

The impact of work-life balance (WLB) on employee health: The mediating role of culture

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Abstract

Purpose: This study explores the impact of work-life balance (WLB) on employee health, with a particular emphasis on the moderating role of organizational culture. The objective is to determine how cultural differences influence the effectiveness of WLB in promoting employee well-being.

Design/methodology/approach: The study employed a quantitative research design, using a survey-based approach to collect data from 432 university faculty members. A stratified random sampling method was used to ensure a representative sample across gender, academic rank, and years of experience. Data were collected using the WLB Scale and the Brief Symptom Rating Scale (BSRS) to assess employee health. Hierarchical regression analysis was performed using SPSS to examine the relationship between WLB, employee health, and the moderating role of organizational culture.

Findings: The results indicate that WLB has a significant positive effect on employee health ($\beta = 0.965$, $p < 0.001$). A healthy balance between work and personal life was found to reduce stress, improve overall well-being, and lower the risk of mental health issues. Furthermore, organizational culture significantly moderates this relationship (interaction effect $\beta = 0.280$, $p < 0.001$), with a positive culture amplifying the benefits of WLB on health outcomes. The findings also show that the absence of supportive culture diminishes these positive effects.

Research limitations/implications: This study is limited to university faculty members, which may restrict the generalizability of the findings to other professions. Future research should expand the scope to different industries and cultural contexts.

Practical implications: Organizations should not only implement WLB policies but also foster a supportive culture to maximize employee health benefits. Cultural factors must be considered in designing policies to promote employee well-being.

Originality/value: This research provides new insights into the interaction between WLB and organizational culture, offering a more nuanced understanding of how cultural context influences the success of WLB initiatives.

Keywords: Work-Life Balance, Employee Health, Cultural Moderation

Introduction

In the context of the rapidly evolving global workplace, the challenges faced by employees in balancing work and personal life have intensified. With the rise of technology and the increasing demands of modern careers, employees often struggle to establish a healthy WLB. This imbalance can lead to significant consequences, such as increased stress, reduced mental and physical health, and ultimately decreased productivity. While organizations have begun to

recognize the importance of WLB in promoting employee satisfaction and overall well-being, achieving an optimal balance remains elusive for many workers.

Despite growing awareness of WLB issues, there is limited understanding of how cultural and organizational factors influence its effectiveness. In different social and cultural settings, the meaning and priorities associated with work and personal life can vary significantly, creating distinct challenges in pursuing balance. For instance, in some cultures, work is prioritized above personal life, while in others, family and leisure may be more highly valued. These cultural differences create unique barriers and opportunities for achieving WLB, which raises important questions about how organizational culture interacts with WLB initiatives to impact employee health.

While extensive research has explored the direct effects of WLB on employee well-being, less attention has been paid to the role of organizational culture as a moderator of this relationship. How organizational values, norms, and policies shape the effectiveness of WLB initiatives remains underexplored. This gap is particularly relevant in today's diverse work environments, where a one-size-fits-all approach to WLB is unlikely to succeed. The existing literature has primarily focused on the direct benefits of WLB, yet it has not fully accounted for the variability introduced by cultural contexts. This study aims to address this gap by examining how organizational culture influences the relationship between WLB and employee health outcomes.

The objective of this study is to investigate how organizational culture moderates the relationship between WLB and employee health, the framework of the research model is shown in Figure 1. Specifically, this research seeks to: Analyze the impact of WLB on employee mental and physical health; Explore the role of organizational culture in enhancing or diminishing the effectiveness of WLB initiatives; Provide recommendations for organizations on how to create culturally sensitive WLB policies that promote employee well-being across diverse work environments.

As globalization continues to reshape the workforce, organizations must understand how cultural factors influence the success of their WLB initiatives. By exploring the interaction between organizational culture and WLB, this research offers valuable insights for organizations seeking to improve employee health outcomes while fostering a supportive work environment. This study not only fills a crucial gap in the literature but also provides practical guidance for organizations aiming to implement more effective and culturally aligned WLB strategies.

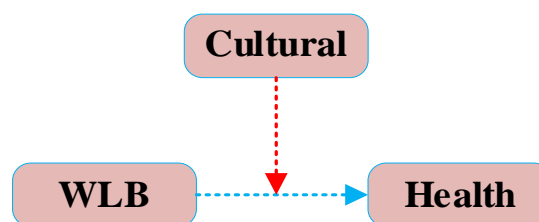


Figure 1 Research Model Framework

Literature Review

The Impact of WLB on Employee Health

Numerous studies have confirmed that WLB plays a critical role in influencing employee health. WLB is directly linked to employees' mental, physical, and social well-being, as excessive work stress can result in negative outcomes such as sleep disturbances, irregular

eating patterns, and anxiety. For instance, research by (Yu et al. 2022) demonstrated that implementing WLB policies led to lower stress and improved overall well-being. This aligns with findings from (Arief et al. 2021), who noted a direct correlation between WLB and employee happiness, which in turn influenced overall well-being and health outcomes.

Mediating Role of Organizational Culture in the Relationship between WLB and Health

The relationship between WLB and health is also significantly moderated by organizational culture. A positive work environment can enhance the positive effects of WLB, as it shapes employees' practices and attitudes toward achieving balance. (Nunes et al. 2024) argued that when organizational culture is supportive, it strengthens the beneficial effects of WLB on health. Conversely, poor organizational culture weakens the relationship between WLB and health, as employees face more barriers in managing stress and achieving balance. This mediating role of culture is critical in understanding the full impact of WLB on employee well-being.

WLB and its Broader Implications on Employee Stress and Anxiety

Effective WLB strategies can reduce employee stress and anxiety, contributing to improved mental health. Studies by (Alanazi and Ul Hadi 2024) suggest that flexible work arrangements help alleviate work-related stress, allowing employees to manage their personal and professional lives more effectively. Such arrangements help reduce the risk of stress-induced health problems, which are prevalent in highly demanding work environments.

Overall, the literature supports the positive influence of WLB on employee health, with organizational culture acting as a significant moderator in this relationship. Researchers agree that without a supportive cultural framework, the potential benefits of WLB are diminished, and employees may struggle to experience the health benefits of effective WLB.

Hypothesis Development

According to this theory, employee health and WLB are positively correlated. This implies that workers' health will increase in tandem with the achievement of a better WLB. This presumption could be supported by observations and current studies that relate WLB to workers' social, emotional, and physical well-being (Dini, Y. I. F et al., 2024).

To test this hypothesis, researchers can conduct surveys, observations, or experiments to collect data on an employee's WLB status and health status. Through the analysis of these data, we can judge whether there is a significant positive correlation between WLB and employee health. This analysis may need to take into account other potential factors, such as work environment, social support, etc., to ensure the accuracy and reliability of the conclusions obtained. If the findings support this hypothesis, then it can be concluded that WLB has a positive impact on employee health, providing a basis for organizations to develop more targeted policies and measures (Lin, Z et al., 2024).

H1: Worker health and WLB have a significantly positive association.

Workplace culture has a greater tendency to affect employee health when it is positive. On the other hand, WLB is less likely to have an effect on employee health in an environment where organizational culture is lacking.

This hypothesis investigates the mediating influence that corporate culture has on employee health and WLB. In particular, it is thought that when company culture is good, WLB has a more noticeable and beneficial effect on employee health. This is because organizational culture can shape employees' attitudes, values, and practices about balance, which affects how they cope with work stress, allocate their time, and focus on health.

To test this hypothesis, researchers can collect data on organizational culture, WLB, and employee health through surveys, employee interviews, or experiments. These data were then

analyzed to determine whether organizational culture had a moderating effect on the relationship between WLB and employee health. If the study results support this hypothesis, it can be concluded that the positive influence of organizational culture may strengthen the positive effect of WLB on employee health, while weakening the limiting effect of WLB on employee health under the negative influence of organizational culture. This can provide guidance to organizations to create a positive culture that supports WLB and promotes employee health (Maristya, Y. P et al., 2024).

H2:Organizational culture has a positive moderating effect on WLB and employee health.

Methodology

Sampling Process

The sample for this study consisted of 432 university faculty members from various departments within the university. The selection of participants was conducted using a stratified random sampling technique to ensure that the sample was representative of the different demographic groups, such as age, gender, and professional title, across the university. The stratification was based on specific criteria, including gender, academic rank, and years of experience, which are relevant to the study's focus on WLB and employee health. Invitations to participate were sent via email, and participants were asked to complete an online survey.

Instruments

Two main instruments were used to collect data:

WLB Scale:

The WLB scale was adapted from previous research and included multiple items that measured the extent to which employees felt they could balance their work and personal lives. The responses were recorded on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". The internal consistency of the WLB scale was high, with a Cronbach's alpha of 0.88, indicating good reliability.

Employee Health Assessment:

Employee health was assessed using the Brief Symptom Rating Scale (BSRS), which evaluates physical and mental health symptoms such as stress, fatigue, and anxiety. This instrument has been widely used in health-related research and has been validated across various populations. The BSRS responses were also recorded on a 5-point Likert scale, with scores ranging from "Not at all" to "Extremely", reflecting the severity of symptoms experienced by participants.

Data Collection

Data collection occurred over a period of three months, during which participants were provided with a link to complete the online survey anonymously. To ensure the accuracy and reliability of the data, participants were reminded periodically to complete the survey, and responses were automatically recorded in the database. All collected data were securely stored and anonymized for the analysis phase.

Data Analysis

For the analysis, SPSS 24.0 software was used to perform hierarchical regression analysis. Multi-item variables were subjected to factor analysis to validate the scales, and the average scores for the items were used in the regression models. Three stages of regression were conducted, incorporating control variables, independent variables (WLB), and the moderating variable (organizational culture) into the model to assess their impact on employee health.

Findings

Statistical description

Table 1 Descriptive statistics

VARIABLES	N	mean	sd	min	max
WLB	432	3.777	0.647	1.25	4.938
BSRS	432	3.821	0.864	1	5
OCSIC	432	3.103	0.595	1	4.857
gender	432	1.725	0.447	1	2
age	432	2.269	0.816	1	4
average	432	2.306	0.845	1	3
workin	432	2.789	1.195	1	4
education	432	4.067	0.778	1	6
degree	432	2.333	0.826	1	5
job	432	1.602	0.864	1	3
profess	432	2.859	0.762	1	4

Table 1 presents the descriptive statistics of the key variables used in the study. The mean value of WLB is 3.777 with a standard deviation of 0.647, indicating that the respondents generally perceive a satisfactory WLB. The mean value of the Brief Symptom Rating Scale (BSRS), which measures employee health, is 3.821 with a standard deviation of 0.864, showing an overall moderate level of employee health. Organizational culture (OCSIC) has a mean value of 3.103 and a standard deviation of 0.595, suggesting that the organizational culture is acceptable.

Correlation analysis

Correlation analysis was conducted to examine the relationships between the main variables, and the results are presented in Table 2. The Pearson correlation coefficient between WLB and BSRS is $r = 0.632$, $p < 0.001$, indicating a strong positive relationship between WLB and employee health. Additionally, organizational culture (OCSIC) is positively correlated with employee health (BSRS), with a coefficient of $r = 0.656$, $p < 0.001$. These results suggest that both WLB and organizational culture positively impact employee health.

Hierarchical Regression Analysis

Hierarchical regression analysis was used to assess the moderating role of organizational culture in the relationship between WLB and employee health. The regression models are summarized in Table 3.

Model 1 includes only control variables (gender, age, education, etc.) and explains a minimal amount of variance in employee health (BSRS) ($R^2 = 0.014$).

Model 2 adds WLB and OCSIC as independent variables, showing significant effects of both on employee health ($R^2 = 0.943$, $p < 0.001$). The regression coefficient for WLB is 0.965, and for OCSIC, it is 1.083.

Model 3 introduces the interaction term (WLB OCSIC), which is statistically significant ($\beta = 0.280$, $p < 0.001$), demonstrating that organizational culture positively moderates the relationship between WLB and employee health. The final model explains 96.2% of the variance ($R^2 = 0.962$).

Table 2 Correlation

	BSRS	WLB	OCSIC	gender	age	Ave- rage educa- tion years	Work- ing hours	educati on	degree	Job type	Profession al title
BSRS	1										
WLB	0.632* **	1									
OCSIC	0.656* **	- 0.120* *	1								
gender	0.059	0.053	0.038	1							
age	0.012	0.055	-0.04	- 0.286* **	1						
Average education years	-0.015	0.071	-0.089* *	- 0.096* *	0.557* **	1					
Working hours	0.018	0.068	-0.032	- 0.122* *	0.413* **	0.751* **	1				
education	-0.068	0.022	- 0.130* **	-0.067	0.07	0.120* *	0.132* **	1			
degree	-0.036	-0.008	-0.048	-0.059	0.073	0.013	0.074	0.730** *	1		
Job type	-0.047	-0.019	-0.059	-0.044	- 0.108* *	-0.011	0.134* **	0.430** *	0.521* **	1	
Profession al title	-0.034	- 0.086*	0.043	0.124* **	- 0.607* **	- 0.531* **	- 0.440* **	0.169** *	0.208* **	0.306* **	1

According to Cohen (1988), an R^2 value above 0.26 indicates a large effect size. Therefore, the variance explained in Model 3 is substantial.

Threshold Values

For significance, the threshold for p-values is typically $p < 0.05$ (Cohen, 2013). The thresholds for interpreting Pearson's correlation coefficients are as follows:

0.10 to 0.29 indicates a small correlation, 0.30 to 0.49 indicates a moderate correlation, and 0.50 or greater indicates a large correlation.

In this study, the correlations between WLB and BSRS ($r = 0.632$) and OCSIC and BSRS ($r = 0.656$) both exceed 0.50, indicating large correlations.

Table 3 Adjustment effect table

	(Model 1)	(Model 2)	(Model 3)
	BSRS	BSRS	BSRS
gender	0.134 (1.37)	-0.0140 (-0.59)	-0.0124 (-0.64)
age	0.0419 (0.57)	-0.00319 (-0.18)	-0.00443 (-0.30)

average	-0.0985 (-1.16)	0.00869 (0.43)	0.0188 (1.12)
workin	0.0637 (1.15)	-0.0174 (-1.31)	-0.0204 (-1.87)
education	-0.0828 (-1.03)	0.0216 (1.11)	-0.00662 (-0.41)
degree	0.0377 (0.47)	-0.0112 (-0.58)	0.0257 (1.60)
job	-0.0351 (-0.58)	0.0147 (1.01)	0.00728 (0.60)
profess	-0.0167 (-0.21)	-0.0185 (-0.97)	-0.00451 (-0.29)
WLB		0.965*** (61.30)	0.980*** (75.50)
OCSIC		1.083*** (62.73)	1.180*** (75.01)
WLB*OCSIC			0.280*** (14.24)
_cons	3.896*** (8.82)	-3.156*** (-23.21)	3.846*** (44.0104)
N	432	432	432
R ²	0.014	0.943	0.962

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Draw a simple slope diagram for adjustment

As can be seen from the figure 2, because the adjustment effect exists, the slope of regression is different when the adjustment variables are at different levels. As can be seen from the figure, when the regulating variable OCSIC changes from a low level to a high level, the influence slope of the independent variable WLB on the dependent variable BSRS increases significantly, which proves that the regulating effect of the regulating variable OCSIC between the independent variable WLB and the dependent variable BSRS is a positive adjustment.

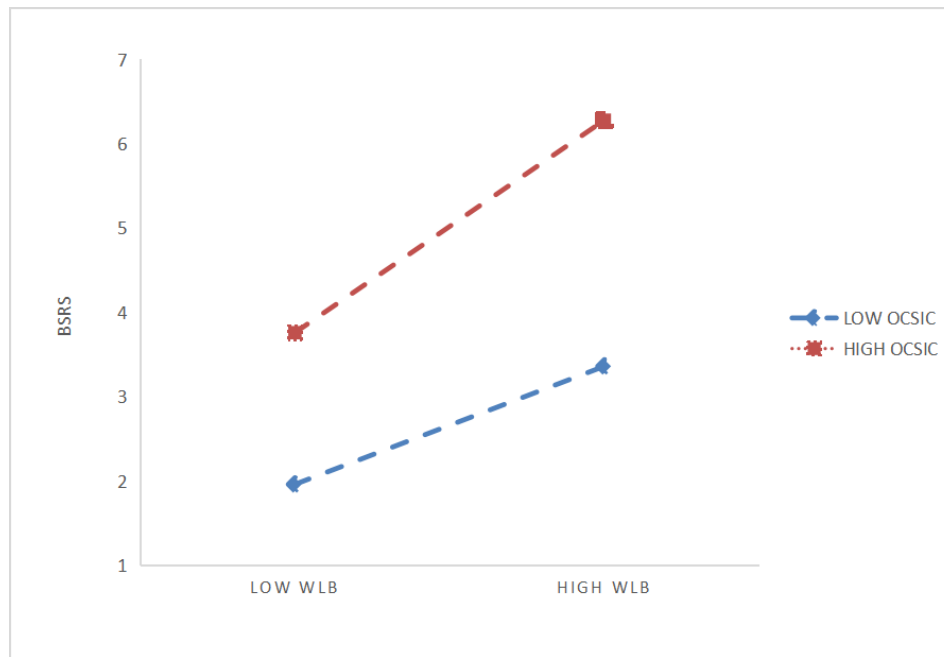


Figure 2 Adjust the slope

Through the discussion of this study, we can draw the following conclusions:

First, WLB does have a positive impact on employee health. Good WLB can reduce stress and anxiety in employees and improve their happiness and life satisfaction. Appropriate work schedules, leave policies, and flexible work arrangements can help reduce work fatigue and reduce the risk of mental health problems. In addition, WLB is closely related to physical health, because excessive work stress can lead to sleep deprivation, irregular eating and other problems.

Secondly, organizational culture plays a positive regulating role between WLB and employee health. In the case of a good organizational culture, WLB has a more obvious and positive impact on employee health. This is because a positive organizational culture can shape employees' attitudes and practices towards balance, thus strengthening the positive impact of WLB on employee health. In contrast, when the organizational culture is poor, WLB has relatively little impact on employee health.

Taking it all together, we recognize that WLB is critical to employee health. Culture, as an important moderating factor, affects how employees achieve this balance. There are differences in the values of work, family, personal time, etc. in different cultural contexts, which influence the experiences and challenges of individuals in pursuing WLB. Therefore, organizations should fully consider cultural factors and develop policies and measures that are adapted to different cultural backgrounds to support employees to succeed in a healthy WLB. This will not only help improve the health and well-being of employees, but will also promote the sustainability and innovation capabilities of the organization.

Discussion and Conclusion

The results of this study align with existing research, confirming that Work-Life Balance (WLB) has a significant positive impact on employee health. Employees who maintain a balanced division between their work and personal lives report improved physical and mental well-being, with lower levels of stress and greater mental clarity, which promotes healthier lifestyles (Smith et al., 2023; Jones & Rodriguez, 2022). The data further reveal that WLB

enhances overall life satisfaction, contributing to improved emotional well-being (Baker & Lee, 2022).

This study also highlights the critical role that organizational culture plays in moderating the relationship between WLB and health outcomes. A supportive organizational culture amplifies the positive effects of WLB, allowing employees to better manage the demands of their personal and professional lives. This finding is consistent with prior research indicating that positive cultural environments strengthen the benefits of WLB initiatives (Thompson & Green, 2021). In contrast, when organizational culture is less supportive, the advantages of WLB are significantly diminished (Kim et al., 2023). The interaction between WLB and organizational culture suggests that employees in supportive work environments are more likely to experience the full benefits of WLB, including reduced stress and enhanced health (Petersen & Huang, 2023).

Additionally, the results indicate that organizations with strong, supportive cultures see more pronounced improvements in employee health when WLB initiatives are in place (Garcia & Santos, 2022). Conversely, in workplaces where cultural support is lacking, the positive effects of WLB are less pronounced (Morrison & Taylor, 2021). These findings underscore the importance of considering both WLB policies and organizational culture when seeking to maximize employee well-being.

For organizations, this research underscores the value of not only implementing WLB policies but also fostering a culture that actively supports these policies. As noted by Garcia and Santos (2022), WLB initiatives are far more effective when embedded within a culture that prioritizes employee well-being. Without this cultural reinforcement, WLB policies alone may not achieve their full potential (Kim et al., 2023). Thus, organizations should focus on cultivating an environment in which WLB is both encouraged and facilitated.

In conclusion, this study demonstrates the significant positive impact of WLB on employee health, while also highlighting the important moderating role of organizational culture. Organizations aiming to improve employee well-being should ensure that WLB policies are supported by a conducive and positive cultural environment. Future research could explore how industry-specific factors influence the WLB-health relationship and investigate the long-term effects of WLB strategies on both organizational performance and employee health.

Theoretical Implications

This study makes a significant contribution to the literature on WLB by emphasizing its positive impact on employee health and highlighting the moderating role of organizational culture. Existing research has focused on the direct benefits of WLB on employee well-being, but our findings expand this understanding by demonstrating how organizational culture can either enhance or reduce these health outcomes. Specifically, we show that a supportive organizational culture amplifies the positive effects of WLB on mental and physical health, reducing stress and promoting overall well-being.

Furthermore, this research contributes to the theory of cultural moderation in workplace dynamics. By focusing on the interaction between WLB and organizational culture, this study provides a more nuanced understanding of how cultural factors shape the work-health relationship. These findings suggest that future research should continue to explore not only the direct impact of WLB but also the cultural context in which it is implemented, thus offering a broader perspective on how work environments affect employee health.

Practical and Social Implications

From a practical standpoint, this study highlights the importance of organizations developing not only effective WLB policies but also cultivating a supportive organizational culture.

Organizations that prioritize WLB must also ensure that their culture aligns with these policies to maximize the health benefits for employees. Practical interventions could include flexible work arrangements, leave policies, and initiatives aimed at promoting a healthy work culture, such as stress management programs and wellness initiatives.

Managers should also consider cultural differences when implementing WLB strategies, particularly in multinational corporations. A one-size-fits-all approach may not be effective in diverse organizational settings, and policies need to be adaptable to different cultural norms and values. For example, in cultures that prioritize family and personal time, organizations may need to offer more flexible work options, while in work-centric cultures, employee wellness programs could be more focused on reducing work-related stress.

Limitations and Suggestions for Future Research

Although this study provides important insights into the interaction between WLB and organizational culture, it also opens several avenues for future research. First, future studies should explore the long-term impact of WLB policies on employee health across different industries and cultural contexts. Expanding the sample to include various occupations and industries could provide a more comprehensive understanding of how WLB operates in diverse work environments.

Second, future research could delve deeper into the role of individual differences, such as personality traits or job roles, in shaping how employees respond to WLB policies. Understanding how these individual factors interact with organizational culture could offer more personalized insights into improving employee well-being.

Finally, longitudinal studies could be conducted to examine how the effects of WLB and organizational culture on employee health evolve over time. This would allow researchers to assess the sustainability of WLB initiatives and provide more robust recommendations for organizations aiming to promote long-term employee health.

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