E-ISSN : 2549-3280 P-ISSN : 2549-5933
INTEGRATED JOURNAL OF BUSINESS AND ECONOMICS
Email: ijbe.feubb@gmail.com
http://ojs.ijbe-research.com/index.php/IJBE/index

Implementing Sustainable HR Practices: A New Paradigm in Building Organizational Capacity to Address the Climate Crisis

Darul Wiyono[a*], Hedi Setiadi[a], Rinaldi Tanjung[a], Ela Julaeha[a], Megie Ambarsari[a]
Ariyanti Academy of Secretary and Management, Indonesia
*darulwiyono96@ariyanti.ac.id

Abstract

This study examines the implementation of sustainable Human Resource (HR) practices and their impact on organizational capacity to address climate crises in private universities in Bandung City. The research background highlights the importance of integrating sustainability principles into HR policies to strengthen organizational resilience against global environmental challenges. This study aims to analyze the influence of sustainable HR practices on organizational culture, managerial support, and climate resilience within higher education institutions. A quantitative research method was employed, utilizing the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach to examine the relationships among key variables. The study involved a population of 882 individuals from 138 private universities in Bandung, with a representative sample of 270 participants determined using Slovin's formula with a 5% margin of error and selected through stratified random sampling. The sample was proportionally distributed across university management (rectors, vice rectors, and department heads), lecturers, and administrative staff to ensure comprehensive representation of the population. The results indicate that sustainable HR practices significantly influence organizational culture and managerial support, which subsequently enhance organizational resilience to climate crises. The study concludes that integrating sustainable HR practices into the policies of private universities can improve institutional capacity to address climate change. Practical implications include the development of holistic sustainability policies and increased managerial engagement to effectively support sustainability implementation.

Article Info

- ***Received*** : 22th, August 2024
- ***Revised*** : 10th, January 2025
- ***Published*** : 9th, February 2025
- ***Pages*** : 69-86
- ***DOI*** : *http://dx.doi.org/10.33019/ijbe.v9i1.1038*
- JEL : M12, M54, Q56, O15
- ***Keywords*** : *Sustainable HR Practice, Organizational Culture, Management Support, Climate Resilience*

1. Introduction

Amid the increasing complexity of globalization, environmental and sustainability issues have become major challenges faced by organizations worldwide. The escalating climate crisis not only affects the economic and industrial sectors but also impacts various aspects of human life, including education. According to the IPCC report (2022), the climate crisis demands that every sector adapt by implementing environmentally-friendly and sustainable practices. In this context, educational institutions play a strategic role as agents of change in supporting climate change mitigation and raising global awareness of the importance of sustainability (UNESCO, 2021).

Indonesia, as a country rich in biodiversity and abundant natural resources, faces significant challenges in maintaining environmental sustainability. According to data from the Ministry of Environment and Forestry (KLHK, 2023), Indonesia also experiences substantial impacts from climate change, such as rising temperatures, flooding, and other natural disasters. In this situation, the education sector, particularly higher education, is expected to make tangible contributions through the implementation of sustainability practices that encompass not only academic aspects but also human resource (HR) management, governance, and social responsibility (World Bank, 2022).

Private universities in Bandung, West Java, Indonesia, play a critical role in educating future generations about sustainability and climate change. Bandung, as one of Indonesia's educational hubs, has the potential to be a pioneer in integrating sustainability values into university policies and operations. With the growing global awareness of the need for concrete action to address climate change, the implementation of sustainable HR management models has become increasingly relevant and urgent (Thakhathi et al., 2019; Mohiuddin et al., 2022).

The implementation of sustainable HR practices in private universities not only supports the achievement of global sustainability goals but also strengthens the institution's reputation as a leader in environmental education. By integrating sustainability principles into recruitment policies, training, and employee development, universities can contribute to climate change mitigation (Altassan, 2023). Work environments committed to sustainability tend to increase employee job satisfaction and productivity (Cao et al., 2024). Moreover, these practices promote well-being, efficiency, and better relationships with local communities, generating positive impacts both locally and globally.

Furthermore, the adoption of sustainable HR practices offers dual benefits: improving organizational performance while having positive environmental impacts. These practices include training programs on environmental awareness and recruitment policies that promote diversity and inclusion (Tamtik & Guenter, 2020). Training on waste management and energy efficiency, for instance, supports climate change mitigation efforts (Roscoe et al., 2019). By integrating sustainability into their operations, organizations not only contribute to global sustainability goals but also improve

operational efficiency, employee satisfaction, and their reputation as leaders in sustainability (Bilderback, 2024; Ahsan, 2024).
In addition, private universities in Bandung hold significant potential to promote corporate social responsibility (CSR) through the integration of CSR programs into their sustainability agendas. CSR programs focusing on environmental issues in local communities can directly contribute to addressing environmental challenges. Research by Yan et al. (2022) shows that active involvement in CSR programs can enhance institutional reputation and strengthen relationships with various stakeholders. Effective CSR programs not only improve the visibility and credibility of universities but also encourage closer collaboration with communities and other partners, reinforcing their position as leaders in social and environmental responsibility.

From a governance perspective, private universities must also ensure transparency and accountability in sustainability reporting. Research indicates that comprehensive ESG (Environmental, Social, and Governance) reporting can enhance public and investor trust (Mooneeapen et al., 2022). Adopting international standards like the Global Reporting Initiative (GRI) allows universities to demonstrate their commitment to sustainability, manage environmental and social impacts effectively, and improve governance practices. Transparent ESG reporting also enhances institutional reputation, strengthens global competitiveness, attracts investment, and facilitates strategic partnerships. High-quality ESG reporting integration is a crucial step toward building trust, improving accountability, and reinforcing the position as a leader in sustainability.

This study focuses on the challenges faced by private universities in implementing sustainable HR practices, including a lack of understanding of sustainability values and limitations in facilities and resources (Aro-Gordon & Mohamed Al-Raeesi, 2022). This study aims to provide guidance for university management in formulating sustainability practice strategies encompassing academic, environmental, and social aspects. By understanding sustainable HR practices, private universities can support global sustainability through the integration of sustainability principles into HR policies, CSR programs, and transparent governance, thereby enhancing operational performance and institutional reputation both locally and internationally.

2. Literature Review

Sustainable HR Practices

In a global context that emphasizes sustainability, sustainable HRM practices are crucial for organizational relevance and competitiveness. Sustainable HRM integrates sustainability principles into HR policies to create long-term value by considering employee well-being and environmental impact (Tortia et al., 2022). Key practices include recruiting in alignment with sustainability values (Yong et al., 2020), training for employee awareness and motivation (Mehrajunnisa et al., 2023), and compensation policies that encourage sustainable behavior (Amjad et al., 2021). Focusing on employee well-being, including work-life balance and mental health, enhances satisfaction and productivity (Nabawanuka & Ekmekcioglu, 2022). Sustainable HRM can also improve organizational reputation and attract high-quality talent (Malik et al., 2020). Although

challenges such as initial costs and resistance to change exist, appropriate strategies and management support can overcome these barriers.

Organizational Culture

Organizational culture is a crucial aspect that influences how an organization operates and performs, encompassing the values, beliefs, and practices that shape the behavior of its members and their internal and external interactions (Anning-Dorson, 2021). Core values accepted and practiced by organization members form the foundation for daily behaviors and decisions, creating a cohesive work environment (Sharma & Anon, 2021). A culture that supports creativity and experimentation can accelerate innovation and adaptation to market changes, enhancing competitiveness (Mohiuddin et al., 2022). Conversely, a culture that does not align with the organization's strategy can lead to internal conflicts and failure to achieve goals (Cao et al., 2024). Therefore, leaders need to actively manage the culture to support long-term strategies. Investing in developing a strong culture, through training and internal communication, can enhance employee engagement, job satisfaction, and performance outcomes (Yan et al., 2022).

Management Support

Management support is a key element in the success of implementing organizational initiatives and strategies, encompassing the commitment, resources, and actions of managers to ensure project success (Salas-Vallina et al., 2021). According to Akomea-Frimpong et al. (2021), managers who provide adequate resources, both financial and non-financial, increase the likelihood of project success by reducing constraints and enhancing productivity. Management support also fosters a positive work environment, where involvement in decision-making and support for innovative ideas enhance job satisfaction and motivation (Nanjundeswaraswamy, 2023). Additionally, active managerial support in communicating the benefits of change can reduce employee resistance and increase change adoption (Doeze Jager et al., 2022). Managerial involvement in formulating and delivering the strategic vision, as well as ensuring its implementation, also impacts the success of strategy execution (Wang & Huang, 2023).

Climate Resilience

Climate resilience is a crucial concept in addressing global climate change, referring to the ability of systems whether organizations, communities, or nations to adapt, respond to, and recover from the impacts of extreme climate change (Alibašić, 2022). The literature discusses climate resilience in the context of adaptation and mitigation strategies to reduce vulnerability and enhance response capacity (Mason et al., 2022). Adaptation, which involves modifying processes and practices to lessen the negative impacts of climate change, includes land use planning and investing in disaster-resistant infrastructure, thus strengthening social and economic resilience (Kyriakopoulos & Sebos, 2023). Community involvement in planning climate resilience strategies ensures local relevance and better support (Bernados & Ocampo, 2024). Mitigation, such as reducing greenhouse gas emissions and transitioning to clean energy, slows climate change and reduces associated disasters (Huang et al., 2023). Integrating climate resilience principles into sustainable development policies ensures that economic growth does not compromise the system's capacity to handle climate risks (Ferguson & Wollersheim, 2023).

Factors that Influence Climate Resilience

Factors influencing climate resilience play a crucial role in building an organization's capacity to address climate crises. Recent research indicates that climate resilience is affected by various factors, including internal policies, stakeholder engagement, and organizational resources. According to Cao et al. (2024), internal policies that support sustainability and innovation contribute to enhanced climate resilience by strengthening adaptation and risk mitigation. Stakeholder engagement, including employees and local communities, is also considered crucial, as highlighted by Mason et al. (2022), who emphasize that active participation from various parties in planning and implementing climate resilience strategies improves response effectiveness to climate change. Additionally, investment in relevant resources and training strengthens an organization's capacity to respond to and adapt to climate challenges (Orr, 2023). Thus, implementing sustainable HR practices that integrate these factors can enhance overall organizational climate resilience, making it more robust in facing increasingly urgent climate crises. The theoretical foundation underlying this research is illustrated in Figure 1 below:

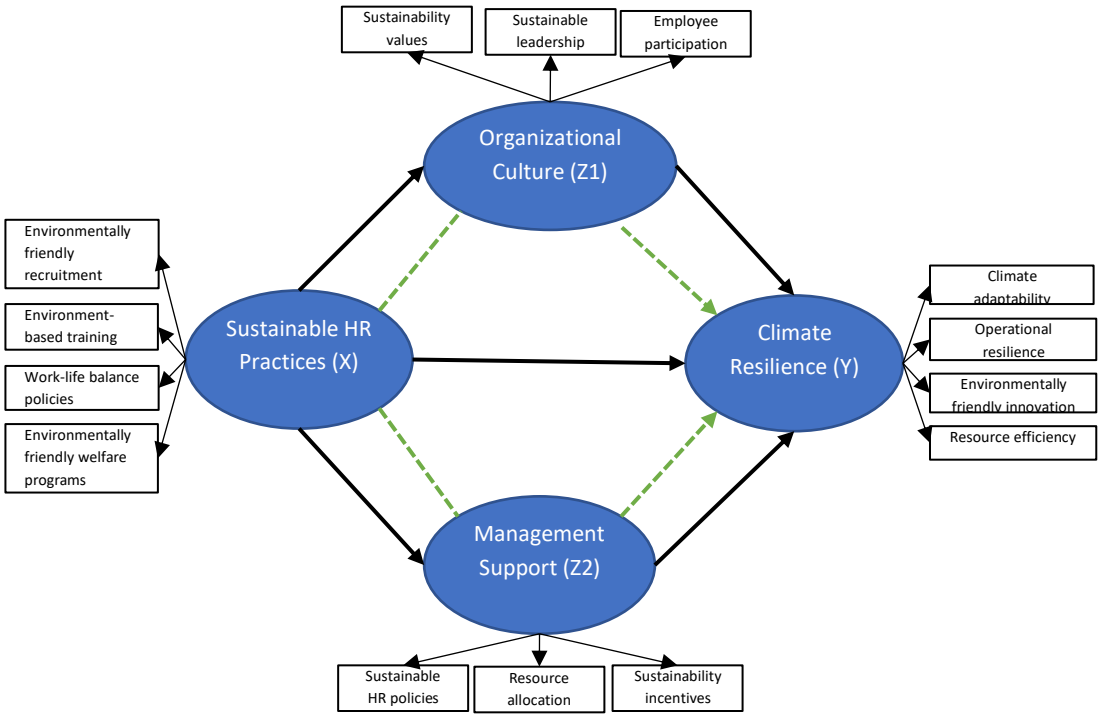

Figure 1. The Theoretical Common Ground that Underlies the Study

Hypothesis

Recent studies indicate that integrating Environmental, Social, and Governance (ESG) criteria into Human Resource (HR) management can significantly enhance organizational resilience to climate change (Khamisu et al., 2024). This provides a foundation to explore whether the implementation of ESG criteria in HR practices plays a pivotal role in enabling organizational adaptation to the climate crisis. Innovative HR strategies increasingly emphasize cutting-edge methods, including sustainability impact measurement and eco-friendly initiatives, as crucial elements for driving organizational transformation (Aftab et al., 2023). This underscores the claim that sustainability can be

a key driver in creating more effective and impactful HR strategies. Moreover, the implementation of these practices involves leveraging advanced technologies and data-driven approaches to improve operational efficiency and reduce carbon footprints (Williams et al., 2024).

Therefore, the research hypothesis seeks to test the extent to which technology and data integration can optimize the sustainability impact on HR management. By adopting the latest standards in HR practices, organizations can bolster their adaptation to climate change, while also improving employee performance and well-being (Nanjundeswaraswamy, 2023). This supports the assertion that proactive HR management is instrumental in enhancing organizational resilience. This approach signals a paradigm shift toward more proactive HR management that addresses not only employee needs but also broader environmental challenges (Ren et al., 2023). Consequently, the hypothesis proposed in this study is as follows:

H1 : There is a significant effect of Sustainable HR Practices on Climate Resilience.
H2 : There is a significant effect of Sustainable HR Practices on Organizational Culture.
H3 : There is a significant effect of Sustainable HR Practices on Management Support.
H4 : There is a significant effect of Organizational Culture on Climate Resilience.
H5 : There is a significant effect of Management Support on Climate Resilience.
H6 : Organizational Culture mediates the effect of Sustainable HR Practices on Climate Resilience.
H7 : Management Support mediates the effect of Sustainable HR Practices on Climate Resilience.

3. Research Methods

A quantitative research method was employed, utilizing the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach to examine the relationships among key variables. PLS-SEM was chosen for its ability to handle structural models and non-normally distributed data, as well as its flexibility in path modeling (Hair et al., 2021). The data were processed using SmartPLS 3.0. The study involved a population of 882 individuals from 138 private universities in Bandung, with a representative sample of 270 participants determined using Slovin's formula with a 5% margin of error, ensuring sample representativeness (Schuberth et al., 2023). Stratified random sampling was applied to represent each subgroup within the population, allowing for more accurate and reliable results (Kumar, 2021; Ringle et al., 2022). The sample was proportionally distributed across university management (rectors, vice rectors, and department heads), lecturers, and administrative staff to ensure comprehensive representation of the population. The use of Slovin's formula to determine the minimum sample size ensured that the sample was sufficiently representative of the population without overburdening the limited research resources. By using 270 respondents, we can ensure that the research results remain valid and generalizable, even with a relatively small margin of error (5%).

Data were collected through questionnaires distributed to the selected respondents. The questionnaires were designed to measure the variables in the research model, which

include sustainable HR practices, organizational culture, management support, and climate crisis resilience. Respondents were asked to provide ratings for each indicator listed in the questionnaire. The research model illustrates the relationships between the variables, including sustainable HR practices (X), organizational culture (Z1), management support (Z2), and climate crisis resilience (Y). The indicators used to measure these variables include: for sustainable HR practices (X), environmentally friendly recruitment (EFR), environmental-based training (EBT), work-life balance policies (WPB), and environmentally friendly welfare programs (EFW); for organizational culture (Z1), sustainability values (STV), leadership committed to sustainability (STL), and employee participation in sustainability initiatives (EPP); for management support (Z2), sustainable HR policies (SHP), resource allocation (RSA), and sustainability incentives (STI); and for climate crisis resilience (Y), adaptability to climate change (CMA), operational resilience (OTR), environmentally friendly innovation (EFI), and resource efficiency (RSE).

The analytical method used in this study is PLS-SEM, which is applied to explore the relationships between the variables in the model. Figure 2 below illustrates the relationships between the variables in the research model, providing a clear picture of the contribution of sustainable HR practices, organizational culture, and management support in building organizational resilience to climate crises.

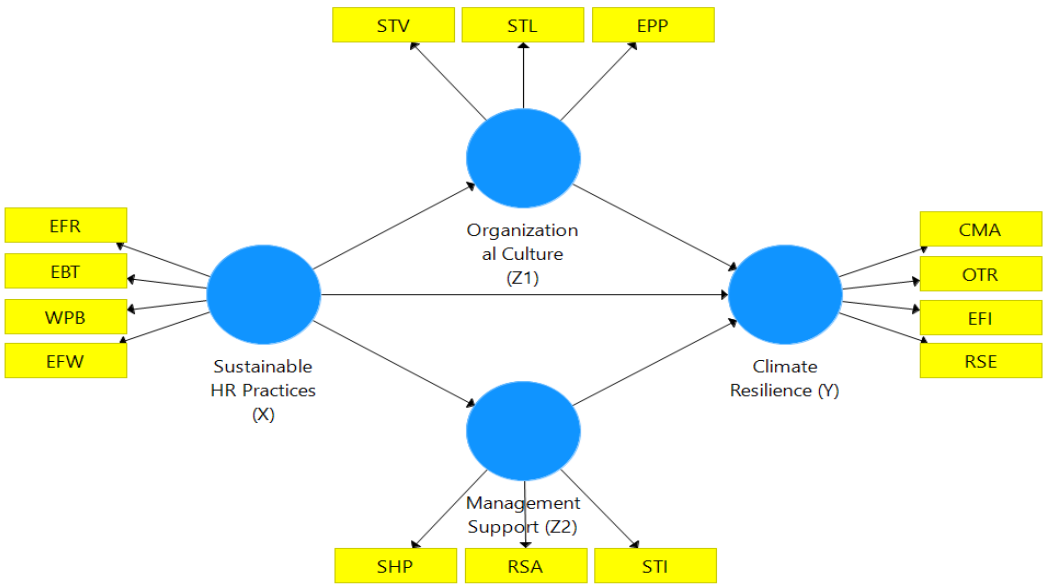

Figure 2. Partial Least Squares Structural Equation Modeling (PLS-SEM) by Program SmartPLS ver 3.0

4. Results

Outer Model

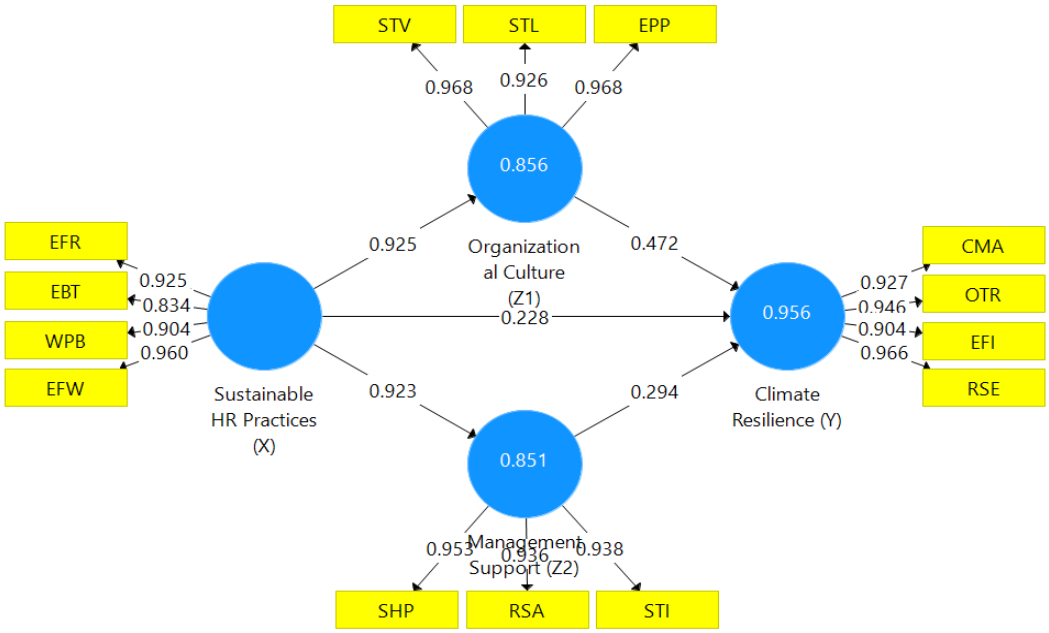

Figure 3. Outer Model

Figure 3 above illustrates the structural model (outer model) depicting the relationships between the variables in the study of the impact of Sustainable HR Practices (X) on Climate Resilience (Y), considering the mediating roles of Organizational Culture (Z1) and Management Support (Z2). The Sustainable HR Practices (X) variable is measured through four indicators: EFR (0.925), EBT (0.834), WPB (0.904), and EFW (0.960). The Organizational Culture (Z1) variable is measured through three indicators: STV (0.968), STL (0.926), and EPP (0.968). The Management Support (Z2) variable is measured through three indicators: SHP (0.953), RSA (0.936), and STI (0.938). Finally, the Climate Resilience (Y) variable is measured through four indicators: CMA (0.927), OTR (0.946), EFI (0.904), and RSE (0.966). These results indicate that all indicators have high loading values, signifying the significant contribution of each indicator in measuring the respective variables.

Table 1. Construct Reliability and Validity

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Climate Resilience (Y)	0.953	0.953	0.966	0.876
Sustainable HR Practices (X)	0.927	0.933	0.949	0.823
Organizational Culture (Z1)	0.951	0.952	0.968	0.910
Management Support (Z2)	0.937	0.938	0.960	0.888

Source: Data Processing Results, SmartPLS 3.0.

Table 1 presents the results of the reliability and validity testing for the variables Climate Resilience (Y), Sustainable HR Practices (X), Organizational Culture (Z1), and Management Support (Z2). The Cronbach's Alpha values range from 0.927 to 0.953, indicating high internal consistency (Hair et al., 2020). The Composite Reliability values, ranging from 0.949 to 0.968, signify excellent composite reliability (Fornell & Larcker, 2016). The AVE values above 0.5 for all variables demonstrate strong convergent validity, with more than half of the variance in the indicators being explained by the construct (Henseler et al., 2015). These results indicate that the research instrument has strong reliability and validity.

Inner Model

Table 2. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Sustainable HR Practices (X) -> Climate Resilience (Y)	0.228	0.230	0.061	3.743	0.000
Sustainable HR Practices (X) -> Organizational Culture (Z1)	0.925	0.925	0.013	71.852	0.000
Sustainable HR Practices (X) -> Management Support (Z2)	0.923	0.922	0.012	75.148	0.000
Organizational Culture (Z1) -> Climate Resilience (Y)	0.472	0.465	0.084	5.638	0.000
Management Support (Z2) -> Climate Resilience (Y)	0.294	0.298	0.066	4.452	0.000

Source: Data Processing Results, SmartPLS 3.0.

Table 2 shows the results of the path coefficients from the inner model. Sustainable HR Practices (X) have a significant effect on Climate Resilience (Y) with a path coefficient of 0.228 and a T-Statistic of 3.743 ($p = 0.000$), indicating a significant improvement in climate resilience. Sustainable HR Practices also have a strong influence on Organizational Culture (Z1) and Management Support (Z2), with path coefficients of 0.925 and 0.923, and T-Statistics of 71.852 and 75.148 ($p = 0.000$), respectively. Organizational Culture (Z1) significantly affects Climate Resilience (Y) with a path coefficient of 0.472 and a T-Statistic of 5.638 ($p = 0.000$), while Management Support (Z2) influences Climate Resilience with a path coefficient of 0.294 and a T-Statistic of 4.452 ($p = 0.000$). These results emphasize the crucial roles of organizational culture and management support in enhancing climate resilience.

Hypothesis Testing

The Influence of Sustainable HR Practices on Climate Resilience

The Path Coefficients analysis results in Table 2 show that Sustainable HR Practices have a significant impact on Climate Resilience, with a path coefficient of 0.228 and a T-Statistic of 3.743 ($p < 0.001$). This indicates that the implementation of sustainable HR practices directly enhances climate resilience in private higher education institutions in Bandung. Supporting literature also demonstrates that sustainable HR practices contribute

to improving an organization's capacity to address environmental and social challenges, which is highly relevant in the context of climate change (Aftab et al., 2023). Other studies emphasize that institutions adopting sustainable policies tend to have better resilience to environmental crises, positively affecting the institution's long-term sustainability (Aung & Hallinger, 2023). Thus, private higher education institutions in Bandung that implement sustainable HR practices can not only improve employee performance but also strengthen their resilience to various climate-related challenges, ultimately enhancing the institution's reputation and competitiveness.

The Influence of Sustainable HR Practices on Organizational Culture

The Path Coefficients analysis results in Table 2 show that Sustainable HR Practices have a highly significant impact on Organizational Culture, with a path coefficient of 0.925 and a T-Statistic of 71.852 ($p < 0.001$). This indicates that the implementation of sustainable HR practices effectively strengthens organizational culture in private higher education institutions in Bandung. Research has demonstrated that sustainable HR practices can create a more inclusive, collaborative, and responsive work environment, which is crucial for building a strong and adaptive organizational culture (Esan et al., 2024). Additionally, an organizational culture supported by sustainable HR practices can enhance employee engagement and satisfaction, which ultimately contributes to improved institutional performance (Sypniewska et al., 2023). In the context of private higher education institutions in Bandung, strengthening organizational culture through sustainable HR practices can also enhance the institution's reputation and attract high-quality students and staff (Papademetriou et al., 2023). Thus, the implementation of sustainable HR practices not only positively impacts operational aspects but also shapes and strengthens an adaptive and competitive organizational culture in private higher education institutions in Bandung.

The Influence of Sustainable HR Practices on Management Support

Based on the Path Coefficients results in Table 2, Sustainable HR Practices have a highly significant impact on Management Support, with a path coefficient of 0.923 and a T-Statistic of 75.148 ($p < 0.001$). This indicates that the implementation of sustainable HR practices directly enhances management support in private higher education institutions in Bandung. Strong management support is a key factor in the successful implementation of sustainable HR policies and programs, as it reflects the leadership's commitment to sustainability values and employee well-being (Gyensare et al., 2024). Moreover, consistent management support also boosts employee engagement and motivation in achieving organizational goals, particularly when facing dynamic environmental challenges (Sypniewska et al., 2023). In private higher education institutions, management support reinforced by sustainable HR practices can create a more productive and innovative work environment, ultimately contributing to the academic and operational success of the institution (Al-Alawneh et al., 2024). Thus, integrating sustainable HR practices in private higher education institutions in Bandung not only enhances operational efficiency but also strengthens crucial management support for the sustainable development of the institution.

The Influence of Organizational Culture on Climate Resilience

Based on the Path Coefficients results in Table 2, Organizational Culture has a significant impact on Climate Resilience, with a path coefficient of 0.472 and a T-Statistic of 5.638 ($p < 0.001$). This indicates that a strong and positive organizational culture in private higher education institutions in Bandung significantly contributes to enhancing resilience against climate change. An organizational culture that emphasizes sustainability, collaboration, and adaptability enables institutions to be more responsive to environmental challenges and strengthens their internal capacity to face climate crises (Ingram et al., 2023). Previous research also shows that a culture supporting sustainability can enhance collective awareness and action in addressing climate change (Anning-Dorson, 2021). Moreover, in the higher education context, an inclusive and collaborative culture fosters innovation and the implementation of best practices in environmental management (Christou et al., 2024). Therefore, strengthening a sustainability-oriented organizational culture in private higher education institutions in Bandung is a strategic step towards improving climate resilience and overall institutional sustainability.

The Influence of Management Support on Climate Resilience

Based on the Path Coefficients results in Table 2, Management Support has a significant impact on Climate Resilience, with a path coefficient of 0.294 and a T-Statistic of 4.452 ($p < 0.001$). This indicates that strong management support in private higher education institutions in Bandung significantly contributes to enhancing climate resilience. Management support, which includes policies, resources, and proactive leadership in implementing sustainable practices, enables institutions to be better prepared for climate change challenges (Sanches et al., 2023). Empirically, institutions with robust management support are more likely to successfully integrate climate resilience into their operational strategies, leading to better adaptation to environmental changes (Bass & Riggio, 2020). Furthermore, in the context of higher education, effective management support fosters a culture of continuous improvement and innovation, which is critical for building climate resilience (Ajayi & Udeh, 2024). Therefore, strengthening management support in private higher education institutions in Bandung is a crucial element in efforts to enhance resilience to climate change.

Testing Mediation Effects

Table 3. Total Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Sustainable HR Practices (X) -> Climate Resilience (Y)	0.936	0.935	0.012	78.649	0.000
Sustainable HR Practices (X) -> Organizational Culture (Z1)	0.925	0.925	0.013	71.852	0.000
Sustainable HR Practices (X) -> Management Support (Z2)	0.923	0.922	0.012	75.148	0.000
Organizational Culture (Z1) -> Climate Resilience (Y)	0.472	0.465	0.084	5.638	0.000
Management Support (Z2) -> Climate Resilience (Y)	0.294	0.298	0.066	4.452	0.000

Source: Data Processing Results, SmartPLS 3.0.

Table 3 presents the results of the total effects analysis for mediation testing. Sustainable HR Practices (X) have a highly significant impact on Climate Resilience (Y), with a coefficient of 0.936 and a T-Statistic of 78.649 ($p < 0.001$). These practices also significantly affect Organizational Culture (Z1) and Management Support (Z2), with coefficients of 0.925 and 0.923, respectively, and T-Statistics exceeding 71.852 and 75.148 ($p < 0.001$). Organizational Culture (Z1) has a positive influence on Climate Resilience (Y) with a coefficient of 0.472 and a T-Statistic of 5.638, while Management Support (Z2) affects Climate Resilience (Y) with a coefficient of 0.294 and a T-Statistic of 4.452 ($p < 0.001$). All relationships in the model show significant effects, supporting the research hypotheses regarding mediation effects.

Table 4. Specific Indirect Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Sustainable HR Practices (X) -> Organizational Culture (Z1) -> Climate Resilience (Y)	0.436	0.430	0.077	5.645	0.000
Sustainable HR Practices (X) -> Management Support (Z2) -> Climate Resilience (Y)	0.271	0.275	0.061	4.471	0.000

Source: Data Processing Results, SmartPLS 3.0.

Table 4 displays the results of the indirect effects analysis in mediation testing. Organizational Culture (Z1) plays a significant role as a mediator, with an indirect effect coefficient of 0.436 and a T-Statistic of 5.645 ($p < 0.001$), indicating that the influence of Sustainable HR Practices (X) on Climate Resilience (Y) is largely mediated by Organizational Culture. Management Support (Z2) also serves as a mediator, with an indirect effect coefficient of 0.271 and a T-Statistic of 4.471 ($p < 0.001$). These findings highlight the crucial role of both mediating factors in enhancing climate resilience through sustainable HR practices.

The Influence of Sustainable HR Practices on Climate Resilience through Organizational Culture

Based on the analysis results presented in Tables 3 and 4, the impact of Sustainable HR Practices on Climate Resilience through Organizational Culture shows a significant mediating effect. Table 3 indicates that Sustainable HR Practices have a strong positive impact on both Organizational Culture (coefficient of 0.925) and Climate Resilience (coefficient of 0.472). Meanwhile, Table 4 reveals that Organizational Culture mediates the relationship between Sustainable HR Practices and Climate Resilience, with an indirect effect coefficient of 0.436, which is statistically significant ($T = 5.645$, $p < 0.001$). This underscores that enhancing Organizational Culture as a result of Sustainable HR Practices can strengthen Climate Resilience. This finding is consistent with research by Al-Alawneh et al. (2024), which demonstrates that a strong Organizational Culture supports the success of sustainability initiatives in higher education institutions. Additionally, Orr (2023) emphasizes the importance of developing Organizational Culture to improve Climate Resilience in the higher education sector. In Bandung, Adinew (2024) shows that private higher education institutions effectively enhance

Climate Resilience through the strengthening of Organizational Culture as a result of implementing Sustainable HR Practices.

The Influence of Sustainable HR Practices on Climate Resilience through Management Support

The analysis results presented in Tables 3 and 4 show that Sustainable HR Practices have a positive impact on Management Support and Climate Resilience, with Management Support acting as a mediator. Table 3 demonstrates that Sustainable HR Practices significantly influence Management Support (coefficient of 0.923) and Climate Resilience (coefficient of 0.294). Table 4 reveals that the indirect effect of Sustainable HR Practices on Climate Resilience through Management Support is 0.271, with a T-statistic value of 4.471 ($p < 0.001$), indicating the effectiveness of Management Support in mediating this relationship. This finding is supported by previous research showing that Management Support is crucial for implementing Sustainable HR Practices and influencing Climate Resilience (Mehrajunnisa et al., 2023). Research by Mokski et al. (2023) emphasizes that strong Management Support enhances the success of sustainability strategies in higher education institutions. Additionally, a study by Leal Filho et al. (2023) shows that in private higher education institutions in Bandung, effective Management Support strengthens the impact of Sustainable HR Practices on Climate Resilience.

5. Conclusion and Suggestion

The research on "Implementing Sustainable HR Practices: A New Paradigm in Building Organizational Capacity to Address the Climate Crisis" highlights the importance of sustainable HR practices in enhancing organizational capacity to address the climate crisis, particularly in private higher education institutions in Bandung. The findings indicate that these practices have a significant impact on managerial support and organizational culture, which in turn strengthen climate resilience. Managerial support and organizational culture act as important mediators in this relationship, emphasizing the role of management involvement and a supportive work environment for sustainability.

Private higher education institutions in Bandung are advised to integrate sustainable HR practices into their institutional policies and strategies, ensuring adequate managerial support and appropriate training. Institutions should foster a culture that supports sustainability, develop strong managerial support, and collaborate with external stakeholders to enhance sustainability initiatives. By implementing these measures, higher education institutions can serve as models in addressing the climate crisis and advancing sustainable development through innovative HR policies and practices.

Private higher education institutions in Bandung can operationalize these findings by formulating HR policies that support sustainability, including the development of training programs related to environmental awareness and recruitment policies that promote diversity and inclusion. Additionally, institutions can strengthen an organizational culture oriented toward sustainability by involving all stakeholders, both internal and external.

This practice can be implemented by creating incentive structures that encourage individuals to contribute to sustainability initiatives, as well as providing the necessary resources to support the achievement of sustainability goals.

The findings of this study reinforce previous research showing that the success of implementing sustainable HR policies is highly influenced by managerial involvement and organizational culture that supports sustainability. For example, research by Tamtik & Guenter (2020) and Roscoe et al. (2019) emphasizes the importance of management support for sustainability initiatives and training related to energy efficiency and waste management. The findings of this study align with previous research and demonstrate that private higher education institutions can leverage sustainable HR policies not only to enhance resilience to climate change but also to improve operational efficiency and institutional reputation.

References

1. Adinew, Y. (2024). A comparative study on motivational strategies, organizational culture, and climate in public and private institutions. *Current Psychology*, *43*(13), 11470–11492. https://doi.org/10.1007/s12144-023-05259-9.
2. Aftab, J., Abid, N., Cucari, N., & Savastano, M. (2023). Green human resource management and environmental performance: The role of green innovation and environmental strategy in a developing country. *Business Strategy and the Environment*, *32*(4), 1782–1798. https://doi.org/10.1002/bse.3219.
3. Ahsan, M. J. (2024). Unlocking sustainable success: exploring the impact of transformational leadership, organizational culture, and CSR performance on financial performance in the Italian manufacturing sector. Social Responsibility Journal, 20(4), 783–803. https://doi.org/10.1108/SRJ-06-2023-0332.
4. Ajayi, F. A., & Udeh, C. A. (2024). Combating Burnout in the It Industry: A Review of Employee Well-Being Initiatives. *International Journal of Applied Research in Social Sciences*, *6*(4), 567–588. https://doi.org/10.51594/ijarss.v6i4.1010.
5. Akomea-Frimpong, I., Jin, X., & Osei-Kyei, R. (2021). A holistic review of research studies on financial risk management in public–private partnership projects. *Engineering, Construction and Architectural Management*, *28*(9), 2549–2569. https://doi.org/10.1108/ECAM-02-2020-0103.
6. Al-Alawneh, R., Othman, M., & Zaid, A. A. (2024). Green HRM impact on environmental performance in higher education with mediating roles of management support and green culture. *International Journal of Organizational Analysis*, *32*(6), 1141–1164. https://doi.org/10.1108/IJOA-02-2023-3636.
7. Alibašić, H. (2022). The Administrative and Ethical Considerations of Climate Resilience: The Politics and Consequences of Climate Change. *Public Integrity*, *24*(1), 33–50. https://doi.org/10.1080/10999922.2020.1838142.
8. Altassan, A. (2023). Sustainable Integration of Solar Energy, Behavior Change, and Recycling Practices in Educational Institutions: A Holistic Framework for Environmental Conservation and Quality Education. Sustainability, 15(20), 15157. https://doi.org/10.3390/su152015157.

9. Amjad, F., Abbas, W., Zia-UR-Rehman, M., Baig, S. A., Hashim, M., Khan, A., & Rehman, H.-. (2021). Effect of green human resource management practices on organizational sustainability: the mediating role of environmental and employee performance. *Environmental Science and Pollution Research*, *28*(22), 28191–28206. https://doi.org/10.1007/s11356-020-11307-9.
10. Anning-Dorson, T. (2021). Organizational culture and leadership as antecedents to organizational flexibility: implications for SME competitiveness. *Journal of Entrepreneurship in Emerging Economies*, *13*(5), 1309–1325. https://doi.org/10.1108/JEEE-08-2020-0288.
11. Aro-Gordon, S., & Mohamed Al-Raeesi, F. Y. (2022). Sustainable HRM Practice and Organisational Excellence: An Empirical Analysis. *SDMIMD Journal of Management*, *13*. https://doi.org/10.18311/sdmimd/2022/29573.
12. Aung, P. N., & Hallinger, P. (2023). Research on sustainability leadership in higher education: a scoping review. *International Journal of Sustainability in Higher Education*, *24*(3), 517–534. https://doi.org/10.1108/IJSHE-09-2021-0367.
13. Bass, Bernard M. Riggio, R. E. (2020). Transformational Leadership : Second Edition. In *Lawrence Erlbaum Associates* (Vol. 62, Issue 4).
14. Bernados, S., & Ocampo, L. (2024). Exploring the role of social capital in advancing climate change mitigation and disaster risk reduction. *Community Development*, *55*(4), 470–490. https://doi.org/10.1080/15575330.2023.2253316.
15. Bilderback, S. (2024). Integrating training for organizational sustainability: the application of Sustainable Development Goals globally. European Journal of Training and Development, 48(7/8), 730–748. https://doi.org/10.1108/EJTD-01-2023-0005.
16. Cao, S., Xu, P., Qalati, S. A., & Wu, K. (2024). Impact of Employee Environmental Concerns on Sustainable Practices: Investigating Organizational Commitment and Job Satisfaction. *Sustainability*, *16*(13), 5823. https://doi.org/10.3390/su16135823.
17. Christou, O., Manou, D. B., Armenia, S., Franco, E., Blouchoutzi, A., & Papathanasiou, J. (2024). Fostering a Whole-Institution Approach to Sustainability through Systems Thinking: An Analysis of the State-of-the-Art in Sustainability Integration in Higher Education Institutions. *Sustainability*, *16*(6), 2508. https://doi.org/10.3390/su16062508.
18. Direktorat Jenderal Pengendalian Perubahan Iklim (DJPPI) - Kementerian Lingkungan Hidup dan Kehutanan (KLHK). (2023). *Sistem Registri Nasional Perubahan Iklim*. Retrieved from https://srn.menlhk.go.id/index.php?r=home%2Findex
19. Doeze Jager, S. B., Born, M. Ph., & van der Molen, H. T. (2022). The relationship between organizational trust, resistance to change and adaptive and proactive employees' agility in an unplanned and planned change context. *Applied Psychology*, *71*(2), 436–460. https://doi.org/10.1111/apps.12327.
20. Esan, O., Ajayi, F. A., & Olawale, O. (2024). Managing global supply chain teams: human resource strategies for effective collaboration and performance. *GSC Advanced Research and Reviews*, *19*(2), 013–031. https://doi.org/10.30574/gscarr.2024.19.2.0161.
21. Ferguson, P., & Wollersheim, L. (2023). From sustainable development to resilience? (Dis)continuities in climate and development policy governance discourse. *Sustainable Development*, *31*(1), 67–77. https://doi.org/10.1002/sd.2374.
22. Fornell, C., & Larcker, D. F. (2016). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research This*, *18*(1).

23. Gyensare, M. A., Adomako, S., & Amankwah-Amoah, J. (2024). Green HRM practices, employee well-being, and sustainable work behavior: Examining the moderating role of resource commitment. *Business Strategy and the Environment*, *33*(4), 3129–3141. https://doi.org/10.1002/bse.3642.
24. Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). A primer on partial least squares structural equations modeling (PLS-SEM). Sage Publications. *Journal of Tourism Research*, *6*(2).
25. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1). https://doi.org/10.1007/s11747-014-0403-8.
26. Huang, X., Khan, Y. A., Arshed, N., Salem, S., Shabeer, M. G., & Hanif, U. (2023). Increasing social resilience against climate change risks: a case of extreme climate affected countries. *International Journal of Climate Change Strategies and Management*, *15*(3), 412–431. https://doi.org/10.1108/IJCCSM-04-2022-0051.
27. Ingram, T., Wieczorek-Kosmala, M., & Hlaváček, K. (2023). Organizational Resilience as a Response to the Energy Crisis: Systematic Literature Review. *Energies*, *16*(2), 702. https://doi.org/10.3390/en16020702.
28. Intergovernmental Panel on Climate Change (IPCC). (2022). *Climate change 2022: Impacts, adaptation and vulnerability*. Working Group II contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Retrieved from https://www.ipcc.ch/working-group/wg2/
29. Khamisu, M. S., Paluri, R. A., & Sonwaney, V. (2024). Stakeholders' perspectives on critical success factors for environmental social and governance (ESG) implementation. *Journal of Environmental Management*, *365*, 121583. https://doi.org/10.1016/j.jenvman.2024.121583
30. Kumar, K. (2021). Partial Least Square (PLS) Analysis. *Resonance*, *26*(3). https://doi.org/10.1007/s12045-021-1140-1.
31. Kyriakopoulos, G. L., & Sebos, I. (2023). Enhancing Climate Neutrality and Resilience through Coordinated Climate Action: Review of the Synergies between Mitigation and Adaptation Actions. *Climate*, *11*(5), 105. https://doi.org/10.3390/cli11050105.
32. Leal Filho, W., Simaens, A., Paço, A., Hernandez-Diaz, P. M., Vasconcelos, C. R. P., Fritzen, B., & Mac-Lean, C. (2023). Integrating the Sustainable Development Goals into the strategy of higher education institutions. *International Journal of Sustainable Development & World Ecology*, *30*(5), 564–575. https://doi.org/10.1080/13504509.2023.2167884.
33. Malik, S. Y., Cao, Y., Mughal, Y. H., Kundi, G. M., Mughal, M. H., & Ramayah, T. (2020). Pathways towards Sustainability in Organizations: Empirical Evidence on the Role of Green Human Resource Management Practices and Green Intellectual Capital. *Sustainability*, *12*(8), 3228. https://doi.org/10.3390/su12083228.
34. Mason, J. G., Eurich, J. G., Lau, J. D., Battista, W., Free, C. M., Mills, K. E., Tokunaga, K., Zhao, L. Z., Dickey-Collas, M., Valle, M., Pecl, G. T., Cinner, J. E., McClanahan, T. R., Allison, E. H., Friedman, W. R., Silva, C., Yáñez, E., Barbieri, M. Á., & Kleisner, K. M. (2022). Attributes of climate resilience in fisheries: From theory to practice. *Fish and Fisheries*, *23*(3), 522–544. https://doi.org/10.1111/faf.12630.
35. Mehrajunnisa, M., Jabeen, F., Faisal, M. N., & Lange, T. (2023). The influence of green human resource management practices and employee green behavior on business performance in sustainability-focused organizations. *Journal of Environmental Planning and Management*, *66*(12), 2603–2622. https://doi.org/10.1080/09640568.2022.2074824.
36. Mohiuddin, M., Hosseini, E., Faradonbeh, S. B., & Sabokro, M. (2022). Achieving Human Resource Management Sustainability in Universities. *International Journal of Environmental Research and Public Health*, *19*(2). https://doi.org/10.3390/ijerph19020928.

37. Mokski, E., Leal Filho, W., Sehnem, S., & Andrade Guerra, J. B. S. O. de. (2023). Education for sustainable development in higher education institutions: an approach for effective interdisciplinarity. *International Journal of Sustainability in Higher Education*, *24*(1), 96–117. https://doi.org/10.1108/IJSHE-07-2021-0306.
38. Mooneeapen, O., Abhayawansa, S., & Mamode Khan, N. (2022). The influence of the country governance environment on corporate environmental, social and governance (ESG) performance. *Sustainability Accounting, Management and Policy Journal*, *13*(4), 953–985. https://doi.org/10.1108/SAMPJ-07-2021-0298.
39. Nabawanuka, H., & Ekmekcioglu, E. B. (2022). Millennials in the workplace: perceived supervisor support, work–life balance and employee well–being. *Industrial and Commercial Training*, *54*(1), 123–144. https://doi.org/10.1108/ICT-05-2021-0041.
40. Nanjundeswaraswamy, T. S. (2023). The mediating role of job satisfaction in the relationship between leadership styles and employee commitment. *Journal of Economic and Administrative Sciences*, *39*(2), 286–304. https://doi.org/10.1108/JEAS-02-2021-0029.
41. Orr, M. (2023). Finding consensus on indicators for organizational climate capacity in sport. *Managing Sport and Leisure*, *28*(4), 360–378. https://doi.org/10.1080/23750472.2021.1914710
42. Papademetriou, C., Anastasiadou, S., & Papalexandris, S. (2023). The Effect of Sustainable Human Resource Management Practices on Customer Satisfaction, Service Quality, and Institutional Performance in Hotel Businesses. *Sustainability*, *15*(10), 8251. https://doi.org/10.3390/su15108251.
43. Ren, S., Cooke, F. L., Stahl, G. K., Fan, D., & Timming, A. R. (2023). Advancing the sustainability agenda through strategic human resource management: Insights and suggestions for future research. *Human Resource Management*, *62*(3), 251–265. https://doi.org/10.1002/hrm.22169.
44. Ringle, C., Hult, G. T. H., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM). In *Sage*.
45. Roscoe, S., Subramanian, N., Jabbour, C. J. C., & Chong, T. (2019). Green human resource management and the enablers of green organisational culture: Enhancing a firm's environmental performance for sustainable development. *Business Strategy and the Environment*, *28*(5), 737–749. https://doi.org/10.1002/bse.2277.
46. Salas-Vallina, A., Alegre, J., & López-Cabrales, Á. (2021). The challenge of increasing employees' well-being and performance: How <scp>human resource management</scp> practices and engaging leadership work together toward reaching this goal. *Human Resource Management*, *60*(3), 333–347. https://doi.org/10.1002/hrm.22021.
47. Sanches, F. E. F., Souza Junior, M. A. A. de, Massaro Junior, F. R., Povedano, R., & Gaio, L. E. (2023). Developing a method for incorporating sustainability into the strategic planning of higher education institutions. *International Journal of Sustainability in Higher Education*, *24*(4), 812–839. https://doi.org/10.1108/IJSHE-10-2021-0439.
48. Schuberth, F., Zaza, S., & Henseler, J. (2023). Partial Least Squares is an Estimator for Structural Equation Models: A Comment on Evermann and Rönkkö (2021). *Communications of the Association for Information Systems*, *52*. https://doi.org/10.17705/1CAIS.05232.
49. Sharma, L. D., & Anon, N. (2021). Work-Life Balance: A Literature Review. *Jaipuria International Journal of Management Research*, *7*(1). https://doi.org/10.22552/jijmr/2021/v7/i1/209140.

50. Sypniewska, B., Baran, M., & Kłos, M. (2023). Work engagement and employee satisfaction in the practice of sustainable human resource management – based on the study of Polish employees. *International Entrepreneurship and Management Journal*, *19*(3), 1069–1100. https://doi.org/10.1007/s11365-023-00834-9
51. Tamtik, M., & Guenter, M. (2020). Policy Analysis of Equity, Diversity and Inclusion Strategies in Canadian Universities – How Far Have We Come? *Canadian Journal of Higher Education*, *49*(3), 41–56. https://doi.org/10.7202/1066634ar.
52. Thakhathi, A., le Roux, C., & Davis, A. (2019). Sustainability Leaders' Influencing Strategies for Institutionalising Organisational Change towards Corporate Sustainability: A Strategy-as-Practice Perspective. *Journal of Change Management*, *19*(4). https://doi.org/10.1080/14697017.2019.1578985.
53. Tortia, E. C., Sacchetti, S., & López-Arceiz, F. J. (2022). A Human Growth Perspective on Sustainable HRM Practices, Worker Well-Being and Organizational Performance. *Sustainability*, *14*(17), 11064. https://doi.org/10.3390/su141711064.
54. UNESCO. (2024, November 26). *ESD for 2030 learning webinars: Providing concrete and practical education for sustainable development activities*. Retrieved from https://www.unesco.org/en/sustainable-development/education/esd-net/webinars
55. Wang, X., & Huang, Y.-H. C. (2023). Uncovering the Role of Strategic Orientation in Translating Communication Strategies to Organizational Performance: An Analysis of Practitioners From Two Chinese Societies. *International Journal of Business Communication*, *60*(1), 234–259. https://doi.org/10.1177/2329488420924839.
56. World Bank. (2022). *Climate change knowledge portal for development practitioners and policy makers: Climate change overview country summary*. Retrieved from https://climateknowledgeportal.worldbank.org/country/vietnam
57. Yan, X., Espinosa-Cristia, J. F., Kumari, K., & Cioca, L. I. (2022). Relationship between Corporate Social Responsibility, Organizational Trust, and Corporate Reputation for Sustainable Performance. *Sustainability*, *14*(14), 8737. https://doi.org/10.3390/su14148737.
58. Yong, J. Y., Yusliza, M., Ramayah, T., Chiappetta Jabbour, C. J., Sehnem, S., & Mani, V. (2020). Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management. *Business Strategy and the Environment*, *29*(1), 212–228. https://doi.org/10.1002/bse.2359