Workplace

The results indicate that for employees, emotion regulation, conscious digital habits, protection of work-life boundaries and regular recovery are important. For banking organizations, they emphasize responsibility for workload design, communication expectations, managerial practices, and access to restorative settings. Employee-level and organization-level actions should therefore complement each other, not be used as alternatives.

5.3 The relevance of the Natural Health Intervention

The nature-based element can be valuable as it can be provided at relatively low cost, can be scaled up to workplaces and can be integrated into short recovery times where safe green space is available. It is not designed to be a substitute for clinical support or organisational change where these are needed, but to provide structured opportunities for restoration during the working day.

5.4 Study Limitations

There are some limitations to be taken into account. The measures were largely self-reported, the sample was limited to the Indian banking sector, and social media behavior was measured by self-report. The intervention and follow-up periods were also relatively short, which limits inferences about persistence of effects. Individual preference for nature, access to green environments, climate and adherence may also have affected the results of the intervention.

5.5 Future Research Directions

Future studies might involve a longer observation period, objective and multisource measures of digital behavior, and banking employees from a broader range of settings. Comparative studies between public and private banks and demographic or occupational moderators would be useful. Longer NB programs could also be directly compared to mindfulness, exercise, and digital-detachment interventions. The evidence would be strengthened and more generalizable with multisite designs and preregistration.

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