

Combined Influence of Smartphone Overuse and Psychological Impact on Work–Life Balance Impairment among Urban Employees in Didwana - Kuchaman

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Abstract:

The rapid rise of smartphone dependency in professional environments has created new challenges for employees attempting to maintain a healthy work–life balance. This study examines whether smartphone overuse and psychological impact jointly predict work–life balance impairment among urban employees in Didwana - Kuchaman. Using a descriptive research design and data collected from 208 working professionals aged 25 to 45 years, the study applied multiple regression to assess combined predictors. The results show that smartphone overuse and psychological impact significantly predict work–life balance impairment, $F(2, 205) = 68.58, p < .001$, explaining 40.1 per cent of variance. Psychological impact emerged as the stronger predictor, $B = 0.648, t(205) = 10.37, p < .001$, while smartphone overuse became non-significant in the combined model. These findings highlight that employees' emotional fatigue, mental strain and difficulty disengaging from digital demands play a central role in shaping work–life imbalance. The study contributes valuable insights for organisations aiming to mitigate digital overload and strengthen wellbeing frameworks.

Keywords: Smartphone overuse, Psychological impact, Work–life imbalance, Digital stress, Behavioural predictors.

INTRODUCTION: DIGITAL BEHAVIOUR AND THE CHALLENGE OF WORK–LIFE BALANCE

The increasing integration of smartphones into professional life has reshaped how employees communicate, collaborate and access information. While smartphones enhance convenience, their excessive use often introduces subtle psychological pressures that erode personal boundaries. Research shows that continuous digital engagement can interrupt opportunities for mental rest, limit emotional recovery, and compress the space available for family interactions (Kushlev et al., 2016).

Employees in urban environments are particularly at risk because digital connectivity becomes intertwined with expectations of immediate availability. As work messages, alerts, and notifications continue beyond office hours, employees may struggle to disengage mentally from occupational roles, leading to difficulties in maintaining healthy boundaries (Derks & Bakker, 2014).

In Didwana - Kuchaman, workplaces across IT services, healthcare, education, and corporate sectors have embraced digital tools at increasing intensity. As digital workloads expand, smartphone overuse and its associated psychological effects may contribute to growing work–life conflict. Understanding how overuse interacts with psychological strain is essential to designing interventions that support employee well-being. This study, therefore, examines the combined influence of smartphone overuse

and psychological impact on work–life balance impairment, providing evidence for how digital habits and emotional responses jointly shape employees’ daily experience.

REVIEW OF LITERATURE

Smartphone overuse has been widely linked to behavioural and emotional consequences. Studies indicate that excessive smartphone engagement interferes with employees’ ability to detach psychologically from work, increasing cognitive load and emotional exhaustion (Thomé, 2018). Scholars have also highlighted that continuous connectivity restricts opportunities for leisure and personal restoration, reinforcing patterns of work–related intrusion into family life (Park et al., 2018). Psychological strain appears to be an important mediator in the relationship between digital behaviour and wellbeing. Research suggests that problematic smartphone use is associated with anxiety, depression, emotional fatigue and diminished capacity for concentration (Elhai et al., 2017). These psychological outcomes directly influence work–life balance, as employees experience greater difficulty managing boundaries when under emotional distress (Rozgonjuk et al., 2018).

Work–life balance literature further shows that technology-related stress reduces individuals’ ability to maintain distinct personal and professional roles. High digital workload and pressure to remain constantly available are recognised predictors of imbalance (van Laer & de Bloom, 2020). Several studies argue that the psychological dimension of digital behaviour, including stress and mental fatigue, contributes more significantly to imbalance than usage frequency alone (Busch & McCarthy, 2021).

Despite rising research interest globally, limited literature explores the combined predictive power of smartphone overuse and psychological impact in the context of Indian urban workplaces. The present study addresses this gap by examining how both variables jointly influence work–life balance impairment.

RESEARCH METHODOLOGY

a. Research Design

A descriptive research design was selected to analyse the combined influence of behavioural and psychological predictors.

b. Area of Study

The research was conducted in urban regions of Didwana -kuchaman.

c. Population

Working professionals employed in corporate, educational, healthcare and IT-enabled sectors formed the study population.

d. Sample Size

208 urban employees aged between 25 and 45 years participated.

e. Sampling Technique

Purposive non-probability sampling was applied to target individuals actively using smartphones for work purposes.

f. Data Collection Tool Likert Statement

Data were collected through a structured questionnaire containing three Likert-based instruments:

I. Smartphone Overuse Scale (SOS)

1. I frequently check my phone even during my personal time.
2. I find it difficult to reduce my phone usage even when I try.

3. My sleep routine is affected because of late-night phone use.
4. I feel uneasy or restless when my phone is not with me.
5. I often attend to work-related messages outside working hours.

II. Psychological Impact Scale (PIS)

6. I feel mentally tired because of continuous digital engagement.
7. Notifications and constant alerts make me feel emotionally overwhelmed.
8. My concentration at work reduces when I use my phone excessively.
9. I feel emotionally drained after prolonged periods of smartphone use.
10. I find it harder to relax due to frequent digital interaction.

III. Work–Life Balance Impairment Scale (WLB)

11. I struggle to maintain boundaries between my work and personal life.
12. My family or partner has expressed concern about my phone habits.
13. Work messages or calls often interrupt my personal or family time.
14. I find it difficult to mentally disconnect from work even at home.
15. I believe my smartphone habits negatively affect my work–life balance.

g. Research Objective

To evaluate whether smartphone overuse and psychological impact together serve as meaningful predictors of work–life balance impairment.

HYPOTHESIS TESTING

H₀₁: There is no significant impact of Smartphone overuse and psychological impact on work–life balance impairment.

a. Interpretation

The combined regression model reveals a substantial and statistically significant predictive relationship. When both variables are entered, psychological impact emerges as the dominant predictor, overshadowing the independent contribution of smartphone overuse. This suggests that the psychological burden resulting from digital behaviour exerts a more direct influence on work–life balance than overuse by itself. The strength of the model indicates that work–life imbalance is heavily shaped by emotional exhaustion, mental fatigue, and difficulty disengaging from digital interactions.

b. Results

Table 1.1: Model Summary

R	R ²	Adjusted R ²	Standard error of the estimate
0.63	0.401	0.401	1.02

Table 1.2: ANOVA

Model	df	F	p
Regression	2	68.58	<.001

Table 1.3: Coefficient

Model	Unstandard. Coef. B	Standard. Coef. Beta	Std. Error	t	p
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Model	Unstandard. Coef. B	Standard. Coef. Beta	Std. Error	t	p
Constant	1.02		0.24	4.19	<.001
SOS	-0.03	-0.03	0.07	-0.50	.621
PIS	0.65	0.65	0.06	10.36	<.001

A multiple regression indicated that smartphone overuse and psychological impact together significantly predicted work–life balance impairment, $F(2, 205) = 68.58, p < .001$, accounting for 40.1 per cent of the variance ($R^2 = .401$). Psychological impact was a significant predictor, $B = 0.65, t(205) = 10.36, p < .001$, whereas smartphone overuse was not significant within the combined model, $B = -0.03, t(205) = -0.50, p = .621$.

c. Decision

Because the regression model as a whole produced a p-value below 0.05, the null hypothesis is rejected. Together, smartphone overuse and psychological impact significantly predict work–life balance impairment, although psychological impact contributes most strongly.

d. Key Findings

1. The predictive strength of the model is substantial, explaining 40.1 per cent of the variation in work–life balance impairment.
2. Psychological impact is the primary determinant of work–life imbalance, while smartphone overuse becomes non-significant when both variables are considered simultaneously.
3. The regression equation for this model is:
WLB = 0.648(PIS) – 0.034(SOS) + 0.978
4. The findings suggest a potential mediating effect, where overuse affects work–life balance chiefly through its influence on psychological impact.

e. Conclusion

The combined influence of smartphone overuse and psychological impact provides a strong explanation for work–life balance impairment. The results demonstrate that psychological distress plays a pivotal role in shaping employees’ experiences of imbalance, overshadowing the direct effects of smartphone behaviour alone. This highlights the intertwined nature of digital habits and emotional well-being. The conclusion underscores the importance of recognising psychological strain as a core component of technological overload and reinforces the need for organisational and personal strategies that support healthier digital practices and emotional regulation.

SUGGESTIONS

The following were the suggestions derived from the research work done

1. Organisations should prioritise mental-health support programmes addressing digital strain.
2. Establishing clear protocols for after-hours communication can help reduce boundary intrusion.
3. Employees should be encouraged to practise digital mindfulness and scheduled device-free intervals.
4. HR policies must acknowledge psychological strain as a key component of technology-related stress.



5. Training programmes on emotional regulation and digital hygiene can improve work–life balance outcomes.
6. Workplaces may benefit from periodic assessments of digital overload and employee well-being.

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