Linking Green Human Resource Management Practices with Green Employee Behavior: The Role of Environmental Knowledge as a Mediator

Kittisak Jermsittiparsert^{1,*}

¹ College of Innovative Business and Accountancy, Dhurakij Pundit University, Bangkok, Thailand

Abstract. Past empirical researches have shown concern regarding the importance of creation of knowledge among green human resources management (GHRM) practices and employees' green behavior (EGB). The main objective of current research is to investigate environmental knowledge (EK) as a mediator among GHRM practices and green behavior of Thai public sector higher educational institutions lecturers. The cross-sectional research determines the process through which GHRM practices affect the EGB in Thai public sector higher educational institutions by the mediating role of EK. In this research, GHRM practices involves green recruitment and selection, green training, green pay and rewards, green involvement and participation and green performance management and EGB is assessed through environmental management system. In order to evaluate the relationship from 375 useable responses, partial least squares structural equation modelling (PLS-SEM) technique was used. The results of this research indicate that EK has a full mediating effect on GHRM practices and EGB. The results provided theoretical contributions in the form of AMO theory.

1 Introduction

1.1 Green Human Resource Management Practices

Green Human Resource Management (GHRM) practices are important for achieving a sustainable competitive advantage and environmental performance by aligning the behaviors of individuals with the strategic goals of the company [1]. Employee's environmental efficiency factors are important because of the major challenges that a company needs to overcome in order to make systemic improvements that affect all individuals. GHRM practices encourage the environmentally sustainable use of assets, enhance environmental performance of the company, to raise employee understanding and show a commitment to environmental issues. GHRM practices also characterize human resource management practices that stimulate workers environmental consciousness and improve their attitudes in personal and professional life towards eco-friendly behaviors [2].

* Corresponding author: kittisak.jer@dpu.ac.th

In addition, organizational activity which allows individuals to involve in green attitude at work is called green human resource management practices. Study concluded that the GHRM concept can be related to strategic HRM, high-performance HRM and increased commitment HRM but GHRM practices are a special concept that takes environmental preservation into account and influences for an enterprise [3-4]. In fact, GHRM practices have a favorable influence on increasing corporate credibility, ensuring the accomplishment of organizational goals and maximum employee commitment by outside stakeholders. GHRM practices will promote engagement and involvement of employees in sustainability activities, while encouraging them to work more to enhance their sense of belonging and pride. This improves the performance of the company, creates a positive image and minimizes stakeholders' pressure. Additionally, a study based on the current literature has been developed to analyze micro-level mechanisms that affect the behavior of employees based on employee centered and GHRM practices [5]. The concept of GHRM practices is labeled as HRM facets of the environmental management system [6], which encourages improvements in employees' attitudes and behaviors. A total of five GHRM practices, for instance green involvement and participation (GIP), green pay and reward (GPR), green performance management (GPM), green training (GT) and green recruitment and selection (GRS) [3].

Although most current publications deal with GHRM practices at the organizational level [7], green attitudes and behaviors are becoming the subject of individual research [8]. There was a lack of effective green training impact due to lack of employee cynicism, needs analysis and employee readiness. This makes it essential for green recruitment and selection to help select workers who are willing to learn, while green performance management helps to determine the needs of the workforce. Green training, green pay and reward motivates employees' behavior to demonstrate green employee behavior and green participation and ensures employees participation in the process [9].

1.2 Employees' Green Behavior

Getting environmentally committed and conscious towards green practice is a strategic benefit for companies. Since people become agents to perform green corporate policies, it is important for companies to align and encourage workers' behavior in accordance with green corporate objectives and goals [10]. Green behavior is the behavior of employees who become more environmentally friendly. Research has indicated a strong interest in green sustainability and highlighted the need to promote green behavior in the organization called EGB [11]. EGB is a tangible behavior of employees who are committed to organizational environmental sustainability development objectives.

[12] identified EGB as a behavior of employees who intentionally try to reduce the adverse environmental consequences of their behaviors by maximizing the usage of paper, avoiding energy waste, and properly recycle the content of their workplaces. Organizations support the EGB and allow the institutions to effectively adopt an environmental management system to enhance the environmental performance of the organization. These green attitudes can be an extra role and role of green attitudes that can be identical and differentiates between all types of behavior, adding to the environmental organizational performance. However, extra-roles green behavior is an attitude that goes beyond the employee's necessary roles and is not officially acknowledged in the performance evaluation [13]. In-role green behavior is a compulsory attitude to perform the formal tasks of a worker who are deemed for employee's performance assessment, like the lesser use of papers for recycling and printing. Such attitudes provide recommendations to enhance environmental performance of the company, or to encourage staff to practice green attitude, like on-the-job lighting, disclosing water leakage and shutting down of the machine.

While others have suggested that both green behavior in roles and extra roles of the standard EGB would be part of behavior, it was also pointed out that green behavior in-roles and extra roles have varying antecedents depending on whether or not each person is involved in EGB [14]. However, the inspirational cause of the EGB is an important issue for environmental psychology. It indicates that workforce cannot afford the direct cost of using resources in research, and resources are frequently used without knowing how they are used (e.g., energy or other resources). In turn, the means to enable workers to save must be discovered. Different research investigated EGB predictors. Such research looked at both internally and externally. For example, the role of attitudes, norms and values in the forecasting of the EGB was studied for internal factors, while others used the interpretation of the EGB as a measure of organizational assistance [15]. Additionally, for external antecedents, studies have explored GHRM practices [16] and leadership styles through the inclusion of higher-level management commitment as a EGB driver [17]. Although, GHRM practices research on EGB remains in its infancy and further studies are needed to understand more clearly how it affects EGB.

2 Literature Review

2.1 Relationship Between GHRM Practices and EGB

There is a need to promote environmentally friendly attitudes by developing motivation, opportunities, training and awareness to encourage and respond to meticulous attitudes. Employee expectations of environmental benefits concerning the environment play a crucial role in inspiring EGB. Research has shown that active, motivated and well-trained staff will participate in behavior that encourages environmental performance in the organization [18]. This is a well-known truth that ability, motivation and opportunity are mutually dependent and will not operate separately until workers confirm EGB performance [19]. It ensures that staff have sufficient capability through green recruitment and selection and green training, a well-planned green performance and green pay and reward is important. To ensure that green training is used as a motivation to achieve the strategic objectives of the organization. Additionally, green involvement and participation gives employees the opportunities to engage in decision making and to conduct reviews to make it easier to endorse the environmental performance program through the implementation of the EGB. Research has shown that GHRM practices have an effect on employees' motivation and commitment to organizational objectives, such as initiatives for environmental sustainability [20]. GHRM practices focus on providing staff the means to get the help from the organization through green values, rewards and recognitions, performance management, encouragement, training, commitments and feedback on how GHRM practices and EK constructs the EMS significantly better. This would then contribute positive behavior to the work environment. Literature has presented that GHRM practices have a positive influence on green behavior of employees [2, 16]. Research by global corporate workers in China found that GHRM practices predicted substantial in-role EGB, however, GHRM practices had an insignificant association with extra-role EGB [20]. Thus, we hypothesize the following:

H1: GHRM practices have a positive and significant impact on EGB.

2.2 Relationship Between GHRM Practices and EK

The understanding of human collaborations, their issues related to environment and the different links between ecological practices are known as EK. This awareness may involve

the requisite capabilities to reduce adverse ecosystem impacts, resulting in pro-environmental behavior. The study has reported that the mitigation process and knowledge of issues contribute to sustainable behaviors [21]. Current studies have demonstrated that, in spite of attempts to disseminate knowledge on environmental sustainability weaknesses, people's understanding and perception of environmental problems have been identified. This can be attributed to the GHRM's incompetence in cooperation with environmental sustainability in the organization. The value of GHRM practices with environmental management has been highlighted by [22], as the association enables individuals to engage in environmental management programs by increasing awareness and behavior. Literature has presented that GHRM practices has a significant influence on the EK of employees [3]. The reason for this is that green recruitment and selection, green training, green performance management, green pay and reward and green involvement and participation work as interdependent behavior in order to increase employees EK [23]. With this understanding of environmental training, protection and education through developing practices of environmental involvement and rewards, recruitment and selection along with performance management, the EK of staff will enhance in the organization, increase the knowledge of employees on environmental sustainability and increase employees' knowledge on the usefulness and importance of greening at workplace [24]. Toyota company research has shown that HRP facilitates the creation and transfer of information along with personal learning between individuals through the development of knowledge stock, participation, feedback, effective training and interpersonal relationships [25]. Thus, we hypothesize the following:

H2: GHRM practices have a positive and significant impact on EK.

2.3 Mediation of EK Between GHRM Practices and EGB

GHRM practices are designed to involve, motivate, train, participate employees in green practices to enable them to achieve their strategic objectives. The EGB has been shown to influence, but analysis of the fundamental dynamics of this interaction is still in its infancy. The role of EK between GHRM practices and EGB relationship was suggested by [6]. Moreover, there is a lack of mediation studies between GHRM practices and EGB. One idea is that the relationship between GHRM practices and EGB is mediated by the skills of employees. The reasons behind these associations are less clear. For this situation, staff competencies are acknowledged as EK. GHRM practices are the external forces that ensure employees' match their attitudes with an organization's strategic environmental objectives. External characteristics were considered to influence the internal and cognitive qualities of employees' who contribute to EGB performance. For EGB, EK is an essential device. To build EK, individuals should feel cognitive readiness to do this. It includes the recruitment and selection of green-value workers and the provision of sufficient green training. When green recruitment and selection are used for choosing green ideals, the delivery of green training to staff increases their abilities and EK enables them to engage more in EGB. Green performance management and green pay and rewards, in turn, are included in the process for maintaining the motivation of EK.

Green performance management assesses the sustainability efficiency and retraining requirements of the individuals while eco-rewarding compensates employees on the basis of performance evaluation. If workers understand how performance assessments are to be carried out and how they will learn through it, they are encouraged to achieve the goals they need, and it could mean how the EK is to be established. The reward will be either financial or non-monetary. Meanwhile the study concluded that the most powerful motivation is non-monetary rewards, while other researchers suggest that monetary rewards empower workers efficiently [2, 26]. However, all kinds of rewards are required to ensure that employees are

optimally encouraged and thus promote the acquisition of high EK and how EGB can be more successful in contributing to the environment. Opportunities for individuals to be engaged and involved in participating in the environmental protection practices empowered employees and their morale is strengthened. As individuals take part in the activity, they gather more EK and get more energy to support the progress of green practices. GHRM strategies to affect the green employees' performance, improved interpersonal and cognitive abilities (i.e., EK) are more needed [27]. The creation of EK by GHRM practices are therefore equal to the development of environmentally friendly attitudes, and individual actions represent the degree of their EK. Thus, we hypothesize the following:

H3: The link between GHRM practices and EGB is mediated by EK.

3 Research Methodology

The data were gathered with the help of self-administered survey from public sector higher education institutions in Thailand. This study was cross-sectional in nature. we collected data through convenience sampling method, from 600 respondents. We circulated questionnaires through survey method and by email method. Total 445 questionnaires have been obtained, out of which 375 questionnaires have been effective representing a 61.7 percent response rate. University lecturers were participants to fill the survey.

The following measures were taken to complete the survey procedure.

Table 1. Measurement Scales

Constructs	No of Items	Scale-Type	Scale Range	Adopted/Adapted
EGB	7	5-point Likert type scale	1 (never) to 5 (always).	[12]
GHRM practices	6	5-point Likert type scale	1(not at all) to 5 (to a very great extent)	[20]
EK	4	5-point Likert type scale	1 (not at all) to 5 (to a very great extent)	[28]

Smart PLS 3.0 and SPSS 23.0 software were used for the analysis of the measurement model and structural model. First, the outer model was developed in the form of a structural model analysis, which focuses on specified procedure [29]. In addition, common method variance (CMV) analysis is applied by using SPSS version 23. The reason behind is that when collecting data from one source, CMV might be an issue for the analysis [30]. In order to solve the CMV, the Harman single factor test was applied.

4 Research Results

4.1 Assessment of Measurement Model

Convergent and discriminant validity were established to assess the measurement model. As per indicated by authors that composite reliability (CR), average variance extracted (AVE) and outer loadings were utilized to fulfill the convergent validity (CV) [29]. In addition, the outer loadings of 0.40 to 0.70 is sufficient, when AVE and CR are adequate [31]. With respect to average variance extracted, if the value of AVE is greater than 0.40 and the CR is higher than 0.60, it shows that CV of the latent variable is sufficient

[32]. Consequently, the convergent validity criteria in this model were found and established, which were deemed satisfactory.

Table 2. Convergent Validity of the Measurement Model

Constructs	Indicators	Loadings	AVE	CR
EGB	GEB_2	0.549	0.467	0.732
	GEB_3	0.521		
	GEB_4	0.655		
	GEB_5	0.784		
	GEB_6	0.802		
GHRM practices	GHRM_1	0.802	0.654	0.923
	GHRM_3	0.842		
	GHRM_4	0.726		
	GHRM_5	0.827		
	GHRM_6	0.881		
EK	EK_1	0.544	0.640	0.834
	EK_2	0.879		
	EK_4	0.929		

Note: Following items like GEB_1, GEB_6 and GEB_7, GHRM_2 and EK_3 was deleted due to low items loadings.

Next discriminant validity was used to assess the distinction of constructs. The precise discriminant validity of the measurement model is important because its asses the variables used are different from the other variables in the model [34]. The research results actually assign discriminant validity with the HTMT ratio [35], If the values of HTMT are above 0.85, it shows a serious discriminant validity problem. The HTMT test, as seen in Table 3, is less than the 0.85 threshold value which shows that there is no discriminant validity issue.

Table 3. Discriminant Validity through HTMT Criterion

Constructs	EGB	GHRM practices	EK	Gender
EGB				
GHRM practices	0.149			
EK	0.263	0.386		
Gender	0.234	0.178	0.120	

4.2 Assessment of Structural Model

It is important to check that there is no issue with lateral collinearity in the structural model till starting the analysis of hypothesis testing. This study measured collinearity by variance inflation factor (VIF) and VIF value should be lower than 3.3 as recommended by [36]. As shown in the Table 4 that all values of VIF were lower than the suggested threshold value of 3.3, thus confirmed that collinearity in this analysis was not a concern. Additionally, for testing the hypotheses, the approval was based on t-values, p-values and even confidence interval upper and lower limit of the variables were assessed by utilizing the bootstrapping procedure with a re-sample of 5,000. Bases on these criterions just two out of three hypotheses were accepted.

Table 4. Hypothesis Description Direct and Indirect Relationships

Relationships	β values	SD	t values	p values	Lower limit	Upper limit	Results	VIF
GHRM>EGB	0.055	0.059	1.085	0.262	-0.044	0.154	Insignificant	1.202
GHRM>EK	0.421	0.041	7.868	0.000	0.278	0.449	Significant	1.100
GHRM>EK>EGB	0.091	0.027	4.053	0.000	0.043	0.133	Significant	-

As presented in Table 4 that GHRM practices have been significantly and positively associated with EK (beta value = 0.421, t = 7.868, lower limit = -0.044, upper limit = 0.154, p = <0.01). Consequently, Hypothesis 2 has been positively supported. Remarkably, the author has found that GHRM practices have not been significantly associated with EGB (beta value = 0.055, t = 1.085, lower limit = 0.278, upper limit = 0.449, p = <0.01). Consequently, Hypothesis 1 has been insignificant. From Table 5, finding has presented that EK has a significant and positive mediation between GHRM practices and EGB (beta value = 0.091, t = 4.053, lower limit = 0.043, upper limit = 0.133, p = < 0.01), thus supporting hypothesis H3.

The evaluation of the values of coefficient of determination values (R^2), predictive relevance (Q^2) and effect size (f^2) of the endogenous latent construct EGB and exogenous latent construct EK is shown in Table 5. Finding from Table 5 has shown that R^2 value for endogenous variable EGB was 0.143, means that both GHRM practices and EK has explained total variance 14.3 percent, and the R^2 value for EK was 0.167 presented that GHRM practices have described 16.7 percent of total variance towards EK.

Table 5. Structural Model Values of R^2 , Q^2 and f^2

Constructs	R^2	f^2	Q^2	Effect
GEB	0.143	0.079	0.051	Small
EK	0.167	0.135	0.095	No
GHRM		0.009		Medium

The R^2 values should be at least 0.10 to be considered appropriate, as suggested by [37]. The 14.3 and 16.7 percent R^2 values are appropriate in this analysis. The research used the Q^2 to evaluate the predictive relevancy [33]. The predictive capacity of the model was tested by a blindfolding test. Analysis has used 7 distance to suggests the predictive value if the Q^2 measurement is greater than 0 [31]. The predictive values of EGB (0.051) and EK (0.095), separately, showing predictive relevance. The effect sizes of 0.02, 0.15 and 0.35 were defined as small, medium and large effect respectively [38-41]. The analysis has established that EK has a small effect size towards EGB (0.079), moreover GHRM practices have explained medium effect size towards EK (0.135). Nevertheless, GHRM practices have no effect size towards EGB (0.009). Findings from Table 5 has shown that all criteria have fulfilled the prerequisites.

5 Conclusion

This research evaluated the influence of GHRM practices on EGB with the mediator of EK between public sector higher education institutions lecturers in Thailand. The findings revealed unexpectedly that GHRM practices do not have any significant relationship towards EGB. These findings are in line with [16] who found insignificant correlation between GHRM practices and EGB. This means that GHRM practices are not inherently a company-wide procedure that allows workers to act in an environmentally friendly manner. Therefore, it is necessary to enforce GHRM activities effectively to empower employees to perform EGB. This result also confirms the need to affect EGB in the underlying variables for GHRM practices.

Thereafter, the results have demonstrated that EK is influenced by GHRM policies. This demonstrates the impact of good GHRM policies on employee EK development. While green training strengthens the EK of workers, other activities such as green recruitment and selection, green performance management, green incentives and rewards along with green involvement and participation, all work together to accomplish and grow EK strategic business objectives and goals. This statement is in favor of prior studies which have shown

that GHRM practices can enhance and ensure the EK of workers [39]. The outcomes of the present research support for the positive and indirect association between GHRM practices and EGB is mediated fully by EK. This result adds to previous literature that GHRM practices can affect the outcomes of employees work climate by using specific mechanisms [40] such as EK. It indicates that the development of the EK is crucial to the strict adherence of GHRM policies, leading to environmentally sustainable behavior in the workplace. The study has shown that the higher degree of EK improves GHRM practices and EGB interactions.

5.1 Theoretical Contribution

First, this research subsidizes to the AMO theory since GHRM practices are rarely used in EK forecasts, especially in academics of Thailand. The results suggested that if lecturers are provided with the necessary skills, opportunities and motivation to succeed, they are able to better understand the environmental conditions completely and to use procedural information on addressing environmental problems. It is believed the successful adoption of GHRM strategies to achieve sustainable protection is focused on enhancing EK of employees.

Furthermore, with regard to the role that EK plays as mediator between GHRM practices and EGB, its environmental expertise can enhance environmentally friendly behavior in universities when teachers are given adequate participation, motivation, awareness and training in the environmental sustainability cycle. The results are consonant with [27], who have demonstrated with the help of top management that EK influences the EGB of the workers. Research has helped in understand how the green behavior of lecturers can be improved to make sure that green practices are a core function of teaching, providing motivation and modeling in society and higher education institutions.

5.2 Practical Contribution

The effect of the current research on a green workforce is significant, since it was carried out in public sector higher educational institutions in Thailand. The contributions from the study are on the basis of the assumption that it is important to have green behavior of employees in an enterprise to solve global climatic problems. Higher education institutions must effectively implement GHRM policies and help environmental management programs to meet this responsibility. This research emphasizes the value of GHRM policies in higher education institutions as it seeks to improve employee's environmental knowledge and awareness of ecological problems and to address environmental concerns. Alternatively, the environmental performance of higher education institutions and society will be successful. Such operations shall involve selection and recruitment procedures which represent the environmental principles of higher education institutions. Positioning of new recruiters that stress the significance of environmental protection at job, the green performance feedback of lecturers which is associated with environmental-friendly behavior and green training that involves preparing them to lessen the ecological problems at workplace. Therefore, this study highly suggests that executives and human resource professionals in higher education institutions are developing GHRM strategies, which are key organizational concepts. Similarly, HR experts and top management in the higher education institutions must appoint lecturers who have the same environmental conservation values. It is therefore necessary to consider hiring and choosing staff who value the protection of the environment. HR policy makers will set a strong precedent by highlighting the environmental ethics of their higher education institutions on job posters and assessing the environmental standards of their candidates through environmental conservation issues during the interview process.

In addition, human resources experts must provide training and education with an environmental-sustainable curriculum that can help them better understand the environmental strategies of higher education institutions and increase the understanding of education staff on the importance of environmental sustainability. As a result, the information and understanding obtained from these training courses will lead lecturers to think more about environmental dilapidation and prevention initiatives, such as the collection of data on carbon emissions and waste as well as the recognition of the causes of pollution and the steps taken to mitigate these occurrences. In addition, in the higher education institutions, HR managers and top management should also connect performance evaluation to the environmental performance of lecturers. This can be done by assessing the number of paper reams used within a given time frame (weekly), with a centralized print monitor also monitoring the quantity of printings done within a certain timeframe. For comparison, activities such as leaving the computer switched on or leaving the air conditioner on after working hours may also be considered in an evaluation. Consequently, such evaluations would also be related to incentives and rewards to inspire lecturers to perform and facilitate environmentally friendly behaviors. Additionally, involvement, retraining and encouraging feedback on environmental management practices can be utilized for post-performance evaluation to ensure the EGB and EK of lecturers of the public sector universities.

References

1. K. Jermsittiparsert, P. Siriattakul, S. Wattanapongphasuk, *IJSCM*, **8** (2019).
2. B. Afsar, B. Saeed, I. Khan, S. Hafeez, M. Tahir, M. Afridi, *CSREM*, **26** (2019).
3. G. Tang, Y. Chen, Y. Jiang, P. Paille, J. Jia, *APJHR*, **56** (2018).
4. U. Waqas, A. Rahman, N. Ismail, N. Basha, S. Umair, *FS*, **3** (2019).
5. G. Tang, S. Jackson, S. Ren, *APJM*, **35** (2018).
6. D. Renwick, T. Redman, S. Maguire, *IJMR*, **15** (2013).
7. M. Guerri, A. Longoni, D. Luzzini, *IJHRM*, **27** (2016).
8. P. Nhat Tan, T. Zuzana, Q. Phan, *JBEM*, **20** (2019).
9. U. Waqas, A. Rahman, N. Ismail, N. Basha, *Proceedings of the 3rd International Conference on Computers in Management and Business*, (Association for Computing Machinery, 2020).
10. B. Daily, J. Bishop, N. Govindarajulu, *BS*, **48** (2009).
11. O. Deniz, S. Dilchert, *Managing Human Resources for Environmental Sustainability*, (John Wiley & Sons, 2012).
12. V. Blok, R. Wesselink, O. Studynka, R. Kemp, *J. Clean. Prod.*, **106** (2015).
13. P. Pascal, O. Boiral, *JEP*, **36** (2013).
14. S. Dilchert, B. Hoffman, *The Oxford Handbook of Personnel Assessment and Selection*, (Oxford University Press, 2012).
15. H. Xiuhong, & W. Zhan, *J. Clean. Prod.*, **172** (2018).
16. Y. Kim, W. Kim, H. Choi, K. Phetvaroon, *IJHM*, **76** (2019).
17. L. Graves, J. Sarkis, N. Gold, *RCR*, **140** (2019).
18. J. Shen, J. Dumont, X. Deng, *GOM*, **43** (2018).
19. M. Pavitra, *IJOA*, **25** (2017).
20. J. Dumont, J. Shen, X. Deng, *HRM*, **56** (2017).

21. L. Brett, R. Marans, JSHE, **13** (2012).
22. A. Mazzi, S. Toniolo, M. Mason, F. Aguiari, A. Scipioni, J. Clean. Prod., **139** (2016).
23. D. Silvana, C. Jabbour, R. Battistelle, J. Rodrigues, D. Renwick, C. Foropon, D. Roubaud, JKM, **23** (2019).
24. Y. Zhang, Y. Luo, X. Zhang, J. Zhao, Sustainability, **11** (2019).
25. M. Makoto, JKM, **19** (2015).
26. C. Jabbour, F. Santos, M. Nagano, J. Clean. Prod., **16** (2008).
27. J. Rayner, D. Morgan, APJHR, **56** (2018).
28. B. Gatersleben, L. Steg, C. Vlek, EB, **34** (2002).
29. F. Hair Jr, C. Ringle, G. Hult, K. Thiele, M. Sarstedt, JAMS, **45** (2017).
30. P. Podsakoff, S. MacKenzie, N. Podsakoff, ARP, **63** (2012).
31. J. Hair Jr, C. Ringle, G. Hult, M. Sarstedt, *A primer on partial least squares structural equation modeling (PLS-SEM)*, (Sage, 2017).
32. C. Fornell, D. Larcker, JMR, **18** (1981).
33. S. Geisser, Biometrika, **61** (1974).
34. J. Hair, J. Risher, M. Sarstedt, C. Ringle, EBR, **31** (2019).
35. J. Henseler, C. Ringle, M. Sarstedt, (2015). JAMS, **43** (2015).
36. A. Diamantopoulos, J. Siguaw, BJM, **17** (2006).
37. R. F. Frank, N. Miller, *A primer for soft modelling*, (University of Akron Press, 1992).
38. J. Cohen, CDPS, **1** (1992).
39. S. Tariq, F. Jan, M. Ahmad, QQ, **50** (2016).
40. D. Lepak, K. Jiang, J. Hu, J. Baer, AMJ, **55** (2012).
41. M. S. D. Kumari, J. Contemp. Gov. Public Policy **2**, 31 (2021)