



Enhancing Performance Through Work-Life Balance and Work Engagement: A Systematic Review in the Manufacturing Sector

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ABSTRACT

This study systematically reviews the empirical and conceptual literature to examine how Work-Life Balance (WLB) and Work Engagement (WE) collectively affect employee performance in the manufacturing sector. Using the PRISMA method, nineteen relevant studies published between 2020 and 2025 were analyzed from the Scopus, Emerald, and Google Scholar databases. The research findings revealed that WLB contributes positively to employee performance by reducing stress, increasing satisfaction, and maintaining productivity, while WE mediate these relationships through increased motivation, enthusiasm, and dedication. This review highlights that integrating flexible work arrangements, psychological development programs, and supportive supervision can optimize WLB and WE outcomes. Furthermore, the implementation of environmentally friendly human resource management practices strengthens sustainable engagement and performance. Despite having positive relationships, variations across cultural and industrial contexts demonstrate the need for longitudinal and experimental research. The study provides theoretical insights into the human factors that drive manufacturing excellence and practical recommendations for organizations to design integrated strategies that improve sustainable performance.

INTRODUCTION

The manufacturing sector has long been recognized as the backbone of global economic development due to its contribution to job creation, innovation, and national productivity. In the midst of increasingly competitive and digitized market dynamics, manufacturing organizations are required to focus not only on technical efficiency, but also on the human dimension that underpins the sustainability of their operations. Employee performance is a strategic key in maintaining a competitive advantage, especially when the industry faces challenges in the form of high workloads, tight production schedules, and pressures due to rapid technological transformation (Hu et al., 2025; Mehta et al., 2024). In this context, there is a need to understand how psychological and organizational factors such as *Work-life balance* (WLB) and *Work Engagement* (WE) plays a role in shaping the welfare and performance of the manufacturing workforce.

Concept *Work-life balance* has evolved significantly in the last two decades. Once understood as a separation between work and personal life, WLB now encompasses broader aspects of flexibility, autonomy, and psychological well-being (Zaitouni et al., 2024). Studies have confirmed that a supportive work culture and flexible work policies can help employees balance professional and personal roles effectively (Bellini et al., 2025; Domagalska-Grędyś & Sroka, 2025). In the context of manufacturing, Hu et al. (2025) emphasizes that the application of work-life balance practices in internal marketing orientation (*WL-IMO*) can improve employee happiness, retention, and productivity. This shows that work-life balance not only has an impact on individual well-being, but also on the company's operational performance, especially in the era of *Industry 4.0* which demands adaptation and continuous innovation.

In addition to WLB, *Work Engagement* is an important variable that describes the extent to which employees feel passionate, dedicated, and fully engaged in their work. Employees who have a high level of engagement tend to show proactive behavior, are more adaptive to change, and perform better (Gürbüz et al., 2025). However, empirical evidence related to WE is still mixed. Layek & Koodamara (2024) found that WE can mediate the relationship between rewards and performance, but its direct influence varies according to the context of the organization. Similarly Okon et al. (2025) suggests that procedural fairness and career opportunities can improve WE, but cross-sectoral longitudinal understanding is still limited.

Although these two constructs, WLB and WE, are often associated with improved performance, empirical findings show inconsistent results. Some studies have concluded that WLB contributes positively to job satisfaction and retention, but is not always significant to performance (Faris et al., 2024; Harini et al., 2025). In contrast, other studies have found that WE increases motivation and psychological resilience, but its direct effects on performance are not always significant (Fachrurazi et al., 2022; Natakusumah et al., 2022; Ravhudzulo & Eresia-Eke, 2025). This inconsistency raises an important theoretical question: is employee performance more influenced by work-life balance, work engagement,

or the interaction of both? And in the context of complex and technology-intensive manufacturing, how do the two factors work together?

Technological disruption and digital transformation in *Industry 4.0* reinforcing the urgency of this study. Mehta et al. (2024) affirms that the integration of human factors such as ergonomics and employee engagement with technological innovation is a key foundation for world-class manufacturing excellence. However, the majority of theoretical frameworks still focus on technical aspects and operational efficiency, while the sustainability dimension of human resources is often overlooked. Tripathi et al. (2025) added that workforce empowerment on the production floor can only be achieved through synergies between effective operations management and supportive human resources policies, but long-term empirical evidence on the effectiveness of such synergies is still limited.

In addition, there is also a temporal gap in the literature, especially after the COVID-19 pandemic which changed the paradigm of work and employee expectations. Maryadi et al. (2025) noted that the direction of performance research has now shifted to contemporary themes such as digital leadership, work well-being, and organizational adaptation to digital globalization. In this context, manufacturing organizations are required to not only implement policies *Work-life balance* inclusive (Casper et al., 2024), but also reinforcing mechanisms *Work Engagement* which can maintain motivation and innovation amidst increased automation.

Based on this background, this study aims to conduct a systematic review of the latest empirical and conceptual literature to examine how *work-life balance* and *work engagement* simultaneously affect employee performance in the manufacturing sector. This study seeks to bridge the inconsistencies of previous findings, identify unfilled theoretical research gaps, and offer a conceptual framework that can deepen understanding of the role of human factors in an organization's competitive advantage. The novelty of this research lies in the integration of the two main constructs of WLB and WE which are often studied separately, in the context of the manufacturing sector which is at the intersection of human systems and technology. By consolidating the results of various multidisciplinary studies, this research is expected to broaden the discourse on sustainable human resource management and make a practical contribution to performance improvement strategies in the modern manufacturing industry.

LITERATURE REVIEW

Employee performance has become one of the main topics in the study of human resource management and organizational behavior, especially in the manufacturing sector which is the main pillar of national productivity. In a competitive and technology-intensive industrial environment, the success of an organization depends heavily on the ability to maintain a productive, motivated, and prosperous workforce. Therefore, two psychological concepts that are getting more and more attention in the literature are *Work-life balance (WLB)* and *work engagement (WE)*, both of which have been proven to contribute to improving the performance of individuals and organizations (Gürbüz et al., 2025; Hu et al., 2025).

Theoretically, the concept *Work-life balance* rooted in role conflict theory (*Role Conflict Theory*) introduced by Greenhaus and Beutell (1985), explaining that individuals often experience stress due to the imbalance between the demands of work and personal life. This imbalance can lead to stress, fatigue, and decreased productivity. In its development, *Work-life balance* not only is it understood as the absence of conflict, but also the ability of individuals to harmoniously manage the various roles of their lives (Zaitouni et al., 2024). Domagalska-Grędyś & Sroka (2025) It adds that work-life balance includes organizational aspects (e.g. flexibility and management support) as well as personal aspects (e.g. coping strategies and individual priorities). In the context of manufacturing, which often demands long working hours and shift systems, *Work-life balance* is crucial in maintaining psychological health and reducing turnover rates (Hu et al., 2025). Research by Bellini et al. (2025) It shows that the implementation of flexible policies, such as working time arrangements and social supports, has the dual effect of improving well-being and stabilizing labor productivity.

Meanwhile, *Work Engagement* has become one of the key concepts in modern work motivation theory. Schaufeli & Bakker (2010) defines it as a positive psychological state characterized by *Vigor* (enthusiasm and energy), *dedication* (enthusiasm and pride in work), and *Absorption* (full involvement in work activities). *Work commitment* based on *Job Demands-Resources (JD-R) Theory* (Bakker & Demerouti, 2007), which asserts that high engagement arises when work resources (such as organizational support, autonomy, and recognition) are able to balance the heavy demands of work. In the context of manufacturing, the *Commitment* It is often affected by the physical environment, time pressure, and strict production systems. Mehta et al. (2024) emphasizes that integration between human factors and technological innovation is necessary to build sustainable engagement amid industrial automation.

Other than *JD-R Theory*, other relevant theories are *Conservation of Resources (COR) Theory* (Hobfoll, 1989), which explains that individuals seek to maintain and protect their psychological resources. In this context, *Work-life balance* It acts as a key resource that can prevent burnout and allow psychological energy to be allocated to work engagement. When employees are able to manage their life balance well, they have greater energy reserves and motivation to be actively involved in work (Andrić et al., 2023). Conversely, imbalances can lead

to *Burnout* and decreased performance, as described in various cross-sector studies (Ravhudzulo & Eresia-Eke, 2025).

Relationship between *Work-life balance* and *Work Engagement* can also be explained through *Ability–Motivation–Opportunity (AMO) Model* (Appelbaum, 2000). This model states that high performance arises when employees have the ability (*Ability*), motivation (*Motivation*), and opportunity (*Opportunity*) to contribute optimally. In this context, *Work-life balance* plays a role in maintaining motivation by reducing role pressure and strengthening emotional well-being. *Work commitment* enhances employees' abilities through energy and dedication, while human resource management practices provide opportunities for them to excel. All three work synergistically to produce sustainable performance.

A number of empirical studies support the linkage between the three constructs. Gürbüz et al. (2025) found that work engagement mediated the relationship between resource-based HR practices and task performance. Layek & Koodamara (2024) shows that work engagement is able to strengthen the effect of rewards on performance, while Okon et al. (2025) Identify that procedural fairness and career development opportunities strengthen those relationships. However, the results of the study are not always consistent. Palar et al. (2022) reports that *Work-life balance* does not always have a direct impact on performance, but rather plays more of a role through job satisfaction or *Commitment* as an intermediate variable. These inconsistencies underscore the need for a systematic approach to understanding the relationship between life balance, engagement, and performance in different contexts, especially manufacturing sectors that have unique characteristics.

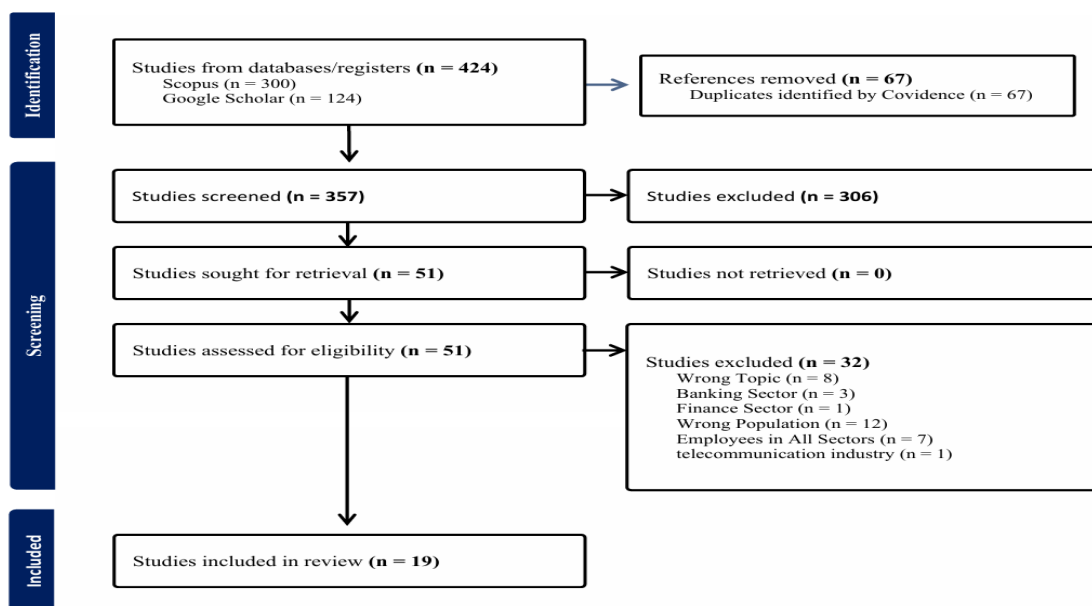
Conceptually, the relationship between the three constructs can be explained as follows: *Work-life balance* provide the basic conditions that allow individuals to achieve emotional and psychological stability. This stability then encourages the formation of *Work Engagement*, which brings out energy, dedication, and focus on work. Such involvement ultimately led to an increase in *employee performance*, both in the form of task performance, organizational civic behavior (*Organizational citizenship behavior*), as well as work innovation. In the context of manufacturing, this synergy becomes especially important as workers face a combination of physical demands, time pressures, and the need to adapt to new technologies (Mehta et al., 2024; Tripathi et al., 2025).

The conceptual framework proposed in this study positions *work-life balance* as a key resource factor that supports *work engagement*, and ultimately improves *employee performance*. In addition, contextual factors such as organizational support, work flexibility, and safety and efficiency culture in the manufacturing environment can play a role as a moderator that strengthens or weakens the relationship between these variables. Thus, this integrative approach provides a theoretical basis for the systematic analysis conducted in this study, while also offering a comprehensive view of how work-life balance and engagement can be used to drive sustainable performance in the modern manufacturing sector.

METHODOLOGY

This study uses a systematic literature review approach to identify, analyze, and synthesize various empirical and conceptual research results regarding the relationship between *work-life balance* (WLB), *work engagement* (WE), and employee performance in the manufacturing sector. This approach was chosen because it was able to provide a comprehensive overview of theoretical developments and empirical results spread across various studies, as well as reveal inconsistencies and gaps in research that still exist. The review process follows the PRISMA 2020 guidelines to ensure transparency and methodological accuracy. The data was collected from reputable academic databases such as Scopus, Emerald Insight, and Google Scholar, with a publication range between 2020 and 2025 to reflect the post-pandemic dynamics and the era of industrial digitalization. Search keywords include a combination of the terms "work-life balance", "work engagement", "performance", and "manufacturing", which are combined with Boolean operators to obtain relevant results.

The articles obtained were selected based on strict inclusion and exclusion criteria, including the type of conceptual research, the context of the manufacturing sector, and the direct relationship with the variables of WLB, WE, and employee performance. Out of a total of 424 initial articles, 19 studies were eligible for further analysis after going through the title, abstract, and full review screening stages. The analysis was conducted narratively and thematically to identify relationship patterns, mediation or moderation mechanisms, and the specific context of the manufacturing industry. The overall picture of the process of identifying, screening, eligibility, and inclusion of articles in this study is presented visually through the PRISMA (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*) flowchart, which is as follows:



Picture 1. PRISMA Flowchart for Study Selection Process

RESULT AND DISCUSSION

The results of the literature review of the selected articles provide an overview of the research focus related to Work-Life Balance, Work Engagement, and performance in the manufacturing sector. These studies collectively highlight how the interplay between employees' personal and professional lives can significantly influence their level of engagement and overall productivity. In addition, the findings reveal recurring themes, methodological approaches, and key variables that are frequently examined across different research contexts within the manufacturing industry. The list of articles analyzed is presented in Table 1 below:

Table 1. Distribution of articles related to Work-Life Balance, Work Engagement, and Performance in the Manufacturing Sector

No.	Article Title	Author Name	Year	Journal Name
1.	The Effect of Employee Mindfulness on Thriving at Work: A Chain Mediating Effect of Self-Efficacy and Work Engagement	Guangli Lu, Jinfeng Li, Yingfei Li, and Chaoran Chen	2025	Psychological Act
2.	A Descriptive Study of Work Engagement among Manufacturing Employees at PT. X	Vania Angeline, Yohana, Valentina, Noviantika, Daniel Lie, and Ismoro	2024	International Journal of Application on Social Science and Humanities
3.	Work-Life Balance, Leader Member Exchange and Job Satisfaction Towards Employee Engagement Among Millennial in Manufacturing Industry	Noor Azura Dahalan, Muna Wadhiha Mohd Fauzi, Marhani Mohamed Anuar, Muhamad Khalil Omar, and Rosilah Abdul Rahim	2024	South East Asia Journal of Contemporary Business, Economics and Law
4.	Work Life Balance and Work Engagement on Employee Performance in the Auto Cutting Department	Haris Fauzi	2024	Indonesian Journal of Multidisciplinary Science
5.	Demystifying the Relationships Among Green HRM, Green Work Engagement, Green Innovation and Environmental Performance: A Serial Mediation Model	Jnaneswar K	2024	Social Responsibility Journal

No.	Article Title	Author Name	Year	Journal Name
6.	Impact of Green Work-Life Balance and Green Human Resource Management Practices on Corporate Sustainability Performance and Employee Retention	Zi Lin, Hai Gu, Kiran Zahara Gillani, and Mochammad Fahlevi	2024	Sustainability
7.	The Effect of Work Life Balance on Employee Performance in Manufacture Companies (Case Study at PT. Gemilang Mitra Sejahtera)	Aisyah, Cita; Suryaningsih, Annisa; Princess, Sister's Tongue	2023	Journal of Contemporary Administration and Management (ADMAN)
8.	Emotional Intelligence as a Predictor of Employee Engagement: A Study of US Manufacturing Workers	Trina Lang, Susan Saurage-Altenloh	2023	Business Management Research and Applications: A Cross-Disciplinary Journal
9.	Determinants of Employee Performance in the Manufacturing Industry	Subur Karyatun, Tri Wahyono, Intan Apriadi, Priyono Priyono, Harefaan Arief, Muhammad Andy Rachman Hakim, and Mochamad Soelton.	2023	American International Journal of Business Management (AIJBM)
10.	The Impact of Work-Life Balance on Employee Performance: Mediating Role of Affective Commitment and Job Satisfaction	Udin, Udin	2023	International Journal of Sustainable Development & Planning
11.	Work Engagement and Organisation Performance: The Mediating Role of Innovative Work Behaviour and Moderating Role of Perceived Distributive Fairness in	Abdul Waheed, Salma Waheed, Naveed Ahmad, and Jawad Karamat	2023	International Journal of Business Performance Management

No.	Article Title	Author Name	Year	Journal Name
	Manufacturing Industry of Pakistan			
12.	The Effect of Work Engagement on Perceived Business Performance: Comparisons Between Manufacturing and Service Sectors	Bebitoğlu, Meriç Esat	2023	Trakya üniversitesi social bilimler dergisi
13.	Organization Cross-Domain Interventions Managing Strategies and Employee Outcomes: A Role of Work-Family Balance	Bashir, Mohsin; Bhutta, M. Khurram S.; Bari, Muhammad Waseem; Saleem, Ammara; Tanveer, Yasir	2022	International Journal of Organizational Analysis
14.	The Role of Green Human Resource Management Practices in Driving Green Performance in the Context of Manufacturing SMEs	Xiaoyan Huo, Arooj Azhar, Nabeel Rehman, and Nauman Majeed	2022	Sustainability
15.	Linking Level of Engagement, HR Practices and Employee Performance Among High-Potential Employees in Malaysian Manufacturing Sector	Siti Amirah Othman and Nik Hasnaa Nik Mahmood	2022	Global Business Review
16.	The Effects of Relational and Psychological Capital on Work Engagement: The Mediation of Learning Goal Orientation	Malgorzata Rozkwitalska, Beata A. Basinska, Fevzi Okumus, and Osman M. Karatepe.	2022	Journal of Organizational Change Management
17.	Work-Life Balance and Employee Performance in Selected Manufacturing Company	Roziana Shaari, Azlineer Sarip, Shah Rollah Abdul Wahab, and Siti Nur Azrina Md Saat.	2022	International Journal of Academic Research in Business and Social Sciences

No.	Article Title	Author Name	Year	Journal Name
18.	Factors Predicting Employee Engagement in Indian Manufacturing Sector	Choudhury, Sasmita; Mohapatra, A.K. Das; Mohanty, Manoj Kumar	2021	International Journal of Services and Operations Management
19.	Work-Life Balance and Employee Performance: A Case Study of Selected Manufacturing Firms in Ogun State, Nigeria	Nanle Magaji, Valerie Onyia Babatope, Ijeoma Jacklin Ogundiwin and Samuel Damilola	2021	International Journal of Research Science and Management

Source: processed researcher, 2026

In the manufacturing sector, work-life balance plays an important role in improving employee performance because it allows workers to balance the demands of work with personal needs. This ability not only reduces stress and fatigue, but also promotes consistent productivity in a physically and mentally demanding production environment. Research shows that effective work-life balance practices, such as flexible working hours and balanced workload management, make a positive contribution to employee performance, particularly in manufacturing companies in Indonesia, Malaysia, and Nigeria (Magaji et al., 2021; Shaari et al., 2022; Udin, 2023). This confirms that employee well-being is not only a personal focus, but also an important strategy for manufacturing organizations to maintain high performance.

In addition to a direct influence on employee performance, work-life balance also plays a role in shaping work engagement, which in turn strengthens employees' contribution to organizational goals. Work engagement, which includes passion, dedication, and full involvement in tasks, allows workers to channel the benefits of work-life balance into tangible results. Research in Malaysia and the United States shows that highly engaged employees show greater emotional commitment and higher productivity, confirming the important role of work engagement as a mediator between work-life balance and performance (Lang & Saurage-Altenloh, 2023; Lu et al., 2025; Othman & Mahmood, 2022).

Employee psychological factors also play an important role in strengthening the relationship between work-life balance and performance. Psychological capital, such as optimism, resilience, and self-confidence (Luthans, 2011), helping employees cope with operational pressures and maintain high performance. Healthy interpersonal relationships between employees and bosses and co-workers also increase engagement and belonging to the organization, which further supports improved performance (Choudhury et al., 2021; Dahalan et al., 2024; Rozkwitalska et al., 2022). As such, organizations need to pay attention to psychological aspects and interpersonal relationships as part of an overarching strategy to improve the effectiveness of work-life balance.

Approaches that consider environmental sustainability are showing increasing relevance in the context of manufacturing. Eco-friendly human resource

management practices, when combined with work-life balance initiatives, can create sustainable work engagement and improve overall employee performance (Huo et al., 2022; Jnaneswar, 2024; Lin et al., 2024b). This approach not only benefits productivity, but also supports broader organizational goals related to sustainability and social responsibility. Thus, work-life balance not only impacts individual performance, but also contributes to the sustainability of the organization holistically.

Additional factors, such as organizational culture, job satisfaction, and interactions between leaders and team members, reinforce the relationship between work-life balance, engagement, and employee performance. A supportive work environment, appreciation for individual contributions, and healthy working relationships drive higher employee engagement and retention, which in turn improves performance (Bashir et al., 2022; Bilimler & Haziran, 2023). Additional interventions, such as supervisor support and flexibility in work arrangements, also play an important role in creating working conditions that support balance, so that employees can make maximum contributions (Angeline et al., 2024).

While work-life balance has a positive impact, the manufacturing sector faces significant challenges that can reduce its effectiveness. Factors such as job insecurity, high production demands, and excessive workloads can trigger counter-productive behavior, decrease work engagement, and ultimately lower employee performance (Karyatun et al., 2023). These findings suggest that work-life balance practices are not sufficiently applied partially, but must be accompanied by strategies that take into account operational pressures and the psychological needs of employees. Without a holistic approach, the benefits of work-life balance can be reduced, so that companies do not obtain optimal performance improvements.

Practical strategies for strengthening employee engagement and performance involve the implementation of a thorough and systematic program. For example, mindfulness training can help employees manage stress and increase work engagement, so that the positive effects of work-life balance are maximized (Lu et al., 2025). Supervisor support and flexibility in scheduling arrangements also prove important to create conducive working conditions for employees (Bashir et al., 2022; Bilimler & Haziran, 2023). By implementing an integrated approach that combines work-life balance, engagement, and organizational support, manufacturing companies can improve employee performance on an ongoing basis, while reducing the risk of burnout and turnover.

The integration of work-life balance practices with environmental sustainability approaches or green human resource management expands its benefits. Studies show that work-life balance practices combined with green innovation and an environmentally friendly organizational culture can improve ecological work engagement as well as employee performance (Huo et al., 2022; Jnaneswar, 2024; Lin et al., 2024a). This approach creates a positive cycle, where employees who feel balanced in their work lives are also encouraged to contribute to the company's sustainability goals, so that the organization gains a double benefit in terms of productivity and social responsibility.

Demographic and generational factors also affect the effectiveness of work-life balance and employee engagement in the manufacturing sector. Millennial employees, who now make up the majority of the workforce, show a more positive response to a supportive work environment, recognition of their contributions, and opportunities for professional development (Choudhury et al., 2021; Dahalan et al., 2024). As such, the company's strategy must tailor work-life balance and engagement programs to meet the needs of this generation, including flexibility in working hours, appreciation of achievements, and effective communication between superiors and subordinates. This approach increases the likelihood of employee retention, while driving continuous performance improvement.

Findings from the cross-country literature show consistency in the positive relationship between work-life balance, work engagement, and employee performance, although there are variations in the intensity of effects due to differences in culture, workload, and managerial practices (Fauzi, 2024; Magaji et al., 2021; Shaari et al., 2022; Udin, 2023). Research in Indonesia, Malaysia, the United States, India, and Pakistan shows that implementing strategies that combine work-life balance with increased work engagement has the potential to result in higher employee performance. It confirms that the basic principles of the relationship between work-life balance, engagement, and performance apply across contexts, although their implementation needs to be adapted to local characteristics and the needs of the manufacturing industry.

Theoretically, these findings support the argument that work-life balance is an important resource for employees in dealing with the demands of work, in line with the theory *Conservation of Resources* that emphasizes the protection and utilization of personal resources to maintain high performance (Udin, 2023). Work-life balance not only directly affects productivity, but also strengthens emotional commitment and job satisfaction, which in turn increases employee engagement. Thus, this relationship suggests that work engagement plays a crucial mechanism that transforms work-life balance benefits into real performance improvements.

From the perspective of managerial practices, manufacturing organizations need to develop comprehensive programs to improve work-life balance and employee engagement. Effective strategies include flexible working hours, balanced workload management, mindfulness training, and consistent supervisor support (Angeline et al., 2024; Bashir et al., 2022; Billman et al., 2024). In addition, the integration of sustainability initiatives such as green human resource management can strengthen employee ecological engagement and support the company's long-term performance (Huo et al., 2022; Lin et al., 2024a). This holistic approach ensures that the benefits of work-life balance are not only individual, but also impact the productivity and competitiveness of the organization as a whole.

Furthermore, research shows that a supportive work environment, a healthy organizational culture, and good boss-subordinate relationships can reinforce the positive effects of work-life balance and work engagement (Choudhury et al., 2021; Dahalan et al., 2024; Rozkwitalska et al., 2022) (. This shows the importance of integrating psychological, relational, and structural strategies in workforce management. Organizations that are able to create conducive working conditions tend to see increased employee retention, higher

engagement, and ultimately improved performance, while reducing the risk of burnout and counter-productive behavior.

However, the limitations of existing research need to be considered. Many studies are cross-sectional with a limited sample in specific countries, so generalization of findings still needs to be cautious. Future research is suggested using longitudinal or experimental designs to explore the causal relationship between work-life balance, work engagement, and employee performance. In addition, variables such as employee generation, type of manufacturing industry, as well as sustainability practices and green human resource management can be examined in more depth to understand how local contexts and organizational strategies modify these relationships (Fauzi, 2024; Lin et al., 2024a).

Overall, the literature synthesis confirms that work-life balance and work involvement are the main strategic levers in improving employee performance in the manufacturing sector. Work-life balance plays a direct role in creating the psychological and operational conditions that support performance, while work engagement reinforces this effect by encouraging passion, dedication, and full engagement in work. Integrating work-life balance strategies with sustainability practices, organizational support, and employee psychological development can result in sustainable performance, improve retention, and create a healthy, adaptive work environment. The cross-country findings demonstrate the consistency of this relationship, providing strong theoretical and practical implications for managers, human resource practitioners, and researchers in the manufacturing sector.

CONCLUSION AND RECOMMENDATION

Based on the synthesis of the literature studied, it can be concluded that work-life balance significantly supports the improvement of employee performance in the manufacturing sector by facilitating the management of job demands and personal needs, reducing stress, and encouraging sustainable productivity. Work engagement emerges as an important mediator that reinforces the influence of work-life balance through increased passion, dedication, and full involvement in tasks. These findings underscore the need for manufacturing organizations to design comprehensive work-life balance programs, including schedule flexibility, supervisor support, employee psychological development, and integration of sustainability practices, to achieve optimal performance while supporting employee retention and satisfaction. Nonetheless, the effectiveness of this strategy can be affected by excessive workload, job insecurity, and cultural context differences, so generalization of results should be done carefully.

Further research is suggested using longitudinal or experimental designs to examine the causal relationship between work-life balance, work engagement, and performance, as well as explore contextual variables such as industry type, employee generation, and sustainability practices that may moderate or mediate these relationships. Thus, the study not only provides theoretical insights into performance mechanisms in the manufacturing sector, but also offers practical recommendations for managers and human resource practitioners to improve organizational effectiveness in a sustainable manner.

Manufacturing organizations are advised to implement a comprehensive work-life balance program, including flexibility in hours, workload management, supervisor support, and psychological development training, to improve employee engagement and performance. The integration of sustainability practices can also amplify these positive effects. Further research is suggested using longitudinal or experimental designs to explore the causal relationships and roles of contextual variables such as employee generation, industry type, and sustainability practices. This approach provides practical guidance for managers to create an adaptive, productive, and sustainable work environment.

FURTHER STUDY

This study has several limitations, particularly the dominance of cross-sectional research designs that limit causal interpretation and the focus on the manufacturing sector, which may restrict the generalizability of findings to other industries. Therefore, future research is recommended to use longitudinal or experimental approaches to better understand causal relationships over time, while also incorporating additional variables such as leadership style, organizational culture, digital transformation, and employee well-being. Expanding research across different sectors and countries is also important to capture contextual and cultural differences that may influence the relationship between work-life balance, work engagement, and employee performance.

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