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TOWARDS SUSTAINABILITY: INVESTIGATING INFLUENTIAL VARIABLES IN HIGHER EDUCATION'S GREEN PRACTICES

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ABSTRACT

Green practices in educational organizations aim to promote sustainability by reducing emissions, saving resources, and developing student understanding of the environment. These organizations improve both local and global ecosystems by emphasizing energy efficiency, waste reduction, and environmentally beneficial policies. Institutional commitment, stakeholder participation, financial support, and legal frameworks are all key variables influencing this initiative. The effectiveness of green practices in education is dependent on the cooperation of many variables, resulting in a harmonic balance of environmental responsibility and educational achievement. In this research, we investigated the influencing variables of educational organizations' involvement in green practices, as well as the effect of green practices on educational organizations' competition. We established a model for evaluating the support from the government, management assistance, pressure from stakeholders, regulatory compliance, staff support, and mediation significance of green practices acceptance. A self-administered questionnaire was obtained from 420 educational organizations and the gathered data was evaluated using SmartPLS software. The research results demonstrated that top management assistance, support from the government, pressure from stakeholders, and faculty support all performed essential and substantial roles in determining the competition advantage of educational organizations, with the implementation of green practices mediating the mentioned connection. Furthermore, this research demonstrated that green practices had significance in mediating the correlation between the influencing variables and competition.

KEYWORDS: Educational Organizations, Green Practices, Influencing Variables, Competition, Higher Education.

1. INTRODUCTION

Green practices are essential in this period of growing environmental concerns, and higher education is no exception (Bincy and Vasudevan 2023). Higher education institutions are increasingly focusing on green practices due to their significance in producing future leaders and influencers. A more sustainable future is the result of the intricate web of variables influencing the uptake and efficacy of green practices in educational institutions. As small entrances into society, higher education institutions have the power to spark larger shifts in society toward environmental consciousness via their commitment to sustainability (Fuchs et al. 2020). The goal of the Higher Education Sustainability Initiative is to persuade universities to adopt sustainable development principles in their curricula, promote research on sustainable development topics, green campus areas, and assist community-based sustainability initiatives. Green behaviors are often defined as employee actions that support environmental management strategies at work. When sustainability is so complicated, it is necessary to thoroughly examine all of the important variables that might help or impede the adoption of green practices. There is more to environmental responsibility in higher education than just using eco-friendly technology (Vyortkina and Stys 2023). It encompasses the intricate interplay of institutional, social, and economic issues. The most effectively adopted green workplace solutions are those that when employees exhibit certain green behaviors. Furthermore, studies have shown that implementing green practices by staff members is essential for environmental management programs since it improves environmentally friendly performance and offers companies a competitive advantage. The urban features and population the quantity of universities offering higher education are comparable to those of smaller cities (Leal Filho et al. 2019). Additionally, a number of activities that have an influence on the environment directly or indirectly are conducted on university. Green practices must thus be implemented by professionals in higher education institutions so that these professionals can help provide interdisciplinary green technological solutions to achieve sustainable growth inside the university (Raza and Khan 2022).

The degree to which institutions are committed to sustainability is a significant element under investigation. This commitment may be seen in their policies, resource allocation, and organizational atmosphere (Al-Swidi et al. 2021). How much durability is incorporated into an institution's aims

and values influences its green initiatives. Financial considerations also play a significant role, because tight finances sometimes make it difficult to implement sustainable practices and technology. It is crucial to strike the right balance among ecological responsibility and commercial viability (Varela-Candamio et al. 2018, Alam et al. 2024). Moreover, it is impossible to overstate the importance of interactions between students and professors. Because they have a big influence on fostering social change, students are important to an institution's sustainability initiatives (Khan and Terason 2022). Developing effective strategies requires an understanding of the elements that promote or inhibit student involvement in green practices (Al-Dmour 2023). Green practices in higher education are far more successful when faculty members are committed to and actively involved in implementing sustainability into their research and teaching (Fissi et al. 2021).

The present study examined the determinants that shape educational institutions' adoption of environmentally conscious activities and the effects of these procedures on the competitive landscape of educational institutions.

The research has been divided into the following sections: Related works, methods, results, and conclusion.

2. RELATED WORKS

Dagiliūtė et al. (2018) demonstrated that environmental data and the sustainability of campus are significant indicators of students' engagement in conservation. The findings suggested that there were no notable disparities in terms of sustainability features overall. However, students who identify as green university students are more likely to believe that their university presented itself as environmentally responsible. Aboramadan (2022) suggested that the mediating function of "Green Work Engagement (GWE)" could account for the previously mentioned connections, expanding on the job demands-resources concept and Social Exchange Theory (SET) methodologies. The findings showed that employee in and extra-role, and "green innovative work behaviour (GIWB)" were significantly predicted by "green human resources management (GHRM)". Moreover, GWE proved to be a prominent mediating mechanism in explaining the previously mentioned connections. Gilal et al. 2019; Alam et al. 2024) analyzed information from higher educational organizations to investigate whether "green Human Resource Management (GHRM)" practices affect their environmental

sustainability. The results provided managers with information on the circumstances under which GHRM practices are most likely to improve environmental outcomes. Siregar and Tenoyo (2021) investigated the factors that influence students' assessments of Green University. Additionally, they analyzed whether the sustainability-related courses that learners have completed so far have an impact on their initial evaluations of Green University. The findings indicated that respondents' assessments of Green University's procedures are generally favorable. Sukardi *et al.* (2023) demonstrated the reasons behind universities' effectiveness in GHRM practices through information management. The findings indicated that GHRM positively and directly affects competitiveness and that it positively and directly affects information management. The results of information management evaluations on performance are also considered to have a favorable impact.

Ba and Cao (2023) investigated the impact of green practices in managing human resources on environmental sustainability. The results showed that pro-environmental activities partially moderate the connection between GHRM and environmental sustainability, and GHRM procedures had a significant impact on performance in the environment. Asfahani (2023) investigated the moderating effect of "Environmentally Specific Servant Leadership (ESSL)" from the "Resource-Based View (RBV)" and "Conservation of Resources (COR)" theories to determine how GHRM actions impact environmental sustainability and competitive advantages in higher education institutions (HEIs). Several clear and beneficial connections between competitive advantages, environmental sustainability, and GHRM. Srivastava *et al.* (2020) examined the way that green authentic management contributes to sustainability in educational institutions while taking into consideration the influence of green organizational green training and branding. The findings confirmed the model's suitability and demonstrated the beneficial and notable impact of green authentic management on sustainability in educational institutions. Sisson *et al.* (2021) analyzed the factors that influence students' opinions of sustainability and the utilization of reusable drinking glasses during sporting and musical events (Alam, 2023). The study's findings could be utilized to promote sustainable drinking glasses and green practices to attendees of events. They could additionally be used to inform the development of curricula for higher education programs in hospitality. Kuan *et al.* (2022) extended

the "Ability, Motivation and Opportunities (AMO)" theory to examine whether GHRM procedures affect green behavior both in-role and extra-role. Every variable showed a high correlation, according to the information provided (Alam *et al.*, 2024, Alam and Abunar, 2023). The findings also demonstrated that green empowerment had a favorable impact on both extra-role and in-role green behavior, and that green performance evaluation and management had a positive impact on extra-role green behavior. Gill *et al.* (2021) examined whether GHRM practices at higher education institutions in developing countries might improve their environmental sustainability. The outcomes showed that GHRM practices have a beneficial effect on environmental sustainability and offer important new information about the role that eco-friendly employee behavior plays as a partial mediating factor between environmental efficiency and HRM.

Abdalla (2024) investigated whether employee green actions in higher education organizations were affected by upper management's dedication to sustainability and GHRM practices. The findings showed that green employee in-role and extra-role behaviors as well as green innovation were substantially predicted by GHRM and Top Management Green Commitment (TMGC). Al-Zawahreh *et al.* (2018) determined whether one public university's environmental dedication was affected by its green brand identity (Alam *et al.* 2024). The findings showed that the university had an excellent level of environmental engagement and green brand identity. Furthermore, a high and positive connection was discovered between environmental dedication and green identity in organizations. Dakhan *et al.* (2020) investigated the way EK in higher education organizations plays an intermediary function in the relationship between employees' pro-environmental behavior (PB) and GHRM practices ("Green Compensation & Reward (GCR)", "Green Recruitment and Selection (GRS)", "Green Performance Appraisal (GPA)", and "Green Training & Development (GTD)"). The outcomes demonstrated that the GHRM employs had a beneficial effect on employees' environmental behavior. Al-Alawneh *et al.* (2023) examined the direct correlation between GHRM practices and the "environmental performance (EP)" of a firm. Investigating the ways in which "Management Support (MS)" and "Green Organizational Culture (GOC)" moderate the relationship was another goal. According to the findings, both GOC and MS were impacted by the GHRM techniques. Their analysis also revealed that both the MS and GOC had a

substantial impact on the link amongst GHRM and EP. The impact of GHRM on HEIs' ability to be ecologically sustainable was examined by (Muhammad Ali and Nisar 2023). They also examined the ways that green behavior and green commitments mediate. The findings give empirical support for the hypothesis that there is a positive correlation between sustainable development and GHRM practices at HEIs. The results showed how crucial general self-efficacy and involvement level are to improving HEIs' environmentally friendly operations.

Ali et al. (2023) examined the effects of GHRM on the surroundings sustainability of the organization. The function of PB and green engagement as mediators was also investigated. By influencing employee behavior, the results indicated that the implementation of HRM practices might significantly influence an organization's ability to grow sustainably. Atici et al. (2021) enhanced previous research on green campuses by demonstrating the relationship between academic success and a university's dedication to environmental sustainability. The results showed that implementing environmentally friendly activities directly affected university rankings, and that these policies may provide international institutions with a competitive edge. Putri et al. (2023) developed a mechanism known as "green work engagement (Green-E)" in the environment of higher education. They looked at how GHRM practices affected green innovative behaviour (Green-IB) as well as Green-E. The outcomes indicated that the execution of GHRM practices could function as an indicator of individuals' propensity to engage in innovative green behaviours. Moreover, it also demonstrated that green work involvement was an efficient intervention strategy for explaining the connection between GHRM and innovative green behaviour. Oyetunde et al. (2023) the way the efficiency of operation of HEIs is affected by green, sustainable management approaches. The outcome demonstrated that the company created green waste management practices, used green technology, and created green policies. At the 5% level, the combined effect of these green management practices and green technology was found to be statistically important, and at the 10% level, the importance of green management of waste was noted.

2.1. Research Problem

It is basic to facilitate knowledge transfer between practitioners from diverse fields in order to generate

creative solutions to address social, environmental, and economic challenges. Sustainability on university campuses entails a transdisciplinary approach that creates balance among science and technology, social sciences, and humanities, particularly in the context of on-going green initiatives that are taking place. The significance of sustainable development on university campuses has been acknowledged in many literary works; yet, problems with the insufficient integrated data gathered using green indicators to be taken into account for universities' sustainability achievement have not been sufficiently addressed.

2.2. The Development of Hypotheses

H1 The competitiveness of firms is positively impacted by green practices.

H2a Green practices operate as a mediator in the relationship between regulatory compliance and competitiveness.

H2b The association between staff support and competition is mediated by green practices.

H2c The association between competition and pressure from stakeholders is mediated by green practices.

H2d The association between competition and support from the government is mediated by green practices.

H2e The association between competition and management assistance is mediated by green practices.

H3a Green practices benefit from an increase in regulatory compliance.

H3b Green practices benefit significantly from staff support.

H3c Green practices benefit from pressure from stakeholders.

H3d Green practices support from the management assistance.

H3e Green practices receive support from the government.

3. METHODS

Figure 1 displays the conceptual framework together with the main independent variables, which are regulatory compliance, staff support, pressure from stakeholders, management assistance, and support from the government. Green practices are the mediating variable that mediates between the competition and regulatory compliance, staff support, pressure from stakeholders, management assistance, and support from the government. The research will primarily focus on the dependent variable competition, which is formed through the

interaction of these components.

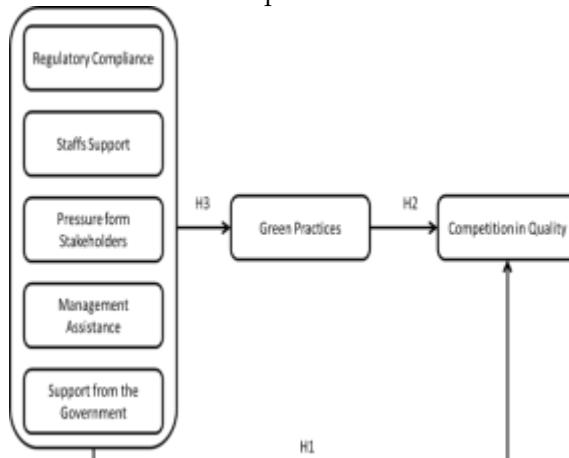


Figure 1: Conceptual Framework.

3.1. Procedure for Collecting Samples and Data

The study's participants were private higher education institutions (PHEIs) recognized on the Ministry of Higher Education's (MOE) website as PHEIs. India had a total of 420 PHEIs, including 17 with the status of universities, 4 foreign university overseas educational institutions, 9 with university college rank, and 390 without university designation. A cross-sectional investigation was utilized, with data obtained at a specific point in time using surveys. This strategy is considered to be the most appropriate since it allows researchers to assess and examine the relationship among the factors under investigation at a given point in time. The research focused on PHEIs. Data was gathered from 420 administrative executives of PHEIs by a web-based survey. The participants acquired a link that was delivered to their emails, allowing them to view and answer the survey online within three weeks. A total of 138 valid surveys were returned after multiple follow-ups scheduled two weeks apart, providing a 34.5% response rate. Ten-to-one is the general standard for the minimum sample size. A minimum sample size of 40 is needed for this investigation. As a result, 138 are regarded as an adequate sample size.

3.2. Participants' Profile

The 138 PHEIs that took part in the survey had 83.3% local ownership, 8.7% collaborative ownership, and 8.0% foreign ownership. Regarding PHEI type, colleges made up 55.8% of the institutions, with universities coming in second at 30.4% and college universities at 13.8%. Only 8 PHEIs employed between 301 and 400 people, whereas 42 PHEIs employed fewer than 100 people. The average number of years the sample had been in operation was 17.5 (SD = 11.0) years, and the average number

of pupils was 4408 (SD = 75596). Table 1 displays an overview of the participants' profiles.

Table 1: Profile of Participants.

Factors	Percentage	Frequency
Ownership		
Foreign	8	11
Joint venture (local & foreign)	8.7	12
Local	83.3	115
Type		
College	55.8	77
College University	13.8	19
University	30.4	42
Number of Employees		
< 100	30.4	42
100-200	21.7	30
201-300	12.3	17
301-400	5.8	8
> 401	29.7	41

3.3. Instrument

The instruments employed in this investigation were significantly modified versions of those from other studies. The competition structure consists of five components. The independent factors were modified from several sources and related to regulatory compliance, support from the government, staff support, management assistance, and pressure from stakeholders. Both staff support and management assistance have been modified to include three items. The support from the government structure consists of four parts. Pressure from stakeholders includes six components. Regulatory compliance includes three components. The green practices framework consists of five components. A five-point Likert scale, with 1 denoting "strongly disagree" and 5 representing "strongly agree," was used to determine how much each survey statement that participants agreed or disagreed with.

4. RESULT

4.1. Data Analysis

4.1.1. Evaluation Model Outcomes

The discriminant and convergent validity of the components must be evaluated using load factors, "average variance extracted (AVE)", and "composite reliability (CR)" to ascertain the validity and reliability of the tools. Every indicator had acceptable loadings (ranging from 0.682 to 0.890). Furthermore, every structure has an AVE value greater than 0.6. The green practice construct's component GP3 (loadings = 0.625) was eliminated because of its minimal AVE (0.485). The desired level of 0.8 was exceeded by the CR for all structures (ranging from 0.826 to 0.899). Therefore, it can be considered that the convergent validity of each concept was excellent

(Table 2).

Table 2: Evaluation Model Outcomes.

Constructs	Question Items	Loadings	CR	AVE
Competition	B1	0.781	0.874	0.570
	B2	0.746		
	B3	0.745		
	B4	0.762		
	B5	0.756		
Staff Support	SS1	0.834	0.879	0.699
	SS2	0.837		
	SS3	0.839		
Regulatory Compliance	RC1	0.822	0.873	0.622
	RC2	0.700		
	RC3	0.789		
	RC4	0.851		
Green Practices	GP1	0.799	0.826	0.536
	GP2	0.718		
	GP4	0.682		
	GP5	0.737		
Pressure from Stakeholders	PS1	0.771	0.879	0.536
	PS2	0.689		
	PS3	0.705		
	PS4	0.703		
	PS5	0.764		
	PS6	0.777		
Management Assistance	MA1	0.890	0.899	0.738
	MA2	0.869		
	MA3	0.829		
Support from the Government	SG1	0.743	0.847	0.573
	SG2	0.703		
	SG3	0.809		
	SG4	0.883		

The Fornell-Lacker standard, which states that the square root of the AVE of each structure should be larger than the relationships between the latent structures, was employed to establish the

discriminant validity of the metrics (Table 3). This suggests that the research's discriminant validity is widely recognized.

Table 3: Discriminant Validity and Relationships of the Construct.

Constructs	Competition	Staff Support	Support from the Government	Green Practices	Regulatory Compliance	Pressure from Stakeholders	Management Assistance
Competition	0.758	-	-	-	-	-	-
Staff Support	0.609	0.840	-	-	-	-	-
Support from the Government	0.686	0.509	0.761	-	-	-	-
Green Practices	0.753	0.522	0.602	0.735	-	-	-
Regulatory Compliance	0.581	0.495	0.466	0.469	0.792	-	-
Pressure from Stakeholders	0.608	0.453	0.564	0.567	0.428	0.735	-
Management Assistance	0.674	0.428	0.549	0.687	0.467	0.480	0.863

Table 4 shows that every item scored highly on its corresponding structure and weakly on additional

concepts, providing sufficient support for the item-level discriminant and convergent validity.

Table 4: Cross-Loadings and Loadings.

	B	SS	RC	GP	PS	MA	GS
B1	0.781	0.555	0.393	0.617	0.532	0.560	0.609
B2	0.746	0.452	0.438	0.553	0.487	0.426	0.451
B3	0.745	0.460	0.499	0.571	0.393	0.508	0.484
B4	0.762	0.332	0.452	0.505	0.433	0.497	0.504
B5	0.756	0.469	0.409	0.574	0.435	0.534	0.518
SS1	0.493	0.834	0.328	0.424	0.426	0.282	0.449
SS2	0.476	0.837	0.454	0.430	0.268	0.330	0.435
SS3	0.551	0.849	0.454	0.451	0.438	0.453	0.392
RC1	0.451	0.398	0.822	0.353	0.321	0.406	0.368
RC2	0.447	0.347	0.700	0.316	0.309	0.321	0.292
RC3	0.438	0.420	0.789	0.326	0.253	0.356	0.334
RC4	0.489	0.399	0.851	0.455	0.434	0.385	0.446
GP1	0.609	0.380	0.411	0.799	0.437	0.583	0.546
GP2	0.594	0.464	0.263	0.718	0.400	0.440	0.368
GP4	0.462	0.288	0.355	0.682	0.375	0.443	0.377
GP5	0.519	0.386	0.340	0.737	0.439	0.525	0.451
PS1	0.493	0.435	0.401	0.564	0.771	0.483	0.419
PS2	0.339	0.271	0.173	0.298	0.689	0.179	0.306
PS3	0.366	0.277	0.360	0.323	0.705	0.300	0.359
PS4	0.428	0.329	0.279	0.330	0.703	0.288	0.439
PS5	0.523	0.394	0.405	0.392	0.764	0.308	0.444
PS6	0.467	0.245	0.223	0.452	0.766	0.430	0.478
MA1	0.540	0.233	0.377	0.577	0.350	0.829	0.474
MA2	0.605	0.412	0.438	0.578	0.441	0.890	0.467
MA3	0.582	0.454	0.384	0.576	0.411	0.869	0.468
SG1	0.482	0.269	0.342	0.388	0.380	0.377	0.743
SG2	0.515	0.332	0.361	0.418	0.386	0.422	0.703
SG3	0.521	0.458	0.313	0.506	0.460	0.422	0.809
SG4	0.551	0.455	0.400	0.454	0.429	0.436	0.783

4.2. Outcomes of the Structural Model

The bootstrap with 5000 resamples was utilized to ascertain the statistical importance of the path coefficients in the structural framework. Table 5 shows that there is a significant positive correlation between green practices and factors such as support from the government ($\beta = 0.184, p < 0.05$), pressure from stakeholders ($\beta = 0.191, p < 0.01$), management assistance ($\beta = 0.426, p < 0.01$), and staff support ($\beta = 0.162, p < 0.05$). Regulatory

compliance ($\beta = 0.058$) was found to have no significant association with green practices. Additionally, there is a strong positive relationship between green practices and competition ($\beta = 0.753, p < 0.01$). Furthermore, and it was found that the association between competition and management assistance, support from the government, pressure from stakeholders, and staff support was significantly mediated by green practices. Figure 2 displays the outcomes of the structural model.

Table 5: Hypothesis Testing Outcomes.

Effects	Hypothesis	Path	Standard Error	Beta Value	Decision	t - Value
Direct	H1	GP->B	0.097	0.753	Supported	19.258**
Indirect	H2a	RC->GP->B	0.072	0.040	Not supported	0.478
	H2b	SS->GP->B	0.074	0.123	Supported	1.782*
	H2c	PS->GP->B	0.072	0.144	Supported	2.151**
	H2d	SG->GP->B	0.081	0.139	Supported	1.813*
	H2e	MA->GP->B	0.077	0.319	Supported	4.648**
Direct	H3a	RC->GP	0.049	0.050	Not supported	0.482
	H3b	SS->GP	0.094	0.162	Supported	1.805*
	H3c	PS->GP	0.093	0.191	Supported	2.192**
	H3d	MA->GP	0.092	0.426	Supported	4.764**
	H3e	SG->GP	0.103	0.184	Supported	1.869*

Note: B = Competitions = Staff Support, SG = Support from the Government, GP = Green Practices, RC = Regulatory Compliance, PS = Pressure from Stakeholders, MA = Management Assistance.

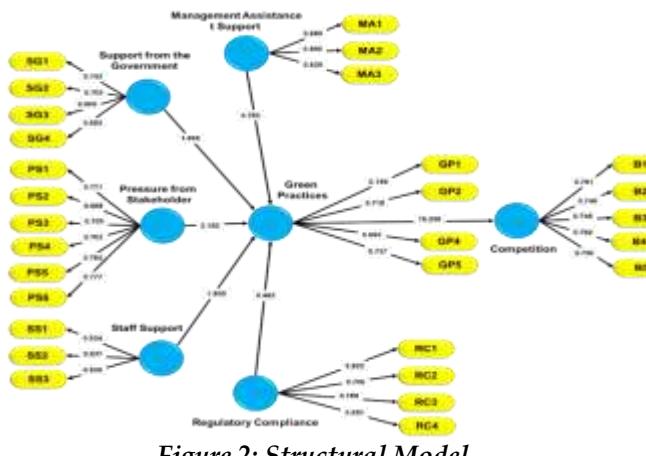


Figure 2: Structural Model.

4.3. Importance Performance Matrix Analysis (IPMA) Outcomes

The researchers used IPMA to determine possible regions that needed to be examined and enhanced.

The findings of the IPMA evaluation are shown in Table 6. The effectiveness value is the rating of a latent variable on a scale ranging from 0 - 100, while the significance value denotes the direct influence of an external factor on an internal component. The IPMA outcomes for the two endogenous factors, green practices, and competition are discussed. These figures show that, for endogenous factors, pressure from stakeholders (60.659) and management assistance (60.687) had high-performance observations, while regulatory compliance (47.473) had the lowest performance observations. With a rating of 0.317 for green practices and 0.282 for competition, management assistance is therefore the most significant factor for both. The least significant factor (0.045) and lowest performing (47.473) in terms of competition and green practices is regulatory compliance. The IPMA's findings indicate that regulatory compliance still has to be improved.

Table 6: IPMA Outcomes.

Latent variable	Green Practices		Competition	
	Direct effect (importance)	Index value (performance)	Direct effect (importance)	Index value (performance)
Staff Support	0.129	57.706	0.115	57.706
Support from the Government	0.176	58.399	0.157	58.399
Regulatory Compliance	0.045	47.473	0.041	47.473
Pressure from Stakeholders	0.178	60.659	0.158	60.659
Management Assistance	0.317	60.687	0.282	60.687

5. DISCUSSION

This research examined how competition is affected by green practices in the circumstances of PHEIs. The influencing elements included management assistance, support from the government, pressure from stakeholders, staff support, and regulatory compliance. All sub-hypotheses, except two, were found to be validated by the data evaluation, demonstrating that management assistance, support from the government, pressure from stakeholders, and staff support are important factors for green practices. However, it was discovered that green practices were not significantly impacted by regulatory compliance. Green practices are also discovered to have a significant and favorable impact on an institution's competition simultaneously. Furthermore, this research's evaluation shows how green practices indirectly affect the connections between competition, management assistance, support from the government, pressure from stakeholders, and staff support.

Management assistance was determined to have the most impact on PHEIs' green practices out of the five different categories of stakeholder involvement. This outcome is consistent with earlier studies. Therefore, PHEI's primary objective is determined mostly by its management assistance, which is the most prominent stakeholder. Management assistance greatly impacts the strategies and activities of the company because it has the authority and power to make decisions on matters about the organization. Support from the government emerges as the second most important stakeholder for PHEIs in this research, which is consistent with the results of most other studies on green practices. Establishing campus green practices is largely dependent on the government. Government-sponsored funding programs encourage academic members to contribute to sustainable technology and support studies on sustainability at PHEIs. Green practices are also found to be significantly influenced by staff support, indicating the importance of faculty members helping with the execution of green

practices.

Therefore, the results of the research are consistent with the stakeholder model, which holds that pressure from stakeholder organizations to implement more environmentally friendly strategies. However, it was discovered that there is no meaningful correlation between regulation compliance and green practices. This is because strict environmental regulations force the company to invest more in safeguarding the environment, which ultimately drains resources and earnings for shareholders. Additionally, the discovery is that green practices enhance competition. Moreover, the discovery that green practices improve competition indicates that incorporating sustainable development into a company's operations increases its competitive edge, which in turn affects PHEIs' revenue levels. Most significantly, this research advances our understanding of the relationship between competitiveness, green practices, and influencing variables. It specifically offers empirical support for the idea that green practices operate as a mediator in the link between competitiveness and impact variables. From a practical standpoint, the study's findings provide PHEIs many choices. PHEIs should work to increase their institution's competitive edge by valuing green practices. Green initiatives may be effectively implemented by enlisting the assistance and cooperation of stakeholders, particularly senior management, the government, and faculty members. According to the present research, PHEIs might become more competitive by improving faculty support, government, and top management.

6. CONCLUSION

The present investigation provides empirical support for the theoretical connection obtained from the research framework, as it confirms the existing relationships between influence variables and green practices. One of the main contributions of the research was the significance of green practices as a mediator among competition (dependent variables) and influencing factors (independent variables) of PHEIs. This study demonstrates the significant direct and indirect effects of green practices on PHEIs, providing compelling evidence that these activities are important for increasing the competitiveness of higher education institutions. The study's findings showed that the competitive advantage of educational institutions was determined by a

number of critical factors, including support from top management, government backing, stakeholder pressure, and faculty support. The adoption of green practices moderated this relationship. Furthermore, this research implies that the connection between stakeholders, green practices, and competition may be explained by applying the Stakeholder Institutional concepts.

6.1. Practical Implications

The findings of this research offer PHEIs several alternatives from a practical approach. Successful implementation of green practices can be achieved by actively involving stakeholders, particularly through the support and cooperation of management, government, and staff members. PHEIs should work to increase their institution's competitive advantage by addressing these efforts effectively. Most significantly, this analysis contributes to the expanding body of research on competition, green practices, and influencing factors. More specifically, it offers empirical support for the idea that green practices operate as a mediating factor in the connection among competition and influence variables. The study suggests that PHEIs can improve their competition by increasing support from management assistance, government, and staff support.

6.2. Limitations

This research has drawbacks due to data collection methods that could result in bias. Furthermore, biases in the results could arise from the low response rate, since only PHEI who actively support green practices took part in the research. Hence, the findings of this study offer useful information for PHEIs regarding strategies to enhance engagement in sustainable development, while simultaneously improving educational excellence and competition. These areas can be further explored in future research. Hence, it is recommended that future research should use either a random data collection methodology or a qualitative data collection methodology to improve the dependability and applicability of results. In addition, it may be necessary to do research on factors such as the quality of service, knowledge administration procedure, information exchange, and research facilities to have a more comprehensive understanding of the activities of PHEIs.

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