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Balancing Flexibility and Digital Strain: How Job Satisfaction Connects Flexible Working Arrangements, Digital Fatigue, and Employee Engagement among Generation Z Employees

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Abstract: This study examines the effects of Flexible Working Arrangements and Digital Fatigue on Employee Engagement, with Job Satisfaction as a mediating variable among Generation Z employees in a public financial institution. A quantitative approach was employed using data collected through questionnaires from 182 respondents selected through purposive sampling. The data were analyzed using partial least squares structural equation modeling. The findings indicate that Flexible Working Arrangements positively affect Employee Engagement and Job Satisfaction, whereas Digital Fatigue negatively affects both variables. Job Satisfaction positively affects Employee Engagement and partially mediates the effects of Flexible Working Arrangements and Digital Fatigue on Employee Engagement. These findings emphasize the importance of providing appropriate work flexibility while controlling digital demands to enhance employees' satisfaction and engagement. The study also supports Social Exchange Theory by demonstrating that positive organizational practices encourage favorable employee responses, whereas excessive digital demands may weaken them.

Keywords: Flexible Working Arrangements, Digital Fatigue, Job Satisfaction, Employee Engagement, Generation Z.

INTRODUCTION

Employee engagement has become a strategic concern for organizations worldwide because it is closely associated with employee well-being, productivity, innovation, and organizational performance. According to the Gallup State of the Global Workplace 2025 Report, only 21% of employees worldwide are engaged at work, while 62% are not engaged and 17% are actively disengaged. This decline in engagement highlights the growing challenge organizations face in sustaining employee motivation and commitment amid rapid technological change and evolving work arrangements. Gallup further emphasizes that improving employee engagement is essential for organizational performance and long-term competitiveness in the digital economy.

Employee engagement is widely recognized as a critical driver of individual performance and organizational sustainability because engaged employees invest cognitive, emotional, and physical energy in their work roles (Kahn, 1990; Bakker & Demerouti, 2017). In an increasingly digitalized work environment, maintaining high employee engagement has become more challenging as organizations continuously adapt to technological change, hybrid work systems, and evolving workforce expectations. This issue is particularly relevant for Generation Z employees, who have entered the workforce during the digital era and place greater value on workplace flexibility, meaningful work, autonomy, and work–life integration than previous generations.

Digital transformation has fundamentally reshaped how organizations organize work, collaborate, and manage human resources. The widespread adoption of cloud-based technologies, digital communication platforms, and hybrid working systems has accelerated the implementation of flexible working arrangements (FWA), allowing employees greater flexibility regarding work schedules and locations. Organizations increasingly recognize Flexible Working Arrangements as a strategic human resource practice that can support employee well-being, workplace productivity, work–life balance, and organizational sustainability while responding to employees' evolving expectations (Carlson et al., 2010; Chung & Van der Lippe, 2020; Edeh et al., 2024; Onyekwelu et al., 2022). Nevertheless, although flexible work provides employees with greater autonomy, it also increases reliance on digital technologies, creating new challenges associated with intensive online interaction and continuous digital connectivity.

One of the most significant challenges emerging from digital work is digital fatigue, which refers to physical, cognitive, and emotional exhaustion resulting from prolonged technology use, excessive virtual communication, continuous notifications, and extended screen exposure. While digital technologies improve collaboration and operational efficiency, excessive digital demands may reduce employees' concentration, recovery opportunities, psychological well-being, and positive work attitudes (Wang et al., 2021; Dong et al., 2025). Consequently, organizations face the challenge of balancing the benefits of workplace flexibility with the unintended psychological consequences of digital work.

This challenge is also reflected in the organizational context of the present study. Internal organizational monitoring indicated a decline in employee engagement between 2023 and 2024 despite the implementation of flexible working practices. Preliminary survey results further revealed that although workplace flexibility was generally perceived positively, a considerable proportion of Generation Z employees experienced symptoms of digital fatigue. These findings suggest that workplace flexibility alone may not be sufficient to sustain employee engagement if the psychological consequences of intensive digital work are not adequately managed.

Social Exchange Theory provides a useful framework for explaining these relationships. The theory suggests that employees tend to reciprocate favorable organizational treatment with positive attitudes and behaviors (Ahmad et al., 2023). Within this perspective, workplace flexibility represents organizational support and a valuable resource that encourages employees to respond with higher job satisfaction and stronger engagement. Conversely, digital fatigue represents a psychological cost that may reduce employees' positive evaluations of their work and weaken reciprocal relationships between employees and organizations. Job satisfaction therefore functions as a proximal psychological mechanism through which employees evaluate organizational support and technology-related demands before translating these evaluations into employee engagement. Employees who experience greater job satisfaction are more likely to demonstrate vigor, dedication, and absorption, the three fundamental dimensions of employee engagement (Schaufeli & Bakker, 2010).

Previous studies generally support the positive relationship between workplace flexibility and employee engagement (Lee et al., 2024; Ghonim et al., 2025). Likewise, several studies

have shown that digital fatigue and digital stress negatively affect employees' well-being, job satisfaction, and work engagement (Bernburg et al., 2024; Dong et al., 2025). However, empirical findings remain inconsistent. While some studies report significant direct relationships, others suggest that these effects vary across organizational contexts, employee characteristics, and work environments. Furthermore, existing studies have primarily examined workplace flexibility and digital fatigue separately, resulting in limited understanding of how both variables simultaneously influence employee engagement.

Another important limitation concerns the role of job satisfaction. Previous research has frequently examined job satisfaction either as an antecedent or as an outcome of employee engagement. Comparatively few studies have positioned job satisfaction as the psychological mechanism through which workplace flexibility and digital fatigue jointly influence employee engagement. As a result, the process explaining how organizational resources and digital work demands shape employee engagement remains insufficiently understood.

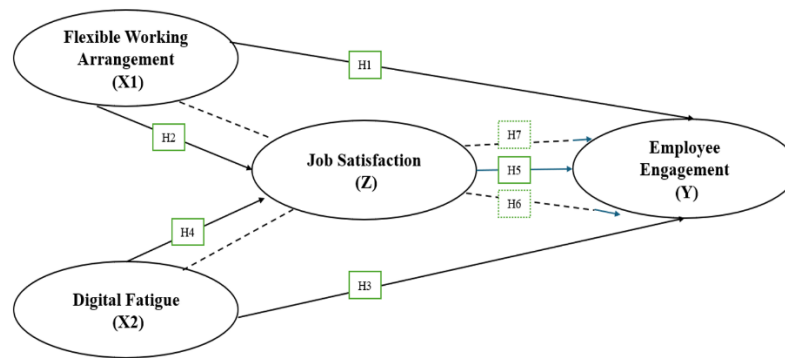
The present study addresses both contextual and theoretical gaps by integrating workplace flexibility, digital fatigue, job satisfaction, and employee engagement within a single conceptual framework based on Social Exchange Theory. Unlike previous studies that predominantly focused on private-sector organizations or investigated these variables independently, this research simultaneously examines the beneficial effects of workplace flexibility and the adverse effects of digital fatigue among Generation Z employees within a public financial institution operating in an increasingly digital work environment. By positioning job satisfaction as the mediating mechanism, this study extends the application of Social Exchange Theory in explaining employee engagement under contemporary digital work conditions.

Accordingly, this study examines whether workplace flexibility positively influences job satisfaction and employee engagement, whether digital fatigue negatively affects job satisfaction and employee engagement, whether job satisfaction positively influences employee engagement, and whether job satisfaction mediates the relationships between workplace flexibility, digital fatigue, and employee engagement. The findings are expected to enrich the employee engagement literature by providing a more comprehensive explanation of how organizational resources and digital work demands jointly shape employee engagement among Generation Z employees.

METHOD

This study employed a quantitative approach with an explanatory research design to examine the relationships among Flexible Working Arrangements, Digital Fatigue, Job Satisfaction, and Employee Engagement. The study involved 182 Generation Z employees in a public financial institution. Data were collected through a structured questionnaire and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The analysis included measurement-model assessment to evaluate construct validity and reliability and structural-model assessment to examine the proposed relationships and test the research hypotheses.

Based on the research problems, previous empirical findings, and identified research gaps, this study developed a conceptual model that positions Flexible Working Arrangements and Digital Fatigue as antecedent variables, Job Satisfaction as a mediating variable, and Employee Engagement as the outcome variable. The proposed conceptual framework is presented in Figure 1.



Information:

: Direct effect (H1–H5)

: Indirect/mediated effect (H6–H7)

Figure 1. Conceptual Framework

RESULTS AND DISCUSSION

Results

Evaluation of the Measurement Model (Outer Model)

Prior to testing the relationships among constructs in the structural model, the measurement model was evaluated to assess the validity and reliability of the research instruments. In the PLS-SEM approach, convergent validity was assessed using outer loading and Average Variance Extracted (AVE), while discriminant validity was evaluated using cross-loadings, the Fornell–Larcker criterion, and the Heterotrait–Monotrait Ratio (HTMT). Construct reliability was assessed using Cronbach’s Alpha and Composite Reliability. Following Hair et al. (2022), outer loading values above 0.70 and AVE values above 0.50 indicate satisfactory convergent validity, while Cronbach’s Alpha and Composite Reliability values above 0.70 indicate satisfactory internal consistency reliability.

The overall measurement model for Flexible Working Arrangements, Digital Fatigue, Job Satisfaction, and Employee Engagement is presented in Figure 2.

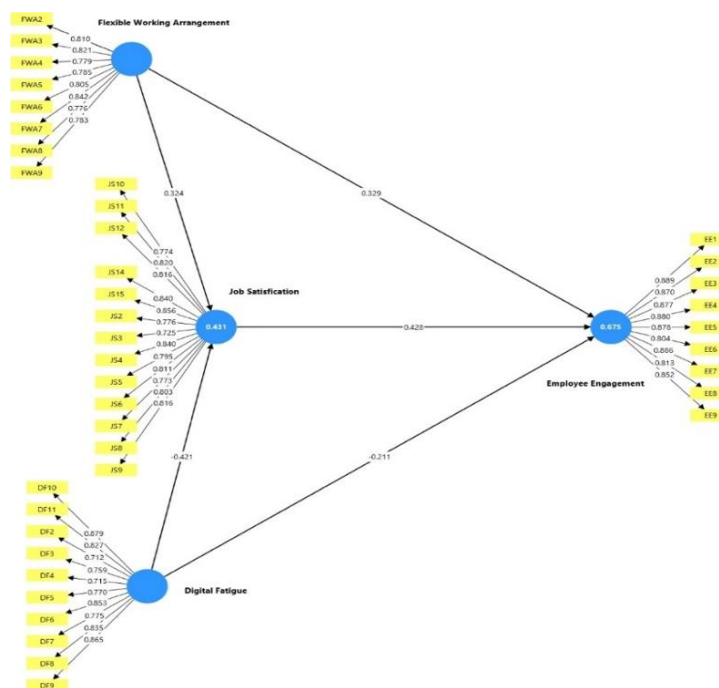


Figure 2. Full Outer Model

Based on the measurement model results presented in Figure 2, all retained indicators demonstrated outer loading values above the recommended threshold of 0.70, indicating satisfactory convergent validity. Therefore, the indicators adequately represented their respective constructs and were considered suitable for further analysis.

Convergent validity and construct reliability were further assessed using AVE, Cronbach's Alpha, and Composite Reliability. The results are presented in Table 1.

Table 1. Construct Reliability

Construct	Cronbach's Alpha	Composite Reliability	AVE
Flexible Working Arrangements	0.931	0.942	0.644
Digital Fatigue	0.937	0.947	0.642
Job Satisfaction	0.954	0.960	0.647
Employee Engagement	0.956	0.963	0.742

Source: SmartPLS data processing (2026)

As presented in Table 1, all constructs had AVE values above 0.50, confirming satisfactory convergent validity. Employee Engagement recorded the highest AVE, followed by Job Satisfaction, Flexible Working Arrangements, and Digital Fatigue. Furthermore, Cronbach's Alpha and Composite Reliability values for all constructs exceeded the recommended threshold of 0.70, indicating satisfactory internal consistency reliability. Overall, these results confirm that the constructs demonstrated adequate convergent validity and reliability.

Discriminant validity was subsequently assessed to determine whether each construct was empirically distinct from the other constructs in the model. The assessment was performed using cross-loadings, the Fornell–Larcker criterion, and HTMT. The cross-loading results showed that each retained indicator loaded more strongly on its respective construct than on the other constructs, providing initial evidence of discriminant validity.

The Fornell–Larcker and HTMT results are presented in Table 2.

**Table 2. Discriminant Validity Assessment
Fornell–Larcker Criterion**

Construct	DF	EE	FWA	JS
Digital Fatigue (DF)	0.801			
Employee Engagement (EE)	–0.646	0.862		
Flexible Working Arrangements (FWA)	–0.543	0.680	0.803	
Job Satisfaction (JS)	–0.597	0.736	0.553	0.804

Source: SmartPLS data processing (2026).

Heterotrait–Monotrait Ratio (HTMT)

Construct	DF	EE	FWA	JS
Digital Fatigue (DF)	—			
Employee Engagement (EE)	0.680	—		
Flexible Working Arrangements (FWA)	0.572	0.714	—	
Job Satisfaction (JS)	0.625	0.763	0.577	—

Source: SmartPLS data processing (2026).

The Fornell–Larcker criterion showed that the square root of the AVE for each construct was greater than its correlations with the other constructs, indicating adequate discriminant validity. The HTMT values ranged from 0.572 to 0.763 and were below the recommended threshold of 0.90. Together with the cross-loading results, these findings confirm that Digital Fatigue, Employee Engagement, Flexible Working Arrangements, and Job Satisfaction are empirically distinct constructs.

Overall, the measurement model assessment demonstrated satisfactory indicator reliability, convergent validity, discriminant validity, and internal consistency reliability. Therefore, the measurement model met the required criteria and was considered appropriate for subsequent structural model assessment.

Structural Model Test Results (Inner Model)

After the measurement model satisfied the required validity and reliability criteria, the structural model was evaluated to assess the explanatory and predictive capability of the proposed research model. The structural model assessment included the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), Variance Inflation Factor (VIF), and Standardized Root Mean Square Residual (SRMR).

The R^2 value indicates the proportion of variance in each endogenous construct that can be explained by its predictor constructs. The R^2 and Q^2 prediction results are presented in Table 3.

Table 3. R-Square and Q^2 Predict Test Results

Endogenous Construct	R^2	Adjusted R^2	Q^2 Predict
Job Satisfaction	0.431	0.425	0.409
Employee Engagement	0.675	0.670	0.551

Source: SmartPLS data processing (2026)

Based on the R-Square test results, Job Satisfaction obtained an R^2 value of 0.431, indicating that Flexible Working Arrangements and Digital Fatigue explained 43.1% of the variance in Job Satisfaction, while the remaining variance was associated with factors outside the research model. Furthermore, Employee Engagement obtained an R^2 value of 0.675, indicating that Flexible Working Arrangements, Digital Fatigue, and Job Satisfaction collectively explained 67.5% of the variance in Employee Engagement. These results demonstrate that the model has meaningful explanatory power, particularly in explaining Employee Engagement.

The Q^2 predict values for Job Satisfaction and Employee Engagement were 0.409 and 0.551, respectively. Both values were greater than zero, indicating predictive relevance relative to the naïve benchmark for the endogenous constructs. Accordingly, the proposed model demonstrated predictive relevance without assigning a low, medium, or high level of predictive power.

The contribution of each predictor construct to the endogenous constructs was further evaluated using the effect size (f^2). The results are presented in Table 4.

Table 4. Effect Size (f^2) Test Results

Relationship	f^2
Flexible Working Arrangements → Employee Engagement	0.207
Flexible Working Arrangements → Job Satisfaction	0.130
Digital Fatigue → Employee Engagement	0.080
Digital Fatigue → Job Satisfaction	0.220
Job Satisfaction → Employee Engagement	0.321

Source: SmartPLS data processing (2026)

The effect-size results indicate that Job Satisfaction made the largest contribution to Employee Engagement among the predictors included in the model. Flexible Working Arrangements also made a meaningful contribution to Employee Engagement, while Digital Fatigue showed a smaller contribution. For Job Satisfaction, Digital Fatigue contributed more

strongly than Flexible Working Arrangements. These findings indicate that both favorable flexible-work conditions and technology-related strain contribute to explaining employees' work experiences and engagement, although their relative contributions differ across the endogenous constructs.

Multicollinearity was subsequently assessed using the Variance Inflation Factor (VIF). The results are presented in Table 5.

Table 5. Variance Inflation Factor (VIF) Test Results

Structural Path	VIF
Digital Fatigue → Employee Engagement	1.730
Digital Fatigue → Job Satisfaction	1.418
Flexible Working Arrangements → Employee Engagement	1.603
Flexible Working Arrangements → Job Satisfaction	1.418
Job Satisfaction → Employee Engagement	1.758

Source: SmartPLS data processing (2026)

The VIF values ranged from 1.418 to 1.758, all of which were below the threshold of 5. These results indicate that multicollinearity was not a concern among the predictor constructs, suggesting that each predictor provided sufficiently distinct information in explaining the endogenous constructs.

Model fit was further evaluated using the Standardized Root Mean Square Residual (SRMR). The results are presented in Table 6.

Table 6. Model Fit Test Results

Model	SRMR	Recommended Threshold	Decision
Saturated Model	0.057	< 0.08	Good Fit
Estimated Model	0.057	< 0.08	Good Fit

Source: SmartPLS data processing (2026)

The SRMR value of 0.057 for both the saturated and estimated models was below the recommended threshold of 0.08, indicating an acceptable approximate fit between the proposed model and the observed data.

Overall, the structural model demonstrated adequate explanatory power, predictive relevance, absence of problematic multicollinearity, and satisfactory model fit. These results support the adequacy of the structural model and provide the basis for proceeding to hypothesis testing.

Hypothesis Testing

Hypothesis testing was conducted to examine the significance and direction of the relationships among the constructs in the structural model. The analysis was performed using the bootstrapping procedure in SmartPLS 4. The significance of each structural path was evaluated based on the path coefficient, t-statistic, and p-value. Following Hair et al. (2022), a relationship was considered statistically significant when the t-statistic exceeded 1.960 and the p-value was below 0.05 at the 5% significance level.

The bootstrapping results are presented in Figure 3 and Table 7.

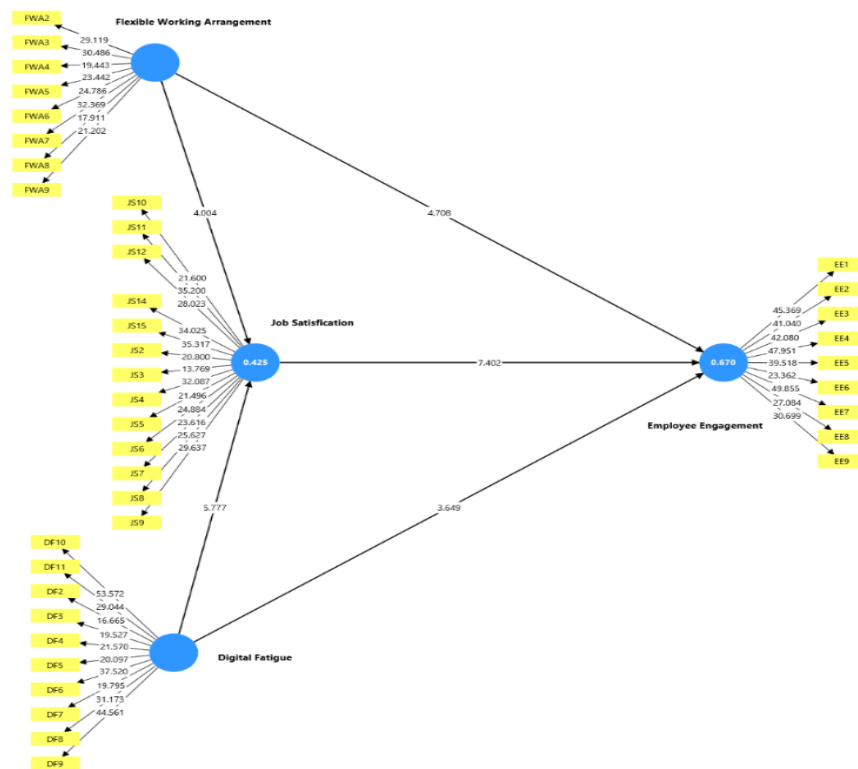


Figure 3. Research Construct Relationship Model Using the Bootstrapping Method

Table 7. Hypothesis Testing Results

Hypothesis	Relationship	Path Coefficient (β)	t-statistic	p-value	Decision
H1	Flexible Working Arrangements → Employee Engagement	0.329	4.708	<0.001	Accepted
H2	Flexible Working Arrangements → Job Satisfaction	0.324	4.004	<0.001	Accepted
H3	Digital Fatigue → Employee Engagement	-0.211	3.649	<0.001	Accepted
H4	Digital Fatigue → Job Satisfaction	-0.421	5.777	<0.001	Accepted
H5	Job Satisfaction → Employee Engagement	0.428	7.402	<0.001	Accepted
H6	Flexible Working Arrangements → Job Satisfaction → Employee Engagement	0.139	3.451	<0.001	Accepted
H7	Digital Fatigue → Job Satisfaction → Employee Engagement	-0.180	4.319	<0.001	Accepted

Source: SmartPLS data processing (2026)

The hypothesis-testing results indicate that all seven proposed hypotheses were supported. Flexible Working Arrangements had positive and significant effects on both Employee Engagement and Job Satisfaction. In contrast, Digital Fatigue had negative and significant effects on Employee Engagement and Job Satisfaction. Job Satisfaction also had a positive and significant effect on Employee Engagement.

The indirect-effect analysis further demonstrated that Job Satisfaction partially mediated the relationship between Flexible Working Arrangements and Employee Engagement. The positive indirect effect indicates that greater work flexibility contributes to higher Employee Engagement partly through increased Job Satisfaction. Similarly, Job Satisfaction partially mediated the relationship between Digital Fatigue and Employee Engagement. The negative

indirect effect indicates that Digital Fatigue reduces Job Satisfaction, which subsequently contributes to lower Employee Engagement.

Overall, the results demonstrate that Flexible Working Arrangements and Digital Fatigue influence Employee Engagement both directly and indirectly through Job Satisfaction. These findings provide empirical support for positioning Job Satisfaction as an important mediating mechanism in explaining how favorable flexible-work conditions and adverse digital-work experiences are associated with Employee Engagement among Generation Z employees.

Discussion

The Effect of Flexible Working Arrangements on Employee Engagement

Flexible Working Arrangements had a positive and significant effect on Employee Engagement. This finding indicates that greater flexibility in managing work schedules, work locations, and work-life responsibilities can strengthen employees' involvement and connection with their work. For Generation Z employees, flexibility may provide greater autonomy in organizing work while allowing them to maintain responsibilities outside the workplace, thereby supporting stronger engagement.

The finding is consistent with Gašić and Berber (2023) and Jannata and Perdhana (2022), who reported a positive relationship between Flexible Working Arrangements and Employee Engagement. It also aligns with Pradipta and Martdianty (2023), who demonstrated the relevance of work engagement in explaining the outcomes of Flexible Working Arrangements in Indonesian digital start-ups. Similarly, Shilpakar et al. (2024) identified Employee Engagement as an important mechanism linking Flexible Working Arrangements with employees' turnover intentions. These findings also support Lee et al. (2024), who highlighted the relevance of workplace flexibility for younger employees. In a public financial institution, the present findings suggest that flexibility can support engagement when employees are provided with sufficient discretion while continuing to meet organizational responsibilities and performance expectations.

H1: Flexible Working Arrangements have a positive and significant effect on Employee Engagement.

The Effect of Flexible Working Arrangements on Job Satisfaction

Flexible Working Arrangements had a positive and significant effect on Job Satisfaction. This finding suggests that employees who perceive greater flexibility in organizing their work tend to evaluate their overall work experience more positively. Flexibility can enable employees to better integrate professional and personal responsibilities, reduce work-life conflicts, and provide greater control over how work is performed.

This finding is consistent with Fleischer and Wanckel (2024) and Kim (2025), who associate flexible work arrangements and job autonomy with more favorable employee attitudes and job satisfaction. It reinforces the view that flexibility is not merely an alternative work arrangement but an important aspect of contemporary work design. For Generation Z employees in increasingly flexible and digitally connected working environments, appropriate flexibility can contribute to a more satisfying work experience.

H2: Flexible Working Arrangements have a positive and significant effect on Job Satisfaction.

The Effect of Digital Fatigue on Employee Engagement

Digital Fatigue had a negative and significant effect on Employee Engagement. This finding indicates that persistent technology-related exhaustion can reduce employees' ability to maintain energy, concentration, and involvement in their work. Continuous exposure to digital platforms, online communication, notifications, and screen-based activities may create

cognitive and emotional demands that make it more difficult for employees to remain fully engaged.

The result is consistent with Bernburg et al. (2024) and Zhang and Deng (2025), who reported that digital stressors and digital fatigue can adversely affect work engagement. It also aligns with Dong et al. (2026) in highlighting fatigue associated with intensive digital interaction. The finding is particularly relevant for Generation Z employees because familiarity with digital technologies does not necessarily protect them from the adverse consequences of continuous digital exposure.

H3: Digital Fatigue has a negative and significant effect on Employee Engagement.

The Effect of Digital Fatigue on Job Satisfaction

Digital Fatigue had a negative and significant effect on Job Satisfaction. The finding indicates that technology-related exhaustion can negatively shape employees' overall evaluation of their work experience. When digital demands become excessive and continuous, employees may experience greater difficulty maintaining concentration, recovering from work demands, and sustaining positive attitudes toward their jobs.

This finding is consistent with previous research linking intensive digital demands and technology-related strain with poorer occupational well-being and work attitudes (Wang et al., 2021; Bernburg et al., 2024; Dong et al., 2025). An important implication is that Digital Fatigue is particularly relevant to employees' evaluation of their work experience. Therefore, increasing digitalization should be accompanied by work practices that prevent excessive digital demands from undermining Job Satisfaction.

H4: Digital Fatigue has a negative and significant effect on Job Satisfaction.

The Effect of Job Satisfaction on Employee Engagement

Job Satisfaction had a positive and significant effect on Employee Engagement. This finding indicates that employees who evaluate their work experiences positively are more likely to demonstrate stronger cognitive, emotional, and behavioral involvement in their work. Satisfaction with the work itself, organizational support, career opportunities, workplace relationships, and other aspects of employment can contribute to employees' willingness to invest greater energy and attention in their roles.

The result supports the relationship between Job Satisfaction and Employee Engagement reflected in Ariyanto et al. (2025), while the present study confirms the direction from Job Satisfaction to Employee Engagement. In the context of Generation Z employees, Job Satisfaction therefore represents an important condition for maintaining engagement in increasingly flexible and digitally intensive work environments.

H5: Job Satisfaction has a positive and significant effect on Employee Engagement.

The Mediating Role of Job Satisfaction in the Flexible Working Arrangements–Employee Engagement Relationship

Job Satisfaction partially mediated the relationship between Flexible Working Arrangements and Employee Engagement. This finding indicates that flexibility contributes to engagement not only directly but also by improving employees' evaluation of their work experience. When employees perceive that flexible work arrangements help them manage their work and personal responsibilities more effectively, they are more likely to experience greater Job Satisfaction, which subsequently strengthens Employee Engagement.

The finding complements Jannata and Perdhana (2022), who examined Job Satisfaction as an intervening mechanism between work–life balance and Employee Engagement. The present mediation result further demonstrates that Job Satisfaction is a mechanism through

which Flexible Working Arrangements contribute to Employee Engagement among Generation Z employees.

H6: Job Satisfaction mediates the effect of Flexible Working Arrangements on Employee Engagement.

The Mediating Role of Job Satisfaction in the Digital Fatigue–Employee Engagement Relationship

Job Satisfaction also partially mediated the relationship between Digital Fatigue and Employee Engagement. The finding demonstrates that Digital Fatigue can weaken Employee Engagement not only directly but also indirectly by reducing employees' satisfaction with their work experience. Persistent digital exhaustion may make employees evaluate their work less positively, which subsequently reduces their willingness and capacity to remain strongly engaged.

This finding extends previous research on digital stress and employee well-being by demonstrating the role of Job Satisfaction in transmitting the adverse consequences of Digital Fatigue to Employee Engagement. It suggests that managing Digital Fatigue is relevant not only for protecting employee well-being but also for maintaining positive work attitudes and engagement in digitally intensive work environments.

H7: Job Satisfaction mediates the effect of Digital Fatigue on Employee Engagement.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The findings demonstrate that Flexible Working Arrangements positively and significantly affect both Job Satisfaction and Employee Engagement, whereas Digital Fatigue negatively and significantly affects both outcomes. Job Satisfaction also has a positive and significant effect on Employee Engagement. These results show that flexibility supports Generation Z employees' evaluation of and involvement in their work, while technology-related exhaustion weakens those outcomes.

Job Satisfaction partially mediates both relationships with Employee Engagement. Flexible Working Arrangements strengthen Employee Engagement partly by increasing Job Satisfaction, whereas Digital Fatigue weakens Employee Engagement partly by reducing Job Satisfaction. Therefore, all seven proposed hypotheses are supported, and the findings consistently position Job Satisfaction as an important psychological mechanism linking flexible and digitally intensive work experiences with Employee Engagement.

Limitations

This study has several limitations. First, the research focused exclusively on Generation Z employees within a single public financial institution in Indonesia, which may limit the generalizability of the findings to other organizational, industrial, and national contexts. Second, the research model was limited to Flexible Working Arrangements, Digital Fatigue, Job Satisfaction, and Employee Engagement, while other organizational and individual factors, such as leadership support, workload, organizational culture, work–life balance, and psychological well-being, may also contribute to Employee Engagement. Third, the study employed a cross-sectional design using self-reported data, which limits the ability to capture changes in employee attitudes and work experiences over time. Therefore, the findings should be interpreted within the organizational, contextual, and methodological boundaries of this study.

Recommendations

Based on the findings, the institution is advised to maintain flexible working arrangements while ensuring that flexibility is supported by clear work expectations and manageable digital demands. Efforts to sustain Employee Engagement should also protect Job Satisfaction by reducing excessive digital exposure and supporting employees' ability to recover from technology-related strain. Future studies may adopt a longitudinal design, broaden the organizational context, or use qualitative interviews or multigroup analysis to examine how these relationships develop across different work settings.

Author Contributions

The first author took primary responsibility for the research conceptualization, development of the theoretical framework, research methodology, data collection, data analysis, interpretation of the findings, and drafting of the manuscript. The second author contributed to research supervision, conceptual and methodological guidance, interpretation of the findings, and critical review and revision of the manuscript. Both authors have read and approved the final version of the article submitted for publication.

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REFERENCES

- Ahmad, R., Nawaz, M. R., Ishaq, M. I., Khan, M. M., & Ashraf, H. A. (2023). Social exchange theory: Systematic review and future directions. *Frontiers in Psychology*, 13, Article 1015921. <https://doi.org/10.3389/fpsyg.2022.1015921>
- Ariyanto, E., Wijaya, M. H., & Sari, A. N. M. (2025). The effect of employee engagement (vigor, dedication, and absorption) on job satisfaction at PT Pelindo 1. *International Journal of Current Science Research and Review*, 8(2), 673–679. <https://doi.org/10.47191/ijcsr/V8-i2-11>
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Bernburg, M., Tell, A., Groneberg, D. A., & Mache, S. (2024). Digital stressors and resources perceived by emergency physicians and associations with their digital stress perception, mental health, job satisfaction, and work engagement. *BMC Emergency Medicine*, 24, Article 31. <https://doi.org/10.1186/s12873-024-00950-x>
- Carlson, D. S., Grzywacz, J. G., & Kacmar, K. M. (2010). The relationship of schedule flexibility and outcomes via the work-family interface. *Journal of Managerial Psychology*, 25(4), 330–355. <https://doi.org/10.1108/0268394101103527>
- Chung, H., & Van der Lippe, T. (2020). Flexible working, work–life balance, and gender equality: Introduction. *Social Indicators Research*, 151(2), 365–381. <https://doi.org/10.1007/s11205-018-2025-x>
- Dong, Y., Wang, M., Liu, E., & Xing, L. (2026). Causes of digital fatigue among hotel employees in the digital age: A configuration study based on fsQCA. *Asia Pacific Journal of Marketing and Logistics*, 38(2), 311–329. <https://doi.org/10.1108/APJML-01-2025-0181>

- Edeh, F. O., Zayed, N. M., Faisal-E-Alam, M., Nitsenko, V., & Bazaluk, O. (2024). Flexible working arrangements on employee well-being concerning the mobile telecommunication industry. *The TQM Journal*. <https://doi.org/10.1108/TQM-11-2023-0390>
- Fleischer, J., & Wanckel, C. (2024). Job satisfaction and the digital transformation of the public sector: The mediating role of job autonomy. *Review of Public Personnel Administration*, 44(3), 431–452. <https://doi.org/10.1177/0734371X221148403>
- Gallup. (2025). *State of the global workplace: The voice of the world's employees*. <https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx>
- Gašić, D., & Berber, N. (2023). The mediating role of employee engagement in the relationship between flexible work arrangements and turnover intentions among highly educated employees in the Republic of Serbia. *Behavioral Sciences*, 13(2), Article 131. <https://doi.org/10.3390/bs13020131>
- Ghonim, A., Awad, A., Shemais, M., Shma, T., & Aziz, A. (2025). Exploring the impact of flexible work arrangements on employee engagement in telecommunications: The case of Egypt. *Problems and Perspectives in Management*, 23(2), 198–207. [https://doi.org/10.21511/ppm.23\(2\).2025.13](https://doi.org/10.21511/ppm.23(2).2025.13)
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). SAGE Publications.
- Jannata, A., & Perdhana, M. S. (2022). Analisis pengaruh work-life balance terhadap employee engagement dengan job satisfaction sebagai variabel intervening: Studi pada PT Barata Indonesia. *Diponegoro Journal of Management*, 11(3).
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.2307/256287>
- Kim, E. J. (2026). The role of flexible work arrangement in adaptive career behavior and satisfaction: A multi-group analysis. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, 14(1), 3–22. <https://doi.org/10.1108/EBHRM-01-2025-0029>
- Lee, S. H., Chong, C. W., & Ojo, A. O. (2024). Influence of workplace flexibility on employee engagement among young generation. *Cogent Business & Management*, 11(1), Article 2309705. <https://doi.org/10.1080/23311975.2024.2309705>
- Onyekwelu, N. P., Monyei, E. F., & Muogbo, U. S. (2022). Flexible work arrangements and workplace productivity: Examining the nexus. *International Journal of Financial, Accounting, and Management*, 4(3), 303–314. <https://doi.org/10.35912/ijfam.v4i3.1059>
- Pradipta, H. A., & Martdianty, F. (2023). Effect of flexible working arrangement on employee performance: Mediating role of work engagement and supervisor support in Indonesia digital startup. *Jurnal Aplikasi Bisnis dan Manajemen*, 9(2), 512–522. <https://doi.org/10.17358/jabm.9.2.512>
- Shilpakar, N., Giri, B., & Pokhrel, S. K. (2024). Flexible working arrangements and employee turnover intention: Mediating role of employee engagement. *SAIM Journal of Social Science and Technology*, 1(1), 27–39. <https://nepjol.info/index.php/sjsst/article/view/72514>
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10–24). Psychology Press.
- Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology*, 70(1), 16–59. <https://doi.org/10.1111/apps.12290>

Zhang, X., & Deng, G. (2025). Protecting work engagement from digital fatigue: The contingent roles of leadership style and network ties. *Frontiers in Psychology*, 16, Article 1645057. <https://doi.org/10.3389/fpsyg.2025.1645057>