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Fostering Employee Sustainable Performance in Higher Education Institutions in Malaysia

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Abstract

Sustainability is a critical factor in the performance of employees in higher education institutions. By promoting sustainable practices, institutions can foster a culture of environmental responsibility, resource efficiency, and long-term thinking, leading to cost savings, improved campus infrastructure, and a stronger reputation, all of which contribute to the institution's success and the well-being of its employees. This study aims to investigate the direct and indirect relationships between institutional commitment, organizational culture, and leadership style with sustainable employee performance, with intrinsic motivation as a mediator in Malaysian higher education institutions (HEIs). The Self-Determination Theory (SDT) was used as an underpinning theory in this study. Methodologically, data collection via survey questionnaires was distributed via email using purposive sampling, yielding a satisfactory response rate. 254 clean data points are used in the data analysis. Structural equation modeling (SEM) was used for data analysis, utilizing SPSS 23 and SmartPLS 4 software. The study contributes to the existing literature by examining the direct and indirect relationships between institutional commitment, organizational culture, leadership style, and sustainable employee performance in Malaysian higher education institutions, with intrinsic motivation as a mediating factor. By incorporating the Self-Determination Theory as the underpinning framework, the study aims to provide a comprehensive understanding of how these variables interact to influence employee performance and sustainability, ultimately offering insights into creating an environment that nurtures intrinsic motivation and sustainable employee performance within the context of Malaysian higher education institutions.

Keywords: Institutional Commitment, Organizational Culture, Leadership Style, Intrinsic Motivation, Employee Sustainable Performance

Introduction

Sustainability is a critical factor in the performance of employees in higher education institutions. By promoting sustainable practices, institutions can foster a culture of environmental responsibility, resource efficiency, and long-term thinking. This not only benefits the institution's environmental impact but also enhances employee engagement, job satisfaction, and overall productivity. Sustainable practices can lead to cost savings, improved

campus infrastructure, and a stronger reputation, all of which contribute to the institution's success and the well-being of its employees (Krücken, 2021; Atici et al., 2021; Fawehinmi et al., 2020; Anwar et al., 2020; Abbas et al., 2022). Krücken (2021) examined multiple competitions in higher education and their conceptual approach. Atici et al. (2021) empirically studied the relationship between green universities and academic performance using the UI Green Metric and World University Rankings. Fawehinmi et al. (2020) assessed the green behavior of academics, exploring the role of green human resource management and environmental knowledge. Anwar et al. (2020) investigated the impact of green human resource management on organizational citizenship behavior toward the environment and environmental performance on a university campus. Abbas et al. (2022) analyzed how green human resource management promotes higher education sustainability through a mediated-moderated analysis. The challenge of achieving sustainable employee performance in higher education institutions is a multifaceted problem that requires a holistic approach. One of the key issues is the lack of a strong institutional commitment to sustainability, which can undermine efforts to foster a culture of environmental responsibility and resource efficiency among employees (Lee, 2020). Additionally, leadership styles that do not prioritize sustainability or fail to empower and motivate employees can hinder the adoption of sustainable practices. Another problem is the disconnect between organizational culture and employees' individual needs and intrinsic motivations (Arulrajah & Senthilnathan, 2020). If the institutional culture does not align with employees' values and psychological needs, it can lead to disengagement, job dissatisfaction, and a lack of commitment to sustainable behaviours. This is particularly important in the context of higher education, where employee autonomy, competence, and relatedness are crucial for fostering intrinsic motivation and sustainable performance (Jeronimo et al., 2020).

To address these challenges, higher education institutions need to adopt a comprehensive strategy that aligns institutional commitment, organizational culture, and leadership styles to support and nurture sustainable employee performance (Muñoz-Pascual et al., 2021). This requires a deep understanding of the complex interplay between these factors and the role of intrinsic motivation as a mediating mechanism. By addressing these issues, institutions can create an environment that empowers and engages employees, leading to improved sustainability, cost savings, and overall institutional success (Sapta et al., 2021). The significance of this study lies in its potential to provide valuable insights for various stakeholders in higher education institutions, particularly policymakers, online distance learning institutions, employees, and students. For policymakers, the findings can inform the development of policies and strategies that foster institutional commitment to sustainability, promote positive organizational cultures, and encourage leadership styles that support sustainable employee performance. This is crucial for ensuring the long-term viability and success of higher education institutions. For online distance learning institutions, the study's focus on the relationships between institutional commitment, organizational culture, leadership style, and sustainable employee performance is highly relevant. As these institutions navigate the challenges of remote work and virtual learning environments, understanding how to cultivate an organizational culture that nurtures intrinsic motivation and sustainable performance among employees is essential for delivering high-quality education and maintaining a competitive edge. Employees and students also stand to benefit from the study's insights, as it can help enhance job satisfaction, career growth, and learning experiences. This study aims to assess the direct and indirect relationships between

institutional commitment, organizational culture, and leadership style with sustainable employee performance with intrinsic motivation as a mediator in Malaysian higher education institutions.

Literature Review

Self-determination theory (SDT) (Ryan & Deci, 2000) provides a robust theoretical framework for understanding the relationships between institutional commitment, organizational culture, leadership style, and sustainable employee performance in higher education institutions, with intrinsic motivation as a key mediating factor. At the core of SDT are three innate psychological needs - autonomy, competence, and relatedness - that, when satisfied, lead to enhanced intrinsic motivation, well-being, and performance. In the context of higher education, the degree to which these needs are met can have a significant impact on employee engagement, job satisfaction, and commitment to sustainable practices (Gagne & Deci, 2005). For example, an organizational culture that fosters autonomy by allowing employees to have a sense of choice and self-endorsement in their work, combined with a leadership style that supports competence development and provides growth opportunities, can nurture intrinsic motivation. Similarly, a strong institutional commitment to sustainability that promotes a sense of relatedness and shared purpose among employees can further enhance their intrinsic drive to engage in sustainable behaviors. By incorporating SDT as the underpinning theory, the proposed study can provide valuable insights into how higher education institutions can create an environment that aligns institutional commitment, organizational culture, and leadership styles to support and sustain employee performance through the lens of intrinsic motivation. This holistic, theory-driven approach can inform policies, strategies, and practices that empower and engage employees, ultimately leading to improved sustainability, cost savings, and overall institutional success (Baard et al., 2004).

Relationship between Organizational Culture, Intrinsic Motivation, and Sustainable Performance

The relationship between organizational culture and sustainable performance is significantly influenced by intrinsic motivation, acting as a mediator. Organizational culture encompasses the shared values, beliefs, and norms within a company, shaping employees' behaviors and attitudes (Khan et al., 2023). When a culture promotes sustainability, employees are more likely to embrace eco-friendly practices and long-term thinking. This alignment fosters an environment where intrinsic motivation thrives. Intrinsic motivation, the internal drive to perform tasks for inherent satisfaction, is crucial for sustainable performance (Mahamadou et al., 2020). Employees motivated by personal fulfillment, rather than external rewards, tend to be more committed, innovative, and resilient. When an organization's culture supports values such as environmental responsibility, social equity, and ethical behavior, employees are more likely to feel intrinsically motivated (Abadiyah et al., 2020). This motivation enhances their engagement in sustainable practices, contributing to the organization’s long-term success (Udin et al., 2023). By nurturing a culture that values sustainability, organizations can cultivate a workforce driven by intrinsic motivation. This, in turn, leads to improved sustainable performance, as employees willingly go above and beyond to implement eco-friendly initiatives, reduce waste, and optimize resource use. Thus, intrinsic motivation serves as a vital link, translating a strong organizational culture into tangible, sustainable outcomes (Wang & Huang, 2022).

Relationship between Leadership Styles, Intrinsic Motivation, and Sustainable Performance

The relationship between leadership styles and sustainable performance is intricately linked, with intrinsic motivation acting as a crucial mediator. Different leadership styles, from transformational to responsible leadership, significantly impact employees' intrinsic motivation and, consequently, sustainable performance. Transformational leaders inspire and motivate through a compelling vision and personal charisma, fostering a high level of intrinsic motivation among employees. These leaders encourage innovation, creativity, and a deep sense of purpose, which aligns with the organization's sustainability goals (Piwowar-Sulej & Iqbal, 2023). Intrinsic motivation, the internal drive to engage in tasks for their inherent satisfaction, is essential for achieving sustainable performance. Leaders who nurture intrinsic motivation by offering autonomy, recognizing individual contributions, and fostering a supportive environment are more likely to see employees engage in sustainable practices. This internal drive enhances commitment to long-term goals, eco-friendly initiatives, and resource optimization (Faraz et al., 2021; Jnaneswar & Ranjit, 2022). In contrast, transactional leaders, focusing on rewards and punishments, may not effectively stimulate intrinsic motivation. Although they can achieve compliance and short-term results, sustainable performance often requires deeper engagement driven by intrinsic motivation. Thus, leadership styles that promote a sense of purpose, belonging, and personal growth are more effective in mediating the relationship between leadership and sustainable performance, translating visionary leadership into enduring, sustainable outcomes (Eide et al., 2020; Huo et al., 2023; Iqbal et al., 2020).

Relationship between Institutional Commitment, Intrinsic Motivation, and Sustainable Performance

The relationship between institutional commitment and sustainable performance is significantly mediated by intrinsic motivation. Institutional commitment, encompassing affective, normative, and continuance commitment, plays a crucial role in shaping employees' dedication to sustainability goals. Affective commitment, reflecting an emotional attachment to the organization, is particularly influential in enhancing intrinsic motivation, as employees feel a strong alignment with the organization’s values and objectives (Karyono & Hakim, 2022). Intrinsic motivation, the internal drive to perform tasks for their inherent satisfaction, is essential for achieving sustainable performance. Employees who are intrinsically motivated are more likely to engage in eco-friendly practices and long-term sustainability initiatives. When an organization fosters a strong sense of commitment, employees are more likely to develop intrinsic motivation, leading to improved sustainable performance (Shin et al., 2019). Institutional commitment influences various dimensions of sustainability, including economic, environmental, and social performance. When organizations feel committed to sustainability, they are more likely to go beyond their basic job requirements, contributing to broader sustainability goals (Abduloh et al., 2020). This commitment, when coupled with intrinsic motivation, enhances the organization’s ability to implement sustainable practices effectively (Khamdamov et al., 2023). Furthermore, knowledge management plays a mediating role in this relationship, as committed employees are more inclined to share and utilize knowledge that supports sustainability (Sapta et al., 2021). Ultimately, fostering institutional commitment and intrinsic motivation is crucial for organizations seeking to achieve sustainable performance (Kim & Kim, 2021).

Conceptual Framework

This study built a research model on employee sustainable performance based on the Self-determination theory (SDT). There is currently a lot of research in the field of psychological needs which covers autonomy, competence, and relatedness which leads to performance. Intrinsic motivation was added as mediator for novel elements in this study, which are still uncommon in many developing countries employees' psychological research. This study suggests 4 determinants of employee sustainable performance, namely institutional commitment, organizational culture, leadership style and intrinsic motivation. These determinants represent the independent and mediating variables that can be empirically tested to evaluate their influences on the sustainability performance among employees in Malaysian higher education institutions. Figure 1 illustrates the conceptual framework of this study.

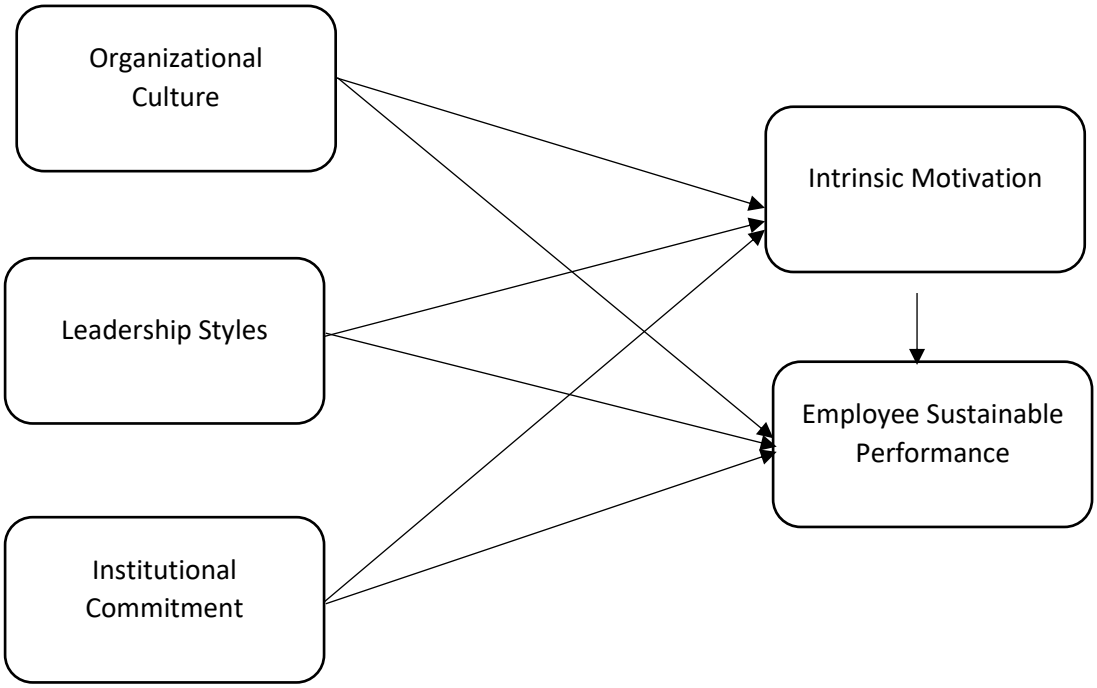

Figure 1: Conceptual framework

Methodology

This study focuses on employees in Malaysia, both academics and administration employees in Malaysian higher education institutions, constituting the targeted population. Employing a survey research design, a quantitative approach was utilized for data collection, involving a sample of 254 participants. The survey questionnaire is divided into sections, commencing with demographic profiles and followed by the study variables: institutional commitment, organizational culture, leadership style, intrinsic motivation and employee sustainability performance. All variables were assessed using a 5-point Likert scale, ranging from strongly disagree to strongly agree, encompassing 28 observed variables. The constructs of institutional commitment, organizational culture, leadership style, intrinsic motivation and employee sustainability performance were adapted from Glavas, Ante. (2012), Van den berg et al., (2004), Madlock, P.E. (2008); Vansteenkiste et al., (2020) and Koopmans et al., (2013) respectively. To ensure comprehensive information and encourage respondent participation, a closed-ended questionnaire format was adopted. The simplicity and efficiency of this

approach likely motivated respondents to answer all questions promptly. Demographic profiles were analyzed using SPSS 24.0, while multivariate data analysis, hypothesis testing, model measurement, and structural model evaluation were conducted using SmartPLS4.

Data Analysis

Respondents profile

Table 1 shows a comprehensive respondent profile, encompassing various demographic factors such as gender, age, years of service, and position. The respondent pool consisted of 254 individuals, with a majority being female (67%) and 33% male. The age distribution reveals that one-third of the respondents were under 30 years old, while the remaining were distributed across the 31-40 (31%), 41-50 (22%), 51-60, and over 60 age groups. In terms of years of service, the respondents were categorized into five groups: less than 5 years, 6-10 years, 11-15 years, 16-20 years, and over 20 years. The largest segment, at 37%, had less than 5 years of experience, followed by those with 6-10 years (25%), 11-15 years (16%), and both 16-20 years and over 20 years of experience. Regarding their positions, the respondents were divided into two broad categories: academicians and non-academicians. Approximately half of the respondents were academicians, while the other half were non-academicians. Overall, the respondent profile reflects a diverse group in terms of gender, age, years of service, and position, providing a comprehensive representation of the target population.

Table 1
Respondent Profile

Profile		Frequency	Percent
Gender	Female	170	67
	Male	84	33
	Total	254	100
Age	< 30 years old	83	33
	31 - 40 years old	79	31
	41 - 50 years old	57	22
	51 - 60 years old	22	9
	> 60 years old	13	5
	Total	254	100
Year of service	< 5 years	93	37
	6 - 10 years	63	25
	11 - 15 years	42	16
	16 - 20 years	28	11
	> 20 years	28	11
	Total	254	100
Position	Academician	120	47
	Non-academician	134	53
	Total	254	100

source: author's analysis

Descriptive statistics and inter-construct correlations were performed using SPSS 24.0 and SmartPLS4 (Ringle et al., 2015), was utilized for the analysis of partial least squares structural equation modeling (PLS-SEM) in order to validate the instruments and assess the study model's hypotheses. Strong statistical techniques like PLS-SEM are particularly useful when

working with complex models and small sample sizes because they can reduce unexplained variance and maximize explained variance in the dependent variable(s) attributable to the independent variables (Hair et al., 2017). Assessment of the measurement model and structural model are the first two steps in PLS-SEM's two-step strategy to evaluate and understand research model outcomes (Rasoolimanesh et al., 2018).

Measurement Model

According to the findings in Table 2, there was sufficient evidence of reliability and convergent validity across all constructs. High correlations were found between the items and the ES construct, with factor loadings ranging from 0.773 to 0.825. Cronbach's alpha for ES was 0.910, and its composite reliability was 0.928, showing high levels of trustworthiness within the construct. With an AVE of 0.648, ES explains a great deal of variation among its components. Items were substantially linked with the construct of IC, with factor loadings ranging from 0.711 to 0.879. IC has high levels of internal consistency, as seen by its high Cronbach's alpha (0.888) and composite reliability (0.905). With an AVE of 0.691, IC explains a great deal of variation between its components. High correlations were found between the items and the IM construct, with factor loadings ranging from 0.717 to 0.878. IM has high levels of internal consistency, as seen by its high Cronbach's alpha (0.880) and composite reliability (0.884). According to the item's AVE of 0.679, the IM construct accounts for a significant percentage of the items' variation (Hair et al., 2017; Fornell & Larcker, 1981; Chin, 1998). Items were substantially linked with the construct of LS, with factor loadings ranging from 0.731 to 0.830. LS has high levels of internal consistency, as seen by its high Cronbach's alpha (0.859) and composite reliability (0.864). With an AVE of 0.640, LS explains a great deal of variation between its components. Items were substantially linked with the construct of OC, with factor loadings ranging from 0.772 and 0.847. OC has high levels of internal consistency, as seen by its high Cronbach's alpha (0.729) and composite reliability (0.739). With an AVE of 0.647, OC explains a great deal of variation between its components. Overall, the constructs' reliability and convergent validity were both adequate, suggesting they may be used in the study model going forward. Figure 2 illustrates the measurement model.

Table 2
Constructs' Reliability and Convergent Validity

Factor Loading		Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Employee Sustainability (ES)		0.910	0.913	0.928	0.648
ES1	0.819				
ES2	0.825				
ES3	0.794				
ES4	0.797				
ES5	0.773				
ES6	0.820				
ES7	0.806				
Institutional Commitment (IC)		0.888	0.905	0.918	0.691
IC1	0.711				
IC2	0.849				

IC3	0.879				
IC4	0.856				
IC5	0.852				
Intrinsic Motivation (IM)		0.880	0.884	0.913	0.679
IM1	0.717				
IM2	0.820				
IM3	0.878				
IM4	0.861				
IM5	0.836				
Leadership Style (LS)		0.859	0.864	0.899	0.640
LS1	0.731				
LS2	0.830				
LS3	0.820				
LS4	0.814				
LS5	0.798				
Organisational Commitment (OC)		0.729	0.739	0.846	0.647
OC1	0.772				
OC4	0.847				
OC5	0.793				

source: author's analysis

Table 3 shows Heterotrait-Monotrait Ratio (HTMT) and Fornell-Larcker Criterion were used to assess the components' discriminant validity. All of the HTMT scores were lower than the cutoff value of 0.85, which is indicative of high discriminant validity (Henseler et al., 2015). Since the square root of the AVE for each construct was higher than its correlation with other constructs, the results of the Fornell-Larcker Criterion also provided support for discriminant validity (Fornell & Larcker, 1981). Further evidence of discriminant validity was found in the correlation matrix (Hair et al., 2017), which showed that the correlations between the constructs were smaller than their individual AVE values.

Table 3
Discriminant Validity

Fornell-Larcker Criterion						Heterotrait-Monotrait Ratio (HTMT)					
	ES	IC	IM	LS	OC		ES	IC	IM	LS	OC
ES						ES	0.805				
IC	0.507					IC	0.468	0.832			
IM	0.735	0.479				IM	0.666	0.430	0.824		
LS	0.474	0.759	0.520			LS	0.431	0.665	0.451	0.800	
OC	0.440	0.860	0.492	0.886		OC	0.369	0.689	0.396	0.701	0.804

source: author's analysis

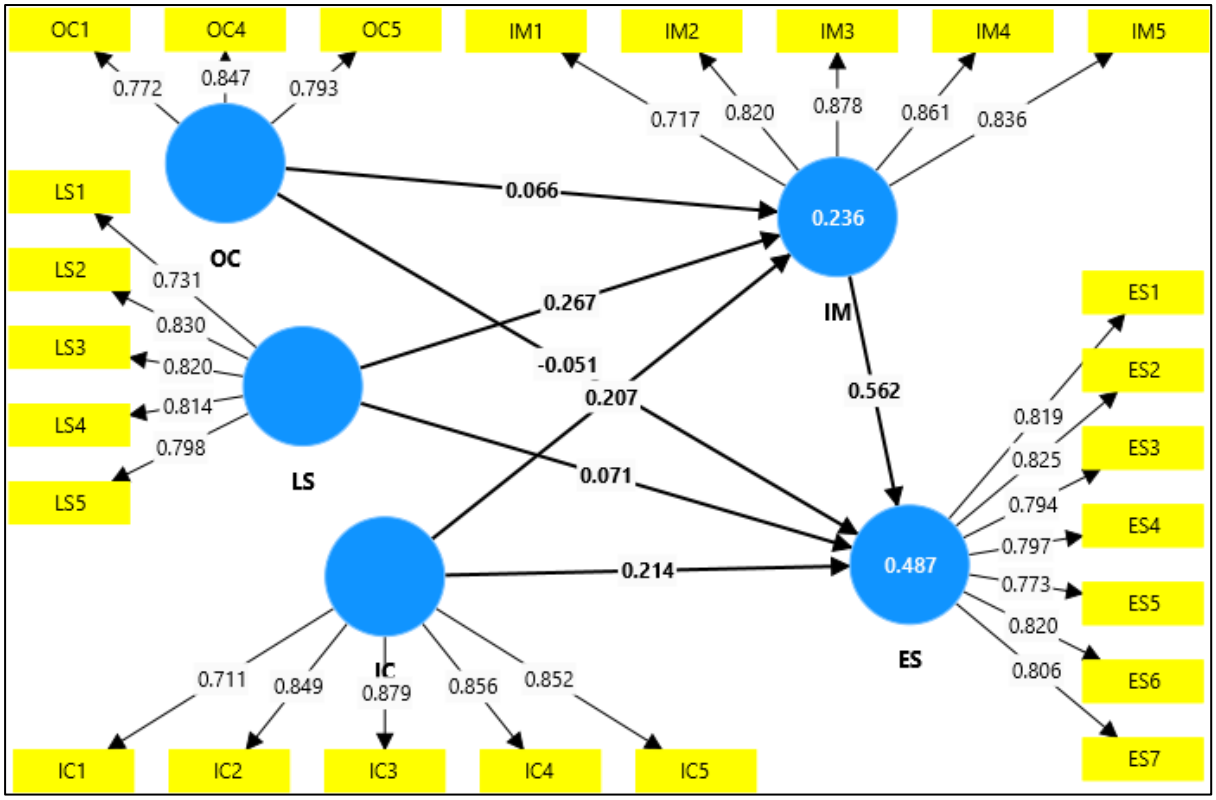

Figure 2: Measurement Model
source: author's analysis

Table 4 shows the model fit that was evaluated using several indices, including the Standardized Root Mean Residual (SRMR), the Degree of Unbiasedness of the Satorra-Bentler Scaled Test Statistic (d_ULS), the Gamma Hat (d_G), the Chi-square statistic, and the Normed Fit Index (NFI). The estimated model showed similar values for these indices compared to the saturated model, representing a good model fit (Hair et al., 2017). Specifically, the SRMR and d_ULS values were 0.067 and 1.444, while the d_G value was 0.579. The Chi-square statistic was 825.241, and the NFI value was 0.806, which were consistent with an acceptable model fit (Hair et al., 2017).

Table 4
Model Fit

	Saturated model	Estimated model
SRMR	0.067	0.067
d_ULS	1.444	1.444
d_G	0.579	0.579
Chi-square	825.241	825.241
NFI	0.806	0.806

source: author's analysis

Structural Model

Table 5 displays the evaluation of the model's ability to predict Employee Sustainability Performance (ES) and Intrinsic Motivation (IM). We computed the R-squared and R-squared adjusted values. The model explains around 48.7% of the variation in ES, as shown by an R-squared value of 0.487 and an adjusted R-squared value of 0.478. Similarly, the model

explains around 23.6% of the variation in IM (Hair et al., 2017) with an R-square value of 0.236 and an R-square adjusted value of 0.226.

Table 5
Result of R Square (Prediction Power)

	R-square	R-square adjusted
ES	0.487	0.478
IM	0.236	0.226

source: author's analysis

Table 6 indicated result of the effect size ***(F^2)*** values were calculated to assess the effect size of the independent variables, Institutional Commitment (IC), Leadership Style (LS), Organisational Commitment (OC) on the dependent variables, Employee Sustainability Performance (ES) and Intrinsic Motivation (IM). The $\mathbf{F^2}$value for IM associated with IC was 0.026, indicating a small effect size, while the $\mathbf{F^2}$ value for ES associated with IM was 0.471, indicating a medium effect size (Cohen, 1988). Additionally, the $\mathbf{F^2}$ value for IM associated with LS and IM associated with OC was 0.042 and 0.002 respectively, indicating a small effect size (Cohen, 1988).

Table 6
Result $\boldsymbol{F^2}$

	ES	IM
IC		0.026
IM	0.471	
LS		0.042
OC		0.002

source: author's analysis

Table 7 shows result of the predictive relevance ***(Q^2)*** values, which the percentage of variation in the dependent variables explained by the model, were used to evaluate the predictive utility of the study model. The square root of the sum of squared errors (SSE) was then subtracted from the square root of the sum of squares observed (SSO) to get the value of Q^2. Q^2 for ES was 0.210, therefore the model accounted for 21.0% of the variation. The model explained 20% of the variation in IM (Geisser, 1975), as shown by the Q^2 value of 0.200 for IM.

Table 7
*Result of Predictive Relevance (**Q^2**)*

	SSO	SSE	Q^2 (=1-SSE/SSO)
ES	0.898	0.670	0.210
IM	0.907	0.679	0.200

source: author's analysis

Table 8 indicates result of multicollinearity. It was assessed using variance inflation factor (VIF) values, which measure the degree to which the variance of an independent variable is overstated due to multicollinearity with other independent variables. VIF values below 10 generally indicate acceptable levels of multicollinearity (Hair et al., 2017). In the current

analysis, the VIF result for IC was 2.173, indicating that multicollinearity was not a concern for this variable. The VIF value for IM was 1.308, indicating no multicollinearity issue with other variables. The VIF value for LS and OC was also 2.244 and 2.381, suggesting no significant multicollinearity with other variables (Neter et al., 1989).

Table 8
Result of Multicollinearity (VIF)

	ES	IM
IC		2.173
IM	1.308	
LS		2.244
OC		2.381

source: author's analysis

Table 9 shows the assessment of path coefficient, the structure model included the evaluation of hypotheses related to the paths, path coefficients (β), T statistics (|O/STDEV|), P values, and the decision on whether the hypotheses were supported or not. The results indicated that H1 (IC -> ES) had a path coefficient of 0.214, with a T statistic of 1.165 and a P value of 0.030, indicating that the hypothesis was supported. Similarly, H2 (IC -> IM) had a path coefficient of 0.207, with a T statistic of 2.247 and a P value of 0.025, also indicating support for the hypothesis. Additionally, H3 (IM -> ES) had a path coefficient of 0.562, with a T statistic of 7.174 and a P value of 0.000, indicating support for this hypothesis as well. The results also indicated that H4 (LS -> ES) had a path coefficient of 0.071, with a T statistic of 0.870 and a P value of 0.384, indicating that the hypothesis was not supported. Meanwhile, H5 (LS -> IM) had a path coefficient of 0.267, with a T statistic of 3.144 and a P value of 0.002, also indicating support for the hypothesis. Additionally, H6 (OC -> ES) had a path coefficient of -0.051, with a T statistic of 0.586 and a P value of 0.558, indicating this hypothesis is not supported. Similarly, H7 (OC -> IM) had a path coefficient of 0.066, with a T statistic of 0.693 and a P value of 0.488, also indicating the hypothesis is not supported as well. Figure 3 illustrates the structural model.

Table 9
Structural model

Hypotheses	Paths	β	T statistics	P values	Decision
H1	IC -> ES	0.214	2.165	0.030	Supported
H2	IC -> IM	0.207	2.247	0.025	Supported
H3	IM -> ES	0.562	7.174	0.000	Supported
H4	LS -> ES	0.071	0.870	0.384	Not Supported
H5	LS -> IM	0.267	3.144	0.002	Supported
H6	OC -> ES	-0.051	0.586	0.558	Not Supported
H7	OC -> IM	0.066	0.693	0.488	Not Supported

source: author's analysis

The analysis of mediation effect as shown in Table 10 included the evaluation of Hypothesis H8, which proposed a mediation effect of LS -> IM -> ES. The results showed that the path coefficient (β) for this mediation effect was 0.150, with a T statistic of 2.668 and a P value of 0.008, indicating that the hypothesis was supported. Meanwhile H9 proposed a mediation

effect of OC -> IM -> ES. The results showed that the path coefficient (β) for this mediation effect was 0.037, with a T statistic of 0.699 and a P value of 0.484, indicating that the hypothesis was not supported. Similarly, the evaluation of Hypothesis H10, which proposed a mediation effect of IC -> IM -> ES. The results showed that the path coefficient (β) for this mediation effect was 0.117, with a T statistic of 1.925 and a P value of 0.054, indicating that the hypothesis was not supported.

Table 10
Mediating Effect

Hypotheses	Paths	β	T statistics	P values	Decision
H8	LS -> IM -> ES	0.150	2.668	0.008	Supported
H9	OC -> IM -> ES	0.037	0.699	0.484	Not Supported
H10	IC -> IM -> ES	0.117	1.925	0.054	Not Supported

source: author's analysis

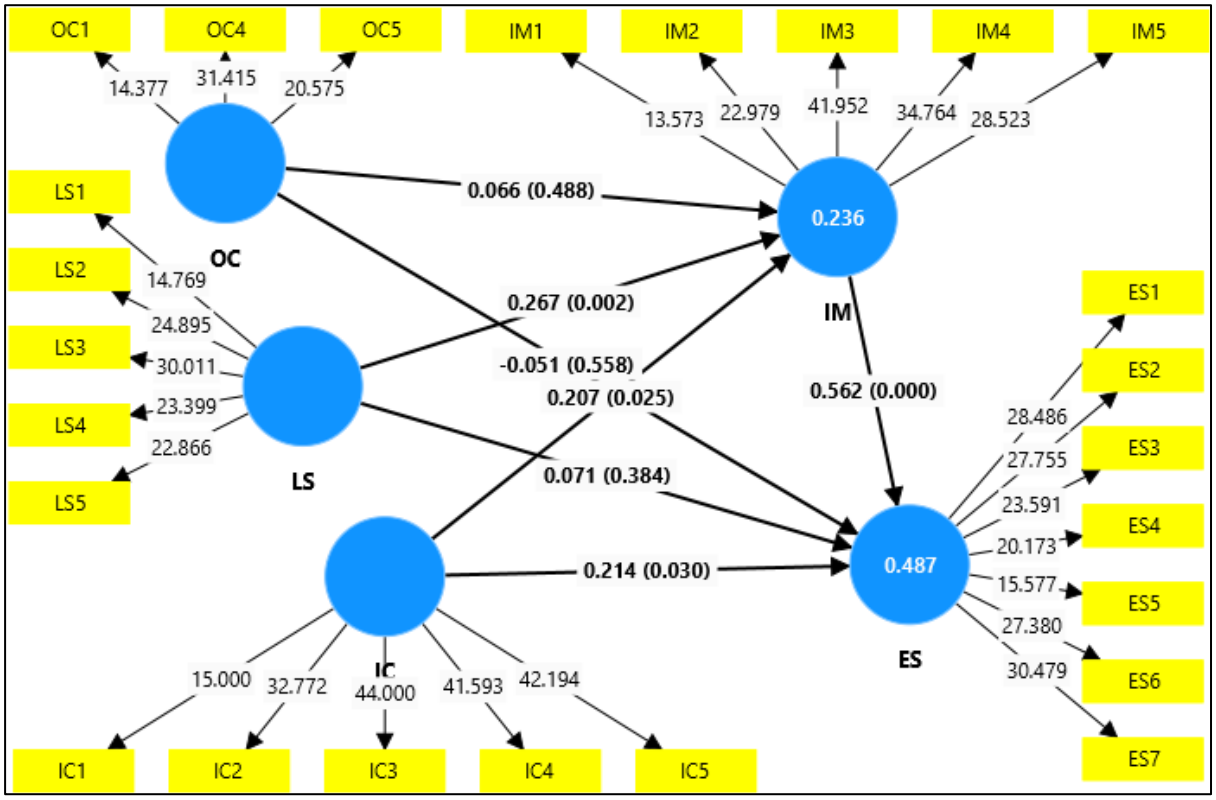

Figure 3: Assessment of Structural Model
source: author's analysis

Discussion and Conclusion

The study's finding highlights a number of significant connections between the variables. IC plays a prominent part in the model as seen by its positive and significant effects on both ES and IM. Conversely, IM exhibits a robust positive correlation with ES, highlighting its crucial function as an intermediary. LS has a favourable impact on IM but has little effect on ES. However, OC has no obvious effect on ES or IM, indicating that it plays a small part in the model. These realizations direct future study and real-world applications while also aiding in the understanding of the dynamics between the constructs.

The findings of this study highlight the importance of IC, OC, and LS in fostering sustainable employee performance in Malaysian higher education institutions (HEIs). Results indicate that these factors, both individually and collectively, influence sustainable performance, with intrinsic motivation serving as a key mediating factor. This reinforces the premise of Self-Determination Theory (SDT), which suggests that when employees' intrinsic needs for autonomy, competence, and relatedness are met, they are more likely to engage in behaviors that support both individual and organizational sustainability.

The strong mediating role of IM suggests that even in environments with supportive structures and policies, employee engagement in sustainable practices is greatly enhanced when individuals find personal satisfaction and purpose in their work. This highlights the need for HEIs to go beyond structural reforms and actively nurture internal drivers of motivation. The integration of environmental responsibility, resource efficiency, and long-term thinking into daily academic and administrative activities can transform sustainability from a compliance measure into a shared institutional value.

Theoretical Implications

The theoretical implications of the study, grounded in self-determination theory, suggest that the significant positive effects of IC on both ES and IM, along with the strong influence of IM on ES, highlight the importance of fostering intrinsic motivation and internalization of autonomous behaviours to enhance outcomes, while the non-significant impacts of LS and OC on ES imply that factors related to leadership style and organizational climate may not directly influence end outcomes without the mediation of intrinsic motivational states. This highlighting the necessity for future research to explore additional mediators and moderators within the framework of self-determination theory to fully understand the complex dynamics at play.

Practical Implications

The practical implications of this study for higher education institutions are that by recognizing the significant positive influence of independent constructs (such as personal autonomy and competence) on both the motivation and outcomes of academicians and non-academicians, and the critical mediating role of intrinsic motivation in enhancing end outcomes. Institutions can better design policies and environments that promote autonomy, competence, and relatedness to boost intrinsic motivation, thereby potentially improving overall performance and satisfaction among all members of the academic community.

Suggestions for Future Study

A suggestion for future study is to investigate the potential mediating and moderating roles of additional constructs such as job satisfaction, organizational commitment, and external rewards within the framework of self-determination theory, while expanding the sample to include diverse demographic and professional backgrounds to comprehensively understand the varied influences of leadership style and organizational climate on intrinsic motivation and end outcomes across different contexts.

Future studies could adopt longitudinal or comparative designs, expand the model to include additional psychological and behavioral variables, and employ qualitative approaches to

capture richer, context-specific insights into how employees experience and enact sustainability.

Motivation and Contribution

Driven by the urgency to embed sustainability within the core of higher education, this study contributes by providing empirical evidence and practical guidance on how institutional commitment, culture, and leadership, when attached with intrinsic motivation, can create a workforce that not only performs sustainably but also views its role as a purposeful contribution to societal and environmental well-being.

Conclusion

In conclusion, the study provides empirical evidence that institutional commitment, organizational culture, and leadership style have both direct and indirect effects on sustainable employee performance in Malaysian HEIs. Intrinsic motivation emerged as a pivotal factor that bridges organizational influences with sustainable outcomes. By adopting the Self-Determination Theory as its underpinning framework, this study advances the understanding of how psychological needs and workplace dynamics jointly shape sustainable behaviors.

The findings emphasize that sustainability in higher education is not merely about policies and infrastructure, it is equally about fostering a motivated, engaged, and purpose driven workforce. This research contributes to the growing literature on sustainable performance in academia and offers actionable insights for HEI leaders, policymakers, and HR practitioners seeking to align institutional goals with long-term societal impact.

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