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The Role of Islamic Work Ethics and Organizational Citizenship Behavior in Green Human Resource Practices and Environmental Performance of Indonesian Food SMEs

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ABSTRACT

Many Small and Medium Enterprises (SMEs) in the food processing sector generate waste and exhaust emissions from food residue burning, and consume excessive electrical energy during cooking, leading to environmental pollution and damage. This study proposes the application of Green Human Resource Management (GHRM) practices (e.g., selection, training, performance management, and compensation) and Organizational Citizenship Behavior towards the Environment (OCBE) to improve the Environmental Performance (EP) of food processing SMEs, with the implementation of Islamic Work Ethics (IWE) as a driving factor. Utilizing a purposive sampling method, a total of 500 owners of food processing SMEs in West Sumatra, Indonesia were selected as research samples. The data were analyzed using Partial Least Squares Structural Equation Modeling. The study's findings demonstrate that OCBE fully mediates the relationship between IWE and EP. These insights are crucial for helping food processing SMEs to enhance their environmental protection efforts.

1. INTRODUCTION

Small and Medium Enterprises (SMEs) have an important role in a country's economic growth [1]. For example, in Indonesia, it has been reported that the contribution of SMEs to the national Gross Domestic Product (GDP) is 57% in 2021 [2]. SMEs engaged in the food processing industry also have an important role in a country's economy which positively influences the country's sustainable development [3]. However, on the other hand, SMEs hurt the natural environment, which is 60-70% of the total pollution produced by SMEs [4], studie of Jermsittiparsert et al. [5] report that SMEs in Indonesia produce as much as 60% of industrial carbon dioxide emissions, then also estimates that Indonesian SMEs produce 60% of commercial waste and 80% is pollution [6]. Likewise, food processing SMEs contribute more to environmental waste in the form of food scraps [1]. Not only that, in processing food ingredients, SMEs need electricity and fuel energy which will produce 85% of carbon dioxide emissions from electricity consumption and the remaining 15% of carbon dioxide emissions come from cooking fuel [7]. Thus, excessive use of energy will have an impact on nature such as increasing global temperatures and can increase the cost of energy use.

The reason for the high environmental damage caused by SMEs is that they think that environmental problems are not a core part of their business [8] and this very competitive environmental problem will generate costs and spend time and money alone and there is no source of competitive advantage [3]. Then being involved in the environment in general is very difficult for SMEs because they do not have adequate resources for sustainable business planning and tend to delay or ignore sustainable environmental improvement investments [9]. The next reason is that the environmental impacts caused by SMEs are diverse, making it difficult to generalize solutions [1]. Generally, SMEs think about short-term profits. When faced with an opportunity the absence of short-term profits allows SMEs to ignore this investment because it is an investment that is not prioritized [10]. Currently, policies and legal regulations in Indonesia do not encourage and support SMEs in environmental management. For these various reasons that make SME owners do not want to commit to improving their environmental performance, they prefer to develop their business rather than improve the environment.

Preserving the environment is very important for companies because it provides many benefits for the interests of shareholders and stakeholders on corporate profits caused by responsible environmental management based on a public perspective [11]. Another study adds that good environmental management can avoid public and government claims as well as improve product quality so that it can increase profits for companies [12]. To achieve this, the human role is needed because humans greatly affect the quality of the environment [13, 14]. In improving the environment, human involvement from the side of owners, managers, and employees can be seen in GHRM practices. Businesses are now forced to adopt GHRM which leverages human resources in the process of implementing innovations to achieve environmental performance, waste reduction, social responsibility, and competitive advantage through continuous learning and development and by embracing goals and strategies environment [15]. Besides that, effective individual voluntary actions in a company that leads to the

environment can also improve environmental performance [16], Such action is called OCBE [17]. Thus, the practice of GHRM and OCBE plays an important role in improving environmental performance (EP) driven by Islamic work ethics (IWE) because Islam always emphasizes cleanliness when working [18]. Therefore, the role of IWE has a big contribution in maintaining the balance of environmental sustainability through inculcating mandated ethics towards the environment.

Studies investigating the role of GHRM and OCBE in EP [16-19]. However, the role of IWE in GHRM, OCBE, and EP has not been discovered. To better understand this, it can be seen in Table 1 which describes several empirical studies related to IWE, GHRM, OCBE, and EP.

Table 1. Several empirical studies related to research variables

Author(s)	IWE	GHRM	OCBE	EP
[15]		✓		✓
[19]		✓	✓	✓
[20]		✓		✓
[21]		✓	✓	
[22]		✓	✓	
[23]		✓	✓	✓
[24]		✓		✓
[25]		✓	✓	✓
[26]		✓		✓
[27]		✓		✓
[28]		✓	✓	

Table 1 provides information that there are no empirical studies that examine the relationship between IWE in GHRM, OCBE, and EP, so there is a gap in the existing literature. Therefore, the contribution of this research is to link IWE on EP with GHRM and OCBE studied as mediators, Assessing the food industry which is an industry that has received less attention in environmental sustainability. In addition, the lack of attention to the EP of SMEs, so makes the environment more vulnerable to pollution and damage. The purpose of this research is to find out and analyze the perceptions of food processing SME owners towards EP that are influenced by IWE, GHRM, and OCBE so that they become important insights into environmental management.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Environmental performance (EP)

Environmental performance (EP) relates to the company's ability to reduce the consumption of toxic substances and chemicals hazardous and to make every effort to reduce emissions, waste, and lower energy consumption so that companies can cut costs which in the end can achieve efficiency [16-27]. In line with the study of Oláh et al. [12] that EP refers to the use of biodegradable materials in products, reducing pollution and waste at the source, reducing the use of materials harmful to the environment, and increasing energy efficiency. On the other hand, EP is a measurable result of the environmental management system relating to the entire management system which includes organizational structure, activity plans, responsibilities, training or practices, procedures, processes, and resources for development, implementation, evaluation, and maintenance of environmental policies [29]. So, EP is related to the company's ability to maintain, manage and protect the environment by planning activities related to the environment, conducting training related to the environment, and training resources to carry out the development, implementation, evaluation, and maintenance of the environment that is implemented effectively.

2.2 Islamic work ethics (IWE)

Islamic work ethics (IWE) as obligations, virtues, and the need to establish balance in one's individual and social life [30]. IWE is related to the orientation and approach to work as a virtue in human life [31]. Thus, work in Islamic ethics is seen as an obligation, responsibility, and provides virtue in human life by moral principles according to the Islamic context. Islam does not tolerate any form of damage to the ecological balance or natural order and systems [18]. Confirmed that the Islamic perspective is very perfect, that is, there are two interactions between humans with a God and humans with their environment or better known as *hablun minallah* (human interaction with Allah) and *hablun minannas* (human interaction with humans and environment) [32]. Thus, Islam has emphasized that in work it is important to pay attention to the surrounding environment, for example creating environmental cleanliness which can be realized by implementing environmentally friendly human resource practices known as green HRM. IWE places great emphasis on cleanliness through human resources [18]. Not only that, but Islam also emphasizes cooperation in the workplace to form conducive work arrangements [30]. Furthermore, Islamic teachings explain that every Muslim has a moral obligation to help their colleagues and organizations when needed [31]. Thus, employees who have work ethics tend to show cooperative behavior, help each other and provide voluntary assistance to their co-workers. Therefore, the hypothesis in this study is:

H1: IWE has a significant and positive impact on EP.
H2: IWE has a significant and positive impact on GHRM.
H3: IWE has a significant and positive impact on OCBE.

2.3 Green human resource management (GHRM)

In general, GHRM as human resource management includes aspects of environmental management [28]. Furthermore, GHRM refers to the use of HR policies, philosophies, and practices (recruitment and selection, training and development, performance management, appraisal, and compensation) which then focus on sustainable business use [19]. In short, GHRM is an expansion from HRM practices that focus on environmental sustainability. The study of Yue et al. [28] argues that GHRM affects OCBE because GHRM is an organizational resource that shapes employees' values, knowledge, and skills related to the environment, helps them to participate in environmental activities, and motivates employees to voluntarily engage in OCBE. Other empirical studies also explain that GHRM practices have a positive and significant effect on OCBE [33]. Furthermore, GHRM does not only play a role in increasing employee OCBE but GHRM also plays a role in improving EP as studies [24-34] that organizations that wish to employ applicants first ask several

questions related to the environment during the interview session and will select applicants with strong environmental values, then with these candidates organizations can improve their EP. This finding is in line with studies [23-27] that GHRM practices are critical to EP. This study presents the following hypothesis:

H4: GHRM has a significant and positive impact on OCBE.

H5: GHRM has a significant and positive impact on EP.

2.4 Organizational citizenship behavior towards the environment (OCBE)

The concept of OCBE was developed from the definition of OCB (*Organizational Citizenship Behaviour*) [23]. OCBE is an individual and discretionary (voluntary) social behavior that is not recognized by formal reward systems and contributes to more effective environmental management in organizations [33]. Discretionary (voluntary) means behavior that is not included in the job description, so it is only natural that OCBE behavior is not recognized by the formal reward system but plays an important role in protecting the environment. OCBE has a positive impact on organizational environmental performance with its relation that employees who are committed to the organization perform tasks that are outside the formal job description to achieve organizational goals such as EP [17]. EP is determined by OCBE [19]. This study presents the following hypothesis:

H6: OCBE has a significant and positive impact on EP.

2.5 The mediating role of green human resource management (GHRM)

Islam can promote environmentally friendly practices because Islam has taught that in work it is obligatory to maintain and protect the environment. Supported by Arauf [32] that IWE requires living in peace and harmony at the social, ecological, and individual levels. Thus, IWE can improve EP through green HRM practices. EP seen from a healthy and harmless environment can be carried out with Islamic teachings and guidelines [18]. For this reason, the practice of GHRM can be realized because of the pressure from IWE so that prosperity and justice are created and avoid greed which in this way will form voluntary behavior in protecting this universe. This study presents the following hypothesis:

H7a: GHRM mediates the relationship between IWE on EP.

H7b: GHRM mediates the relationship between IWE on OCBE.

2.6 The mediating role of organizational citizenship behavior towards the environment (OCBE)

Islam emphasizes that all work must be useful, meaningful, and beneficial for oneself and the surrounding community [30]. So, the Islamic way of working is perfect because in work you have to pay attention to the relationship with the creator and the people around him which in turn can lead to more responsible behavior towards the environment, and in the end the environment becomes clean and protected. Creating sustainable behavior (paying attention to organization, environment, and society) requires GHRM behavior through OCBE [16-19]. Therefore, the hypothesis in this study is:

H8a: OCBE mediates the relationship between IWE on EP.

H8b: OCBE mediates the relationship between GHRM on EP.

2.7 Research framework

Based on the description above, can be described in the form of a research framework which can be seen in Figure 1 below. This research framework provides a useful visual summary of the hypothesized relationships.

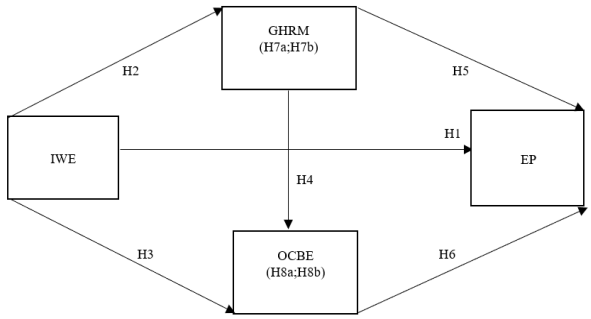

Figure 1. Research framework

3. METHODOLOGY

Food processing SMEs throughout West Sumatra, Indonesia became the population in this study. The number of research population is uncertain, so the sampling technique uses non-probability sampling with a purposive sampling method. Respondents were selected as the research sample because they met the following criteria: owners must be environmentally friendly, conduct business operations with Islamic ethics, and be assisted by employees.

A total of 510 questionnaires were distributed to food processing UKM owners. The questionnaire was distributed online via the WhatsApp platform with four weeks to respond. Results from 500 questionnaires were received (98% response rate) and responses were further processed for data analysis. The steps taken to maintain a high response rate were to get solid support from owners and SMEs, be reminded every week to fill out the questionnaire by conducting follow-up chats and follow-up calls with respondents, and confirm respondents about anonymity and being protected the confidentiality of the answers to reducing the non-response bias explained by Zahl-Thanem et al. [35]. The result of this response rate is the same as the response rate of empirical studies [36]. Thus, the response rate in this study was high. Ameen and Praharaj [37] have reported that high response rates are typical in small-scale survey research and conversely low response rates are typical in large-scale survey research.

Measurement of research variables adopted from previous studies. IWE adopted by Ahmed et al. [31] consists of 17 items, GHRM taken from Obeidat et al. [38] consists of 10 items, OCBE taken from Pham et al. [21] consists of 13 items, and EP based on Pham et al. [21] consists of 10 items. All constructs use the first-order reflective measurement model appropriate given the nature of the constructs. Previously validated measurement scales are used to strengthen the research construct. The measurement scale is a five-point Likert scale starting from strongly disagree (1) and strongly agree (5) [39].

Partial least squares structural equation modeling (PLS-SEM) was used to test the research hypothesis. Measurement model evaluations (convergent validity, discriminant validity) and structural models (path coefficients, R^2, f^2, Q^2) describe the appropriate PLS-SEM practice [40].

4. RESULTS

4.1 Profile of respondents

Table 2. Profile of respondents

Demographic Profile		Variance	%
Gender:	Male	136	27
	Female	364	73
Age (year):	≤25	4	1
	26-30	54	11
	31-35	189	38
	36-40	150	30
	≥40	103	21
Education:	Junior high school	15	3
	Senior high school	195	39
	Associate degree	172	34
	Bachelor's degree	115	23
	Postgraduate	3	1
Run business (year):	1-2	378	76
	≥2	122	24
The number of employees (people):	1-10	478	96
	11-20	15	3
	21-30	3	1
	31-40	4	1
The income per month (IDR):	≤2.5 million	180	36
	2.5 million-5 million	204	41
	5 million-7.5 million	75	15
	≥7.5 million	41	8

Respondents were dominated by women (73%), with this percentage seems to break the stereotype that men are considered the main breadwinner no longer applies in West Sumatra, Indonesia. In general, food processing SMEs are managed by owners who are classified as productive age (38%), namely aged 31 to 35 years with senior high school graduates (34%) in line with the characteristics of SMEs in Indonesia [1]. Respondents run a business for one to two years (76%) with employees owned between one and ten people (96%) generating income per month of IDR 2.500.000 to 5.000.000, as shown in Table 2.

4.2 Reflective measurement model

Convergent validity measures the correlation between constructs with latent variables [40]. In evaluating convergent validity by examining individual item reliability, it can be seen from the value of the standardized loading factor. The standardized loading factor describes the correlation between indicators with their constructs [41]. The loading factor value≥0.7 is said to be ideal, meaning that the indicator is valid in measuring the constructed construct but the loading factor value≤0.7 must be removed from the model because the indicator is invalid and after that, the model is re-calculated as well as do the same thing until all valid indicators are obtained [40]. The results show that all indicators have ideal loading factor values except for the IWE 11, IWE 16, OCBE11, OCBE12, and OCBE 13 indicators. Next, assess the internal consistency reliability. Internal consistency reliability measures the extent to which statement items are latent construction measures [41]. Internal consistency is assessed from composite reliability (CR) [40]. If the CR value is above the cut-off value of 0.7 then the construct is considered satisfactory [41]. The CR results for each construct exceeded the cut-off value of 0.7. Reporting the validity and reliability of the measurement model will strengthen the research rigor. Another measure of convergent validity is assessing AVE. The AVE value describes the diversity of indicators. The AVE value is considered satisfactory if the value is 0.5 [41]. AVE values for all constructs are satisfactory which can be seen in Table 3.

Table 3. Convergent validity

Construct	Items	Outer Loading	Composite Reliability (CR)	AVE
IWE	IWE01	0.716	0.964	0.642
	IWE02	0.732		
	IWE03	0.738		
	IWE04	0.723		
	IWE05	0.845		
	IWE06	0.814		
	IWE07	0.874		
	IWE08	0.857		
	IWE09	0.825		
	IWE10	0.829		
	IWE12	0.767		
	IWE13	0.869		
	IWE14	0.814		
	IWE15	0.804		
	IWE17	0.787		
GHRM	GHRM01	0.936	0.969	0.759
	GHRM02	0.922		
	GHRM03	0.845		
	GHRM04	0.867		
	GHRM05	0.846		
	GHRM06	0.919		
	GHRM07	0.901		
	GHRM08	0.890		
	GHRM09	0.856		
	GHRM10	0.706		
OCBE	OCBE01	0.762	0.946	0.635
	OCBE02	0.845		
	OCBE03	0.856		
	OCBE04	0.803		
	OCBE05	0.845		
	OCBE06	0.755		
	OCBE07	0.857		
	OCBE08	0.707		
	OCBE09	0.764		
	OCBE10	0.760		
EP	EP01	0.793	0.950	0.656
	EP02	0.789		
	EP03	0.808		
	EP04	0.836		
	EP05	0.767		
	EP06	0.844		
	EP07	0.835		
	EP08	0.828		
	EP09	0.782		
	EP10	0.813		

Lastly measuring discriminant validity. Discriminant validity assesses the extent to which a construct differs from other constructs [40]. Testing the discriminant validity using the heterotrait-monotrait ratio (HTMT). HTMT analysis proved to be superior among other methods for assessing discriminant validity [41]. A more conservative cut-off value for HTMT is 0.85 [40]. The results of this study do not violate the assumptions of discriminant validity as presented in Table 4. Thus, the overall results of the measurement model are adequate.

Table 4. Discriminant validity (HTMT criterion)

Construct	EP	GHRM	IWE	OCBE
EP	-			
GHRM	0.042	-		
IWE	0.285	0.075	-	
OCBE	0.321	0.057	0.838	-

4.3 Structural model

Table 5. Path coefficients

Hypotheses	Path	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	Results
H1	IWE->EP	0.088	1.118	0.264	Rejected
H2	IWE->GHRM	0.086	1.280	0.201	Rejected
H3	IWE->OCBE	0.802	38.407	0.000	accepted
H4	OCBE	0.003	0.084	0.933	Rejected
H5	GHRM->EP	0.001	0.009	0.993	Rejected
H6	OCBE->EP	0.239	3.302	0.001	accepted
H7a	IWE->GHRM->EP	0.000	0.008	0.994	Rejected
H7b	IWE->GHRM->OCBE	0.000	0.070	0.945	Rejected
H8a	IWE->OCBE->EP	0.192	3.247	0.001	accepted
H8b	GHRM->OCBE->EP	0.001	0.080	0.936	Rejected

Structural models are used to test the causal relationship between constructs seen from the path coefficients table [40]. The path coefficients table provides information on whether the formulated hypothesis can be accepted or rejected by observing the T Statistics and p values. The hypothesis will only be accepted if the T Statistics is 1.96 and the p-value is 0.05 as reported in Table 5 and Figure 2.

Next reporting the coefficient of determination (R^2), effect size (f^2), and predictive relevance (Q^2) [40]. R^2 is the influence contribution given by the exogenous construct to the endogenous construct. The R^2 value indicates that IWE explains 9.3 percent of EP, 0.5 percent of GHRM, and 64.1 percent of OCBE. Changes in the value of R^2 see whether the influence of exogenous constructs on endogenous constructs has a substantive effect as measured by the effect size (f^2). If the f^2 value is 0.02 it has a weak influence, 0.15 has a moderate effect and a value of 0.35 has a strong influence [40]. f^2 value IWE on OCBE is 1.786 means it has a strong influence so that IWE has a strong effect on OCBE.

Predictive relevance (Q^2) aims to check whether the indicator data points in the reflective measurement model of endogenous constructs can be predicted accurately [40]. Good prediction relevance when the Q^2 value is greater than zero indicating that the exogenous latent variable is suitable as an explanatory variable capable of predicting the endogenous latent variable. Based on that, IWE is suitable as an explanatory variable capable of predicting GHRM, OCBE, and EP variables. Table 6 informs the values of R^2, f^2, and Q^2.

Table 6. Values of R^2, f^2, and Q^2

Construct	R^2	f^2	Effect Size	Q^2
EP	0.093			0.287
GHRM	0.005			0.184
OCBE	0.641			0.556
IWE->GHRM		0.007	Weak	
IWE->OCBE		1.786	Strong	
IWE->EP		0.003	Weak	
GHRM->EP		0.000	Weak	
OCBE->EP		0.023	Weak	
GHRM->OCBE		0.000	Weak	

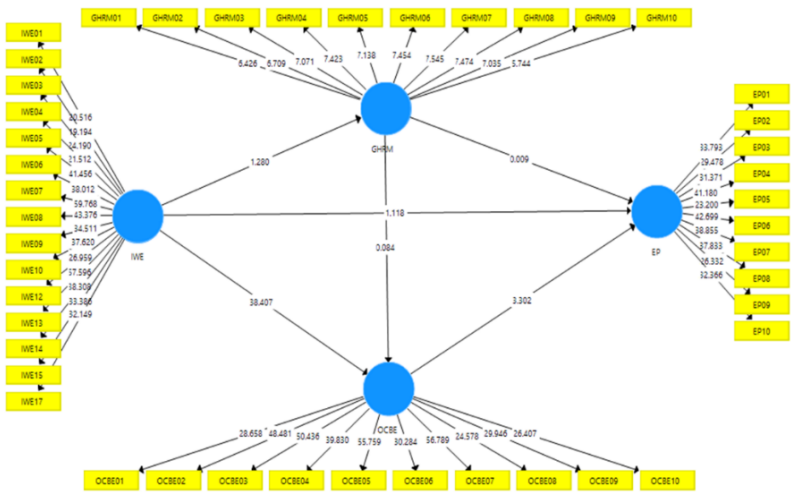

Figure 2. Structural model results

5. DISCUSSION

5.1 Direct effect

Interestingly the results of the study found that IWE among food processing SMEs owner is not significant to EP (H_1). This means that IWE does not contribute to improving EP. The reason is that they do not yet understand the theory of IWE as shown by the indicators of IWE where there are several invalid indicators, by working it allows humans to control nature where these items are discarded in the research model so that weak knowledge of IWE theory plays a role important in improving EP. Besides that, Islamic work ethics teaches a person to behave, do good and behave by applicable values and norms [26], the fact that attitudes and values do not necessarily affect the improvement of environmental performance because behavior and people's attitudes are fickle and varied which may not significantly affect environmental performance. The results of this study differ from empirical studies conducted [32] in that the way Islam works is very perfect, namely *hablun minallah* (human interaction with God) and *hablun minannas* (human interaction with humans and the environment).

Furthermore, it is inconsistent with expectations that IWE does not have a significant impact on GHRM among food processing SMEs (H_2). The reason is that the failure of SMEs to comply with ethical requirements is a challenge and an obstacle in implementing environmentally friendly practices [42]. Emphasized by Kraus et al. [43] creating an ethical business environment is an important challenge for SMEs. So it is not surprising that SMEs are not directly involved in good environmental management practices. In addition, it was found that IWE among food processing SMEs owners had a significant effect on OCBE (H_3). This shows that the principles of IWE in food processing SMEs can increase cooperation between employees towards the environment. As discussed in previous literature, the principles of IWE are cooperation, mutual help, and volunteerism so that they can encourage the formation of OCBE behavior [30, 31].

Not in line with researchers' expectations, these findings explain that GHRM among food processing SMEs owners does not have a significant direct effect on OCBE (H_4). Although previous studies have reported a strong relationship between GHRM on OCBE [28-33]. Therefore this study failed to identify this relationship, but these findings are in line with the findings [21] which found that GRHM did not affect the OCBE of hotel employees in Vietnam. One possible explanation that can be offered for this unexpected finding relates to the context of this study. Large companies are more committed to implementing green HRM processes than small companies [44] because SMEs have limited financial resources and lack other resources such as organization, human, and material which becomes a barrier to adopting environmental practices and limits their involvement in environmental activities [45]. Furthermore, the less formal strategic management approach of SMEs, fewer stakeholders, and a more flattened organizational structure so SMEs do not have the structure to integrate sustainability into their business decisions [46, 47]. Food processing SMEs have not shown an environmental commitment to carrying out their mandatory duties as seen in job descriptions and job specifications so food processing SMEs are untrained and carrying out additional tasks will be difficult. This empirical study could be the reason that the GHRM process did not establish OCBE of food processing SME owners in West Sumatra, Indonesia.

Unlike the results of previous studies [23-27], the results of this study give surprising that GHRM does not have a significant impact on the EP of food processing SMEs (H_5). This can happen because most of the owners of food processing SMEs have multiple positions, namely acting as owners or managers and also acting as employees. Previous studies on multi-task employees [48] show that those with multiple roles should be treated differently compared to employees who have a single task to achieve appropriate performance. Therefore, GHRM is unlikely to affect the EP of food processing SMEs. The results of this study are in line with [15-49] which explain that GHRM practices do not encourage increased EP.

As expected, the results show that OCBE among food processing SMEs owners is a strong predictor of EP (H_6). This means that food processing SMEs owners become role models by showing spontaneous behavior in helping employees understand environmental problems and supporting environmental initiatives so that food processing SMEs form employees with environmental concerns which ultimately benefit the natural environment. This finding has support from previous research on OCBE predicting EP [17-19].

5.2 Indirect effects (mediating effects)

GHRM was not a mediator in this study (H7a, H7b), consistent with previous research [34]. On the other hand, OCBE fully mediates the relationship between IWE and the EP of food processing SMEs (H8a). This finding confirms previous research [32] where the perfect Islamic way of working pays attention to the surrounding environment, both humans and the environment. With the meaning of the word, IWE can improve OCBE behavior and EP. Then this study also does not support (H8b) that OCBE is not a mediator of the GHRM relationship to the EP of food processing SMEs, consistent with [21] OCBE does not mediate the GHRM relationship seen from the aspect of green employee involvement on EP.

6. CONCLUSIONS, IMPLICATION AND LIMITATIONS

This study formulates ten hypotheses to investigate and analyze the relationship between IWE and EP with two mediating variables, namely GHRM and OCBE. The results of the study explain that to create a clean environment, OCBE behavior is needed by creating employee involvement in the environmental management system and individual social behavior that leads to an environment that will provide direct benefits to the natural environment and indirectly affect organizational success and self-benefit because has assisted voluntarily to the subjective well-being of a person who can thus be driven by work ethics because ethics guides actions and behavior following values and norms. From this description, it can be said that OCBE acts as a mediator and conversely GHRM does not act as a mediator in the IWE relationship on EP.

The implication of this research is to give guidance on how to achieve environmental cooperation, volunteerism, and workplace ethics which are very useful for obtaining a pollution-free environment. The study provides an

understanding to food processing SMEs owners to pay more attention to environmentally friendly behavior such as social behavior between owners and employees that leads to the environment. Social behavior is seen in cooperation, mutual help, and volunteering. This study also guides that cooperation, mutual help, and volunteerism in protecting the environment can be a driving force in improving EP. Then the food processing SMEs owner must be ethical in carrying out his business operations so that the environment is clean and not polluted by people who are not responsible for the environment. Besides that, the involvement of owners and employees in an environment that is driven by an IWE is the best way to make environmental improvements.

This research is inseparable from the limitations and suggestions for further research. This study has limitations in generalizing the findings because this study is a cross-sectional study, it is advisable to carry out a longitudinal study. Furthermore, this research cannot be generalized to other countries because it was carried out in one country, namely West Sumatra, Indonesia, so it is advisable to expand this research to several other countries such as Southeast Asian countries. then add variables in the research model such as demographic characteristics. Lastly, only food processing SMEs were considered in this study, for future studies may add other SME sectors to support and refine the findings of this research.

REFERENCES

[1] Najib, M., Fahma, F., Abror, A., Suhartanto, D. (2022). Organizational capability, market perspective, and green innovation adoption: Insight from Indonesian food processing small and medium-sized enterprises. Journal of Small Business Strategy, 32(2): 51-66. https://doi.org/10.53703/001c.32293

[2] Statistik, B.P. (2021). Usaha Mikro Kecil. https://www.bps.go.id/, accessed on Jan. 25, 2023.

[3] Najib, M., Septiani, S., Nurlaela, S. (2020). The role of innovation, entrepreneurial self-efficacy and local uniqueness on marketing performance in small and medium-sized restaurants. Journal of Foodservice Business Research, 23(6): 499-519. https://doi.org/10.1080/15378020.2020.1803687

[4] OECD. (2018). Environmental policy toolkit for SME greening in EU eastern partnership countries. OECD Publishing.

[5] Jermsittiparsert, K., Siriattakul, P., Wattanapongphasuk, S. (2019). Determining the environmental performance of Indonesian SMEs influence by green supply chain practices with moderating role of green HR practices. International Journal of Supply Chain Management, 8(3): 59-70. https://doi.org/10.59160/ijscm.v8i3.3249

[6] Statistik, B.P. (2022). Statistik Lingkungan Hidup Indonesia. Jakarta: Badan Pusat Statistik. https://www.bps.go.id/publication/2022/11/30/eb06d1c8e37285cac10c3086/statistik-lingkungan-hidup-indonesia-2022.html, accessed on Jan. 20, 2023.

[7] Chaniago, H. (2021). The effect of small business innovation and the role of government on the environment: Evidence from Indonesia. International Journal of Energy Economics and Policy, 11(6): 198-205. https://doi.org/10.32479/ijeep.11808

[8] Tevapitak, K., Helmsing, A.B. (2019). The interaction between local governments and stakeholders in environmental management: The case of water pollution by SMEs in Thailand. Journal of Environmental Management, 247: 840-848. https://doi.org/10.1016/j.jenvman.2019.06.097

[9] Chiarini, A. (2019). Why are manufacturing SMEs cancelling their ISO 9001 certification? Research from Italy. Production Planning & Control, 30(8): 639-649. https://doi.org/10.1080/09537287.2019.1566840

[10] Machado, M.C., Vivaldini, M., de Oliveira, O.J. (2020). Production and supply-chain as the basis for SMES' environmental management development: A systematic literature review. Journal of Cleaner Production, 273: 123141. https://doi.org/10.1016/j.jclepro.2020.123141

[11] Chams, N., García-Blandón, J. (2019). On the importance of sustainable human resource management for the adoption of sustainable development goals. Resources, Conservation and Recycling, 141: 109-122. https://doi.org/10.1016/j.resconrec.2018.10.006

[12] Oláh, J., Aburumman, N., Popp, J., Khan, M.A., Haddad, H., Kitukutha, N. (2020). Impact of Industry 4.0 on environmental sustainability. Sustainability, 12(11): 4674. https://doi.org/10.3390/su12114674

[13] Satrianto, A., Juniardi, E. (2023). Inclusive human development and inclusive green growth: A simultaneous approach. International Journal of Sustainable Development & Planning, 18(2): 523-530. https://doi.org/10.18280/ijsdp.180221

[14] Juniardi, E., Amar, S., Aimon, H. (2022). Panel data regression approach on inclusive green growth. Global Journal of Environmental Science and Management, 8(4): 533-544. https://doi.org/10.22034/GJESM.2022.04.06

[15] Elshaer, I.A., Sobaih, A.E.E., Aliedan, M., Azazz, A.M. (2021). The effect of green human resource management on environmental performance in small tourism enterprises: Mediating role of pro-environmental behaviors. Sustainability, 13(4): 1956. https://doi.org/10.3390/su13041956

[16] Anwar, N., Mahmood, N.H.N., Yusliza, M.Y., Ramayah, T., Faezah, J.N., Khalid, W. (2020). Green human resource management for organisational citizenship behaviour towards the environment and environmental performance on a university campus. Journal of Cleaner Production, 256: 120401. https://doi.org/10.1016/j.jclepro.2020.120401

[17] Channa, N.A., Hussain, T., Casali, G.L., Dakhan, S.A., Aisha, R. (2021). Promoting environmental performance through corporate social responsibility in controversial industry sectors. Environmental Science and Pollution Research, 28: 23273-23286. https://doi.org/10.1007/s11356-020-12326-2

[18] Qasim, M., Rizvi, T.H., Irshad, M. (2020). Impact of ethical leadership on task performance and organizational citizenship behavior: Moderating role of Islamic work ethics. Journal of Management and Research, 7(2): 166-193. https://doi.org/10.29145/jmr/72/070206

[19] Khan, N.U., Wu, W.Y., Saufi, R.B.A., Sabri, N.A.A., Shah, A.A. (2021). Antecedents of sustainable performance in manufacturing organizations: A structural equation modeling approach. Sustainability, 13(2): 897. https://doi.org/10.3390/su13020897

[20] Kim, Y.J., Kim, W.G., Choi, H.M., Phetvaroon, K. (2019). The effect of green human resource management

on hotel employees' eco-friendly behavior and environmental performance. International Journal of Hospitality Management, 76: 83-93. https://doi.org/10.1016/j.ijhm.2018.04.007
[21] Pham, N.T., Tučková, Z., Jabbour, C.J.C. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. Tourism Management, 72: 386-399. https://doi.org/10.1016/j.tourman.2018.12.008
[22] Alola, U.V., Cop, S., Tarkang, M.E. (2022). Green training an effective strategy for a cleaner environment: Study on hotel employees. Journal of Public Affairs, 22(3): e2489. https://doi.org/10.1002/pa.2489
[23] Malik, S.Y., Hayat Mughal, Y., Azam, T., Cao, Y.K., Wan, Z.F., Zhu, H.G., Thurasamy, R. (2021). Corporate social responsibility, green human resources management, and sustainable performance: Is organizational citizenship behavior towards environment the missing link? Sustainability, 13(3): 1044. https://doi.org/10.3390/su13031044
[24] Haldorai, K., Kim, W.G., Garcia, R.F. (2022). Top management green commitment and green intellectual capital as enablers of hotel environmental performance: The mediating role of green human resource management. Tourism Management, 88: 104431. https://doi.org/10.1016/j.tourman.2021.104431
[25] Muisyo, P.K., Qin, S., Ho, T.H., Julius, M.M., Barisoava Andriamandresy, T. (2022). Implications of GHRM on organisational citizenship behaviour: The mediating role of enablers of green culture. International Journal of Manpower, 43(3): 719-741. https://doi.org/10.1108/IJM-05-2020-0245
[26] Sun, X.M., El Askary, A., Meo, M.S., Hussain, B. (2022). Green transformational leadership and environmental performance in small and medium enterprises. Economic Research-Ekonomska Istraživanja, 35(1): 5273-5291. https://doi.org/10.1080/1331677X.2021.2025127
[27] Darvishmotevali, M., Altinay, L. (2022). Green HRM, environmental awareness and green behaviors: The moderating role of servant leadership. Tourism Management, 88: 104401. https://doi.org/10.1016/j.tourman.2021.104401
[28] Yue, G.L., Wei, H.Q., Khan, N.U., Saufi, R.A., Yaziz, M.F.A., Bazkiaei, H.A. (2023). Does the environmental management system predict TBL performance of manufacturers? The role of green HRM practices and OCBE as serial mediators. Sustainability, 15(3): 2436. https://doi.org/10.3390/su15032436
[29] Parmawati, R., Mulyadi, F., Rosyani, R., Suaedi, S., Yunikewaty, Y. (2023). The role of environmental education and green supply chain practices in achieving sustainable development: Evidence from Indonesia. International Journal of Energy Economics and Policy, 13(1): 421-430. https://doi.org/10.32479/ijeep.14030
[30] Islam, T., Ahmad, S., Kaleem, A., Mahmood, K. (2021). Abusive supervision and knowledge sharing: Moderating roles of Islamic work ethic and learning goal orientation. Management Decision, 59(2): 205-222. https://doi.org/10.1108/MD-08-2019-1069
[31] Ahmed, A., Arshad, M.A., Mahmood, A., Akhtar, S. (2019). The influence of spiritual values on employee's helping behavior: The moderating role of Islamic work ethic. Journal of Management, Spirituality & Religion, 16(3): 235-263. https://doi.org/10.1080/14766086.2019.1572529
[32] Arauf, M.A. (2021). Ecological view from the perspective of quranic verses: Contesting the idea of religion and environment. International Journal of Social Science and Religion (IJSSR), 2(2): 105-116. https://doi.org/10.53639/ijssr.v2i2.45
[33] Islam, T., Hussain, D., Ahmed, I., Sadiq, M. (2021). Ethical leadership and environment specific discretionary behaviour: The mediating role of green human resource management and moderating role of individual green values. Canadian Journal of Administrative Sciences/Revue Canadienne Des Sciences de L'Administration, 38(4): 442-459. https://doi.org/10.1002/cjas.1637
[34] Rehman, S.U., Kraus, S., Shah, S.A., Khanin, D., Mahto, R.V. (2021). Analyzing the relationship between green innovation and environmental performance in large manufacturing firms. Technological Forecasting and Social Change, 163: 120481. https://doi.org/10.1016/j.techfore.2020.120481
[35] Zahl-Thanem, A., Burton, R.J., Vik, J. (2021). Should we use email for farm surveys? A comparative study of email and postal survey response rate and non-response bias. Journal of Rural Studies, 87: 352-360. https://doi.org/10.1016/j.jrurstud.2021.09.029
[36] Karatepe, O.M., Hsieh, H., Aboramadan, M. (2022). The effects of green human resource management and perceived organizational support for the environment on green and non-green hotel employee outcomes. International Journal of Hospitality Management, 103: 103202. https://doi.org/10.1016/j.ijhm.2022.103202
[37] Ameen, S., Praharaj, S.K. (2020). Problems in using whatsapp groups for survey research. Indian Journal of Psychiatry, 62(3): 327-328. https://doi.org/10.4103/psychiatry.IndianJPsychiatry_321_20
[38] Obeidat, S.M., Al Bakri, A.A., Elbanna, S. (2020). Leveraging "green" human resource practices to enable environmental and organizational performance: Evidence from the qatari oil and gas industry. Journal of Business Ethics, 164: 371-388. https://doi.org/10.1007/s10551-018-4075-z
[39] Sekaran, U., Bougie, R. (2016). Research Methods for Business: A Skill Building Approach. John Wiley & Sons.
[40] Hair, J.F., Ringle, C.M., Gudergan, S.P., Fischer, A., Nitzl, C., Menictas, C. (2019). Partial least squares structural equation modeling-based discrete choice modeling: An illustration in modeling retailer choice. Business Research, 12: 115-142. https://doi.org/10.1007/s40685-018-0072-4
[41] Henseler, J., Ringle, C.M., Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. Journal of the Academy of Marketing Science, 43: 115-135. https://doi.org/10.1007/s11747-014-0403-8
[42] Belás, J., Khan, K.A., Maroušek, J., Rozsa, Z. (2020). Perceptions of the importance of business ethics in SMEs: A comparative study of Czech and Slovak entrepreneurs. Ethics & Bioethics, 10(1-2): 96-106. https://doi.org/10.2478/ebce-2020-0010
[43] Kraus, P., Stokes, P., Cooper, S.C., Liu, Y.P., Moore, N., Britzelmaier, B., Tarba, S. (2020). Cultural antecedents

of sustainability and regional economic development-a study of SME 'mittelstand'firms in Baden-Württemberg (Germany). Entrepreneurship & Regional Development, 32(7-8): 629-653. https://doi.org/10.1080/08985626.2020.1713223

[44] Yong, J.Y., Yusliza, M.Y., Jabbour, C.J.C., Ahmad, N.H. (2020). Exploratory cases on the interplay between green human resource management and advanced green manufacturing in light of the ability-motivation-opportunity theory. Journal of Management Development, 39(1): 31-49. https://doi.org/10.1108/JMD-12-2018-0355

[45] Rudawska, E. (2019). Sustainable marketing strategy in food and drink industry: A comparative analysis of B2B and B2C SMEs operating in Europe. Journal of Business & Industrial Marketing, 34(4): 875-890. https://doi.org/10.1108/JBIM-05-2018-0171

[46] Beier, G., Matthess, M., Guan, T., Grudzien, D.I.D.O.P., Xue, B., de Lima, E.P., Chen, L. (2022). Impact of Industry 4.0 on corporate environmental sustainability: Comparing practitioners' perceptions from China, Brazil and Germany. Sustainable Production and Consumption, 31: 287-300. https://doi.org/10.1016/j.spc.2022.02.017

[47] Heiens, R.A., Pleshko, L.P., Ahmed, A.A. (2019). A comparison of the relationship marketing outcomes of SMEs vs large enterprises in the Kuwait fast food industry. British Food Journal, 121(10): 2442-2453. https://doi.org/10.1108/BFJ-03-2019-0180

[48] Vithayathil Varghese, N., Mahmoud, Q.H. (2020). A survey of multi-task deep reinforcement learning. Electronics, 9(9): 1363. https://doi.org/10.3390/electronics9091363

[49] Bhatti, S.H., Saleem, F., Murtaza, G., Haq, T.U. (2022). Exploring the impact of green human resource management on environmental performance: The roles of perceived organizational support and innovative environmental behavior. International Journal of Manpower, 43(3): 742-762. https://doi.org/10.1108/IJM-05-2020-0215