Navigating the Digital Workplace : The Moderating Role of AI Experience in the Relationship Between Honeybee Sustainable Leadership and Workplace Happiness (SDG 3 View)

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Abstract. This study analyzes the impact of Honeybee Sustainable Leadership (HSL) on workplace happiness (WPH). It investigates the moderating effect of AI experience (AIX) within the context of Sustainable Development Goal 3 (SDG 3). This study seeks to examine the empirical relationship between sustainability-driven leadership, digital transformation, and employee well-being in emerging economies. A quantitative design was employed to collect data from 512 office employees in Greater Jakarta using a structured questionnaire. The study utilized Structural Equation Modeling with Partial Least Squares (SEM-PLS) to evaluate both the measurement and structural models, thereby confirming the reliability and validity of the constructs. Research demonstrates that HSL significantly enhances workplace happiness, underscoring the importance of ethical, inclusive, and human-centered leadership in cultivating supportive and resilient work environments. AIX positively influences workplace happiness by increasing job meaningfulness and decreasing cognitive overload. Nonetheless, AIX does not substantially influence the relationship between HSL and WPH, indicating that leadership remains the primary factor affecting well-being, while AI serves as an additional resource. This study offers new perspectives by combining sustainable leadership with AI experience in the context of SDG 3. Organizations should integrate human-centered leadership with AI to enhance employee satisfaction and strengthen organizational resilience.

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1 Introduction

The pursuit of workplace happiness and employee well-being is increasingly recognized as crucial for advancing Sustainable Development Goal 3 (SDG 3), which focuses on ensuring healthy lives and promoting well-being for all [1]. In organizational contexts, leadership strategies and digital transformation are crucial factors influencing employee well-being, particularly in dynamic work environments. The Honeybee Sustainable Leadership (HSL) model, which emphasizes long-term value creation and stakeholder-centric ethics, is essential for cultivating supportive, inclusive, and resilient organizational cultures [2], [3]. HSL enhances mental health and overall workplace happiness by prioritizing employee development, collaboration, and psychological safety, which mitigates workplace stress and burnout [3], [4]. These attributes correspond directly with the objectives of SDG 3, which emphasizes the importance of ensuring well-being through the management of occupational health risks and the promotion of positive mental states [1].

Workplace happiness (WPH) includes employees' assessments of job satisfaction, emotional well-being, and the equilibrium between professional and personal life. This phenomenon is increasingly recognized as a result of human-centered leadership and organizational support [5], [6]. Research indicates that organizations employing empathetic and sustainable leadership practices experience increased job satisfaction, lower stress levels, and enhanced mental health outcomes [7]. These outcomes align with the SDG 3 agenda, specifically by mitigating the negative impacts of work intensification and fostering healthier work environments [1]. Common-Good HRM (CGHRM) emphasizes the obligation of organizations to enhance employee well-being, linking people-oriented management practices with broader societal benefits [8]. From this perspective, HSL enhances CGHRM by aligning organizational success with the welfare of employees and external stakeholders.

Artificial Intelligence (AI) is transforming the workplace through the automation of routine tasks, enhancement of creative problem-solving, and increase in productivity. Positive AI experiences (AIX), defined by trust, interactivity, and perceived utility, are associated with increased employee satisfaction and decreased cognitive overload [9], [10]. Nonetheless, inadequate management of AI adoption may lead to technostress and uncertainty, negatively impacting mental health [11]. When integrated effectively, AI can enhance HSL by aiding leaders in the development of healthier, less stressful work environments, thus contributing to SDG 3 through the reduction of work-related health risks and the improvement of psychological well-being [1].

The interaction among HSL, AIX, and WPH is essential within the larger framework of sustainability. Studies demonstrate that sustainable HRM practices can reduce detrimental work practices, including excessive work intensification, associated with adverse mental and physical health outcomes [1]Integrating the human-centered principles of HSL with the capabilities of AI enables organizations to develop strategies that enhance workplace satisfaction and align with the objectives of SDG 3. [8] assert that the role of HRM in promoting sustainability and employee well-being is essential for attaining enduring organizational and societal advantages, thereby strengthening the connection between leadership, technology, and health-oriented results.

Previous research has explored the significance of sustainable leadership and employee well-being; however, studies focusing on Honeybee Sustainable Leadership (HSL) and its impact on workplace happiness (WPH) in the context of Sustainable Development Goal 3 (SDG 3) are scarce. Most of the current literature on sustainable leadership tends to adopt a broad perspective, frequently neglecting the distinctive human-centered and long-term focus of the honeybee model, which highlights empathy, inclusivity, and stakeholder well-being [2]. Research on workplace happiness has primarily concentrated on organizational culture and job satisfaction, neglecting the incorporation of sustainability-driven leadership practices

as essential factors influencing employee mental and emotional well-being [12]. Although AI experience (AIX) is associated with productivity and task performance, there is a lack of empirical evidence regarding its moderating role in either enhancing or diminishing the positive effects of HSL on WPH, especially in digital environments where AI can both reduce and exacerbate stress [13]. The intersection of HSL, WPH, and AIX with SDG 3, which emphasizes good health and well-being, remains underexplored, particularly in emerging economies where digital transformation and sustainable leadership are accompanied by increasing workplace stress [1], [8]. This gap underscores the need for empirical research that integrates leadership, technological expertise, and employee well-being within the context of the sustainability agenda, aiming to elucidate how organizations can foster healthier and more resilient work environments in alignment with SDG 3.

2 Literature Review and Hypothesis Development

2.1 The Relationship between Honeybee Sustainable Leadership and Workplace Happiness

The rising complexity of organizational dynamics has generated increased interest in leadership models that prioritize sustainability, resilience, and employee well-being. Honeybee Sustainable Leadership represents a unique framework that contrasts with exploitative management practices by prioritizing long-term value creation through collaboration, empathy, and environmental responsiveness [14], [15]. This model enhances the workplace climate by promoting knowledge sharing and fostering stakeholder-oriented innovation, thereby supporting psychological safety and trust, which are crucial for enhancing employee well-being [16].

In emerging economies, the capacity of honeybee-style leaders to foster adaptability via transparent and ethical practices is essential for managing uncertainty and enhancing employee confidence [17]. Research indicates that sustainable leadership fosters autonomy and inclusive decision-making, thereby enhancing job satisfaction and mitigating stress [2]. Most empirical studies on sustainable leadership have utilized a generic perspective, frequently neglecting the specific aspects of the honeybee model. This study aims to fill the existing gap by examining the contribution of sustainable leadership in honeybees to employee happiness, with an emphasis on its long-term orientation and human-centered principles. Based on the preceding discussion, the following hypothesis is proposed in this study.

H1: Honeybee Sustainable Leadership has a significant effect on Workplace Happiness.

2.2 The Relationship between AI Experience and Workplace Happiness

The integration of artificial intelligence into routine organizational processes has increasingly influenced employee experiences. AI technologies are reshaping operational workflows and transforming employee engagement with their work. AI has the potential to alleviate employees of monotonous tasks and increase job significance through fostering creative problem-solving. However, if not managed effectively, it may also induce anxiety, uncertainty, and technostress [18].

A meaningful AI experience extends beyond simple exposure; it requires interactive, hands-on engagement that fosters familiarity, trust, and perceived utility [19]. Employees perceiving AI as a supportive tool tend to experience decreased cognitive overload and enhanced satisfaction in their daily tasks. Conversely, minimal or passive engagement with AI can diminish job clarity and motivation, particularly in positions that demand significant autonomy and complexity. While specific studies have investigated the impact of AI on job performance and user satisfaction [18], there is a lack of research addressing its emotional and psychological effects on workplace happiness. Investigating the impact of employees' experiences with AI on their workplace happiness provides valuable insights into the human-AI relationship. Drawing from the above arguments, this research formulates the following hypothesis.

H2: AI Experience has a significant effect on Workplace Happiness.

2.3 The Moderating Role of AI Experience on The Relationship between Honeybee Sustainable Leadership and Workplace Happiness

Leadership and technology are interconnected; their interaction can yield either synergistic or contradictory impacts on employee well-being. Studies indicate that AI may mitigate the impact of workplace characteristics on outcomes, including satisfaction, stress, and engagement [20]. When AI integration is appropriately balanced, it can enhance the advantages of supportive leadership by promoting job enrichment and reducing overload. In environments led by sustainable honeybee leaders, the beneficial impacts of leadership can be improved when employees view AI as an enabler rather than a threat [21].

The moderating role of AI experience is significant in the context of psychological conditions within the workplace. Employees with higher AI fluency are more likely to react favorably to leadership strategies that promote innovation and well-being [22]. In contrast, individuals with limited AI experience may find it challenging to engage with digital transformation initiatives, even when led by empathetic leaders [20]. The alignment of technological capability with human-centered leadership may influence employees' feelings of happiness, security, and value in the digital age [20]. Accordingly, the study advances the following hypothesis.

H3: AI Experience moderates the effect of Honeybee Sustainable Leadership on Workplace Happiness.

3 Methodology

3.1 Research Design and Approaches

This research examines the relationship between sustainable leadership in honeybees and workplace happiness, considering AI experience as a moderating variable among office employees. The study was performed in the office sector, involving participants from various companies and organizations throughout Indonesia, specifically in Jakarta and Banten. A non-probability convenience sampling method was employed to facilitate practical and efficient data collection, enabling access to employees who were readily available and willing to participate. The analysis employed path modeling to examine the direct and indirect relationships among the constructs, along with structural model testing and regression

analysis, to establish a robust empirical framework. This approach offers an in-depth analysis of the interaction between sustainable leadership practices and AI experiences in shaping employee well-being and workplace happiness [23], [24]. The research framework is shown in Figure 1.

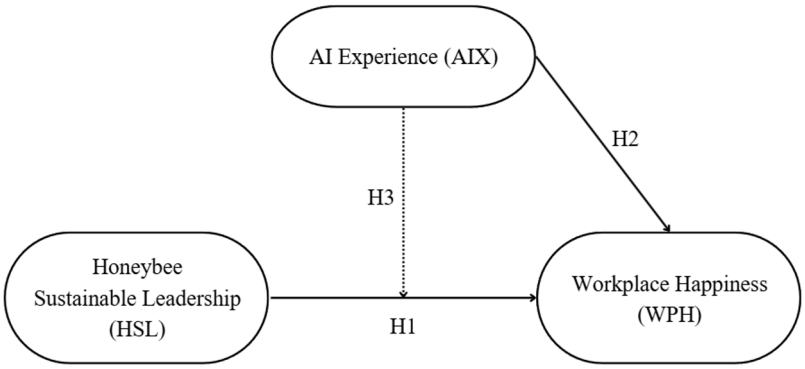

Fig. 1. Research Framework

3.2 Data Collection

The data for this research were collected through a survey of employees from diverse companies and organizations across various sectors in the Greater Jakarta area. Greater Jakarta was selected as the research site due to its status as Indonesia's main economic center, which accommodates a concentration of national and multinational corporations, government institutions, and various industries. The largest metropolitan region in the country offers a diverse workforce, providing an ideal setting for analyzing organizational behavior and workplace dynamics. A non-probability convenience sampling method was utilized to facilitate practical and efficient data collection. Data were collected through an online questionnaire created with Google Forms, which was offered in both Indonesian and English to accommodate participants' language preferences. The required minimum sample size for this study was calculated to be between 180 and 360 respondents, using the formula N = 5 × indicators to N = 10 × indicators. This range is consistent with guidelines for structural equation modeling, recommending a sample size of at least five to ten times the number of observed indicators to achieve reliable parameter estimation and robust statistical analysis [23], [24].

3.3 Research Instrument

This study utilized a quantitative research approach to analyze the proposed relationships among the variables. The survey instrument included three primary constructs: sustainable leadership in honeybees, experience with AI, and workplace happiness. The measurement of honeybee sustainable leadership utilized 14 items derived from the indicators established by [2], [3]. The assessment of AI experience was conducted using eight items derived from the indicators established by [25]. The assessment of workplace happiness utilized 14 items derived from the works of [26]. All measurement items employed a 5-point Likert scale, with response options from 1 (strongly disagree) to 5 (strongly agree), enabling participants to express their level of agreement with each statement.

Table 1. Research Instrument

Research Item	
HS1	The decisions taken by the company consider the long-term consequences for the affected parties.
HS2	The company invests in training and development for all employees.
HS2	The company prioritizes ethical behavior in the organization.
HS4	The company culture supports a collaborative and inclusive (diverse) work environment.
HS5	The company supports innovation and breakthroughs at all levels of the organization.
HS6	The company is actively involved in social responsibility (CSR) and environmental initiatives.
HS7	The company facilitates knowledge sharing activities at all levels of the organization.
HS8	The company encourages employees to work together to achieve common goals.
HS9	The company involves input from employees at all levels when carrying out the decision-making process.
HS10	Company employees to take the initiative and organize themselves.
HS11	The company is committed to providing high quality products and services.
HS12	The company considers the interests of all stakeholders, including employees, customers and society.
HS13	The company prioritizes the well-being and work-life balance of its employees.
HS14	The company identifies employee potential as leaders and develops them through structured succession planning.
AIX1	AI helps me increase productivity and work efficiency
AIX2	AI provides opportunities to learn new skills.
AIX3	AI has had a positive impact on my work.
AIX4	AI creates new opportunities for me.
AIX5	I can learn new things with AI.
AIX6	AI will have a negative impact on my job.
AIX7	AI can replace my job.
AIX8	AI provides a new way for me to work.
WH1	I am happy with the current job
WH2	I feel appreciated at work.
WH3	I am proud to work for the company today.
WH4	I would recommend the current company as a great place to work.

Table 1. Research Instrument

Research Item	
WH5	My job provides space to be able to spend time with family and friends.
WH6	I can balance work and personal life.
WH7	I have good working relationships with colleagues.
WH8	My work environment is supportive and inclusive (diversity).
WH9	Leadership recognizes and appreciates employee contributions.
WH10	Leaders provide support to employees to achieve success.
WH11	My job has a positive impact on my mental health.
WH12	I am happy with my life overall.
WH13	I am optimistic about the prospects for career advancement in the current company.
WH14	I am satisfied with the training and development opportunities provided by the company.

3.4 Data Analysis

The study's data underwent analysis using Structural Equation Modeling (SEM), specifically a variance-based method known as Partial Least Squares (PLS). This approach is well-suited for predictive modeling and theory development, as it adeptly manages complex models involving multiple constructs and indicators [23], [24]. The analysis begins with the evaluation of the measurement model to assess the reliability and validity of the instruments, subsequently followed by structural model testing to investigate the proposed hypotheses. Path analysis will be employed to examine the direct and indirect relationships among the variables. In contrast, regression analysis within the SEM-PLS framework will evaluate the strength and significance of these relationships. Furthermore, PLS facilitates the concurrent estimation of multiple regression equations, thereby offering a thorough assessment of the research model. Statistical analyses will be performed utilizing SmartPLS version 4.0.

4 Result and Discussion

This study was conducted on a national level, without focusing on any particular region of Indonesia. The majority of respondents were located on Java Island, indicating a high concentration of white-collar professionals in this region, which is attributable to its economic importance and the presence of Jakarta as the nation's capital. Data collection took place from May 2024 to August 2024, generating insights that reflect the current workplace dynamics during this timeframe. A total of 512 valid responses were collected from the distributed questionnaire. The respondents were classified according to gender, age, duration of employment, workplace location, and job level, with a comprehensive distribution outlined in Table 2.

4.1 Demographic Data

Table 2 presents the demographic data of the respondents, highlighting key variables such as age, gender, education, and professional experience, which provide context for analyzing Indonesia's diverse and evolving workforce.

Table 2. Respondent Characteristics

Demographic Data		Frequency	Percentages
Gender	Female	276	53.9 %
	Male	236	46.1 %
Age	19-20	61	11.9 %
	21-30	224	43.8 %
	31-40	170	33.2 %
	41-50	38	7.4 %
	> 50	19	3.7 %
Education	High School Graduates	53	10.3%
	Diploma Graduates	91	17.8%
	Bachelor's degree	300	58.6%
	Master's degree	68	13.2%
Tenure	< 5 years	196	38.2%
	< 10 years	213	41.6%
	< 20 years	81	15.8%
	> 20 years	22	4.3%
Company Type	Private	219	42.8%
	Startup/Entrepreneur	92	18%
	Multinational Company	64	12.5%
	State-Owned/Government	79	15.3%
	Goverment Institution	58	11.3%
Job Level	Staff - Officer	378	73.8%
	Contract Employees	43	84%
	Senior Manager - General Manager	17	33.2%

Table 2. Respondent Characteristics

Demographic Data		Frequency	Percentages
	Supervisor	31	60.5%
	Associate Manager - Manager	24	46.8%
	Director	4	0.78%
	Associate Director - Director	12	2.3%

4.2 Measurement Model Analysis

The measurement model analysis (Table 3) demonstrated that all constructs exhibited strong reliability and validity, thereby affirming the robustness of the research framework. All retained indicators demonstrated factor loadings exceeding the threshold of 0.7, signifying that each item effectively represented the underlying constructs. The variance inflation factor (VIF) values were under 5, indicating no multicollinearity among the items. Cronbach's alpha and composite reliability values for Honeybee Sustainable Leadership (HSL), AI Experience (AIX), and Workplace Happiness (WPH) exceeded the acceptable threshold of 0.6, suggesting high internal consistency among the measurement scales. The Average Variance Extracted (AVE) values exceeded 0.5, indicating acceptable convergent validity for all constructs [23], [24].

Table 3. Measurement Model Analysis

Item	Loading Factor (> 0.7)	VIF (<5.0)	Cronbach's Alpha (> 0.6)	Composite Reliability (≥ 0.6)	AVE (≥ 0.5)	Remarks
AI1	0.812	2.162	0.901	0.924	0.670	Valid and Reliable
AI2	0.821	2.166				
AI3	0.823	2.250				
AI4	0.830	2.342				
AI5	0.842	2.407				
AI8	0.782	1.965				
HS1	0.712	1.737	0.894	0.913	0.512	Valid and Reliable
HS10	0.751	1.864				
HS11	0.687	1.644				
HS12	0.752	1.857				
HS13	0.724	1.806				
HS2	0.714	1.730				

Table 3. Measurement Model Analysis

Item	Loading Factor (> 0.7)	VIF (<5.0)	Cronbach's Alpha (> 0.6)	Composite Reliability (≥ 0.6)	AVE (≥ 0.5)	Remarks
HS4	0.689	1.687				
HS5	0.753	1.941				
HS7	0.668	1.567				
HS9	0.704	1.789				
WH10	0.755	1.794	0.863	0.893	0.510	Valid and Reliable
WH11	0.690	1.527				
WH13	0.725	1.646				
WH14	0.689	1.541				
WH2	0.727	1.662				
WH3	0.689	1.536				
WH4	0.716	1.623				
WH9	0.719	1.654				

4.3 R-Square Value Analysis

The R-square value (Table 4) for Workplace Happiness was 0.475, indicating that approximately 47.5% of the variance in workplace happiness is accounted for by the combined influences of sustainable leadership and AI experience. This value indicates that the model has moderate predictive power, suggesting that while leadership and AI significantly influence workplace well-being, additional factors, such as organizational culture, job design, and personal attributes, may also contribute.

The findings validate the measurement properties of the study constructs, ensuring that the subsequent structural model analysis relies on reliable and valid data. The strong psychometric characteristics of the scales confirm their suitability for analyzing the connections among sustainable leadership, AI experience, and workplace happiness. This foundation enables the interpretation of path coefficients and hypothesis testing, ensuring that observed relationships are reliable despite measurement inconsistencies.

Table 4. R-Square Value

Variable	R-Square
Workplace Happiness	0.475

4.4 Hypothesis Testing

The structural model analysis (Table 5) indicates that Honeybee Sustainable Leadership (HSL) exerts a strong and statistically significant positive influence on Workplace Happiness (WPH) – H1 ($\beta = 0.656$, $p < 0.001$). This finding underscores the importance of sustainable leadership in fostering a supportive and fulfilling work environment, characterized by leaders who prioritize ethical decision-making, collaboration, and employee well-being. Leadership practices that promote trust, psychological safety, and inclusivity are essential for improving employee satisfaction and well-being [2]. The findings align with previous research indicating that leaders who prioritize long-term value creation and empathetic engagement play a significant role in alleviating stress, enhancing morale, and fostering a positive workplace environment [17].

Table 5. Hypothesis Testing

Hypothesis	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	*p* Values	Remarks
HSL → WPH	0.656	0.078	8.383	0.000	H1 supported
AIX → WPH	0.208	0.059	3.530	0.000	H2 supported
AIX*HSL_WPH	0.098	0.068	1.453	0.073	H3 not supported

Furthermore, AI Experience (AIX) is a significant predictor of workplace happiness – H2 ($\beta = 0.208$, $p < 0.001$), suggesting that employees who view AI as beneficial, reliable, and empowering tend to report higher levels of satisfaction and engagement. This finding is consistent with previous studies, which indicate that AI can enhance job significance by minimizing repetitive tasks and facilitating creative problem-solving, contingent upon the technology's human-centric integration [18]. The correlation between AIX and WPH underscores the importance of fostering employee familiarity and trust in AI, as effective engagement with AI tools can enhance job clarity and mitigate cognitive overload [20].

The analysis indicated that AI experience does not significantly moderate the relationship between HSL and WPH – H3 ($\beta = 0.098$, $p = 0.073$). This shows that AI experience does not enhance or diminish the impact of sustainable leadership on workplace happiness. Although leadership and technology each play a role in improving employee well-being, their interaction does not yield a synergistic effect. This finding suggests that human values, relational dynamics, and organizational culture primarily shape the influence of leadership on happiness. At the same time, AI mainly serves as an operational tool rather than a facilitator for strengthening the effects of leadership [20].

The findings indicate that sustainable leadership is the primary determinant of workplace happiness in digital work environments. While AI enhances efficiency and engagement, its full advantages are realized only when supported by leadership that fosters empathy, inclusion, and ongoing employee development. This study contributes to the existing literature on the relationship between technology and human-centered leadership, showing that although AI adoption is advantageous, it does not diminish the importance of ethical and sustainable leadership practices in enhancing employee well-being.

4.5 Discussion

This study's findings emphasize the interconnected roles of honeybee sustainable leadership (HSL), AI experience (AIX), and workplace happiness (WPH) among office employees in

Indonesia. The positive impact of HSL on WPH suggests that leadership practices grounded in empathy, ethical conduct, and a long-term perspective substantially enhance employee well-being. Honeybee leaders promote collaboration, inclusivity, and shared value creation, which fosters psychological safety and mitigates workplace stress, ultimately leading to increased employee satisfaction and happiness. Sustainable leadership enhances trust, autonomy, and resilience, especially in contexts undergoing swift technological and organizational transformations.

The findings suggest that AIX is a significant predictor of workplace happiness. Employees who view AI tools as supportive and empowering generally exhibit increased engagement and more favorable emotional states. AI enhances job meaningfulness by minimizing repetitive tasks, enabling employees to focus on creative and value-added responsibilities. The successful integration of AI, along with trust and perceived utility, can reduce job stress and enhance job satisfaction. The findings suggest that the thoughtful implementation of AI can improve operational efficiency and foster employees' emotional engagement with their work.

The absence of a significant moderating effect of AIX on the relationship between HSL and WPH highlights the persistent human-centric aspect of leadership. Although both AI and leadership play roles in workplace happiness, technology does not enhance the impact of leadership on well-being. This highlights that interpersonal connections, empathy, and ethical practices are crucial factors in influencing employee happiness. In Indonesia's collectivist cultural context, characterized by a strong emphasis on harmony and mutual respect, leadership practices that prioritize social responsibility and inclusivity are more influential than technological factors in determining workplace satisfaction.

This study contributes to the literature on sustainable leadership by analyzing its relationship with AI experience and its impact on workplace happiness. The findings support the continued significance of the honeybee leadership model, which emphasizes long-term stakeholder welfare over immediate benefits. The findings suggest that, despite the ongoing digital transformation of organizational structures, the influence of leadership on employee happiness remains unaffected by technological mediation. This offers new insights into the relationship between human-centered leadership and the adoption of AI.

These findings underscore the importance of leadership development programs for practitioners, highlighting the integration of honeybee principles that prioritize ethics, inclusivity, and employee well-being. Organizations should adopt AI as a supportive tool that complements human effort, alongside training programs designed to alleviate anxiety and improve technological confidence. This approach guarantees that employees experience empowerment and value within digital workplaces.

The consistency of these findings with prior research reinforces the significant influence of leadership and technology on favorable employee outcomes. Studies have consistently associated sustainable leadership with increased trust, job satisfaction, and overall well-being. The positive correlation between AIX and WPH aligns with research highlighting AI's capacity to improve engagement when perceived as a resource rather than a source of technostress. The lack of moderation suggests that cultural or organizational factors may affect the relationship between leadership and technology.

In Indonesia, these findings are particularly significant due to the country's emphasis on collectivist values, which prioritize relational leadership, inclusivity, and social harmony. The sustainable leadership of honeybees aligns with cultural values, likely accounting for its significant impact on workplace happiness. AI adoption is increasing; however, its function is primarily supportive, and its influence is contingent upon the organizational climate established by leadership.

The implications for Sustainable Development Goal 3, concerning good health and well-being, are clear. Sustainable leadership, as exemplified by honeybees, promotes mental and

emotional well-being by creating a supportive work environment that reduces stress and burnout, while fostering greater satisfaction and resilience. AI can also enhance well-being by serving as a tool for stress reduction and creativity enhancement. The findings indicate that leadership is fundamental to workplace happiness, with technology acting primarily as a supportive tool. Organizations pursuing SDG 3 must integrate digital innovation with human-centered leadership to maintain both organizational performance and employee well-being.

5 Conclusion

This study demonstrates that sustainable leadership in honeybees (HSL) significantly enhances workplace happiness (WPH) among employees by promoting collaboration, ethical conduct, and psychological safety. The findings suggest that leaders who prioritize long-term stakeholder value and inclusivity cultivate work environments that mitigate stress and promote employee engagement and satisfaction. Additionally, AI experience (AIX) has a positive effect on workplace happiness by reducing repetitive tasks and increasing job meaningfulness; however, it does not moderate the relationship between HSL and WPH. This highlights the critical significance of human-centered leadership in comparison to technological factors in influencing employee well-being, particularly in collectivist cultural settings such as Indonesia.

This research makes a theoretical contribution to the literature on sustainable leadership by highlighting the significance of the honeybee model in digital workplaces. This highlights the ongoing importance of ethical, empathetic, and inclusive leadership practices, especially in contexts undergoing rapid technological change. This study presents a novel perspective on the integration of HSL, AIX, and WPH within the framework of Sustainable Development Goal 3 (SDG 3), emphasizing the collaborative role of leadership and digital tools in promoting mental health and workplace satisfaction. The findings provide practical insights for managers and HR practitioners, stressing the importance of leadership development programs that integrate sustainability principles and employee-centric approaches, as well as the incorporation of AI as a supportive tool.

This research has significant limitations despite its contributions. The cross-sectional design limits the capacity to determine causality among the variables studied. Future research may employ longitudinal or experimental methodologies to more effectively investigate the evolving relationship between leadership practices, AI adoption, and employee well-being over time. The data collection, confined to the Greater Jakarta area, may limit the generalizability of the findings to other cultural or organizational contexts. Incorporating a variety of geographical regions and industries into the research may strengthen the validity of the findings. The assessment of AI experience primarily focused on employees' perceptions rather than objective measures of AI integration. Future research may employ multi-method approaches, integrating surveys with qualitative interviews or observational data to enhance understanding of AI's impact on workplace dynamics. Investigating additional moderating or mediating variables, including organizational culture, psychological resilience, and digital literacy, may improve the understanding of the mechanisms that connect sustainable leadership with workplace happiness.

Authors' Contributions and Data Availability

MGH lead the research, overseeing conceptualization, methodology, software, writing (including the original draft preparation), and final review. **SI, NT, KI** prepare the literature review and discussion and is responsible for writing, proofreading, and editing. **SI, NT, and**

KI handle data collection and prepare the literature review. They are responsible for writing, proofreading, and editing.
Data availability
https://zenodo.org/records/17391209/files/Open%20Data%20ID%2052.xlsx?download=1

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