

The Effect of Green Human Resource Management on Green Service Behavior Mediated by Corporate Social Responsibility

Shinta Dwi Setiyani¹, Nur Wening²

^{1,2} Management Study Program, Faculty of Business & Humanities, Universitas Teknologi Yogyakarta, Yogyakarta, Indonesia. Email: shintadwisetiyani243@gmail.com¹, weninguty@gmail.com²

ARTICLE HISTORY

Received: April 16, 2025
Revised: October 20, 2025
Accepted: October 21, 2025

DOI

<https://doi.org/10.52970/grdis.v5i4.1247>

ABSTRACT

This study aims to analyze the influence of green human resource management on green service behavior mediated by corporate social responsibility at PT X. The study uses green service behavior variable indicators, namely extra-role green service and intra-role green service. The method used in sampling is nonprobability sampling of 127 respondents. Primary data collection using a questionnaire method. This study uses validity, reliability, normality, heteroscedasticity, linearity, simple linear regression analysis, t-test, coefficient of determination test, path analysis, and path coefficient. The results of the study showed that: (1) Green human resource management has a significant positive effect on extra-role green service. (2) Green human resource management has a significant positive effect on intra-role green service. (3) Green human resource management has a significant positive effect on corporate social responsibility. (4) Corporate social responsibility does not have a significant positive effect on extra-role green service. (5) Corporate social responsibility has a significant positive effect on intra-role green service. (6) Green human resource management and corporate social responsibility have a simultaneous influence on extra-role green service. (7) Green human resource management and corporate social responsibility have a simultaneous influence on intra-role green service.

Keywords: Green Human Resource Management, Green Service Behavior, Corporate Social Responsibility.

I. Introduction

Climate change and growing concerns about the increasingly complex environmental impact have urged companies to consider the ecological consequences of their operations. In line with the long-term sustainability goals, organizations must prepare employees to demonstrate environmentally friendly behavior and concern for the company's environmental values (Antika & Suryani, 2024). As sustainability frameworks continue to evolve, companies have begun to adopt several supporting practices, such as Green Service Behavior—which consists of extra-role and intra-role green service behaviors. According to Paille and Boral (as cited in Aboramadan, 2022), extra-role green service behavior refers to voluntary pro-environmental actions that go beyond the formal duties of employees and are not formally recognized in performance evaluations. In contrast, intra-role green service behavior involves environmentally friendly behaviors that are formally required and form part of employees' performance assessments.

The implementation of Green Service Behavior enables companies to reduce negative environmental impacts and manage energy resources more efficiently (Zamzamy & Suryani, 2024). However, the development of green service behavior requires strong organizational support to ensure that eco-friendly initiatives can be effectively carried out by employees. One of the organizational factors that can facilitate such environmental programs is Green Human Resource Management (GHRM). Green Human Resource



Management (GHRM) encompasses all activities related to developing, implementing, and maintaining systems designed to cultivate environmentally responsible behaviors among employees (Emilisa et al., 2020). The implementation of GHRM can enhance overall organizational performance. Green initiatives—such as GHRM—help organizations improve environmental performance and foster a green corporate culture (Isrososiawan et al., 2021). In this context, employees' engagement in green workplace behaviors serves as a crucial factor in supporting a company's commitment to social and environmental responsibility. Companies today are not only responsible for achieving economic objectives but also for contributing to social welfare and environmental preservation through Corporate Social Responsibility (CSR).

The core principle of CSR is that corporate accountability extends beyond shareholders to include a broader range of stakeholders (Kumandang & Hendriyani, 2021). Through CSR programs, companies provide services, assistance, and empowerment to communities, thereby improving their quality of life and overall well-being. In Indonesia, various industrial sectors have begun implementing Green Human Resource Management, Green Service Behavior, and Corporate Social Responsibility practices as part of their efforts to achieve long-term sustainability. One notable example is the palm oil plantation sector. A company that actively runs sustainability programs in this area is PT X, located in South Sumatra. Based on this background, researchers identified a research gap involving the independent variable Green Human Resource Management (X), the dependent variable Green Service Behavior (Y), and the mediating variable Corporate Social Responsibility (Z). Several previous studies have shown inconsistencies in their findings regarding the relationships among these variables. Therefore, this study aims to further explore the relationship between these constructs—particularly within the palm oil plantation sector—to provide additional insights and contribute to the growing literature on Green Service Behavior in different industrial contexts.

II. Literature Review and Hypothesis Development

2.1. Green Service Behavior

Green service behavior refers to employees' actions aimed at reducing negative environmental impacts when delivering services and carrying out operational activities. Companies can enhance green service behavior by improving energy-use efficiency, reducing waste, and developing more environmentally friendly products (Antika & Suryani, 2024). Green service behavior also encompasses employees' environmentally conscious conduct in service delivery and includes two forms: extra-role green service and intra-role green service (Zamzamy & Suryani, 2024).

2.1. Green Human Resource Management

Green Human Resource Management (GHRM) can be defined as programs that help build a "green" workforce—employees who understand and value a green culture and possess strong technical and managerial skills to support it (Isrososiawan et al., 2021). GHRM is an organizational practice designed to maximize positive and resilient environmental outcomes that benefit many stakeholders (Alyahya et al., 2023). GHRM emerges as a response to intensifying environmental degradation linked to production activities. In essence, green HR policies are sustainable HR management practices that integrate environmental considerations to safeguard natural resources within corporate operations.

2.1. Corporate Social Responsibility

Corporate Social Responsibility (CSR) is an investment in a company's growth and sustainability. It should not be viewed as a cost center but as a means to generate long-term value (a profit center). The World Business Council for Sustainable Development (WBCSD) defines CSR as *"the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of*

the workforce and their families" (Giantika & Qona'ah, 2024). CSR activities are crucial for building corporate image and reputation, thereby strengthening trust among consumers and business partners. According to Kumandang and Hendriyeni (2021), CSR reflects corporate accountability, ethical management, and social responsibility. Practically, CSR comprises organizational actions intended to keep the firm competitive while returning a portion of profits to stakeholders—communities, shareholders, employees, and the environment—through various programs. In Indonesia, many sectors have adopted GHRM, green service behavior, and CSR as pillars of long-term sustainability. One prominent example is the palm-oil plantation sector. PT X in South Sumatra is among the firms actively running sustainability programs.

2.1. Hypothesis Development

a. Influence of GHRM on Extra-Role Green Service

Zhang et al. (2021) found that GHRM positively affects extra-role green service. Aboramadan (2022) similarly reported a positive effect of GHRM on employees' green behaviors beyond formal duties. Adelia and Suryani (2024) also showed that GHRM positively and significantly increases extra-role green service.

H1: GHRM has a positive effect on extra-role green service.

b. Influence of GHRM on Intra-Role Green Service

Aboramadan (2022) reported a positive effect of GHRM on intra-role green service. Antika and Suryani (2024) reached the same conclusion.

H2: GHRM has a positive effect on intra-role green service.

c. Influence of GHRM on CSR

Krisna and Emilia (2023) found that GHRM positively affects CSR. Wang et al. (2023) also reported a positive relationship between GHRM and CSR.

H3: GHRM has a positive effect on CSR.

d. Influence of CSR on Extra-Role Green Service

Sabokro et al. (2021) concluded that CSR positively and significantly affects extra-role green service. Xu et al. (2022) also found a positive effect.

H4: CSR has a positive effect on extra-role green service.

e. Influence of CSR on Intra-Role Green Service

Sabokro et al. (2021) and Xu et al. (2022) showed that CSR positively affects intra-role green service. Antika and Suryani (2024) similarly found that CSR increases intra-role green service.

H5: CSR has a positive effect on intra-role green service.

f. GHRM → Extra-Role Green Service Mediated by CSR

Xu et al. (2022) and Antika & Suryani (2024) indicated that CSR mediates the positive effect of GHRM on extra-role green service.

H6: GHRM positively affects extra-role green service, mediated by CSR.

g. GHRM → Intra-Role Green Service Mediated by CSR

Xu et al. (2022) found that CSR mediates the relationship between GHRM and intra-role green service. Zamzamy & Suryani (2024) also provided support, noting mediation (and moderation by green psychological climate).

H7: GHRM positively affects intra-role green service, mediated by CSR.

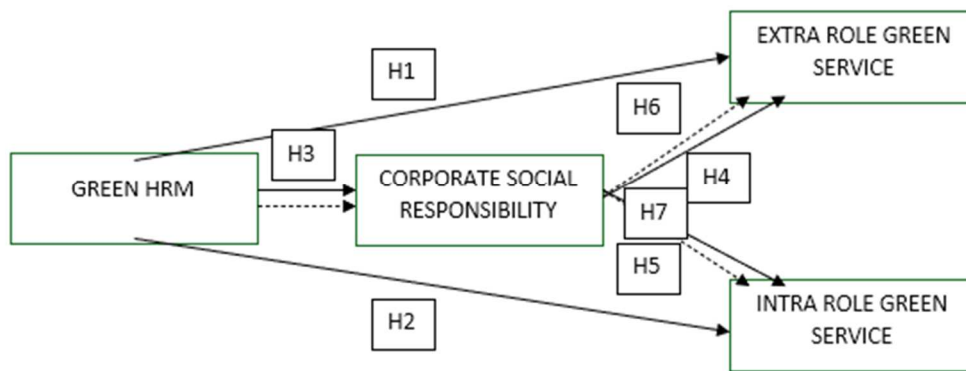


Figure 1. Framework Thinking

III. Research Method

This study surveyed the full population of PT X employees—127 respondents selected via non-probability, saturated sampling because the population was small and fully accessible, improving representativeness and reducing bias (Sugiyono, 2015). It examined three variables: the independent variable Green Human Resource Management (X), the dependent variables Extra-role Green Service (Y₁) and Intra-role Green Service (Y₂), and the mediating variable Corporate Social Responsibility (Z). Primary data were collected through questionnaires (with secondary data from company records and prior studies) using a modified 4-point Likert scale (Strongly Agree, Agree, Disagree, Strongly Disagree) to avoid neutral responses (Sugiyono, 2015). Data analysis in SPSS included instrument testing—validity (items measure intended constructs) and reliability (Cronbach’s alpha > 0.70)—followed by classical assumptions: normality (Kolmogorov–Smirnov, Asymp. Sig > 0.05), heteroscedasticity (no variance inequality if Sig > 0.05), and linearity (Deviation from Linearity Sig > 0.05). The core inferential model used simple linear regression, $Y = a + bX + e$, where Y denotes Green Service Behavior (Y₁ or Y₂) and X denotes GHRM; hypotheses were tested with t-tests for partial and path analysis to estimate direct and indirect (mediated) effects, and model explanatory power was assessed via the coefficient of determination (Adjusted R²).

IV. Results and Discussion

4.1. Results and Discussion

a. Validity Test

Validity test used For measure valid or whether or not questionnaire with compare calculated r value and table r value. If calculated r > table r so results the declared valid. The validity test variables used in study This as following:

Table 1. Validity Test Results

Variables	Statement Items	R Count	Sig.	R Table	Conclusion
Extra-Role Green Service	1	0.887	0,000	0.172	Valid
	2	0.885	0,000	0.172	Valid
	3	0.899	0,000	0.172	Valid
	4	0.870	0,000	0.172	Valid
Intra-Role Green Service	5	0.837	0,000	0.172	Valid
	6	0.807	0,000	0.172	Valid
	7	0.818	0,000	0.172	Valid
	8	0.791	0,000	0.172	Valid
	9	0.372	0,000	0.172	Valid
	10	0.464	0,000	0.172	Valid
Green Human Resource Management(X)	11	0.187	0.036	0.172	Valid
	12	0.227	0.010	0.172	Valid
	13	0.810	0,000	0.172	Valid
	14	0.855	0,000	0.172	Valid
	15	0.819	0,000	0.172	Valid
	16	0.828	0,000	0.172	Valid
	17	0.862	0,000	0.172	Valid
	18	0.815	0,000	0.172	Valid
	19	0.818	0,000	0.172	Valid
	20	0.816	0,000	0.172	Valid
	21	0.780	0,000	0.172	Valid
	22	0.761	0,000	0.172	Valid
Corporate Social Responsibility (Z)	23	0.889	0,000	0.172	Valid
	24	0.899	0,000	0.172	Valid
	25	0.868	0,000	0.172	Valid
	26	0.854	0,000	0.172	Valid
	27	0.849	0,000	0.172	Valid
	28	0.842	0,000	0.172	Valid

In table 1 we can see that all statement items on the third variables green service behavior, green human resource management, and corporate social responsibility declared valid because results from each item shows that r count > r table with all over mark significance below 0.05.

b. Reliability Test

Reliability test done with test the data obtained from results questionnaires that were distributed. A variables it is said reliable if give mark Cronbach alpha > 0.7. As for the validity test variables used in study This as following.

Table 2. Reliability Test Results

Variables	Cronbach's Alpha	Information
Green Service Behavior	0.908	Reliable
a. Extra-Role Green Service		
b. Intra-Role Green Service	0.776	Reliable
Green Human Resource Management	0.911	Reliable
Corporate Social Responsibility	0.934	Reliable

In table 2 we can see that reliability test results for each variable stated reliable. This Because mark Cronbach's alpha on variables green service behavior (Y) which include extra-role green service of 0.908 and intra-role green service of 0.776, variable green human resource management (X) of 0.911, and the variable corporate social responsibility (Z) is 0.934.

c. Normality Test

For detect whether the residuals are normally distributed or not No that is with the Kolmogorov Smirnov test with sig. Value 0.05, then the data is stated normally distributed if Asymp.Sig > 0.05. Here results normality test:

Table 3. Results of the Kolmogorov-Smirnov Test for Normality

Model	N	Mean	Std. Deviation	Test Statistic	Asymp. Sig. (2-tailed)	Decision
X → Z	127	0.000	2.014	0.067	0.200	Normal
Z → Y ₁	127	0.000	1.841	0.052	0.200	Normal
Z → Y ₂	127	0.000	2.030	0.048	0.200	Normal
X → Y ₁	127	0.000	1.549	0.053	0.200	Normal
X → Y ₂	127	0.000	1.780	0.072	0.181	Normal

d. Heteroscedasticity Test

Heteroscedasticity test aim test what is the regression model happen inequality variance from residual one observation to other observations. The heteroscedasticity test in study This as following

Table 4. Heteroscedasticity Test (Model 1)

Variable	Unstandardized Coefficient (B)	Std. Error	t	Sig.	Decision
Constant	3.261	0.674	4.84	0	
Green Human Resource Management	-0.05	0.02	1.508	0.134	No heteroscedasticity

In table 4 we can see that the results of the heteroscedasticity test for model 1 state that mark significance of 0.134 > 0.05 which means No happen heteroscedasticity in residual data.

Table 5. Heteroscedasticity Test (Model 2)

Variable	Unstandardized Coefficient (B)	Std. Error	t	Sig.	Decision
Constant	0.097	0.619	0.156	0.876	—
Corporate Social Responsibility	0.076	0.033	1.301	0.23	No heteroscedasticity

On table 5 can see that the results of the heteroscedasticity test for model 2 state that mark significance of 0.876 > 0.05 which means No happen heteroscedasticity in residual data.

Table 6. Heteroscedasticity Test (Model 3)

Variable	Unstandardized Coefficient (B)	Std. Error	t	Sig.	Decision
Constant	0.029	0.69	0.041	0.967	—

Corporate Responsibility	Social	0.088	0.037	1.375	0.191	No heteroscedasticity
-----------------------------	--------	-------	-------	-------	-------	--------------------------

On table 6 can seen that the results of the heteroscedasticity test for model 3 state that mark significance of $0.967 > 0.05$ which means No happen heteroscedasticity in residual data.

Table 7. Heteroscedasticity Test (Model 4)

Variable	Unstandardized Coefficient (B)	Std. Error	t	Sig.	Decision
Constant	0.216	0.502	0.431	0.667	—
Green Human Resource Management	0.031	0.015	1.089	0.388	No heteroscedasticity

On table 7 can seen that the results of the heteroscedasticity test for model 4 state that mark significance of $0.667 > 0.05$ which means No happen heteroscedasticity in residual data.

Table 8. Heteroscedasticity Test (Model 5)

Variable	Unstandardized Coefficient (B)	Std. Error	Beta	t	Sig.	Decision
Constant	0.165	0.522	—	0.315	0.753	—
Green Human Resource Management	0.04	0.015	0.225	1.586	0.108	No heteroscedasticity

In table 8 we can seen that heteroscedasticity test results for the 5- value model significance $0.753 > 0.05$ then from That obtained conclusion that No happen heteroscedasticity in residual data.

e. Linearity Test

Linearity test used For know something variables independent and dependent own linear relationship or no. As for the linearity test in study This as following.

Table 9. Linearity Test of Variable XZ

Source	Sum of Squares	df	F	Sig.	Decision
Linearity	455.781	1	107.203	0	Linear
Deviation from Linearity	77.6	23	0.794	0.732	Linear
Within Groups	433.659	102			
Total	967.039	126			

In table 9 we can seen that F value $< F$ table namely $0.794 < 3.07$ and the sig value. namely $0.732 > 0.05$. So can concluded that connection between variables green human resource management and corporate social responsibility the results are linear and significant.

Table 10. Linearity Test of Variable Z-Y1

Source	Sum of Squares	df	F	Sig.	Decision
Linearity	173.783	1	52.014	0	Linear
Deviation from Linearity	46.012	11	1.252	0.262	Linear
Within Groups	380.882	114			
Total	600.677	126			

In table 10 we can see that F value < F table namely $1.252 < 3.07$ and the sig value. namely $0.262 > 0.05$. So can concluded that connection between variables Corporate social responsibility and extra-role green service are linear and significant.

Table 11. Linearity Test of Variables Z-Y2

Source	Sum of Squares	df	F	Sig.	Decision
Linearity	368.537	1	82.947	0	Linear
Deviation from Linearity	12.564	11	0.257	0.992	Linear
Within Groups	506.505	114			
Total	887.606	126			

In table 11 it can be seen that F value < F table namely $0.257 < 3.07$ and the sig value. namely $0.992 > 0.05$. So can concluded that connection between variables Corporate social responsibility and intra role green service are linear and significant.

Table 12. Linearity Test of Variable X-Y1

Source	Sum of Squares	df	F	Sig.	Decision
Linearity	173.783	1	52.014	0.000	Linear
Deviation from Linearity	46.012	11	1.252	0.262	Linear
Within Groups	380.882	114			
Total	600.677	126			

In table 12 we can see that F value < F table namely $1.248 < 3.07$ and the sig value. namely $0.224 > 0.05$. So can concluded that connection between variables Green human resource management and extra-role green service are linear and significant.

Table 13. Linearity Test of Variables X-Y2

Source	Sum of Squares	df	F	Sig.	Decision
Linearity	488.534	1	149.625	0.000	Linear
Deviation from Linearity	66.038	23	0.879	0.625	Linear
Within Groups	333.035	102			
Total	887.606	126			

In table 13 we can see that F value < F table namely $0.879 < 3.07$ and the sig value. namely $0.625 > 0.05$. So can concluded that connection between variables Green human resource management and intra role green service are linear and significant.

f. Simple Linear Regression Test Results

Analysis simple linear regression show connection between variables independent and variable dependent. The following results from testing simple linear regression :

Table 14. Simple Linear Regression Test Results (XZ)

Variable	Unstandardized Coefficients (B)	Std. Error	Beta	t	Sig.
Constant	3.394	1.107	—	3.065	0.003
Corporate Social Responsibility	0.424	0.059	0.538	7.133	0

Based on table 14 obtained equality that is :

$$Z = a + b_1 X$$

$$Z = 0.165 + 0.040X$$

constant value (a) of 0.165 indicates that if GHRM does not There is so CSR value of 0.165.

GHRM coefficient value of 0.040 indicates that If GHRM value increases so CSR values will also be increase.

Table 15. Simple Linear Regression Test Results (Z-Y1)

Model	Unstandardized Coefficients	Standardized Coefficients			t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,394	1,107		3,065	.003
	Corporate Social Responsibility	.424	.059	.538	7,133	.000

Based on table 15 obtained equality that is :

$$Y_1 = a + b_2 Z$$

$$Y_1 = 3.394 + 0.424Z$$

Cconstant value (a) of 3.394 indicates that if CSR is not There is so mark extra-role green service of 3,394. CSR coefficient value of 0.424 indicates that If CSR value increases so mark extra role green service will also be increase.

Table 16. Simple Linear Regression Test Results (Z-Y2)

Variable	Unstandardized Coefficients (B)	Std. Error	Beta	t	Sig.
Constant	5.255	1.221	—	4.305	0
Corporate Social Responsibility	0.617	0.066	0.644	9.421	0

Based on table 16 obtained equality that is:

$$Y_2 = a + b_3 Z$$

$$Y_2 = 5.255 + 0.617Z$$

Constant value (a) of 5.255 indicates that if CSR is not There is so mark intra-role green service of 5,255 CSR coefficient value of 0.617 indicates that If CSR value increases so mark intra role green service will also increase.

Table 17. Simple Linear Regression Test Results (X-Y1)

Coefficients a

Variable	Unstandardized Coefficients (B)	Std. Error	Beta	t	Sig.
Constant	4.386	1.002	—	4.375	0

Based on table 17 obtained equality that is:

$$Y1 = a + b_4 X$$

$$Y1 = 4.386 + 0.364X$$

Constant value (a) of 4.386 indicates that if GHRM does not There is so mark extra role green service amounting to 4,386 GHRM coefficient value of 0.364 indicates that If GHRM value increases so mark extra role green service will also be increase.

Table 18. Simple Linear Regression Test Results (X-Y2)

Variable	Unstandardized Coefficients (B)	Std. Error	Beta	t	Sig.
Constant	1.634	0.872	—	1.874	0.063
Green Human Resource Management	0.284	0.026	0.705	11.111	0

Based on table 18 then obtained equality that is :

$$Y2 = a + b_5 X$$

$$Y2 = 1.634 + 0.284X$$

Constant value (a) of 1.634 indicates that if GHRM does not There is so mark intra-role green service amounting to 1,634. GHRM coefficient value of 0.284 indicates that if GHRM increases so mark intra role green service will also be increase.

4.2. Hypothesis Test Results

a. t-test

According to Ghozali (2021) t-test is the test used For see how much influence from each variable independent to variables dependent. If the calculated t value > t table and the sig value < 0.05 then can concluded that individually variable independent influential significant to variables dependent. The following results t-test testing:

Table 19. Results of the t-test (X, Y1)

Model	t	Sig.
Green Human Resource Management → Extra-Role Green Service	7.287	0.000

In table 19 we can seen that calculated t value > t table namely 7.287 > 1.657 and the Sig value. 0.000 < 0.05. So obtained decision H 1 accepted with conclusion that variables green human resource management own influence positive and significant For increase variables extra-role green service.

Table 20. Results of the t-test (X, Y2)

Model	t	Sig.
Green Human Resource Management → Intra-Role Green Service	7.119	0.000

In table 20 we can seen that calculated t value > t table namely 7.119 > 1.657 and the Sig value. 0.000 < 0.05. So obtained decision H2 accepted with conclusion that variables green human resource management own influence positive and significant For increase variables intra role green service.

Table 21. Results of the t-test (X, Z)

Model	t	Sig.
Green Human Resource Management → Corporate Social Responsibility	10.556	0.000

In table 21 it can be seen that calculated t value > t table namely $10.556 > 1.657$ and the Sig value. $0.000 < 0.05$. So obtained decision that H 3 accepted with conclusion that variables green human resource management own influence positive and significant For increase variables corporate social responsibility.

Table 22. Results of the t -test (Z, Y1)

Model	t	Sig.
Green Human Resource Management → Corporate Social Responsibility	1.171	0.244

In table 22 we can see that calculated t value < t table namely $1.171 < 1.657$ and the Sig value. $0.244 > 0.05$. So obtained H 4 decision rejected with conclusion that variables corporate social responsibility No own influence positive For increase variables extra-role green service.

Table 23. Results of the t -test (X, Y2)

Model	t	Sig.
Corporate Social Responsibility → Intra-Role Green Service	3.210	0.002

In table 23 we can see that calculated t value > t table namely $3.210 > 1.657$ and the Sig value. $0.002 < 0.05$. So obtained decision H 5 accepted with conclusion that variables corporate social responsibility own influence positive and significant For increase variables intra role green service.

b. Path Analysis Test

Path analysis used For know influence direct and indirect effects direct (indirect effect) between variables independent with dependent. Hypothesis study This want to prove whether green human resource management influential to green service behavior which includes (extra role and intra role green service) with corporate social responsibility as variables mediation (intervening). The following results testing path analysis :

Table 23. Path Analysis Test Results (XZ)

Model	t	Sig.
Corporate Social Responsibility → Intra-Role Green Service	3.210	0.002

In table 23 we can see that mark coefficient regression green human resource management capable influencing corporate social responsibility of 0.687.

Table 24. Path Analysis Test Results (X →Z →Y 1)

Variable	B	Std. Error	Beta	Sig.
Green Human Resource Management	0.256	0.035	0.635	0.000
Corporate Social Responsibility	0.080	0.069	0.102	0.244

Table 24 shows that the standardized beta coefficients for green human resource management are 0.635 and for corporate social responsibility, 0.102. Therefore, it can be concluded that green human resource management can increase the level of extra-role green service by 0.635, and corporate social responsibility can increase the level of extra-role green service by 0.102.

Table 25. Path Analysis Test Results (X →Z →Y 2)

Variable	B	Std. Error	Beta	Sig.
Green Human Resource Management	0.278	0.039	0.567	0.000
Corporate Social Responsibility	0.245	0.076	0.255	0.002

In table 25 we can see that mark standardized coefficients beta green human resource management 0.567 and corporate social responsibility is 0.255. Then can concluded that green human resource management capable raise level intra-role green service of 0.567 and corporate social responsibility capable raise intra-role green service of 0.255.

c. Coefficient Test Results Determination (R²)

According to Ghozali (2016) coefficient test determination (R²) for measure how much big model capabilities in explain variation variables dependent. Testing determination can seen in the table model summary, section Adjusted R-Square. Here results testing coefficient determination :

Table 26. Results of the Coefficient of Determination (XZ) Test

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.687 a	.471	.467	2.02239

In table 26 we can see that mark Adjusted R Square is 0.467 then obtained conclusion that variables green human resource management capable give influence to variables corporate social responsibility by 46.7% while the rest amounting to 53.3% of variables Corporate social responsibility is influenced by other variables outside study This.

Table 27. Results of the Determination Coefficient Test (Z-Y1)

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.538 a	.289	.284	1.84801

In table 27 we can see that mark Adjusted R Square is 0.284 then obtained conclusion that variables corporate social responsibility capable give influence to variables extra role green service of 28.4% while the rest amounting to 71.6% of variables extra role green service is influenced by other variables outside study This.

Table 28. Results of the Determination Coefficient Test (Z-Y2)

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.644 a	.415	.411	2.03778

In table 28 we can see that mark Adjusted R Square is 0.411 then obtained conclusion that variables corporate social responsibility capable give influence to variables intra role green service was 41.1% while the rest amounting to 58.9% of variables intra role green service is influenced by other variables outside study This.

Table 29. Results of the Determination Coefficient Test (X-Y1)

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.705 a	.497	.493	1.55488

In table 29 we can see that mark Adjusted R Square is 0.493 then obtained conclusion that variables green human resource management is capable give influence to variables extra role green service of 49.3% while the rest by 50.7% of variables extra role green service is influenced by other variables outside study This.

Table 30. Results of the Determination Coefficient Test (X-Y2)

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.742 a	.550	.547	1.78678

In table 30 we can see that mark Adjusted R Square is 0.547 then obtained conclusion that variables green human resource management is capable give influence to variables intra role green service was 54.7% while the rest by 45.3% of variables intra role green service is influenced by other variables outside study This.

4.3. Discussion

a. Influence Green Human Resource Management to Extra-Role Green Service

Hypothesis results First known mark significance For variables green human resource management is of $0.000 < 0.05$ and the calculated t value $> t$ table namely $7.287 > 1.657$. Then hypothesis in study This (H 1) is accepted. Based on results the show that the more increase implementation green human resource management then extra-role green service the more increases. On the other hand, if implementation green human resource management low so extra-role green service will declining. Green human resource management is approach innovative to HR performance and function in something organization in which context environment is base from all initiatives undertaken (Owino and Kwasira, 2016). Referring to the results research, things This indicates that the more Good implementation of GHRM, increasingly high participation employee in behavior friendly the outside environment not quite enough answer work they. The implementation of GHRM at PT X can seen through effort company in integrate practice friendly environment to in management source Power man with recruiting employees who have awareness environment, providing training about sustainability, as well as push employee For participate in initiative environment. Findings study This supported with research conducted by (Zhang et al., 2021) and Adelia and Suryani (2024) who found that GHRM has an effect positive to extra-role green service.

b. Influence Green Human Resource Management to Intra Role Green Service

Hypothesis results second known mark significance For variables green human resource management is of $0.000 < 0.05$ and the calculated t value $> t$ table namely $7.119 > 1.657$. Then hypothesis in study This (H 2) is accepted. Based on results the show that the more increase implementation green human resource management, then intra-role green service the more increases. On the other hand, if implementation green human resource management low so intra-role green service will decreased. PT X can implementing GHRM with method apply system evaluation performance that includes aspects sustainability, so that employee motivated For do practice friendly environment in work they. The effective implementation of GHRM at PT X is not only will increase intra-role green service, but also creates culture more work care to environment. Findings study This supported with research conducted by Aboramadan (2022) and Antika and Suryani (2024) which found that green human resource management influential positive to intra-role green service.

c. Influence Green Human Resource Management to Corporate Social Responsibility

Hypothesis results third known mark significance For variables green human resource management is of $0.000 < 0.05$ and the calculated t value $> t$ table namely $10.556 > 1.657$. Then hypothesis in study This (H3 \rightarrow) is accepted. Based on results the show that implementation green human resource management give influence positive and significant to corporate social responsibility. These results indicates that the more well PT X implements GHRM practices, increasingly big impact the positive to not quite enough answer social company. With integrate principles sustainability in management source Power human, PT X does not only can increase image company in the eyes stakeholders interests, but also encouraging involvement employee in CSR initiatives, such as management programs waste and conservation energy. Therefore that, the result study This give strong foundation for PT Hindoli For more focus on developing GHRM as part of their CSR strategy, ensuring that operational company No only profitable in a way financially, but also contributes to sustainability environmental and social. Findings study This supported with research conducted by Wang et

al. (2023) and research Krisna and Emilia (2023) who found that green human resource management influential positive to corporate social responsibility.

d. Influence Corporate Social Responsibility to Extra-Role Green Service

Hypothesis results fourth known mark significance For variables corporate social responsibility is of $0.244 > 0.05$ and the calculated t value $< t$ table namely $1.171 < 1.657$. Then hypothesis in study This (H 4) is rejected. Based on results the show that implementation corporate social responsibility No own significant influence to extra-role green service. Although hypothesis beginning I assume that corporate social responsibility will influential to extra-role green service, however findings study This No support hypothesis said. Then with This results study can give outlook new and indicative that other factors influence variables bound to what is necessary investigated more continue. Some possible factors influence results This including culture organization, lack of support from management, and low awareness as well as knowledge employee about issues environment. Findings study This supported with research conducted by (Maharani et al., 2025)entitled " Corporate Social Responsibility and Organizational Citizenship Behavior: Mediating role of psychological capital, affective commitment, and prosocial motivation " which found that corporate social responsibility No influential positive to extra-role green service.

e. Influence Corporate social responsibility to Intra-Role Green Service

Hypothesis results fifth known mark significance For variables corporate social responsibility is of $0.002 < 0.05$ and the calculated t value $> t$ table namely $3.210 > 1.657$. Then hypothesis in study This (H 5) is accepted. However hypothesis This show that corporate social responsibility influential positive No significant to intra-role green service. Corporate Social Responsibility (CSR) has influence positive to intra-role green service at PT X even though influence the No significant. This means that although company has apply various CSR initiatives, such as sustainability and conservation programs environment, improvement in intra-role green service No always influenced by the implementation of CSR. Other factors such as culture company, internal policies, and incentives provided to employees, can also influence behavior friendly environment employees. Therefore that, for increase impact of CSR on intra-role green service, PT increase communication and training about the importance of CSR, creating incentive programs that encourage participation employee in initiative friendly environment, as well as integrate values sustainability to in culture company. Findings study This supported with Research conducted by Xu et al. (2022) entitled " The Role of Healthcare Employees' Pro-Environmental Behavior for De-Carbonization: An Energy Conservation Approach from CSR Perspective " found that that corporate social responsibility influential positive to intra-role green service.

f. Influence Green Human Resource Management to Extra-role Green Service mediated by Corporate Social Responsibility

Research result hypothesis sixth show that corporate social responsibility No capable mediate influence between green human resource management to extra-role green service. Because of the value influence direct more big than influence No direct. Influence No direct that is $0.687 \times 0.102 = 0.070$. Influence value direct $0.635 > 0.070$ influence No directly. So that corporate social responsibility No own effect mediation. Corporate social responsibility No capable mediate influence between green human resource management (GHRM) and extra-role green service Because effective implementation of GHRM can direct influence behavior employee in give service green, without need through CSR. Focusing on GHRM can create culture more work sustainable and encouraging employee For contribute more in practice friendly environment. Corporate Social Responsibility in matter This as supporter, not mediator, because even though CSR at PT X contributes to the image company and can increase satisfaction employees, however matter This No always functioning as a mediator between GHRM and extra-role green services. Trained employees in GHRM maybe Already own understanding and commitment to sufficient sustainability strong, so that they No requires CSR as driving force addition For behave friendly environment. Findings study This No in harmony with research conducted by Antika and Suryani (2024) entitled " The Influence of management source Power

man friendly environment to behavior green service with not quite enough answer social company as mediator ". Research results This state that green human resource management influential positive significant to extra-role green service mediated by corporate social responsibility.

g. Influence Green Human Resource Management to Intra-Role Green Service mediated by Corporate Social Responsibility

Research result hypothesis seventh show that corporate social responsibility does not capable mediate influence between green human resource management to intra-role green service. Because the value influence direct more big than influence No direct. Influence No direct namely $0.687 \times 0.255 = 0.175$. The influence value direct $0.635 > 0.175$ influence No directly. So that corporate social responsibility No own effect mediation. Difference objective in second matter namely, matter This caused by force the influence of GHRM which focuses on empowerment employees and development relevant skills, while CSR is more image - oriented companies and initiatives external. GHRM more focused on development individual and performance employee in context sustainability. While CSR is image -oriented company. CSR is more focus on how company interact with society and environment in a way overall. Although CSR is important For build reputation company, its influence to behavior individual employee in context intra-role green service No as strong as GHRM influence. Findings study This supported by research conducted by Antika and Suryani (2024) entitled " The Influence of management source Power man friendly environment to behavior green service with not quite enough answer social company as mediator "who found that corporate social responsibility No influential significant and not mediate connection between green human resource management to intra-role green service.

V. Conclusion

Based on results study This can concluded that : (1) Green human resource management influential positive significant to extra-role green service ; (2) Green human resource management influential positive significant to intra-role green service ; (3) Green human resource management influential positive significant to corporate social responsibility ; (4) Corporate social responsibility No influential positive significant to extra-role green service ; (5) Corporate social responsibility influential positive significant to intra-role green service ; (6) No there is effect mediation between corporate social responsibility and extra-role green service; and (7) No there is effect mediation between corporate social responsibility and intra-role green service. Researcher next those who are interested do study similar expected can expand study with take samples in the sector different, add amount variables, and perform analysis related variables others that can influence green service behavior. Green human resource management play a role in improvement corporate social responsibility, will but If company expect existence extra role and intra role from employees, then corporate social responsibility No is necessary. Because with implementation green human resource management just can increase extra role and intra role. So that company can choose want to focus on GHRM or corporate social responsibility, because in matter This corporate social responsibility No play a role as intervening or mediator.

References

- Aboramadan, M. (2022). The effect of green HRM on employee green behaviors in higher education: The mediating mechanism of green work engagement. *International Journal of Organizational Analysis*, 30(1), 7–23. <https://doi.org/10.1108/IJOA-05-2020-2190>
- Ayahya, M., Aliedan, M., Agag, G., & Abdelmoety, Z. H. (2023). The antecedents of hotels' green creativity: The role of green HRM, environmentally specific servant leadership, and psychological green climate. *Sustainability*, 15(3), 2629. <https://doi.org/10.3390/su15032629>

- Antika, R., & Suryani, T. (2024). Pengaruh manajemen sumber daya manusia ramah lingkungan terhadap perilaku green service dengan tanggung jawab sosial perusahaan sebagai pemediasi. *Jurnal Manajemen Strategi dan Aplikasi Bisnis*, 7(1), 121–136. <https://doi.org/10.36407/jmsab.v7i1.1188>
- Emilisa, N., Michelle, & Lunarindiah, G. (2020). Consequences of green human resource management: Perspective of professional event organizer employees in Jakarta. *Review of Integrative Business and Economics Research*, 9(1), 361–372.
- Ghozali, I. (2013). *Aplikasi analisis multivariate dengan program IBM SPSS 21*. Badan Penerbit Universitas Diponegoro.
- Giantika, G. G., & Qona'ah, S. (2024). PLN CSR program through community empowerment at Saguling Dam, Citarum River, Bandung, West Java. *Golden Ratio of Data in Summary*, 4(2), 903–910. <https://doi.org/10.52970/grdis.v4i2.735>
- Isrososiawan, S., Rahayu, A., & Wibowo, L. A. (2021). Green human resource management mendukung kinerja lingkungan industri perhotelan. *Jurnal Co Management*, 3(2), 457–470. <https://doi.org/10.32670/comanagement.v3i2.425>
- Krisna, A., & Emilia, N. (2023). Pengaruh green human resource management dan corporate governance terhadap job pursuit intention melalui corporate social responsibility. *Jurnal Pendidikan Tambusai*, 7(3), 1–12.*
- Kristian, A., Waruwu, P., Laila, O., Mendrofa, Y., & Zalukhu, Y. (2025). The effect of social media marketing on VCO purchasing decisions at Osseda Folala Cooperative. *Golden Ratio of Data in Summary*, 5, 229–244.
- Kumandang, C., & Hendriyeni, N. S. (2021). Corporate social responsibility, corporate governance, dan manajemen laba pada perusahaan manufaktur di Indonesia tahun 2015–2019. *Journal of Management and Business Review*, 18(2), 94–109. <https://doi.org/10.34149/jmbr.v18i2.273>
- Maharani, M. (2025). Corporate social responsibility and organizational citizenship behavior: Mediating role of psychological capital, affective commitment, and prosocial motivation. *Jurnal Fokus Manajemen Bisnis*, 15(1). <https://doi.org/10.12928/fokus.v15i1.12189>
- Sabokro, M., Masud, M., & Kayedian, A. (2021). The effect of green human resources management on corporate social responsibility, green psychological climate, and employees' green behavior. *Journal of Cleaner Production*, 313, 127963. <https://doi.org/10.1016/j.jclepro.2021.127963>
- Sugiyono. (2015). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Wang, Q., Sobhani, F. A., Masud, M. A. K., & Akter, S. (2023). Green human resource management and job pursuit intention: Mediating role of corporate social responsibility and organizational reputation. *Environmental Research Communications*, 5(7). <https://doi.org/10.1088/2515-7620/acda81>
- Xu, L., Cherian, J., Zaheer, M., Sial, M. S., Comite, U., Cismas, L. M., Cristia, & Oláh, J. (2022). The role of healthcare employees' pro-environmental behavior for de-carbonization: An energy conservation approach from CSR perspective. *Energies*, 15(9), 1–18. <https://doi.org/10.3390/en15093429>
- Zamzamy, M. V., & Suryani, T. (2024). Peran green human resource management terhadap green service behavior dengan green psychological climate sebagai pemediasi. *Jurnal Manajerial*, 11(1), 63–76. <https://doi.org/10.30587/jurnalmanajerial.v11i01.6464>
- Zhang, B., Yang, L., Cheng, X., & Chen, F. (2021). How does employee green behavior impact employee well-being? An empirical analysis. *International Journal of Environmental Research and Public Health*, 18(4), 1669. <https://doi.org/10.3390/ijerph18041669>