



Unlocking Green Initiatives: A Comprehensive Study on Factors Influencing Employee Environmental Behavior at PT Petrokimia Gresik

> Liliek Harmianto Purbawinasta^{1*}, Gancar Candra Premananto¹ ¹Universitas Airlangga, Indonesia

> > *Corresponding Author. E-mail: liliekharmianto@gmail.com Received: 2 Agus 2023; Revised: 18 Okt 2023; Accepted: 5 Feb 2024

Abstract: Growing concerns about the company's environmental impact and the subsequent efforts to intervene with employees have proven ineffective at PT. Petrokimia Gresik. The lack of active participation among employees serves as evidence of the company's inability to foster environmentally conscious behavior. This research aims to assess the impact of company policies related to community social responsibility (CSR), the work environment's influence on employee well-being, individual employees' environmental knowledge, and leadership's role in ethical leadership on the development of environmental behavior among PT. Petrokimia Gresik employees. Employing qualitative methods and utilizing partial least square (PLS) for data analysis, this study reveals that corporate social responsibility programs, environmental knowledge, and employee wellbeing directly influence employees' environmental behavior. Additionally, the results indicate that employee well-being is shaped by environmental knowledge and ethical leadership. Through indirect testing, the study identifies employee well-being as a mediating variable between environmental knowledge and ethical leadership, influencing employees' environmental behavior. The dominant direct relationship of employee environmental knowledge in shaping green behavior, along with its indirect influence through the employee welfare variable, underscores the significance of fostering employee initiatives. Therefore, enhancing employee awareness at PT. Petrokimia Gresik necessitates an increase in environmental knowledge among employees to promote environmental conservation.

Keyword: Employee green behavior, PT. Petrokimia Gresik, employee well-being

Abstrak: Peningkatan kepedulian terhadap dampak perusahaan terhadap lingkungan yang meningkatkan beragam upaya intervensi terhadap karyawan tidak berjalan efektif di PT. Petrokimia Gresik. Tingkat partisipasi karyawan yang rendah menjadi bukti dari ketidak efektivan perusahaan dalam membangun perilaku hijau karyawan. Penelitian ini bertujuan untuk mengetahui pengaruh kebijakan perusahaan melalui community social responsibility (CSR), lingkungan kerja melalui employee well-being, personal karyawan melalui environmental knowledge, dan pimpinan yang ditinjau dari *ethical leadership* terhadap *employee green behaviour* di PT. Petrokimia Gresik. Penelitian menggunakan metode kualitatif dengan partial least square (PLS) sebagai teknik analisis data. Penelitian ini menemukan bahwa program tanggung jawab sosial perusahaan, pengetahuan tentang lingkungan, dan kesejahteraan karyawan memiliki pengaruh langsung terhadap tindakan hijau karyawan.



Creative Commons Non Comencial CC-8Y-NC-SA: This work is licensed under a Welfare : Jurnal Ilmu Kesejahtenaan Sosial Creative Commons Attribution-NonCommencial 4.0 International License (NC.ps://creativecommons.org/ficenses/by-ncsa/4Q/deed.enj which permits non-comencial use, reproduction, and distribution of the work whitout further permission provided the original work is attributed as spesified on the Welfare : Jurnal Ilmu Kesejahtenaan Sosial and Open Access pages. Hasil penelitian juga menunjukkan bahwa kesejahteraan karyawan dipengaruhi oleh pengetauan terhadap lingkungan dan kepemimpinan etik. Dalam proses pengujian secara tidak langsung, penelitian ini menemukan kesejahteraan karyawan menjadi variabel yang memediasi pengetahuan tentang lingkungan dan kepemimpinan etik terhadap tindakan hijau karyawan. Hubungan dominan secara langusng pengetahuan lingkungan karyawan terhadap pembentukan perilaku hijau yang juga berpengaruh secara tidak langsung melalui variabel kesejahteraan karyawan menunjukkan pembentukan inisiatif karyawan menjadi elemen penting, sehingga untuk meningkatkan kepedulian karyawan PT. Petrokimia Gresik dibutuhkan peningkatan pengetahuan karyawan tentang konservasi lingkungan.

Kata Kunci: Tindakan Hijau Karyawan, PT. Petrokimia Gresik, Kesejahteraan Karyawan

INTRODUCTION

The impact of pollution from utilitarian goods (Ahmed et al., 2020), prompting diverse efforts towards establishing a green culture (Rizki & Augustine, 2022), is implemented through regulations guiding organizations or companies. The administrative sanctions stipulated in Law No. 11 of 2020 on Job Creation, Article 82 B paragraph 3, serve as evidence of restrictions on production waste aimed at fostering a corporate culture. Similarly, Law No. 32 of 2009 on social and environmental responsibility establishes the obligation for companies to be more environmentally conscious. This regulation is further reinforced by Government Regulation (PP) No. 47 of 2012, concerning the Social and Environmental Responsibility of Limited Liability Companies as a guarantee for the community to be protected from environmental damage caused by companies. Companies respond to these regulations to encourage environmental management activities and raise employees' environmental awareness.

As reflected in these regulations, the company's adherence to environmental concerns contributes to shaping employees' behavior in green initiatives. The behavior known as Employee Green Behavior (EGB) (Norton et al., 2015) becomes an obligation imposed by the company on its employees. Implementing this obligation requires employees to promote green behavior in the workplace (Ramus & Steger, 2000). Employees who exhibit green behavior ultimately enhance a company's sustainability (Felin et al., 2015). This pattern is exemplified by the PT. Petrokimia Gresik adopted the ISO 14001:2015 Environmental Management System and the Corporate Environmental Performance Rating (PROPER) program organized by the Ministry of Environment and Forestry (KLHK).

Despite PT. Petrokimia Gresik's commendable environmental management is based on compliance with these tools, achieving and maintaining corporate sustainability, which requires collaboration among all elements of the company, including employees, in implementing effective environmental management.

The company's regulations regarding Employee Green Behavior (EGB) formation at PT. Petrokimia Gresik was not the sole driving factor. Employees play a role in voluntarily shaping environmentally conscious behaviors. Concrete actions reflecting this voluntary practice include turning off electrical equipment during inactive periods and conserving office consumables. These actions represent behaviors aimed at protecting and conserving organizational resources (Kim et al., 2017). However, voluntary green behavior among PT Petrokimia Gresik employees remains low, as evidenced by data on office water and electricity consumption and the accumulation of paper waste over the three years from 2020 to 2022, showing an annual increase.

The motivation for environmentally conscious behavior among company employees was partially identified by examining specific variables. Kotchen & Reiling (Kotchen & Reiling, 2000), Su & Swanson (Su & Swanson, 2019), and Tudor et al. (Tudor et al., 2008) emphasize the environmental trigger aspect originating from individuals within the organization as a factor driving employees to take relevant actions for environmental conservation. Other research connects group and organizational motivation, as Raineri and Paille demonstrated (Raineri & Paillé, 2016). Studies examining the motivations that can influence employees' green behavior at various levels, including organizational, individual, and leadership aspects, have been overlooked by researchers.

This research aims to identify variables that significantly influence the formation of employee behavior considering environmental conservation. To achieve this objective, the study employs a two-step identification process. The first identification involves examining the relationships among various variables that impact employee green behavior, encompassing individual aspects related to environmental knowledge and employee wellbeing, leadership aspects associated with ethical leadership, and organizational aspects linked to community social responsibility (CSR) programs. The results of this initial identification serve as the foundation for the formulation of the second identification, which focuses on identifying dominant factors. In this section, the study also identifies dominant variables that shape employee actions that contribute to reducing environmental pollution.

This research is based on the hypothesis.

H₁: CSR influences employees' green behavior among employees in PT. Petrokimia Gresik.

H₂: CSR influences employee well-being in PT. Petrokimia Gresik.

H₃: Environmental knowledge influences employees' green behavior in PT. Petrokimia Gresik.

H₄: Environmental knowledge influences employee well-being in PT. Petrokimia Gresik.

H₅: Ethical leadership influences Employee Green Behavior in PT. Petrokimia Gresik.

H₆: Ethical leadership influences employee well-being in PT. Petrokimia Gresik.

H₇: Employee well-being influences employees' green behavior in PT. Petrokimia Gresik.

- H₈: Employee well-being mediates the relationship between CSR and employee green behavior in PT. Petrokimia Gresik.
- H₉: Employee well-being mediates the relationship between environmental knowledge and employee green behavior in PT. Petrokimia Gresik.
- H₁₀: Employee well-being mediates the relationship between ethical leadership and employee green behavior in PT. Petrokimia Gresik.

METHODS

This study employs a quantitative approach. The population for this research consisted of employees at PT Petrokimia Gresik, totaling 1,942 permanent employees. The sample was a subset of the population chosen based on the characteristics and number of employees (Sugiyono, 2017). In this study, the sampling technique utilized was census or saturation sampling, encompassing the entire population. Thus, the sample for the research includes all organic employees of PT Petrokimia Gresik from Grades 1 to 6. The questionnaire achieved a response rate of 28%, with a total of 536 questionnaires. This response rate is deemed acceptable, aligning with Sekaran & Bougie's (Sekaran & Bougie, 2010) assertion that the ideal response rate for social science research is between 5% and 35%.

The data analysis technique employed in this study was Partial Least Squares (PLS). PLS is a variance-based statistical method within the Structural Equation Modeling (SEM) framework. As a predictive modeling approach, PLS does not assume a specific distribution to estimate the parameters or predict causality relationships. The model evaluation consists of two stages: assessing the measurement model (outer model) and the structural model (inner model) (Abdillah & Hartono, 2015).

An outer model was used to assess the validity and reliability of the instruments. In the validity testing of this research, the focus was on construct validity, encompassing both convergent and discriminant validity. Reliability testing was conducted to measure the consistency of the measurement tool for assessing a specific concept. The structural model was evaluated using R2 for dependent constructs, the values of path coefficients, or t-values for each path, and to test the significance between constructs. The significance of hypothesis testing can be determined by comparing the t-table values with t-statistics. If the t-statistics exceed the t-table values, the hypothesis is supported with a significance level of 5% (Hartono & Abdillah, 2014). Additionally, Inner model testing can be conducted by examining the Goodness of Fit (GoF) index values based on Tenenhaus et al. (2004), which can be calculated using the formula $\Sigma \sqrt{AVE \times R2}$.

Subsequently, mediation effects were examined. These effects were tested when a suspected mediating variable existed between the independent and dependent variables. This implies that the independent variable influences the dependent variable through a process represented by the mediating variable (Barron & Kenny, 1986). The research method examines the influence of independent variables, namely CSR, environmental knowledge, and ethical leadership, on dependent variables, namely employee well-being and green behavior.

RESULTS AND DISCUSSION

Understanding the Link between CSR, environmental knowledge, ethical leadership, employee well-being, and employee green behavior

In this section, data testing examines the relationships between CSR, environmental knowledge, ethical leadership, employee well-being, and employee green behavior. The process of identifying these relationships involves three mechanisms, as described below:

Characteristics of subjects

The participants were identified based on gender, education, tenure, and job position. The following table presents the respondents' characteristic data categorized by the dominant percentages.

Item	_	Total	Percentage (%)
Educati	on		
	High school/equivalent	315	59
	SI	184	34
	S2	37	7
	Total	536	100
Period o	fwork		
	<10 Years	286	53
	11-20 Years	232	43
	>21 Years	18	7
	Total	536	100
Gender			
	Male	476	89
	Female	60	11
	Total	536	100

Table 1. Respondent characteristi	CS
-----------------------------------	----

Source: Processed Primary Data, 2023

The measurement model in this study consists of a reflective measurement model with variables such as CSR, environmental knowledge, ethical leadership, employee wellbeing, and employee green behavior measured reflectively. The reflective measurement model consists of loading factors, Cronbach's alpha, composite reliability values greater than or equal to 0.7, and average variance extracted (AVE) values greater than or equal to 0.5.

Measurement model result

The measurement of the reliability and validity of the model refers to the measurement model using indicator coefficient values, composite reliability (CR), and average variance extracted (AVE) for each variable (Hair et al., 2012).

Table 2. Results of the Evaluation of the Reflective Measurement Model

Welfare : Jurnal Ilmu Kesejahteraan Sosial, Vol. 12, No. 2, 2023

Measure	Indikator	Nilai Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Employee green	EGB1	0,874	0,827	0,896	0,743
behaviour	EGB2	0,849			
	EGB3	0,862			
CSR	CSR1	0,793	0,909	0,932	0,734
	CSR2	0,887			
	CSR3	0,873			
	CSR4	0,854			
	CSR5	0,875			
Environmental	EK1	0,822	0,896	0,92	0,659
Knowledge	EK2	0,831			
8	EK3	0,844			
	EK4	0,76			
	EK5	0,778			
	EK6	0,831			
Ethical leadership	EL1	0,865	0,918	0,942	0,803
1	EL2	0,912			
	EL3	0,905			
	EL4	0,902			
Employee wellbeing	EWB1	0,837	0,841	0,903	0,756
	EWB2	0,905			
	EWB3	0,865			

Source: Data Processing Results Using SmartPLS Software

The item reliability in the presented model is considered consistent, as all reflective factor loadings exceed the recommended threshold of 0. 5, as suggested by Chin (Chin, 2010). Regarding the Composite Reliability (CR) index, all items surpass the minimum value of 0.70 (Hair et al., 2012), with ethical leadership exhibiting the highest value (0.942) and employee green behavior the lowest (0.896). These results indicated that the model passed the reliability test. Concerning the convergent validity of the model, the last column in Table 2 reveals that all Average Variance Extracted (AVE) values exceed the 0.50 cutoff recommended by Fornell and Larcker (Fornell & Larcker, 1981).

To confirm the established discriminant validity, two tests were conducted: AVE (based on Fornell and Larcker, 1981) and the heterotrait-monotrait ratio of correlations (HTMT) developed by Henseler et al. (Henseler et al., 2015).

	CSR	Employee green behaviour	Employee wellbeing	Environmental knowledge	Ethical leadership
CSR	0,857				
Employee green behaviour	0,396	0,862			
Employee wellbeing	0,388	0,506	0,87		
Environmental knowledge	0,454	0,64	0,538	0,812	
Ethical leadership	0,593	0,388	0,518	0,473	0,896

Tabel 3. Criteria Fornell-Lacker

Source: Data Processing Results Using SmartPLS Software

ruber 1. value meterotrate Monociale Ratio (mmm)					
	CSR	Employee green behaviour	Employee wellbeing	Environmental knowledge	Ethical leadership
CSR					
Employee green behaviour	0,457		1.2.1		
Employee wellbeing	0,434	0,592			
Environmental knowledge	0,503	0,74	0,604		
Ethical leadership	0,649	0,445	0,581	0,522	

Tabel 4. value Heterotrait-Monotrait Ratio (HTMT)

Source: Data Processing Results Using SmartPLS Software

Table 3 indicates that the square root of AVE (on the diagonal) is higher than all correlations below it, signifying that each latent variable has more variance than any other latent variable (Henseler et al., 2009). As for HTMT, using the absolute criterion of 0.85, Table 4 reveals that all ratios are below 0.85, and the upper intervals for all relationships are below 1, indicating that discriminant validity is not an issue in this study. Therefore, the results demonstrate satisfactory discriminant validity.

AVE is also used for the Fornell-Larcker criterion (Fornell & Larcker, 1981). The results of the discriminant validity assessment are presented in Table 3. Discriminant validity is established when the shared variance between two constructs (i.e., the square of their intercorrelation) is less than the AVE of each construct (Fornell & Larcker, 1981). In this data analysis, no correlation between the two latent constructs was equal to or greater than the square root of the AVE for both constructs. Therefore, discriminant validity is

supported, and confidence is gained in the fact that all constructs in the research model measure distinct concepts. Finally, a cross-loading examination must be conducted to test the discriminant validity. In this context, we analyzed whether the loading of an indicator on a latent variable is greater than the loading of a specific indicator variable on all other latent variables. The analysis revealed that each indicator variable had the highest loading on its respective latent variable. Therefore, these criteria were satisfied.

Hair et al. (Hair et al., 2011) and Hair Jr. et al. (Hair Jr. et al., 2017) stated that research on discriminant validity relies on assessing Fornell-Larcker criteria and cross-loading. In the cross-loading method, each indicator in the research variable must have the highest cross-loading value on the variable it forms, compared to the cross-loading values of the other variables. Based on the evaluation results depicted in Table 5, the indicators used in this study have demonstrated good discriminant validity in constructing their respective variables.

	CSR	Employee green behaviour	Employee wellbeing	Environment al knowledge	Ethical leadership
CSR1	0,793	0,319	0,362	0,387	0,449
CSR2	0,887	0,348	0,31	0,381	0,498
CSR3	0,873	0,351	0,325	0,386	0,512
CSR4	0,854	0,321	0,326	0,381	0,525
CSR5	0,875	0,353	0,339	0,401	0,553
EGB1	0,32	0,876	0,466	0,576	0,309
EGB2	0,362	0,848	0,402	0,528	0,339
EGB3	0,342	0,861	0,437	0,556	0,355
EK1	0,331	0,56	0,429	0,829	0,365
EK2	0,345	0,588	0,455	0,838	0,368
EK3	0,388	0,559	0,447	0,847	0,394
EK4	0,375	0,415	0,399	0,752	0,387
EK5	0,372	0,435	0,425	0,769	0,385
EK6	0,4	0,546	0,461	0,829	0,405
EL1	0,516	0,334	0,452	0,383	0,865
EL2	0,543	0,332	0,448	0,433	0,912
EL3	0,527	0,37	0,477	0,434	0,905
EL4	0,538	0,351	0,479	0,438	0,902
EWB1	0,269	0,352	0,838	0,37	0,385
EWB2	0,333	0,429	0,905	0,439	0,452
EWB3	0,391	0,512	0,865	0,561	0,497

Table 5. Cross Loadings

Source: Data Processing Results Using SmartPLS Software

Evaluation of the structure model

Subsequent testing in the analysis using the PLS model involves evaluating the structural model (inner model), referring to the fit of determination coefficients (R^2 values), effect sizes (f^2), and the final testing of previously hypothesized relationships (*Chin*, 2009). Inner model testing in this study examined the significance of path coefficients or hypothesis testing to assess the direct and indirect effects between variables, followed by the goodness-of-fit test or R^2 . The path coefficient test is performed to assess the strength of the effect or influence between the independent and dependent variables by examining the t-statistic or p-value. The R^2 test measured the substantive influence of specific endogenous and exogenous variables.

Hypothesis testing was conducted by examining the t-statistics and p-values. Research hypotheses are acceptable if the p-value is less than 0.05 or the t-statistic value is greater than 1.96. Hair et al. (2021) also suggested that the level of influence can be observed through the F-square value, categorized as low (≤ 0.02), moderate (≤ 0.15), and high (≤ 0.35).

HIPOTESIS	PATH COEFFICIE NT	T- STATISTI CS	P VALU E	KESIMPUL AN	F SQUAR E
$CSR \rightarrow EMPLOYEE$	0,104	2,184	0,029	diterima	0,011
GREEN BEHAVIOUR					
$CSR \rightarrow EMPLOYEE$	0,026	0,545	0,586	ditolak	0,001
WELLBEING					
EMPLOYEE	0,209	3,599	0,000	diterima	0,050
$WELLBEING \rightarrow$					
EMPLOYEE GREEN					
BEHAVIOUR					
ENVIRONMENTAL	0,569	13,651	0,000	diterima	0,279
$KNOWLEDGE \rightarrow$					
EMPLOYEE GREEN					
BEHAVIOR					
ENVIRONMENTAL	0,371	7,746	0,000	diterima	0,162
$KNOWLEDGE \rightarrow$					
EMPLOYEE					
WELLBEING					

Table 6. Results of the t-statistical	test and P-value for the direct effect.
---------------------------------------	---

ETHICAL LEADERSHIP	0,058	1,183	0,237	ditolak	0,000
\rightarrow EMPLOYEE GREEN					
BEHAVIOR					
ETHICAL LEADERSHIP	0,328	6,580	0,000	diterima	0,103
$\rightarrow EMPLOYEE$					
WELLBEING					

Source: Data Processing Results Using SmartPLS Software

Table 6 reveals that employee green behavior is influenced by CSR, employee well-being, and environmental knowledge, with p-values less than 0.05 and t-statistics greater than 1.96, confirming the acceptance of H1, H3, and H4. However, ethical leadership does not affect employee green behavior, as evidenced by a t-statistic of 1.183 and a p-value of 0.237, leading to the rejection of H5. Conversely, the variable of employee well-being is significantly influenced by environmental knowledge (p-value=0.000; t-statistic=7.746) and ethical leadership (p-value=0.000; t-statistic=6.580), supporting H6 and H7. In contrast, CSR does not affect employee well-being, with p-values less than 0.05 and t-statistics greater than 1.96, resulting in rejecting H2. This outcome was elucidated in the bootstrapping analysis, as shown in Figure 1.

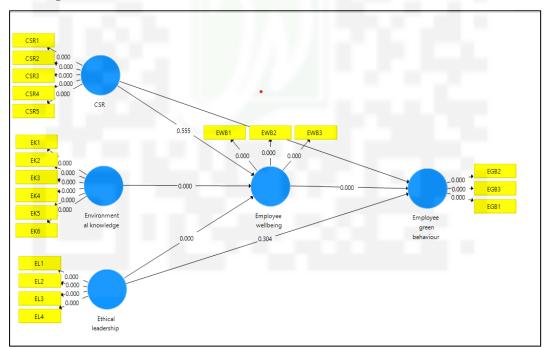


Figure 1. Hypothesis Testing Results

Hypothesis testing for indirect effects or mediation is conducted by observing the tstatistic values and p-values. Research hypotheses are accepted if the p-value is less than 0.05, or the t-statistic value is greater than 1.96.

HIPOTESIS	ORIGINAL SAMPLE	T- STATISTIC S	P VALUE	KESIMPULA N
$CSR \rightarrow EMPLOYEE$ WELLBEING $\rightarrow EMPLOYEE$ GREEN BEHAVIOUR	0,006	0,509	0,611	ditolak
ENVIRONMENTAL KNOWLEDGE → EMPLOYEE WELLBEING → EMPLOYEE GREEN BEHAVIOUR	0,078	3,261	0,001	diterima
ETHICAL LEADERSHIP→ EMPLOYEE WELLBEING→ EMPLOYEE GREEN BEHAVIOUR	0,069	3,137	0,002	diterima

Table 7. Results of the t-statistical test and P-value for the indirect effect.

Source: Data Processing Results Using SmartPLS Software

Table 7 indicates that employee wellbeing serves as a mediator for the influence of environmental knowledge (t-statistic=3.261; p-values=0.001) and ethical leadership (t-statistic=3.137; p-values=0.002) on employee green behavior, confirming the acceptance of H9 and H10. In contrast, a t-statistic value of 0.509 and p-values of 0.611 suggest that CSR directly influences employee green behavior without needing to be mediated by the employee wellbeing variable, leading to the rejection of H8.

Employee green behavior: How PT. Petrokimia Gresik can help the environment.

The findings of this study reveal that employees' behavior in preserving and caring for the environment is directly influenced by CSR programs, employees' environmental knowledge, and employee well-being in PT. Petrokimia Gresik. However, ethical leadership is identified in this study as a variable that does not directly influence employees' green initiation actions. The ethical leadership model directly impacts employee well-being, making it indirectly influential on green initiation. Employee well-being is also influenced by employees' environmental knowledge, allowing the knowledge variable to affect green initiation actions directly and indirectly. Meanwhile, CSR, which does not affect the ethical leadership model and is not mediated by well-being, is a variable that directly influences green initiation.

The direct influence of CSR on employees' green initiatives in PT. Petrokimia Gresik was propelled by a series of company mechanisms to implement environmentally focused social programs. This argument is also supported by De Roeck and Farooq (De Roeck & Farooq, 2018) and Raineri and Paillé (Raineri & Paillé, 2016), who assert that increased employee commitment to green initiatives is influenced by the presence of environmentally oriented CSR programs. The relationship between a company's environmentally oriented social programs becomes a driving factor for employees to take actions aligned with the company's initiatives (De Roeck & Maon, 2018). This manifests the respect that employees have for the company.

The emergence of green initiation actions, driven by a commitment to support corporate responsibility, is also associated with employees' environmental knowledge. Safari et al., (2018) indicate that environmental knowledge directly affects employees' green behavior. Employees with environmental knowledge tend to be more concerned and inclined to take action to contribute to environmental conservation. This link between knowledge and environmental programs (Chan & Hawkins, 2010). Ahmed et al. (Ahmed et al., 2020) similarly find that employees with knowledge and concern for the environment are more likely to exhibit green actions and behaviors and are more committed to their organizational environmental context.

The commitment of employees to their environment has an impact on enhancing well-being. Well-being, linked to increased employee concern for the environment, can be shaped by their knowledge of environmental issues. Murni et al. (Murni et al., 2018) also explored the impact of knowledge management on well-being, concluding that environmental knowledge can enhance employee well-being. Employees with environmental knowledge are more willing to contribute to environmental initiatives, consequently elevating employee well-being within the organizational framework. Employee well-being also directly influences their concern for the environment. This assertion is supported by Farooq et al. (Farooq et al., 2017), Su & Swanson (Su & Swanson, 2019), and Kim et al. (Kim et al., 2017), who state that employees' perceived well-being

significantly shapes corporate identity, fostering respect and compliance with various corporate initiatives.

Respect and pride among employees towards their leaders drive performance improvement, leading to increased well-being. Barnett (Barnett, 2008) contends that leaders are responsible for assisting and motivating employees, thereby providing impetus for performance enhancement. Enhanced employee performance contributes to organizational performance improvement fostered by ethical leadership practices (Wood et al., 2021). Leaders directing their policies towards environmental concerns and promoting increased well-being indirectly affect employees' environmental concerns. This is because employees with higher levels of well-being tend to exhibit green behavior (Ahmed et al., 2020). This illustrates that the implementation of ethical leadership can indirectly impact green practices through employee well-being. These findings align with the conclusion of Islam et al. (Islam et al., 2021), asserting a relationship between ethical leadership and green practices.

CONCLUSION

This study did not substantiate the increase in employees' environmental concern, which was traditionally perceived as a company-driven incentive in various policies. In contrast, this study identifies the environmental concerns of PT. Petrokimia Gresik employees develop initiatives rooted in their environmental knowledge. This is demonstrated through t-statistic and p-value tests, indicating that knowledge is the primary determinant factor. Knowledge influences employees' environmental care actions, directly and indirectly, and is mediated by employee well-being. While employee well-being has a direct impact, it predominantly serves as a mediator for other variables that do not have a direct but insignificant influence on employees' environmental concerns.

Initiatives related to employees' intrinsic aspects identified in this study were based on testing various variables using the partial least squares (PLS) technique. This technique provides predictions of the distribution of specified variables through parameter estimation to predict causal relationships. However, determining variables such as CSR, environmental knowledge, ethical leadership, employee well-being, and employee green behavior, which are the focus of this research, overlooks the existence of other variables such as green organizational culture. This limitation provides an avenue for further research to critique or reinforce these findings.

REFERENCES

- Abdillah, W., & Hartono, J. (2015). Partial Least Square (PLS) Alternative. Structural Equation Modelling (SEM) dalam Penelitian Bisnis. Penerbit Andi.
- Ahmed, M., Zehou, S., Raza, S. A., Qureshi, M. A., & Yousufi, S. Q. (2020). Impact of <scp>CSR</scp> and environmental triggers on employee green behavior: The mediating effect of employee <scp>well-being</scp>. Corporate Social Responsibility and Environmental Management, 27(5), 2225–2239. https://doi.org/10.1002/csr.1960
- Barnett, J. E. (2008). The ethical practice of psychotherapy: easily within our reach. *Journal* of *Clinical Psychology*, 64(5), 569–575. https://doi.org/10.1002/JCLP.20473
- Barron, R. M., & Kenny, D. A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Chan, E. S. W., & Hawkins, R. (2010). Attitude towards EMSs in an international hotel: An exploratory case study. *International Journal of Hospitality Management*, 29(4), 641–651. https://doi.org/10.1016/j.ijhm.2009.12.002
- Chin, W. W. (2009). How to write up and report PLS analyses. In J. E. Gentle, W. K. Härdle, & Y. Mori (Ed.), *Handbook of Partial Least Squares*. Springer.
- Chin, W. W. (2010). How to Write Up and Report PLS Analyses. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Ed.), Handbook of Partial Least Squares: Concepts, Methods and Applications inMarketing and Related Fields (hal. 655–690). Springer. https://doi.org/10.1007/978-3-540-32827-8_29
- De Roeck, K., & Farooq, O. (2018). Corporate Social Responsibility and Ethical Leadership: Investigating Their Interactive Effect on Employees' Socially Responsible Behaviors. *Journal of Business Ethics*, 151(4), 923–939. https://doi.org/10.1007/s10551-017-3656-6
- De Roeck, K., & Maon, F. (2018). Building the Theoretical Puzzle of Employees' Reactions to Corporate Social Responsibility: An Integrative Conceptual Framework and Research Agenda. Journal of Business Ethics, 149(3), 609–625. https://doi.org/10.1007/s10551-016-3081-2
- Farooq, O., Rupp, D. E., & Farooq, M. (2017). The Multiple Pathways through which Internal and External Corporate Social Responsibility Influence Organizational Identification and Multifoci Outcomes: The Moderating Role of Cultural and Social Orientations. Academy of Management Journal, 60(3), 954–985. https://doi.org/10.5465/amj.2014.0849
- Felin, T., Foss, N. J., & Ployhart, R. E. (2015). The Microfoundations Movement in Strategy and Organization Theory. Academy of Management Annals, 9(1), 575–632. https://doi.org/10.5465/19416520.2015.1007651
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39–50. https://doi.org/10.1177/002224378101800104

- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. Journal of Marketing Theory and Practice, 19(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414–433. https://doi.org/10.1007/s11747-011-0261-6
- Hair Jr., J. F., Hult, G. T., Ringle, C., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). SAGE Publications.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Ed.), New Challenges to International Marketing: Advances in International Marketing (Vol. 20, hal. 277–319). Emerald Group Publishing Limited. https://doi.org/10.1108/S1474-7979(2009)0000020014
- Islam, T., Khan, M. M., Ahmed, I., & Mahmood, K. (2021). Promoting in-role and extra-role green behavior through ethical leadership: mediating role of green HRM and moderating role of individual green values. *International Journal of Manpower*, 42(6), 1102–1123. https://doi.org/10.1108/IJM-01-2020-0036
- Kim, A., Kim, Y., Han, K., Jackson, S. E., & Ployhart, R. E. (2017). Multilevel Influences on Voluntary Workplace Green Behavior: Individual Differences, Leader Behavior, and Coworker Advocacy. Journal of Management, 43(5), 1335–1358. https://doi.org/10.1177/0149206314547386
- Kotchen, M. J., & Reiling, S. D. (2000). Environmental attitudes, motivations, and contingent valuation of nonuse values: a case study involving endangered species. *Ecological Economics*, 32(1), 93–107. https://doi.org/10.1016/S0921-8009(99)00069-5
- Murni, M. K. S., Khalisah, K. S., Nasir, M. A. M., Ibrahim, M. F., Noor, M. F. M., Sofian, A. I., Ramlee, K. M., Nazar, M. R. A. M., Hassan, W. M. H. W., & Bakar, N. A. S. A. (2018). The Impact of Knowledge Management on Employee's Sense of Well-Being. In Proceedings of the 2nd Advances in Business Research International Conference (hal. 359–368). Springer Singapore. https://doi.org/10.1007/978-981-10-6053-3_34
- Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee Green Behavior. Organization & Environment, 28(1), 103–125. https://doi.org/10.1177/1086026615575773
- Raineri, N., & Paillé, P. (2016). Linking Corporate Policy and Supervisory Support with Environmental Citizenship Behaviors: The Role of Employee Environmental Beliefs and Commitment. Journal of Business Ethics, 137(1), 129–148. https://doi.org/10.1007/s10551-015-2548-x
- Ramus, C. A., & Steger, U. (2000). The Roles of Supervisory Support Behaviors and Environmental Policy in Employee "Ecoinitiatives" at Leading-Edge European Companies. Academy of Management Journal, 43(4), 605–626. https://doi.org/10.5465/1556357
- Rizki, A. F., & Augustine, Y. (2022). Green supply chain management practices: direct effects sustainability performance. *Technium Social Sciences Journal*, 28, 389-407.

https://doi.org/10.47577/tssj.v28i1.5795

- Safari, A., Salehzadeh, R., Panahi, R., & Abolghasemian, S. (2018). Multiple pathways linking environmental knowledge and awareness to employees' green behavior. Corporate Governance: The International Journal of Business in Society, 18(1), 81–103. https://doi.org/10.1108/CG-08-2016-0168
- Sekaran, U., & Bougie, R. (2010). Research methods for business A skill-building approach. John Wiley & Sons.
- Su, L., & Swanson, S. R. (2019). Perceived corporate social responsibility's impact on the well-being and supportive green behaviors of hotel employees: The mediating role of the employee-corporate relationship. *Tourism Management*, 72, 437–450. https://doi.org/10.1016/j.tourman.2019.01.009

Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif Dan R & D. Alfabeta.

- Tudor, T. L., Barr, S. W., & Gilg, A. W. (2008). A Novel Conceptual Framework for Examining Environmental Behavior in Large Organizations. *Environment and Behavior*, 40(3), 426–450. https://doi.org/10.1177/0013916507300664
- Wood, B. P., Eid, R., & Agag, G. (2021). A multilevel investigation of the link between ethical leadership behaviour and employees green behaviour in the hospitality industry. *International Journal of Hospitality Management*, 97, 102993. https://doi.org/10.1016/j.ijhm.2021.102993

