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Research Article

The Effect of Green Human Capital, Green Structural Capital and Green Relation Capital on Company Sustainability by Mediating Green Environment Management

Syahidun

Lenny C. Nawangsari

Universitas Mercu Buana,
Jl. Raya, RT.4/RW.1, Meruya Sel.,
Kec. Kembangan, Jakarta,
Daerah Khusus Ibukota Jakarta 11650,
Indonesia

Abstract

This study will dissect the influence of green human resources and capital on corporate stewardship by managing green environmental administration. The participants in this study were workers at PERTAMINA's Rewul, Fuel Terminal, with a complete sample of 125 representatives. The data testing strategy uses the Structural Equation Model Partial Least Square. The results of this study found that green human resources and green social capital significantly affect the carrying capacity of the company, eirectly by intervening in the administration of the green environment; besides that, green environmental governance also has a significant impact on the sustainability of the company. On the other hand, green structural capital does not directly affect company sustainability but becomes a substantial effect by mediating green environmental management. In order to maintain sustainability, continuous improvement projects are carried out to support green innovation in implementing green technology in resource utilization and preserving the environment while still involving external parties. The company is committed to implementing the highest occupational health and safety standards, respecting and affecting the surrounding community to promote sustainable social and economic development.

Keywords: Green Intellectual Capital, green environmental management, company sustainability, continuous improvement, green innovation

1. Introduction

Globally, the issue of environmental discussion began to emerge since the implementation of the Environment Conference in Sweden in 1972 in Stockholm, which the United Nations initiated. Extreme weather changes can increase the earth's temperature. This is caused by the release of nitrous oxide, methane, carbon dioxide, perfluorocarbons, hydrofluorocarbons, and sulfur hexafluoride gases, which result in sunlight-based energy needs being captured in the earth's

environment—or referred to as the nursery effect (Cars and West, 2015).

The Kyoto Protocol in 1997 is a country's concern to actively contribute to minimizing the occurrence of significant global climate change—so Indonesia needs to be environmentally friendly in sustainable development. One of which becomes the obligation for companies in operational management for business continuity to comply with all regulations related to the environment with high responsibility and make the green environmental management program a movement of self-awareness and the needs of the company company's internal. With this paradigm change, companies' role in proactively preserving the environment will be sustainable (Boca Santa *et al.*, 2020; Sovacool *et al.*, 2021).

In this case, the government's role, the Ministry of Environment and Forestry (KLHK), to motivate and monitor company compliance in preserving the environment has been running smoothly. One of these programs is the Company Performance Rating Program (PROPER). PROPER is an evaluation of the performance of top management in each business entity in the field of environmental management with the following criteria: black, red, blue, green, and gold (Asmeri *et al.*, 2017; Latan *et al.*, 2018).

PT Pertamina (Persero) Marketing Operations Unit is a company that manages the downstream sector in the oil and gas sector in the form of marketing and commercial activities which include the supply and distribution of fuel oil and petrochemicals produced by domestic refineries and from foreign sources. PT Pertamina has an environmental policy to ensure the implementation of green ecological management in all of its work areas and take an active role in energy resource efficiency and reducing or preventing various pollutions from achieving sustainability (Santosa, 2020).

Organization maintainability is business manageability that alludes to the association's objectives to accomplish benefits and work on social improvement by considering ecological angles (Abbas and Sağsan, 2019). Sustainable business starts with the idea of advancement, which keeps harmony between monetary, social, and natural aspects(Purvis et al., 2019). Things that can influence organization maintainability, in particular: Green Intellectual capital, including human resources, primary capital, and social capital as exogenous factors, just as Green Environmental Management is a go-between (intervening variable) on organization sustainability (Asiaei et al., 2021).

Intellectual capital is considered as theoretical exercises that incorporate individuals, the specialty of making and learning (human resources), hierarchical and social innovation (primary capital), and relationship with the extreme climate (social capital) in the worth creation process, which guide organizations towards seriousness (Salinas-Ávila et al., 2020; W. Yu et al., 2020). Interest in Intellectual Capital has a cozy relationship with natural security, ch is known as GIC. This review planned to dissect the effect of green human resources and capital on the company's maintainability by interceding green natural administration (Liu, 2017; Yusoff et al., 2019).

2. Material and Methods

This review is a causal exploration utilizing a quantitative methodology. The number of inhabitants in this review was representatives of Pertamina Rewulu Fuel Terminal - Yogyakarta, with an all-out example of 125 workers. The examining procedure utilized was non-likelihood inspecting, implying that the whole populace wauseded as the examination test. The factors in this review were green human resources (X_1), green primary capital (X_2), green social capital (X_3), green natural administration (Y_1), and friends supportability (Y_2). This review utilized essential and auxiliary information hotspots for information assortment through perception, conveying polls, and documentation.

The primary data is presented through analysis using the Structural Equation Model Partial Square with several steps that develop the evaluation model by playing several tests clearly to get Convergent Validity Distinguishing validity and reliability and extractive variation and Cronbach Alpha which composes a structural model with determinant coefficient tests. Tests the relevance of the perspective from there; the data is then tested to obtain the relevance of the overall structure model validation

coefficient with the goodness of fit index. This theory test comprises two tests, in particular, the immediate impact test utilizing Smart PLS with the bootstrapping technique and the backhanded impact test using SmartPLS 3.3.3 by testing the impact of exogenous factors on endogenous factors, testing the impact of exogenous factors on interceding variable, and at the same time testing the impact of exogenous and intervening factors on endogenous factors. From that point onward, the interceding result was tried with a relapse trial of exogenous factors to endogenous factors, exogenous factors to the arbiter (intervening variable), and exogenous and intervening factors to endogenous factors. The last advance was incorporating the relationship lattice between aspects.

3. Results and Discussion

3.1 Company Description

Result Fuel Terminal is one of PT. Pertamina (Persero) work locations are located in the Marketing Operation Region (MOR) IV, Central Java & Special Region of Yogyakarta. The main activities of Rewulu Fuel Terminal include receiving, stockpiling, and distributing fuel (premium, diesel, biodiesel) and specific fuel (Betamax, Pertamina dex, after) products. The Rewulu TBBM distribution area covers the Special Regions of Yogyakarta, Kedu and Klaten. Result Fuel Terminal does not let go of its responsibility to care about environmental sustainability and continues to strive to reduce the effect on the environmental system. The Triple Bottom Line principle needs to be implemented according to the capacity owned, where the balance of aspects, planet, and profit becomes the primary reference in managing the operation of a fuel terminal to maintain the sustainability of the company company's downstream oil and gas business.

3.2 Respondent description

The conveyance of respondents dependent on sex, schooling, working period, and age are displayed in the accompanying table:

Table 1: Conveyance of Respondents dependent on Gender, Education, Working Period, and Age

No	Research variable		Total (people)	Percentage
1	Gender	Male	116	92.8%
		Female	9	7.2%
2	Education	Senior High School	23	18%
		Vocational High School	9	7%
		Diploma One	4	3%
		Diploma Three	42	33%
		Diploma Four	2	3%
		Bachelor	42	33%
		Master	2	3%
3	Working period	<5 years	36	31%
		5-10 years	46	37%
		10-15 years	20	16%
		>15 years	22	18%
4	Age	<25 years old	15	12%
		25 – 35 years old	65	52%
		36 – 50 years old	36	29%
		>50 years old	9	7%

The table above shows that most of the respondents are male (92.8%), have D3 and S1 education (43%), have a working period of 5 to 10 years (37%), and are between 25 to 35 years old (52%).

3.3 Inferential analysis

1. Testing the Measurement Model (Outer Model)
2. Validity test
3. Convergent Validity

3.4 Green Human Capital (X1) Variable

The results of the validation test are shown in the following table:

Table 2: The value of the loading factor of the green human resource variable

Variable	Indicator Code	Outer Loading Value	Condition	Description
Green Human Capital (X1)	X1.1	0.780	>0.7	Validity
	X1.2	0.798	>0.7	Validity
	X1.4	0.800	>0.7	Validity
	X1.5	0.800	>0.7	Validity

Table 3: Distribution Value of Green Human Resource Dimension

Dimension	Indicator Code	Outer Distribution Mark	Condition	Description
1.1 *Competence*	X1,1	0.883	>0.7	Validity
	X1,2	0.880	>0.7	Validity
1.2 *Behavior*	X1,4	0.894	>0.7	Validity
	X1,5	0.894	>0.7	Validity

The table above shows that each indicator's entire loading factor value in the variable and dimension is above 0.7. This proves that all Green Human Capital (X1) variable indicators used in this study are valid or have met convergent validity.

3.5 Green Structural Capital (X2) Variable

The results of the validation test are shown in the following table:

Table 4: Loading Factor Value of Green Structural Capital (X2) Variable

Variable	Indicator Code	Outer Loading Value	Condition	Description
Green Structural Capital (X2)	X2.1	0.827	>0.7	Validation
	X2.2	0.874	>0.7	Validation
	X2.3	0.863	>0.7	Validation
	X2.4	0.864	>0.7	Validation

Table 5: Stacking Factor Value of Green Structural Capital (X2) Dimension

Dimension	Indicator Code	Outer Loading Value	Condition	Description
Company Authority	X2,1	0.885	>0.7	Validation
	X2,2	0.897	>0.7	Validation
Company Culture	X2,3	0.904	>0.7	Validation
	X2,4	0.902	>0.7	Validation

From the table above, it very well may be seen that the whole stacking factor worth of every pointer in the primary variable and aspect is above 0.7. It demonstrates that those marks of its Green

Structural Capital (X2) variable utilized in its review are legitimate or reached merged legitimacy.

3.6 Green Relational Capital (X3) Variable

The consequences of the approval test are displayed in the accompanying table:

Table 6: Stacking Factor Value of Green Relational Capital (X3) Variable

Variable	Indicator Code	Outer Loading marks	Condition	Description
Green Relational Capital (X3)	$X_{3,1}$	0.877	>0.7	Validation
	$X_{3,2}$	0.912	>0.7	Validation
	$X_{3,3}$	0.930	>0.7	Validation
	$X_{3,4}$	0.904	>0.7	Validation

Table 7: Stacking Factor Value of Green Relational Capital (X3) Dimension

Dimension	Indicator Code	Outer Loading Value	Condition	Description
3.1 Network	$X_{3,1}$	0.937	>0.7	Validation
	$X_{3,2}$	0.944	>0.7	Validation
3.2 Teamwork	$X_{3,3}$	0.963	>0.7	Validation
	$X_{3,4}$	0.958	>0.7	Validation

From the table above, it tends to be seen that the whole stacking factor worth of every marker in the variable and aspect is above 0.7. This demonstrates that all marks of the Green Relational Capital (X3) variable utilized in this review are legitimate or have met focalized legitimacy.

3.7 Green Environmental Management (Y1) Variable

The finding of the validation test are shown in the following list:

Table 8: Loading Factor Value of Green Environmental Management (Y1) Variable

Variable	Indicator Code	Outer Loading Value	Condition	Description
The Green Ecological Control (Y1)	$Y_{1,1}$	0.917	>0.7	Validation
	$Y_{1,2}$	0.941	>0.7	Validation
	$Y_{1,3}$	0.898	>0.7	Validation
	$Y_{1,4}$	0.938	>0.7	Validation

Table 9: Stacking Variable Value from Green Ecology System (Y1) Dimension

Dimension	Indicator Code	Outer Loading Value	Condition	Description
4.1 *Green Innovation*	$Y_{1.1}$	0.954	>0.7	Validation
	$Y_{1.2}$	0.956	>0.7	Validation
4.2 *Under Control*	$Y_{1.3}$	0.942	>0.7	Validation
	$Y_{1.4}$	0.947	>0.7	Validation

From the table above, it tends to be seen that the whole stacking factor worth of every marker in the factor and aspect is above 0.7. It indicates that these Green Environmental Management (Y1) variable indicators applied in this project have high validity and reliability.

3.8 Company Sustainability Variable (Y2)

The finding of the validation test are shown in the following list:

Table 10: Loading Factor Value of Company Sustainability (Y2) Variable

Variable	Indicator Code	Outer Loading Value	Condition	Description
Company Sustainability (Y2)	Y-2,1	0.707	>0.7	Validation
	Y-2,3	0.772	>0.7	Validation
	Y-2,4	0.725	>0.7	Validation
	Y-2,5	0.842	>0.7	Validation
	Y-2,6	0.715	>0.7	Validation
	Y-2,7	0.797	>0.7	Validation
	Y-2,8	0.831	>0.7	Validation
	Y-2,9	0.832	>0.7	Validation

Table 11: Distribution Factor Value of the Company Sustainability (Y2) Dimension

Dimension	Indicator Code	Outer Loading Value	Condition	Description
5.1 Economic Aspect	Y2.1	0.845	>0.7	Validation
	Y2.3	0.871	>0.7	Validation
5.2 Social Aspect	Y2.4	0.834	>0.7	Validation
	Y2.5	0.888	>0.7	Validation
	Y2.6	0.789	>0.7	Validation
5.3 Environmental Aspect	Y2.7	0.853	>0.7	Validation
	Y2.8	0.912	>0.7	Validation
	Y2,9	0.914	>0.7	Validation

From the table above, it will generally be seen that the entire stacking factor worth of marker in the factor and perspective is higher than 0.7. This exhibits that those indications of the Company Sustainability (Y2) factors applied in the survey were considered or have reached centered authenticity.

3.9 Discriminant Validity

This test relied upon the Fornell-Larcker standard, specifically the assessment with the creation and the Average Variance Extracted (AVE) regard.

Table 12: Fornell-Larcker Criterion Value of Research Variables

Variable	GEM	GHC	GRC	GSC	CSY
GEM (Y1)	**0.925**				
GHC (X1)	0.625	**0.794**			
GRC (X3)	0.607	0.642	**0.907**		
GSC (X2)	0.596	0.742	0.579	**0.856**	
CS (Y2)	0.714	0.710	0.655	0.617	**0.778**

From the table above, it very well may be seen that the AVE root worth of every factor is more noteworthy than the connection esteem between another variable. Hence it very well may be reasoned that all factors show significant discriminant legitimacy dependent on the Fornell-Larcker rule in this examination model.

Table 13: AVE (Average Variance Extraction) Value of Research Model

Variable	Dimension	AVE Value	AVE Value
Green Human Capital (X1)	1.1 Competence	0.787	0.633
	1.2 Behavior	0.802	

Variable	Dimension	AVE Value	AVE Value
Green Structural Capital (X2)	2.1 Company Authority	0.796	0.735
	2.2 Company Culture	0.815	
Green relational capital (X3)	3.1 Networking	0.885	0.820
	3.2 Teamwork	0.922	
Green Environmental Management (Y1)	4.1 Green Innovation	0.8912	0.853
	4.2 Beyond Compliance	0.893	
Company Sustainability (Y2)	5.1 Economic Aspect	0.735	0.607
	5.2 Social Aspect	0.696	
	5.3 Environmental Aspect	0.797	

From the table above, it tends to be seen that the AVE worth of the exploration model, for all examination factors and aspects, is above 0.5, so the AVE an incentive for discriminant legitimacy testing have met (the condition) for additional testing.

3.10 Reliability Test

The aftereffects of the dependability test are displayed in the accompanying table:

Table 14: Composite Reliability Value of the Research Model

Variable	*Composite Reliability*	Condition	*Cronbach's Alpha*	Condition	Description
GHC (X1)	0.873	>0.7	0.807	>0.7	Reliable
GSC (X2)_	0.917	>0.7	0.880	>0.7	Reliable
GRC(X3)	0.947	>0.7	0.928	>0.7	Reliable
GEM(Y1)	0.958	>0.7	0.944	>0.7	Reliable
SP (Y2)	0.926	>0.7	0.906	>0.7	Reliable

The table above shows that every factor has a composite unwavering quality worth above 0.7 with the most elevated worth of 0.959 from the Green Environmental Management (Y1) variable and the minor worth of 0.873 from the Green Human Capital (X1) variable. These outcomes may well be inferred that the exploration kind has reached the composites dependability esteem. Though, the Cronbach's alpha worth from the table exploration model shows that every factor has a Cronbach's alpha worth above 0.6 with the most significant worth of 0.943 from the Green Environmental Management (Y1) variable and the minor worth of 0.807 from the Green Human Capital (X1) variable. From these outcomes, it very well may be inferred which the examination type has reached the worth of Cronbach's alpha.

3.11 Testing the Structural Model (Inner Model)

3.11.1 Coefficient of Determination Test (R²)

The assessment of the inward model was finished by taking a gander at the coefficient of assurance. The worth of the assurance coefficient is somewhere in the range of 0 and 1. The worth of the coefficient of assurance (R^2) is near 1. Coming up next are the consequences of the coefficient of assurance test:

Table 15: Square (R^2) Value of the Research Model

Construct	R Square	R Square Adjusted
GEM (Y1)	0.484	0.471
SP (Y2)	0.641	0.629

Portrayal: Pearl = Green Ecological System and CS = Sustainability of company

The table above shows the connection between builds dependent on the Adjusted R-square worth. It tends to be clarified that the Green Environmental Management (Y1) variable is 0.471 (feeble), this shows that 47.1% of the Green Environmental Management (Y1) variable can be affected by the Green Human Resource (X1), Green Structural Capital (X2) and Green logical Resource (X3) factors. In comparison, the leftover 52.9% is impacted by different factors outside the examination. Though, the connection between develops dependent on the Adjusted R-square worth—it very well may be clarified that the Company Sustainability (Y2) variable is 0.629 (moderate), this shows that 62.9% of the Company Sustainability (Y2) variable can be affected by the capital of human ability variable (X1), Green Structural Capital (X2) and Green human Capital (X3) factors, while various elements outside the investigation sway the abundance 37.1%.

R2 Value Evaluation

R2 esteem assessment depended on the computation results utilizing the SmartPLS rendition 3.3.3 calculation. The aftereffect of the R2 esteem is 0.484 (moderate) for the Green Environmental Management variable and 0.641 (moderate) for the Company Sustainability variable. The combined effect of Green Human Resource, Green Structural Capital, and Green human Resources variable on Green Ecological system and Sustainability of Company ought to be conceivable by figuring f count/f of insights using the concurrent condition R2 = 0.484

F count = $(R^2/((k-1) / (1-R \, 2 \,(n-k)$
F count = $(0,484/ (4-1) / (1-0.484/ (125-4)$
F count = 0.516/0.004264
F count = 37.83204

The delayed consequences of the preliminary test simultaneously show that the F remember regard for the survey is 37.83204—the F table worth at alpha 0.05 is 3.48. It infers that f count > f Table (3.48), while the Green Human Capital, Green Framework Capital, and Green Rational Capital Factors sway the Green Ecological Management.

R2 = 0.641 (Sustainability of Company)
F count = $(R^2/((k-1) / (1-R \, 2 \,((n-k)$
F count = $(0,641/ (5-1)))/(1-0.641/(125-5))$
F count = 0.16025/0.002992
F count = 53.56546

The delayed consequences of the enormous test simultaneously show the F remember regard for this survey is 53.56546—the F table worth at alpha 0.05 is 3.17. This infers that f count > f Table (3.17), simultaneously the Green Human Resources, Green Framework Capital and Green Logical Capital, Green Ecological System Factors impact the maintainability of the company

As a rule Model Validation with Goodness of Fit Index (GoF). The basic model (internal model) got past the going with computations:

GoF = $\sqrt{(AVE \times R^2)}$
GoF = $\sqrt{0.730 \times 0.563}$
GoF = $\sqrt{0.410}$
GoF = 0.641
Portrayal:
AVE = (0.632+0.734+0.820+0.854+0.606)/5 = 0.731
R2 = (0.483+0.640)/2 = 0.562

The delayed consequences of assessing the Goodness of Fit Index (GoF) show 0.641. Ghozali and

Latan (2015) said that the plan of GoF regards is 0.1 (small), 0.25 (medium), and 0.36 (immense). Considering these results, it will, in general, be contemplated that the overall show of the assessment model (outside the model) and essential model (internal model) is fantastic because the GoF regard is 0.641 (the request for 0.36 "colossal").

Prescient Relevance Test (Q2)

The aftereffects of the Q2 estimation are as per the following:

$Q2 : 1-(1-R12) (1-R23)$

$Q2 : 1-(1-0.484) (1-0.642)$

$Q2 : 1-(0.234) (0.412)$

$Q2 : 1-(0.452)$

$Q2 : 0.588$

The aftereffect of estimating prescient importance (Q2) is 0.589 or Q2 > 0. Accordingly, the exogenous inert factors as logical factors can anticipate the endogenous variable, to be specific the manageability of the organization—or, all in all demonstrates that this model has decent prescient pertinence esteem (Ghozali and Latan, 2015).

Theory testing

The consequences of theory testing utilizing SmartPLS 3.3.3 programming are displayed in the accompanying table:

Table 16: Upsides of Path Coefficient, P-Values, and t-Statistics

Relationship Between Constructs	Path Coefficient	t-Statistics	P-Value	Description
Direct Effect				
GHC → GEM	0.262	2,045	0.021	Significantly Valuable Effect
GHC → CS	0.287	2.212	0.014	Significantly Valuable Effect
GSC → GEM	0.217	1,765	0.039	Significantly Valuable Effect
GSC → CS	0.067	0.509	0.306	Un-significant
GRC → GEM	0.314	2.811	0.003	Significantly Valuable Effect
GRC → CS	0.209	2.194	0.014	Significantly Valuable Effect
GEM → CS	0.367	3.617	0.000	Significantly Affected valuable
GHC, GSC, GRC → GEM	0.696	11,971	0.000	Significant Positive Effect
GHC, GSC, GRC → CS	0.750	16,161	0.000	Significant Positive Effect
Indirect Effect				
GHC → GEM → CS	0.096	1.858	0.032	Significant Positive Effect
GSC → GEM → CS	0.080	1,705	0.044	Significant Positive Effect
GRC → GEM → CS	0.115	2015	0.022	Significant Positive Effect

The description of direct and indirect effects between exogenous and endogenous variables was found in the following picture:
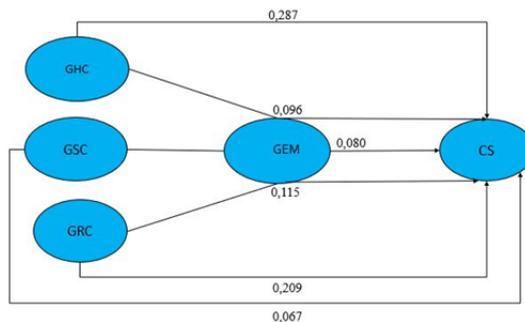

Figure 1: Test Results of *Direct and Indirect Effects*

The mediation types between exogenous and endogenous variables are shown in the following Table 17:

Table 17: Mediation Types between Exogenous and Endogenous Variables

Variable	Indirect Impact (cm)	Direct Impact (c)	Description
GHC→CS		0.287	Value c > c' = partial mediation
GHC→GEM→CS	0.096		
GSC→CS		0.067	Value c < c', = full mediation
GSC→GEM→CS	0.080		
GRC→CS		0.209	Value c > c' = partial mediation
GRC→GEM→	0.115		

The aftereffects of speculation testing in this review close a few things, to be specific:
1. There is a valuable and primary effect of Green Human Capital (X1) on Green Ecological System (Y1)
2. There is a valuable and primary effect of Green Structure Resources (X2) on Green Ecological Management (Y1)
3. There is a valuable and monstrous effect of Green Logical Resources (X3) on Green Environmental Management (Y1)
4. There is a valuable and enormous impact of Green Human Resources (X1) on Company Sustainability (Y2)
5. There is a valuable and monstrous effect of Green Structural Resources (X2) on Company Maintainability (Y2)
6. There is a valuable and monstrous effect of Green Relational Resources (X3) on Company Sustainability (Y2)
7. There is the valuable and enormous effect of Green Ecological Management (Y1) on Company Maintainability (Y2)
8. There is a valuable and monstrous effect of Green Human Capital (X1) on Company Sustainability (Y2) by mediating Green Environmental Management (Y1)
9. There is a valuable and monstrous effect of Green Structural Capital (X2) on Company Maintainability (Y2) by mediating Green Environmental Management (Y1)
10. There is a valuable and enormous effect of Green Relational Capital (X3) on Company Maintainability (Y2) by interceding Green Environmental Management (Y1)
11. There is a valuable and monstrous effect of Green Intelectual Resources (X1), Green Structural Resources (X2), Green Logical Capital (X3) on Green Ecology Management (Y1)
12. There is a valuable and primary effect of Green Human Capital (X1), Green Structural Resources (X2), Green Logical Resources (X3) on Sustainability of Company (Y2)

3.12 Inter-Dimensional Correlation Analysis

The aftereffects of the relationship examination between the components of the information are displayed in the accompanying table:

Table 18: Relation Values between Dimensions

Variable	Dimension	Correlation				
		Green Environmental Management (Y1)		Company Sustainability (Y2)		
		4.1 Green Innovation	4.2 Beyond Compliance	5.1 Economic Aspect	5.2 Social Aspect	5.3 Environmental Aspects
GEM (X1)	1.1 Competence	0.058	0.055	0.227	0.178	0.141
	1.2 Behavior	0.292	0.322	0.263	0.208	0.217
GSC (X2)	2.1 Company Authority	0.080	0.140	0.051	0.256	0.275
	2.2 Culture Company	0.259	0.188	0.055	0.085	0.077
GRC (X3)	3.1 Networking	0.087	0.162	0.180	0.086	0.045
	3.2 Teamwork	0.414	0.383	0.368	0.406	0.341
GEM (Y1)	4.1 Green Innovation	-	-	0.006	0.290	0.233
	4.2 Beyond Compliance	-	-	0.184	0.173	0.080

The translation of connection investigation is as per the following:

1. Green Human Resources (X1) Variable on Green Ecological Control Variable (Y1)
2. Green Structural Resources (X2) Variable on Green Ecological Control Variable (Y1)
3. Green Relational Resources (X3) Variable on Green Ecological Control Variable (Y1)
4. Green Human Resources (X1) Variable on Company maintainableVariables (Y2)
5. Green Structural Resources (X2) Variable on Company Maintainable Variable (Y2)
6. Green Relational Resources (X3) Variable on Company Maintainable Variable (Y2)
7. Green Ecology Management (Y1) Variable on Company Maintainable (Y2) Variable

a. ***The Effect of Green Human Resources on Green Ecological Management***

Green Human Capital significantly affects Green Environmental Management. The highest correlation value is between the behavior and beyond compliance dimensions from the correlation between dimensions. The correlation relationship is at a low level, so it is necessary to improve behavior in the form of employees who actively make innovations to improve the environmental management to affect the *Green Environmental Management* beyond compliance. This is in line with the research of (Fait *et al.*, 2021), which advised that human capital is the capital represented by employees to create intellectual capital through the competence, ability, and agility of employees. Green human capital is an intangible asset of employees in the form of knowledge, experience, expertise, the innovation that can be empowered to achieve the company'sCompany's operational environmental sustainability.

b. ***The Impact of Green Structural Resource on Green Environmental Control***

Green Framework Capital fundamentally affects Green Environmental Management. From the connection between's perspectives, the most vital association regard is between the association culture and green turn of events. The association relationship is low, so extending the socialization of association culture, especially association game plans associated with the natural organization, is fundamental to convince delegates to be dynamic in the green progression advancement. The better the execution of Green Structural Capital inside the association will impact the Green Environmental Management to the extent green turn of events. This follows the examination of Yusoff et al. (2019), which communicates that hidden capital is an establishment that maintains HR and data, for instance, inventive lead, legitimacy, and quality authorization, similarly to association culture (Yusoff et al., 2019). Agreeing on Ahmad et al. (2019), essential capital in various leveled capital joins systems, plans, and cycles, such as informational indexes, the board

cycles, and companions plans (Ahmad et al., 2019). Green hidden capital is culture, outstanding obligation, data on the leader's structure, and reputation/image in environmental confirmation completed in the association's practical locale (Josephine et al., 2020).

c. ***The Impact of Green Relational Resources on Green Environmental Management***

The complimentary green resource has a valuable and significant impact on Green Environmental Management. The highest correlation value is between the teamwork and green innovation dimensions from the correlation between dimensions. The correlation relationship is moderate, so it needs to be developed in the form of employees who actively interact and exchange ideas with the person in charge between internal and external functions related to environmental issues and their mitigation that contribute to green implementation innovation. It means the better the implementation of Green complimentary resource within the company, and it will affect the *Green Environmental Management*—which is in line with this study. However, the review results were not in relevance with the previous study of Wang *et al.* (2019), which states that the existence of relational capital will have a significant effect on sustainable growth (Wang *et al.,* 2018). Similarly to Josephine *et al.* (2020), that complementary green resource is defined as a reserve of interactive company relationships with external parties such as customers, suppliers, and partners to contribute to encouraging environmental management in the company company's operational areas(Josephine *et al.*, 2020).

d. ***The Effect of Green Human Capital on Company Sustainability***

Human Resources has a positive and massive impact on Company Sustainability. The highest correlation value is between the behavioral and economic aspects from the correlation between dimensions. The correlation relationship is at a moderate level, so it is necessary to develop behavior in the form of employees who actively make innovation to improve the environmental management to affect Company Sustainability in terms of the economic aspect of the company, operating cost efficiency. Profitable business affects welfare—and eventually, affects Company *Sustainability* primarily to determine business decisions in preparing a good company budget work plan to maintain a balance between welfare and environmental sustainability (Tien *et al.,* 2020).   This is following the review. The aftereffects of this review are following the review, which expresses that human resources positively affect manageable development, where the additional worth of human resources can build the worth of reasonable development (Zallé, 2019). This is likewise following the review which uncovers that business manageability is a work made by organizations to limit adverse consequences on the climate and social for the present and the future—and partitions hierarchical maintainability into three viewpoints, to be specific monetary, social, and the climate (Yusoff et al., 2019). Moreover, this is in like manner following the examination of Josephine et al. (2020) that driving Green Human Capital and Green complimentary resource influences Business Maintainable, while Green Structural Capital does not affect Business Sustainability (Josephine et al., 2020).

e. ***The Significant of Green Framework Capital on Company Maintainability***

Green Structural Capital gigantically affects Company Sustainability. From the association between's angles, the most raised relationship regard is between the association culture viewpoint and the realistic perspective. It is considered in Table 4.3. , it is understood that the t estimations regard is 0.509, which is more unassuming than the t table worth = 1.658 and the P-Values = 0.306, which is more critical than = 0.05. Henceforth the theory H5 in this survey which communicates that "Green Structural Capital gigantically affects Company Sustainability," is excused. This is following past assessments to be explicit the examinations of (1) Josephine et al. (2020) that vitally Green human Resources and Green Logical Capital influence Business Maintainability, while Green Structural Capital no affects Business Sustainability, that the pieces of intellectual capital that generally affect an association's

financial improvement are simply HR and social capital and that hidden capital no affects helpful turn of events (Asiaei et al., 2021; Josephine et al., 2020; Y. Yu and Huo, 2019).

f. *The Impact of Green Human resources on Company Maintainability*

Green social capital has a positive and critical impact on Company Sustainability. The most noteworthy connection esteem is between the collaboration and social viewpoint aspects from the relationship between's aspects. The correlation relationship is at a moderate level, so it needs to be developed, meaning that the better the implementation of teamwork by involving external parties such as customers, business partners, and related agencies in the form of a community economic empowerment movement (company social responsibility program) around the company's company's operational areas, it will affect the Company Sustainability. This is following the investigation of Josephine et al. (2020) that leading Green Human Resources and Green logical capital affect Business Maintainability, while Green Structural Capital has no impact on Business Sustainability (Josephine et al., 2020).

g. *The Effect of Green Ecological Management on Company Sustainability*

Green Environmental Management has a positive and massive impact on Company Sustainability. The highest correlation value is between the green innovation and social aspect dimensions from the correlation between dimensions. The correlation relationship is at a low level; thus, it needs to be improved—meaning that pro-green environmental innovation is more optimal by involving customers and partners in energy efficiency and waste management (3R) programs to become a social movement will affect Company Maintainability. This result is similar to the evidence that environmental management as a managerial activity helps companies in company environmental management, obeying environmental policies, anticipating environmental impacts, and increasing green environmental activities, which eventually will affect Company Sustainability (Latan et al., 2018; Yildiz Çankaya & Sezen, 2019).

h. *The Impact of Green Human Resource on Company Sustainability by interceding Green Environmental Management*

Green Human Resource has a beneficial and massive effect on Company Sustainability by interceding Green Environmental Management. This means that the knowledge, expertise, innovation of employees with a green environmental perspective affect Company Sustainability. This includes innovative ways to efficiently utilize resources to save electrical energy, water and paper use, and solid waste management (3R).

From the direct and indirect effect hypothesis testing, it would be seen that the value of *Green Human Capital* effect on Company Sustainability directly has a higher value than by mediating the Green Environmental Management variable. It means green human capital— knowledge, experience, expertise—that is packaged in the green innovation movement in terms of energy efficiency & emission reduction, hazardous & non-hazardous waste reduction, and water efficiency & water pollution load reduction can become the main drivers of Company Sustainability in terms of environmental aspect (Song *et al.,* 2021).

i. *The Impact of Green Structural Capital on Company Maintainability by intervening Green Environmental Management*

Green Structural Capital has a valuable and profound impact on Company Sustainability by mediating Green Environmental Management. From the direct and indirect effect hypothesis testing, it can be seen that the value of Green Structural Resources effect on Company Sustainability directly has a negative value, meaning that the existing green structural capital hurts company sustainability. On the other hand, if it is by mediating the Green Environmental Management variable, then the value is positive. This means that the company culture and commitment, especially the energy conservation and biodiversity preservation programs if consistently implemented, will directly support green environmental management and will indirectly have a positive effect on Company Sustainability (Agustia *et al*., 2019).

j. **The Significant of Green Logical Resource on Company Maintainability by mediating Green Environmental Management**

Green social capital significantly affects Company Sustainability by intervening in Green Environmental Management. This infers that departmental collaboration and developing association with partners and customers will emphatically focus on association acceptability.

From the immediate and circuitous impact theory testing, it very well may be seen that Green social capital impact on Company Sustainability straightforwardly has a higher worth than intervening the Green Environmental Management variable. This implies that dynamic joint effort with outer gatherings and dynamic organizations with accomplices in green ecological administration and arrangement will significantly affect Company Sustainability (Chuang and Huang, 2018).

k. **The Effect of Green Human Resource Capital, Green Framework Capital, Green Logical Resource on Green Ecological System**

Green Human Resources, Green Structural Resources, and Green Relational Capital simultaneously affect Green Environmental Management. From the prompt and roundabout hypothesis testing, it might be seen that the value of Green Human Resources, Green Structural Resource, Green Relational Capital effect on Green Environmental Management simultaneously is higher than the value of Green Human Resource, Green Structural Resource, and Green Logical Capital effect on Green Environmental Management autonomously. This infers that the effect of Green Intellectual Resource—as yet not restricted to information, experience, worker abilities, organization culture and responsibility, relationship with outside parties (local area, clients, and accomplices) all the while in green advancement—will significantly affect Green Environmental Management. This follows that Green Human Resources Management (GHRM) can decidedly influence green advancement and natural administrative worries. These discoveries likewise further widen the extent of examination and the hypothetical and viable ramifications of GHRM (Dal Mas, 2018; Yong et al., 2019).

l. **The Significant of Green Human Resource, Green Framework Resource Capital, Green Relational Resource on Company Maintainability**

Green Human Capital, Green Structural Capital, and Green Relational Capital influence Company Sustainability. From the brief and indirect theory testing, it very well may be seen that the impact worth of Green Human Capital, Green Structural Capital and Green Relational Capital impact on Company Sustainability at the same time is higher than the worth of Green Human Capital, Green Structural Capital and Green Relational Capital impact on Company Sustainability independently or possibly by interceding factors. This implies the Effect of Green Intellectual Capital—in the form of but not limited to knowledge, experience, employee skills, company culture & commitment, relationship with external parties (community, customers, and work partners) simultaneously driving economic aspects with cost efficiency and social aspects by maintaining health & safety of employees and surrounding communities as well as economic empowerment; environmental aspects with resource use (electricity and water) efficiency, reduction and management of hazardous waste (solid and liquid) programs—will have a significant impact on Company Sustainability. This is in line with the company starting all its activities with comprehensive planning with a vision of sustainability that involves all stakeholders inside and outside the company. With this approach, the company ensures that all economic, social, and environmental considerations are carefully considered as the basis for sustainable business development(Aboelmaged & Hashem, 2019; Chuang & Huang, 2018; D. Wang *et al.*, 2018).

4. Conclusion

Green human resources and green social capital significantly affect organization manageability, either straightforwardly or by interceding green natural administration. Similarly, green natural administration additionally significantly affects organization manageability. On the other hand, green structural capital does not directly affect company sustainability but becomes a significant effect by mediating green environmental management. In order to maintain sustainability, continuous improvement projects are carried out to support green innovation in implementing green technology in resource utilization and preserving the environment while still involving the role of external parties.

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