



Work-Life Balance, Ethical Leadership, and Their Effects on Employee Engagement: A Mediated Model of Job Satisfaction in the Medical Healthcare Industry

Mita Widyaningsih^{1*}, Lenny Christina Nawangsari²
Mercu Buana University, Indonesia

Corresponding Author: Mita Widyaningsih widyaningsih.mita@gmail.com

ARTICLE INFO

Keywords: Work-Life Balance, Ethical Leadership, Job Satisfaction, Employee Engagement

Received : 16, July

Revised : 30, July

Accepted: 24, August

©2025 Widyaningsih, Nawangsari:
This is an open-access article distributed under the terms of the [Creative Commons Atribusi 4.0 Internasional](https://creativecommons.org/licenses/by/4.0/).



ABSTRACT

This project aims to enhance employee well-being and engagement in a Jakarta-based healthcare device company by promoting ethical leadership and work-life balance. The program began with assessments and focus group discussions to identify key employee needs. Practical training sessions were conducted over three months, focusing on stress management, ethical decision-making, and effective work-life integration. All activities were scheduled across weekly sessions, ensuring continuous support and feedback. Implementation involved the active participation of both management and staff, encouraging open communication and mutual learning. Results indicate improved job satisfaction and team cohesion. The initiative highlights the value of sustained leadership development and balanced working environments as critical factors in fostering healthy, productive workplace communities.

INTRODUCTION

In Jakarta's fast-changing healthcare device industry, sustaining high employee engagement (EE) and job satisfaction (JS) remains challenging, even though the workforce is largely comprised of skilled and adaptable millennials.

Survey data show concerning trends: 32% of employees feel undervalued, 30% are hesitant to share ideas, and nearly 70% say their jobs don't support personal well-being—alongside limited growth, fair rewards, and recognition (State of the Global Workplace, 2024; Znidaršič & Marič, 2021; Nafis et al., 2020). For millennials, who value purpose, equity, and balanced work-life, these gaps threaten loyalty, creativity, and long-term engagement.

Work-life balance (WLB) is a major concern, with 90% of respondents stating work intrudes on personal time, and mixed satisfaction regarding leadership, career growth, and fairness. Ethical leadership (EL) is inconsistent; only 58% see leaders regularly display fairness and integrity. Research confirms that fair and ethical management encourages employee trust, meaning, and emotional connection (Laradi et al., 2024; Ramlawati et al., 2023; Reuben N.D., 2024).

The relationship between WLB, EL, and EE is mediated by JS, which serves as a bridge from daily work experiences to deeper engagement (Westover, 2024; Pamara & Bayudhirgantara, 2022; Utama et al., 2021). This process is influenced by factors like organizational culture and recognition (Baina & Warsindah, 2023). Some studies (Hartanto & Nawangsari, 2024) find no significant mediation, while others (Kristinanda & Priyatama, 2023; Utama et al., 2021) show JS strengthens the WLB-EE link.

Research reveals key gaps: most prior studies are broad and miss Indonesia's healthcare device sector—where regulatory complexity, tech advances, and many millennials create unique conditions. The literature often focuses on direct effects between WLB, EL, EE, and JS, not JS's mediating role, and conflicting findings persist (Hartanto & Nawangsari, 2024; Kristinanda & Priyatama, 2023). When JS is high—supported by tools, rewards, colleagues, and career paths—engagement rises; if not, disengagement grows, matching Gallup's (2024) finding that 8% of Indonesia's workforce is "actively disengaged."

Against this backdrop, this study examines how work-life balance (WLB) and ethical leadership (EL) impact employee engagement (EE), with job satisfaction (JS) as a mediator, among a millennial-dominated workforce. Using company survey data and established literature, the research addresses gaps by exploring these relationships and providing actionable insights for HR and sustained competitiveness. Focusing on balanced work, ethical leadership, and job satisfaction, organizations can build a more loyal, innovative, and high-performing workforce to support sustainable growth and SDG 8 (Haar et al., 2020; Lin et al., 2024).

LITERATURE REVIEW

Work-Life Balance

WLB is increasingly vital as work demands rise and employees' personal priorities become central (Nafis et al., 2020). WLB means fulfilling work duties without sacrificing personal and family well-being, but it varies by profession

and life stage, requiring organizational flexibility. In Indonesia and similar economies, workers favor roles integrating career and personal aspirations (Znidaršič & Marič, 2021). Companies offering flexible schedules or wellness programs report higher satisfaction and belonging, especially in high-involvement sectors.

Research shows WLB directly and indirectly boosts employee engagement (EE), also supporting job satisfaction (JS), which deepens commitment (Kristinanda & Priyatama, 2023; Jannata & Perdhana, 2022). However, its impact is context-dependent—talent management and organizational climate sometimes outweigh WLB, and high stress can nullify formal policies (Hartanto & Nawangsari, 2024; Amelia et al., 2023).

Overall, WLB is essential for JS and engagement, yielding benefits like lower turnover and higher morale, but optimal effects depend on responsive, holistic workplace strategies that adapt to evolving employee needs (Znidaršič & Marič, 2021).

Ethical Leadership

EL centers on leaders who model fairness, honesty, and transparency, cultivating respect and serving as ethical role models (Laradi et al., 2024). Through consistent actions and communication, ethical leaders build trust, collaboration, and emotional commitment among employees (Amoah et al., 2022; Ramlawati et al., 2023). Organizations that prioritize EL foster loyalty and discretionary effort.

Research shows a strong link between EL and employee engagement (EE): ethical leaders help employees internalize values, take pride in their work, and feel they belong (Ramlawati et al., 2023; Naeem et al., 2020). However, EL's effect is shaped by organizational culture and systems (Baina & Warsindah, 2023). In settings with strict protocols, ethical conduct is especially vital, but the impact on job satisfaction (JS) and engagement may be influenced by factors like organizational justice and recognition (Baina & Warsindah, 2023; Reuben N.D., 2024). Overall, EL is key to high EE and JS. Leaders who uphold ethical standards build cultures of trust and openness, empowering employees to contribute meaningfully to organizational goals.

Job Satisfaction

JS is vital for organizational health and performance, reflecting how employees feel about their roles and work environment. It includes factors like fair pay, engaging tasks, supportive teams, advancement, and recognition (Westover, 2024). Satisfied employees show greater engagement, creativity, and loyalty, strengthening organizational resilience.

JS grows when employees see their job as meaningful and their contributions linked to success (Pamara & Bayudhigantara, 2022). Leadership that cares for employee well-being and openly recognizes achievements boosts enthusiasm (Utama et al., 2021). What drives JS varies by individual—some value teamwork, others autonomy or job security. Organizations that continually monitor and improve JS adapt better and reduce turnover.

Research shows satisfied employees are more engaged and prouder of their organization, while lack of fulfillment reduces engagement (Pamara & Bayudhirgantara, 2022; Utama et al., 2021). Ethical leadership (EL) also impacts JS, but must be paired with a supportive culture and fair rewards for lasting satisfaction (Baina & Warsindah, 2023). Investing in fair practices, open communication, and growth opportunities builds satisfaction and boosts engagement and performance.

Employee Engagement

EE is central to organizational success, reflecting employees' emotional and mental investment in their work. Engaged staff show energy, enthusiasm, and purpose, contributing ideas and effort beyond routine tasks (Astari et al., 2023). Companies with high EE see better retention, teamwork, and adaptability, especially with millennials who value meaning in work (State of the Global Workplace, 2024). EE is shaped by leadership style, work-life balance (WLB), peer support, and opportunities for growth. Organizations that recognize contributions and support development have more engaged employees (Kristinanda & Priyatama, 2023). Conversely, lack of fairness or resources reduces engagement.

EE both drives and results from job satisfaction (JS): satisfied employees build strong attachment, and engaged employees find greater satisfaction. Clear communication, fair compensation, recognition, and career growth strengthen this interplay (Pamara & Bayudhirgantara, 2022; Utama et al., 2021).

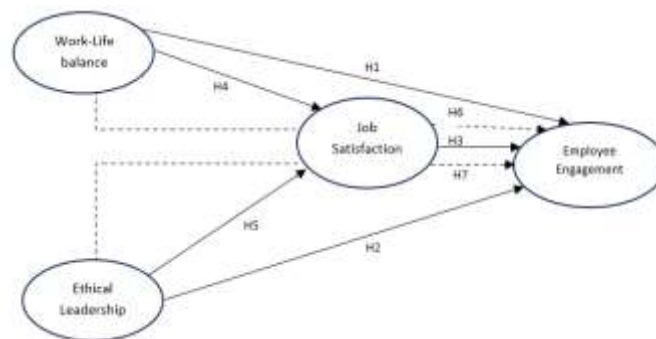


Figure 1. Conceptual Framework

a. The Effect of Work-Life Balance (WLB) to Employee Engagement (EE)

WLB is not just splitting time between work and life, but managing energy to meet both responsibilities, which varies by job and life stage (Maier, cited in Hartanto & Nawangsari, 2024). Flexibility and support are key, especially in high-pressure environments. WLB is closely linked to employee engagement (EE) (Ojo et al., in Ayodeji Boyede & Oyewumi Omotoye, 2021), and research shows it has a positive effect on EE, mediated by job satisfaction (Utama et al., 2021). When employees balance work and personal engagement, their commitment increases (Ayodeji Boyede & Oyewumi Omotoye, 2021).

H1: WLB positively and significantly affects EE.

b. The Effect of Ethical Leadership (EL) to Employee Engagement (EE)

EL is defined by leaders' commitment to moral principles, shown through integrity, transparent actions, and authentic relationships (Brown, cited in Amoah et al., 2022). Leaders who exemplify honesty and fairness inspire teams to uphold ethical standards. Studies show that such leadership – marked by trust and respect – supports productivity, commitment, and an environment where employees feel valued (Naeem et al., 2020; Mahran et al., 2022; Ramlawati et al., 2023). EL effectively increases job satisfaction (JS) and employee engagement (EE), strengthening dedication to the organization.

H2: EL has a positive and significant effect on EE.

c. The Effect of Job Satisfaction (JS) on Employee Engagement (EE).

JS arises when employees find their work meaningful and impactful, boosting creativity, adaptability, and commitment (Halimsetiono in Pamara & Bayudhigantara, 2022). It is a positive emotional response to achieving work goals, where feeling comfortable and positive about one's job is key (Robbins in Utama et al., 2021). Research consistently shows higher JS leads to stronger employee engagement (EE); employees who feel valued and supported are more motivated, loyal, and eager to contribute, which enhances both engagement and long-term organizational success.

H3: JS has a positive and significant effect on EE.

d. The Influence of Work-Life Balance (WLB) on Job Satisfaction (JS)

WLB involves managing work and personal time so professional demands do not harm personal well-being or family (Laksono & Wardoyo in N. Amelia & Nugroho, 2024). Disorganized schedules or instability can cause stress, conflict, and burnout, highlighting the need for balance. Job satisfaction (JS) is a positive feeling from evaluating work and daily tasks, linked to pride and accomplishment (Robbins & Judge, Colquitt in Naini & Riyanto, 2023).

Research shows millennials with strong WLB have higher JS (F. R. Amelia et al., 2023), and organizational support for WLB increases both satisfaction and engagement (Reners et al., 2024). Thus, WLB benefits well-being and is a key driver of JS.

H4: WLB has a positive and significant effect on JS.

e. The Influence of Ethical Leadership (EL) on Job Satisfaction (JS)

EL differs from other styles like transformational or authentic leadership by its focus on moral example and respect in decision-making (Guo et al., 2023; Idrees et al., 2022, in Ali et al., 2023). Ethical leaders are sincere, caring, and fair; they address moral issues and reward ethical behavior, holding employees accountable.

Alshammari's model shows EL creates an empowering environment and boosts performance and organizational outcomes, especially in government, fostering engagement and responsibility (Shinwari et al., 2024). Job satisfaction (JS) reduces turnover and improves performance through increased engagement and productivity (Yu et al. in Sahid & Abadi, 2023). Shinwari et al. (2024) found a consistently strong, positive link between EL and JS across all employee levels.

H5: EL positively and significantly affects JS.

f. The Effect of Work-Life Balance (WLB) on Employee Engagement through Job Satisfaction (JS).

WLB means maintaining equilibrium between work and personal, family, social, and recreational responsibilities so neither domain overwhelms the other (Abendroth & Den Dulk in Udin, 2023). It covers balancing effort, skills, and time for both commitments, which boosts productivity and satisfaction (Marques & Berry, Johari et al. in Udin, 2023). WLB's multidimensional nature includes equal roles, control, satisfaction, and meaning across life domains (Brough et al. in Mashavira et al., 2023).

Some studies (Hartanto & Nawangsari, 2024) find job satisfaction (JS) does not mediate the WLB-employee engagement (EE) link, stressing the need for strategic management. Others (Kristinanda & Priyatama, 2023) show WLB strengthens EE, with JS further enhancing that effect: higher satisfaction increases dedication and involvement at work.

H6: WLB has a significant effect on EE through JS.

g. The Influence of Ethical Leadership (EL) on Employee Engagement (EE) through Job Satisfaction (JS)

EL is essential for fostering a positive workplace and improving employee satisfaction. Studies from multiple contexts, including Kenya and Ghana, show EL promotes morale and job satisfaction (JS), even in resource-constrained settings (Reuben N.D, 2024). Leadership principles generally yield positive outcomes across industries and cultures; however, factors like organizational climate and interpersonal trust can moderate EL's effects on EE and JS. Adopting EL and creating a supportive climate enhances engagement, satisfaction, and overall performance, contributing to a harmonious and productive organizational environment.

H7: EL has a significant effect on EE through JS.

METHODOLOGY

This quantitative study used a census approach, surveying all 82 permanent employees at a leading Jakarta healthcare device company via structured online questionnaire. Respondents represented diverse demographics and were actively employed and past probation. Data were analyzed with Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS, assessing validity and reliability (factor loadings, AVE, Cronbach's alpha, composite reliability). Relationships among WLB, EL, JS, and EE were examined, yielding strong findings on both direct and mediating effects in this organizational setting.

RESEARCH RESULT AND DISCUSSION

Respondent's Descriptive Statistics

Table 1. Description of Respondents Based on Gender

No	Gender	Total	Percentage
1	Male	40	49%
2	Female	42	51%
Total		82	100%

Source: Primary data processed by researchers, 2025

Table 2. Description of Respondents Based on Year of Birth

No.	Year of Birth	Total	Percentage
1	1965 – 1980	23	28%
2	1981 – 1996	53	64%
3	1997 – 2012	6	7%
Total		82	100%

Source: Primary data processed by researchers, 2025

Table 3. Description of Respondents Based on Education Level

No	Education Level	Total	Percentage
1	Diploma (D1/D2/D3)	6	7%
2	Bachelor (S1)	68	83%
3	Master/ doctorate (S2/S3)	8	10%
Total		82	100%

Source: Primary data processed by researchers, 2025

Table 4. Description of Respondents Based on Length of Service

No	Length of Service	Total	Percentage
1	Less than 6 years	21	26%
2	6 - 10 years	42	51%
3	More than 10 years	19	23%
Total		82	100%

Source: Primary data processed by researchers, 2025

The survey included 82 permanent employees at a healthcare device company in Jakarta. The company's workforce is dominated by well-educated millennial professionals, most of whom have a substantial length of service and a nearly even mix of male and female employees.

Data Analysis Results**Measurement Model Testing (Outer Model)**

Table 5. Results of Convergent Validity Testing of WLB, EL, JS, and EE Variables

Item	Indicator	Factor Loading	Condition	Result
WLB1	My job does not interfere with my personal time.	0,827	$\geq 0,5$	Valid
WLB2	I can achieve my work targets without having to work overtime.	0,716	$\geq 0,5$	Valid
WLB3	I can stay focused on my work even when I have personal problems.	0,765	$\geq 0,5$	Valid
WLB4	My hobbies outside of work help me relieve stress from work.	0,574	$\geq 0,5$	Valid
WLB5	My income from work allows me to enjoy a better life.	0,654	$\geq 0,5$	Valid
EL2	My boss shows integrity in carrying out daily tasks.	0,889	$\geq 0,5$	Valid
EL3	My supervisor is consistent in both words and actions.	0,876	$\geq 0,5$	Valid
EL4	My supervisor openly discusses the ethical standards that the team must follow.	0,871	$\geq 0,5$	Valid
EL5	My supervisor reprimands team members who violate the organization's ethical principles.	0,762	$\geq 0,5$	Valid
EL6	My supervisor uses a transparent decision-making process.	0,804	$\geq 0,5$	Valid
JS1	The salary I receive is in line with my expectations.	0,653	$\geq 0,5$	Valid
JS2	I enjoy the challenges in my daily work.	0,596	$\geq 0,5$	Valid
JS3	I see a clear career path at this workplace.	0,72	$\geq 0,5$	Valid
JS4	Colleagues support each other to achieve targets.	0,713	$\geq 0,5$	Valid
JS5	I have adequate tools to complete tasks efficiently.	0,787	$\geq 0,5$	Valid
JS6	I am confident that my job is secure in the long term.	0,727	$\geq 0,5$	Valid
JS7	I feel that this job allows me to use my potential to the fullest.	0,761	$\geq 0,5$	Valid
JS8	Benefits are provided transparently based on objective evaluations.	0,762	$\geq 0,5$	Valid
JS9	Communication with superiors is open.	0,664	$\geq 0,5$	Valid
EE1	I have sufficient resources to complete tasks in line with company expectations.	0,728	$\geq 0,5$	Valid

EE2	I believe that my contributions are recognized by my colleagues.	0,78	$\geq 0,5$	Valid
EE3	I am proud to be part of this company.	0,778	$\geq 0,5$	Valid
EE4	I am motivated to give my best for the success of the company.	0,848	$\geq 0,5$	Valid
EE5	I am willing to work beyond normal working hours to complete important tasks.	0,745	$\geq 0,5$	Valid
EE6	I take the initiative to solve problems without waiting for instructions.	0,672	$\geq 0,5$	Valid

Source: Primary data processed by researchers, 2025

Based on Table 5, all outer loading values are equal to or greater than 0.5. This demonstrates that every indicator used for the research variables is valid and meets the criteria for convergent validity. Therefore, all indicators are suitable for hypothesis testing and further analysis in this study.

Discriminant Validity

Table 6. Cross Loading Values for All Variables and Constructs in the Research Model

Indicator	EE	EL	JS	WLB	Result
EE1	0,728	0,379	0,493	0,265	Valid
EE2	0,78	0,326	0,565	0,406	Valid
EE3	0,778	0,475	0,406	0,384	Valid
EE4	0,848	0,525	0,549	0,384	Valid
EE5	0,745	0,336	0,503	0,216	Valid
EE6	0,672	0,218	0,335	0,212	Valid
EL2	0,544	0,889	0,565	0,361	Valid
EL3	0,314	0,876	0,594	0,332	Valid
EL4	0,491	0,871	0,547	0,419	Valid
EL5	0,417	0,762	0,427	0,327	Valid
EL6	0,351	0,804	0,694	0,344	Valid
JS1	0,333	0,386	0,653	0,34	Valid
JS2	0,446	0,441	0,596	0,459	Valid
JS3	0,415	0,475	0,72	0,392	Valid
JS4	0,557	0,555	0,713	0,302	Valid
JS5	0,558	0,486	0,787	0,435	Valid
JS6	0,471	0,377	0,727	0,432	Valid
JS7	0,516	0,455	0,761	0,503	Valid
JS8	0,37	0,433	0,762	0,269	Valid
JS9	0,341	0,684	0,664	0,324	Valid
WLB1	0,371	0,418	0,487	0,827	Valid
WLB2	0,188	0,343	0,28	0,716	Valid

WLB3	0,405	0,304	0,453	0,765	Valid
WLB4	0,202	0,102	0,16	0,574	Valid
WLB5	0,231	0,266	0,423	0,654	Valid

Source: Primary data processed by researchers, 2025

Table 7. Average Extracted Variance (AVE) Research Model

Variable	AVE	Condition	Result
EE	0,578	$\geq 0,5$	Valid
EL	0,709	$\geq 0,5$	Valid
JS	0,506	$\geq 0,5$	Valid
WLB	0,508	$\geq 0,5$	Valid

Source: Primary data processed by researchers, 2025

Discriminant validity was assessed using cross-loadings and Average Variance Extracted (AVE) values. AVE measures how well the indicators represent their intended latent variable, with a recommended minimum value of 0.5. In this study, all four variables – WLB, EL, JS, and EE – achieved AVE scores above 0.5, confirming adequate discriminant validity (Hair et al., 2019).

Table 8. Fornell-Larcker Criterion Value for Each Research Variable

Variable	EE	EL	JS	WLB
EE	0,76			
EL	0,506	0,842		
JS	0,637	0,678	0,712	
WLB	0,418	0,425	0,545	0,712

Source: Primary data processed by researchers, 2025

As shown in the table, every variable meets this requirement – the square root of each AVE exceeds the correlations with other variables – indicating the model has good discriminant validity.

Table 9. Heterotrait-Monotrait Ratio (HTMT) Values of All Research Variables

Variabel	EE	EL	JS	WLB
EE				
EL	0,564			
JS	0,712	0,751		
WLB	0,483	0,485	0,62	

Source: Primary data processed by researchers, 2025

An HTMT value below 0.90 is required to confirm discriminant validity (Hair et al., 2019). In this study, all HTMT values met this standard, indicating that discriminant validity is achieved.

Table 10. Cronbach's Alpha Value of the Research Model

Variable	Cronbach's alpha	Condition	result
EE	0,853	> 0,7	Reliable
EL	0,896	> 0,7	Reliable
JS	0,877	> 0,7	Reliable
WLB	0,761	> 0,7	Reliable

Source: Primary data processed by researchers, 2025

Table 10 shows that all variables in this study have Cronbach's alpha values above 0.7, with the lowest at 0.761 for WLB and the highest at 0.896 for EL. These results indicate that the measurement model meets the reliability criteria for Cronbach's alpha.

Table 11. Composite Reliability Value of the Research Model

Variable	Composite reliability	Condition	Result
EE	0,866	> 0,7	Reliable
EL	0,903	> 0,7	Reliable
JS	0,88	> 0,7	Reliable
WLB	0,796	> 0,7	Reliable

Source: Primary data processed by researchers, 2025

Table 11 shows that all variables in this study have composite reliability values above 0.7, with the lowest being 0.796 for WLB and the highest 0.903 for EL. These results confirm that the model meets the composite reliability standard and fulfills both the Cronbach's alpha and composite reliability criteria, showing that the model is reliable and serves as a trustworthy measurement tool.

Structural Testing of Models (Inner Model)

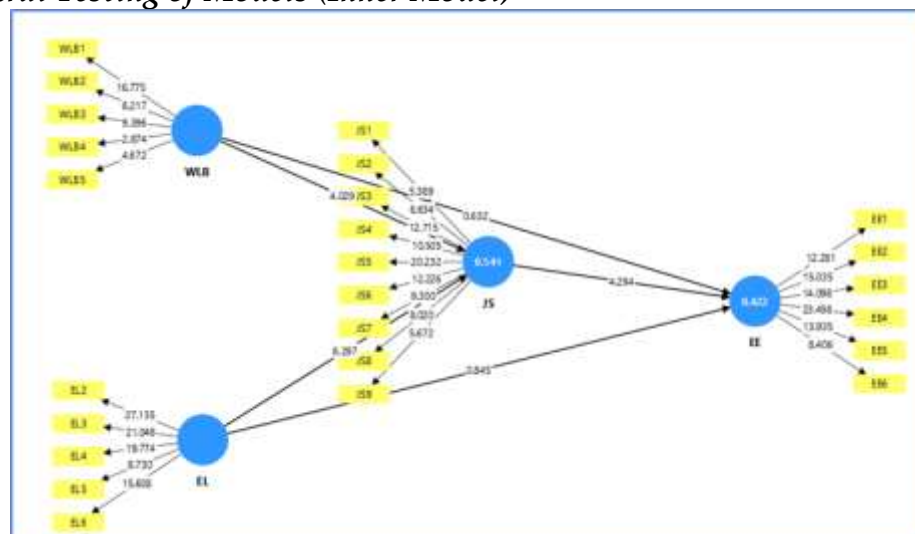


Figure 2. Bootstrapping calculation values for WLB, EL, and JS variables

Source: Primary data processed by researchers, 2025

Table 12. R-Square (R²) Value of the Research Model

Construct	R-square
EE	0,422
JS	0,541

Source: Primary data processed by researchers, 2025

The relationships between constructs can be seen from the R² values, indicating that 42.2% of the variation in EE is explained by WLB, EL, and JS. The remaining 57.8% is influenced by other factors not included in this study. Meanwhile 54.1% of the variation in JS is explained by WLB and EL, while the other 45.9% comes from factors outside this research.

Table 13. Q² Value of the Research Model

Construct	Q ² predict
EE	0,216
JS	0,483

Source: Primary data processed by researchers, 2025

Table 13 shows that EE has a Q² value of 0.216, while JS has a Q² value of 0.483. Since both Q² values are greater than zero, the model demonstrates relevant predictive capability. This indicates the model is suitable and appropriate for hypothesis testing.

$$\begin{aligned}
 \text{GoF Index} &= \sqrt{AVE \times R^2} \\
 &= \sqrt{((0,578 + 0,709 + 0,506 + 0,508)/4) \times ((0,422 + 0,541)/2)} \\
 &= \sqrt{0,575 \times 0,482} \\
 &= \sqrt{0,277} \\
 &= 0,526 (1)
 \end{aligned}$$

Result showing that overall performance of both the measurement model (outer model) and the structural model (inner model) is considered good, since the Goodness of Fit Index (GoF) value is greater than 0.38. This indicates that the model has an adequate overall fit and is suitable for further analysis.

Table 14. f² Value of the Research Model

Effect	f-square	Effect Size
EL -> EE	0,015	Small
EL -> JS	0,529	High
JS -> EE	0,199	Moderate
WLB -> EE	0,01	Small
WLB -> JS	0,176	Moderate

Source: Primary data processed by researchers, 2025

Effect size (f²) is a useful approach for assessing the significance of a predictor's influence on an endogenous variable. The f² statistic measures how much an exogenous construct contributes to explaining an endogenous construct. According to Hair et al. (2019), f² values of 0.35, 0.15, and 0.02 are

considered large, medium, and small effect sizes, respectively (Rawash et al., 2025).

Hypothesis Testing

Table 15. Hypothesis Testing for Direct Effects

Correlations between Constructs	Original sample (O)	T statistics (O/STDEV)	T Table	P values	Result
EL -> EE	0,401	2,855	1,66462	0,002	Significant positive influence
EL -> JS	0,545	6,297	1,66462	0	Significant positive influence
JS -> EE	0,501	4,294	1,66462	0	Significant positive influence
WLB -> EE	0,248	1,741	1,66462	0,041	Significant positive influence
WLB -> JS	0,314	4,029	1,66462	0	Significant positive influence

Source: Primary data processed by researchers, 2025

Table 16. Hypothesis Testing for Indirect Effects

Relationship between Constructs	Original sample (O)	T statistics (O/STDEV)	T Table	P values	Result
WLB -> JS -> EE	0,157	3,227	1,66462	0,001	Significant positive influence
EL -> JS -> EE	0,273	3,011	1,66462	0,001	Significant positive influence

Source: Primary data processed by researchers, 2025

Hypothesis Testing Results Summary

The analysis shows that WLB, EL, and JS) each have a positive and significant influence on EE. Specifically, WLB positively affects EE by 24.8% ($t = 1.741$, $p = 0.041$), while EL has an even stronger positive impact, increasing EE by 40.1% ($t = 2.855$, $p = 0.002$). JS exerts the greatest direct effect, contributing 50.1% to EE ($t = 4.294$, $p < 0.001$). WLB and EL also significantly boost JS, with WLB increasing JS by 31.4% ($t = 4.029$, $p < 0.001$) and EL contributing an impressive 54.5% ($t = 6.297$, $p < 0.001$).

In terms of indirect effects, both WLB and EL were found to positively and significantly influence EE through JS as a mediator. WLB affects EE via JS by 15.7% ($t = 3.227$, $p = 0.001$), while EL's indirect effect via JS is 27.3% ($t = 3.011$, $p = 0.001$). Overall, all proposed hypotheses in the study are supported, confirming

that both direct and mediated relationships between WLB, EL, JS, and EE are statistically significant and positive.

The Effect of WLB on EE

Data confirms that WLB has a positive and significant effect on EE, as shown by a path coefficient of 0.248 ($t = 1.741$, $p = 0.041$), means the more employees feel they have a good balance between work and personal life, the more engaged they become. While the effect size is modest, it is still meaningful. Key questionnaire items, such as whether work interferes with personal time and the ability to stay focused despite personal issues, received strong positive responses, indicating that the company successfully supports employees' WLB needs. This, in turn, enhances motivation, pride, and initiative among staff. These findings are consistent with established theory and previous research, which show that work-life balance is a significant driver of EE (Nafis et al., 2020; Ayodeji Boyede & Oyewumi Omotoye, 2021; Safria, 2022), even if the level of impact varies by company context.

The Effect of EL on EE

The research found that EL plays a crucial role in boosting EE. The workforce is largely made up of millennials, who tend to value fairness, integrity, and transparency from their leaders. When managers consistently demonstrate these ethical values, they help build trust and foster emotional bonds between leaders and employees, they will feel respected, heard, and are more motivated to give their best effort to the company.

Statistically, the relationship between EL and EE is both positive and significant, as shown by a coefficient of 0.401 ($t = 2.855$, $p = 0.002$). This means that the more employees perceive leadership as ethical, the higher their engagement levels in daily work life. The finding shows that employees gave high marks to questions about their supervisors' fairness in decision-making, commitment to integrity, transparent communication about ethical standards, and willingness to address ethical violations. All of these indicators had factor loadings above 0.7, confirming their validity for measuring EL. Similarly, EE scores were high on dimensions such as pride in belonging to the company, motivation to give maximum effort, and willingness to work beyond normal hours. Altogether, these results strengthen the conclusion that strong EL creates a motivating and cohesive workplace where employees feel united around the company's vision and mission.

The Effect of JS on EE

The research confirms that JS is a key factor in shaping EE. The results show a strong positive relationship, with a path coefficient of 0.501, a t-value of 4.294 (far exceeding the t-table value of 1.66462), and a p-value of 0. This means that higher levels of JS correspond directly to greater EE. Valid indicators from the JS questionnaire—such as satisfaction with salary, opportunities for career development, supportive teamwork, transparency in benefits, and job security—were shown by high factor loadings, including 0.761 for the statement “This job allows me to use my full potential” and 0.653 for “My salary matches my

expectations.” Employees expressing high JS also demonstrated higher engagement, as seen in strong responses to items like “I am proud to be part of this company” and “I feel motivated to do my best for the company’s success,” both with factor loadings above 0.741.

This positive relationship is reinforced by previous research. JS is recognized as an essential mediating variable for engagement: when employees feel valued, supported, and given opportunities for growth, they are more likely to develop a strong sense of commitment and belonging (Pamara & Bayudhigantara, 2022). The company profile dominated by millennials with 6–10 years of service underscores the importance of creating a workplace that values employee contributions, supports work-life balance, and enables professional growth. When these needs are met, both JS and EE scores rise, resulting in higher productivity, loyalty, and ongoing innovation. Thus, investing in JS is a strategic step toward sustaining high engagement and consistently achieving company targets.

Brown et al., highlight that EL not only shapes positive employee perceptions but also enhances trust and collaboration. Ramlawati et al. (2023) further emphasize that EL significantly improves EE, though its impact can be moderated by organizational culture and individual employee characteristics. In summary, daily practice of EL at the company serves as a strategic investment strengthening EE and reinforcing the company’s reputation for integrity.

The Effect of WLB on JS

WLB is a key factor shaping job satisfaction (JS) among mostly millennial employees in Jakarta’s medical device sector. Millennials value workplace flexibility and clear boundaries between work and life – supportive WLB policies make staff feel appreciated and comfortable, leading to higher JS. Statistical analysis showed a positive relationship (path coefficient 0.314; $t = 4.029$; $p < 0.05$): better perceived balance means higher JS and greater confidence in career prospects.

Survey items like “My job does not interfere with my personal time” and “Pursuing hobbies helps relieve stress” validate the effectiveness of WLB programs. JS also scored high for salary, development, peer support, and security. These findings match prior research (Fisher, Bulger & Smith in Nafis et al., 2020), confirming that a healthy WLB boosts satisfaction and motivation at work. Organizational support for employees’ non-work needs enhances JS, making WLB investment vital for long-term loyalty and well-being.

The Effect of EL on JS

EL clearly emerged as a critical factor in shaping JS, particularly within a workforce dominated by millennials. Leaders who consistently demonstrate fairness, integrity, transparency, and open communication contribute directly to a sense of security and trust among employees. Such EL creates an environment where employees feel respected and appropriately recognized for their contributions, resulting in naturally higher levels of JS.

Statistical analysis using SmartPLS highlights this effect: the path coefficient from EL to JS was 0.545, with a t -statistic of 6.297 – well above the

threshold of 1.66462—and a p-value of 0, signifying a strong and significant relationship. The high effect size underscores the major influence of EL culture on employee well-being and comfort at work.

Survey indicators for EL—including perceptions of fairness in decision-making, integrity, consistency between words and actions, and transparency—recorded high factor loadings (≥ 0.8), confirming the validity of the measurement. Respondents who rated these aspects highly also expressed greater satisfaction with their salaries, career opportunities, team support, job security, and openness in communication. This demonstrates that EL has both direct and indirect impacts on JS.

Theoretical and empirical research supports these results. EL is known to foster JS by offering a model of balanced attention to organizational and employee needs. Other studies (Ramlawati et al., 2023; Reuben N.D, 2024; Baina & Warsindah, 2023) have similarly shown that EL boosts motivation, reduces uncertainty, strengthens moral values, and builds trust between staff and the company. At the company studied, a strong EL culture underpins a healthy, harmonious, and enthusiastic workplace ensuring high and sustainable JS among employees.

The Effect of WLB on EE through JS

WLB is crucial for a positive work environment and higher job satisfaction (JS). Supportive policies that allow employees to balance work and personal needs lead to increased JS, building loyalty and team spirit. Empirical evidence confirms WLB affects employee engagement (EE) both directly and indirectly through JS, with significant mediation (indirect effect 0.157; $t = 3.227$; $p = 0.001$). Employees with better balance report higher satisfaction and engagement, as shown by strong responses to WLB indicators (like work not intruding on personal time) and JS measures (salary, teamwork, transparent benefits).

Previous research supports JS as a key mediator between WLB and EE, highlighting that consistent WLB policies promote both productivity and well-being (Jannata & Surya Perdhana, 2022; Udin, 2023). Effective WLB programs therefore support lasting satisfaction and engagement, driving sustainable performance.

The Effect of EL on EE through JS

Results show that ethical leadership (EL) strongly and significantly boosts job satisfaction (JS), with a path coefficient of 0.545 ($t = 6.297$, $p = 0$). Higher JS, in turn, significantly increases employee engagement (EE), shown by a coefficient of 0.501 ($t = 4.294$). EL also impacts EE indirectly through JS (indirect coefficient: 0.273; $t = 3.011$; $p = 0.001$), confirming JS as a key mediator. Fair, honest, and consistent leaders make employees feel valued, improving satisfaction with pay, work environment, growth opportunities, and communication—all enhancing engagement. As JS rises, engagement follows: employees show more motivation, pride, and initiative. Thus, EL not only directly affects EE but also does so indirectly by improving JS.

This pattern aligns with prior findings (Ramlawati et al., 2023; Reuben N.D, 2024), showing that EL builds trust, open communication, and a positive

climate—making ethical values a strategic investment for lasting engagement and commitment.

CONCLUSION AND RECOMMENDATION

Based on the discussion, data analysis, and hypothesis testing regarding the influence of WLB and EL on EE as mediated by JS, several key findings can be drawn:

1. WLB, particularly in terms of ensuring that work does not interfere with personal activities, strongly contributes to JS among employees. However, the aspect of having hobbies outside of work to help relieve job-related stress appears to be the weakest contributor.
2. EL, especially when supervisors consistently show integrity in their daily responsibilities, has the most significant impact on JS. Meanwhile, the aspect of supervisors correcting team members who violate ethical principles is the least influential.
3. WLB again, with a focus on maintaining boundaries between work and personal life also strongly supports EE. As before, the influence is weaker when it comes to the role of outside hobbies in managing stress.
4. EL's influence on EE is most pronounced when leaders are seen as having integrity, while the effect is much less where supervisors address ethical violations among team members.
5. Within JS, having adequate tools and resources to complete work efficiently is the most significant driver of EE. On the other hand, satisfaction with salary falls short and contributes the least.
6. WLB also mediates EE through JS. The dominant factor is keeping work from interfering with personal time, whereas activities like hobbies for stress relief have a much smaller effect.
7. EL mediates EE via JS. Supervisor integrity is crucial, but the lack of action on ethical violations reduces the positive impact and can even affect employee satisfaction negatively.

The findings emphasize the importance of workplace policies that support personal boundaries, leader integrity, fair resource allocation, and ethical standards to improve job satisfaction (JS) and engagement. The company has succeeded in preventing work from interfering with personal time, though employees still need better stress relief through hobbies. Organizing inclusive wellness activities or outbound events for all staff can boost engagement. Managers should participate and ongoing evaluation is needed to measure impact.

For ethical leadership (EL), while leader integrity strengthens JS, addressing ethical breaches needs improvement. The company should clearly communicate ethical principles, consistently apply consequences, and provide leadership training in conflict management. Recognizing exemplary leaders—such as with a “Best Ethics Leader” award—will reinforce ethical values.

Regarding JS, access to necessary tools enhances engagement, but salary satisfaction needs attention. Regular facility audits and employee surveys help ensure adequate resources. Compensation should be benchmarked against industry standards with transparent communication and opportunities for

employee feedback. This creates a respectful, inclusive culture where employees feel valued and heard.

ADVANCED RESEARCH

This study was limited to one medical device company in Jakarta with a small sample of 82 employees, which narrows the generalizability of the findings. Future research should include more companies either within the medical device sector or across different industries and larger, more diverse samples to improve the relevance and applicability of results.

Additionally, while this study used a quantitative approach, future studies should consider mixed methods, combining surveys with interviews or focus groups for deeper insights. Exploring additional variables, such as organizational culture, reward systems, or external factors, is also recommended to gain a more comprehensive understanding of what drives EE and satisfaction in today's workplace.

ACKNOWLEDGMENT

I would like to express my sincere gratitude to the lecturers and everyone who has shared their insights and perspectives, making it possible to complete and publish this article in an international journal. Special thanks also go to my family for their constant support throughout this process. I hope this journal will prove valuable and beneficial to its readers.

REFERENCES

- Ali, R., Shehzadi, M., & Mirza, S. (2023). Connecting the dots of Ethical Leadership and Job Satisfaction: Moderated Mediation Effect of Co-Worker Undermining and Employee Engagement. *Academic Journal of Social Sciences (AJSS)*, 7(2), 107–125. <https://doi.org/10.54692/ajss.2023.07022036>
- Amelia, F. R., Heriyadi, H., Daud, I., Shalahuddin, A., & Sulistiowati, S. (2023). Influence of work-life balance and job stress to employee performance mediated by job satisfaction on millennial employees. *Enrichment: Journal of Management*, 13(5), 3066–3081. <http://enrichment.iocspublisher.org/index.php/enrichment/article/view/1745>
- Amelia, N., & Nugroho, S. P. (2024). the Influence of Work Life Balance on Turnover Intention With Job Engagement and Organizational Citizenship Behaviour As Intervening Variables. *International Journal of Global Accounting, Management, Education, and Entrepreneurship*, 4(2), 342–359. <https://doi.org/10.48024/ijgame2.v4i2.150>
- Amoah, C., Jehu-Appiah, J., & Agyenim Boateng, E. (2022). Ethical Leadership, Job Satisfaction, and Organisational Commitment among Health Workers in Ghana: Evidence from Central Region Hospitals. *Journal of Human Resource and Sustainability Studies*, 10(01), 123–141. <https://doi.org/10.4236/jhrss.2022.101009>
- Astari, K., Junjuran, I. M., Nurhastuti, E. S., & Amos. (2023). Review of Politics and Public Policy in Emerging Economies Importance of Psychological Capital in Start-Up Employees and Its Contribution to Employee

- Engagement under a Creative Commons Attribution-NonCommercial 4.0. *Review of Politics and Public Policy in Emerging Economies*, 5(1), 15–26. www.publishing.globalcsrc.org/rope
- Ayodeji Boyede, M., & Oyewumi Omotoye, O. (2021). Worklife Balance on Employee Engagement among Women in Technical Education (Wited) in Polytechnics in Osun State, Nigeria. *Annals of Spiru Haret University. Economic Series*, 20(3), 89–107.
- Baina, N., & Warsindah, L. (2023). Pengaruh Ethical Leadership Dan Organizational Justice Terhadap Intention To Leave Yang Dimediasi Oleh Kepuasan Kerja Pada Karyawan Perusahaan Retail di Depok. *Jurnal Mirai Management*, 8(2), 236–248.
- Haar, J. M., Russo, M., Suue, A., & Ollier-Malaterre, A. (2020). Outcomes of Work-Life Balance on Job Satisfaction, Life Satisfaction and Mental Health: a Study Across Seven Cultures. *Journal of Vocational Behavior*, 85, 361–373. <https://doi.org/10.1016/j.jvb.2014.08.010>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hartanto, R. S., & Nawangsari, L. C. (2024). *the Influence of Talent Management and Work Life Balance on Employee Engagement With Job Satisfaction As an Intervening Variable*. 4(1), 127–138. <http://creativecommons.org/licenses/by/4.0/legalcode>
- Jannata, A., & Surya Perdhana, M. (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(1), 1–13. <http://ejournal-s1.undip.ac.id/index.php/dbr>
- Kristinanda, D. K., & Priyatama, A. N. (2023). Kepuasan Kerja Sebagai Moderator Hubungan Antara Work-Life Balance Dengan Employee Engagement Karyawan Generasi Milenial Pt X Jakarta. *Jurnal Psikologi: Media Ilmiah Psikologi*, 21(01), 1–6.
- Laradi, S., Abadi, M. D., & Okocha, B. (2024). *The Effect of Ethical Leadership on Employee Engagement : The Mediating Role of Work Meaningfulness and Person-Organization Fit . Moderating Role of Self-Efficacy*. October.
- Lin, Z., Gu, H., Gillani, K. Z., & Fahlevi, M. (2024). Impact of Green Work-Life Balance and Green Human Resource Management Practices on Corporate Sustainability Performance and Employee Retention: Mediation of Green Innovation and Organisational Culture. *Sustainability (Switzerland)*, 16(15). <https://doi.org/10.3390/su16156621>
- Mahran, H., Al Fattah, M., & Saleh, N. (2022). Effect of Ethical Leadership on Nurses Job Performance. *Sohag Journal of Nursing Science*, 1(1), 11–20. <https://doi.org/10.21608/sjns.2022.270353>
- Mashavira, N., Nyoni, N. D., Mathibe, M. S., & Chada, L. (2023). Work-life balance in the Zimbabwe Retail Sector: Testing a job-engagement and job-satisfaction model. *Acta Commercii*, 23(1), 1–10. <https://doi.org/10.4102/AC.V23I1.1139>
- Meng, J., & Guo, X. (2025). The relationship between ethical leadership, moral sensitivity, and moral courage among head nurses. *BMC Nursing*, 24(1), 1–

11. <https://doi.org/10.1186/s12912-025-03170-1>
- Nafis, B., Chan, A., & Raharja, S. J. (2020). Analisis Work-Life Balance para Karyawan Bank BJB Cabang Indramayu. *Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis*, 8(1), 115–126. <https://doi.org/10.30871/jaemb.v8i1.1250>
- Naini, N. F., & Riyanto, S. (2023). The Influence of Perceived Organizational Support and Work-Life Balance on Turnover Intention Through Job Satisfaction. *International Journal of Islamic Business and Management Review*, 3(2), 183–193. <https://doi.org/10.54099/ijibmr.v3i2.814>
- Pamara, F., & Bayudhigantara, E. M. (2022). Transformational Leadership and Organizational Culture on Employee Engagement With Work Satisfaction as an Intervening Variable. *Journal Research of Social Science, Economics, and Management*, 1(12), 2180–2194. <https://doi.org/10.59141/jrssem.v1i12.239>
- Ramlawati, R., Serang, S., Arminas, A., Junaidi, J., & Wicaksono, R. (2023). The role of ethical leadership on employee commitment to the organization: The mediating role of job satisfaction and job engagement. *Organizatsionnaya Psikhologiya*, 13(1), 73–91. <https://doi.org/10.17323/2312-5942-2023-13-1-73-91>
- Reuben N.D. (2024). Role of Ethical Leadership in Fostering Employee Engagement and Job Satisfaction in Israel. *American Journal of Leadership and Governance*, 9(1), 68–80. <https://doi.org/10.47672/ajlg.1844>
- Safria, D. (2022). Pengaruh Work Life Balance, Kepemimpinan Transformasional, dan Budaya Organisasi Terhadap Employee Engagement dalam Membentuk Kinerja Pada Karyawan Generasi Y. *Jurnal Ekonomi, Manajemen Dan Perbankan (Journal of Economics, Management and Banking)*, 8(2), 53. <https://doi.org/10.35384/jemp.v8i2.269>
- Sahid, W., & Abadi, F. (2023). Ethic Leadership, Compensation for Work Engagement with Satisfaction as a Mediating Variable. *Influence: International Journal of Science Review*, 5(1), 296–313. <https://doi.org/10.54783/influencejournal.v5i1.126>
- Shinwari, A. Z., Rasool, A., Sadat, S. M., Samir, A., & Shiwari, M. A. (2024). Identifying The Relationship Of Ethical Leadership With Employees ' Job Satisfaction , Organizational Commitment & Orgnaizational Citizenship Behavior. *July*, 2–15. <https://doi.org/10.9790/5933-1503060315>
- Udin, U. (2023). The Impact of Work-Life Balance on Employee Performance: Mediating Role of Affective Commitment and Job Satisfaction. *International Journal of Sustainable Development and Planning*, 18(11), 3649–3655. <https://doi.org/10.18280/ijstdp.18i1131>
- Utama, A. P., Murti, T. R., & Merdiaty, N. (2021). The Influence of Work-Life Balance, Servant Leadership, and Reward to Employee Engagement with Job Satisfaction as Mediator. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(4), 1511–1529. <https://doi.org/10.17762/turcomat.v12i4.1404>
- Westover, J. (2024). The Influence of Workload and Work Environment on Employee Job Satisfaction. *Human Capital Leadership Review*, 12(1), 688–693. <https://doi.org/10.70175/hclreview.2020.12.1.6>