

The Influence Of Individual Characteristics, Human Resource Competence And Compensation On Employee Performance In Waste Management In The Environmental Service Of South Bangka Regency

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Abstract

The results of the analysis show that individual characteristics such as education, work experience and motivation have a significant effect on employee performance in waste management in addition, human resource competencies, which include knowledge and skills in the field of waste management also have a positive impact on their performance further more the level of compensation received by employees has a significant effect on motivation and job satisfaction, which in turn improves their performance in waste management tasks.

Keywords: *Individual Characteristics, Human Resource. Competencies, Compensation, Performance.*

1. INTRODUCTION

Waste Management, it is said that waste is the remains of human daily activities or natural processes in solid or semi-solid form in the form of organic or inorganic substances that are biodegradable or non-biodegradable which are deemed to be no longer useful and are thrown away environment.

Problems in waste management that often occur include people's behavior and lifestyle which still tends to lead to an increase in the rate of waste generation which greatly impacts public

health management, limitations on resources, budgets, personnel vehicles and thus human resource management. not yet able to serve all the waste produced.

Waste management services in South Bangka Regency are directly handled by the Environmental Service in the waste management section. Landfills. The number of Adipura awards from the South Bangka Regency Environmental Service is 4 times. The Environmental Service (DLH) of South Bangka Regency, Bangka Belitung Islands Province transported as much as 12 tonnes of rubbish which had piled up at an illegal final disposal site (TPA).

Literature review

Management

According to Aditama (2020), management is a process consisting of planning, organizing, directing and controlling activities carried out to achieve set goals through the use of human resources and other resources.

Human Resource Management

According to Ajabar (2020) Human Resources Management is an activity that is attempted to trigger, improve, motivate and maintain good performance in the organization.

Individual Characteristics

Individual performance is the basis of organizational performance so that management is required to understand individual behavior. Individual behavior is greatly influenced by how individual characteristics that characterize one person and another are different because each has different potential and needs.

Human Resources Competency

According to Sudiarti (2020) Human resource competence is the ability possessed by a person in relation to knowledge, skills and personality characteristics which directly influence work performance which can achieve the desired goals.

Compensation

According to Enny (2019), compensation can be defined as a form of reciprocal service provided to employees as a form of appreciation for their contribution and work to the organization. This compensation can be direct or indirect financial, and the reward can also be indirect.

2.METHODE

Scope of the Research

This study aims to examine the influence of individual characteristics, human resource competencies, and compensation on the performance of waste management at the Environmental Agency of South Bangka Regency.

Population

According to Sugiyono (2021), a population is a generalization area consisting of objects/subjects that have certain quantities and characteristics determined by the researcher to be studied and from which conclusions are drawn. The population in this study consists of all employees of the Environmental Agency, totaling 195 people.

Sample

According to Sugiyono (2021), a sample is a part of the number and characteristics possessed by the population. The sample is a portion of the units in the population whose characteristics are thoroughly investigated or studied (Djaali, 2020). Therefore, the sample in this study includes all employees of the Environmental Agency of South Bangka Regency, totaling 195 people.

Operational Definition and Variable Measurement

No	Variable	operational definition	variable indicators
1	individual characteristics (x1)	Education: The level of formal education attained by waste management staff. Work Experience: The number of years of work experience in waste management possessed by the staff. Technical Skills: Skills and relevant technical expertise in waste management (e.g., handling hazardous waste, recycling management, composting site management).	The highest level of education attained by staff (e.g., Elementary School, Junior High School, Senior High School, Diploma 1, Diploma 3, Bachelor's Degree, Master's Degree, Doctoral Degree). The number of years of work experience in the field of waste management. The number of years of work experience in the field. The level of technical expertise in waste management.
2	Human Resource Competency (x2)	Training: The number of training sessions attended by staff within a year related to waste management. Certification: The availability of official certifications or licenses held by staff in waste management. Performance Evaluation: The assessment of staff performance in waste management conducted by	The number of training sessions attended by staff within a year related to waste management. The existence of official certification or license in the field of waste management (0 = No, 1 = Yes). Staff performance assessment in waste management by superiors or authorized parties (eg: poor, sufficient, good, very good).

		supervisors or authorized parties.	
3	Compensation (x3)	<p>Wages :</p> <p>The amount of wages or salaries received by waste management staff</p> <p>Benefits:</p> <p>Additional financial or other incentives given to staff as recognition of their performance in waste management</p> <p>Facility :</p> <p>Availability of other facilities or benefits such as health insurance, pension funds, or additional leave provided to staff as part of the compensation package</p>	<p>The amount of wages or salaries received by waste management staff.</p> <p>Provision of additional allowances for waste management staff (0 = No, 1 = Yes).</p> <p>Availability of additional facilities such as health insurance, pension funds, or additional leave (0 = No, 1 = Yes)</p>
4	Waste management performance (y)	<p>Waste collection efficiency: Percentage. The waste that is successfully collected is from the total waste generated in the specified area within the period. certain time</p> <p>To be continued:</p> <p>Level of success in implementing sustainable and environmentally friendly waste management programs</p> <p>Community satisfaction:</p> <p>Scores or numbers that reflect the level of community satisfaction with waste management services provided by the South Bangka Regency Environmental Service</p>	<p>Percentage of waste collected from the total waste generated in a certain area in a certain time period.</p> <p>Level of success in implementing sustainable and environmentally friendly waste management programs (eg: low, medium, high).</p> <p>Level of community satisfaction with waste management services provided by the South Bangka Regency Environmental Service (For example: scale 1-5, where 1 = Very dissatisfied, 5 = Very satisfied).</p>

Data Types and Sources

The type of data in this research is primary data and the data source is waste management employees at the South Bangka Regency Environmental Service.

Method of collecting data

This research uses several methods. which consists of Employee Survey, In-depth Interview, Direct Observation, Document Analysis, and Community Survey.

Data Analysis Techniques

This research uses validity tests, reliability tests, followed by classic assumption tests consisting of normality tests, multicollinearity tests, and heteroskedasticity tests. Next, a multiple linear regression analysis is carried out consisting of analysis of coefficient of determination (R²), f test and t test.

3. RESULTS AND DISCUSSION

Questionnaire Validity Test

Uji Validitas Kuesioner

Variabel	r count	information
individual characteristics (X1)		
X1.1	0.811	Valid
X1.2	0.750	
X1.3	0.782	
X1.4	0.636	
X1.5	0.712	
X1.6	0.746	
X1.7	0.102	
X1.8	0.254	
Human Resource Competency (X2)		
X2.1	0.739	Valid
X2.2	0.720	
X2.3	0.685	
X2.4	0.817	
X2.5	0.734	
X2.6	0.710	
X2.7	0.461	
X2.8	0.435	

Compensation (X3)		
X3.1	0.700	Valid
X3.2	0.696	
X3.3	0.673	
X3.4	0.786	
X3.5	0.731	
X3.6	0.665	
X3.7	0.472	
X3.8	0.456	
Waste management performance (Y)		
Y1.1	0.794	Valid
Y1.2	0.744	
Y1.3	0.664	
X1.4	0.668	
Y1.5	0.751	
Y1.6	0.575	
Y1.7	0.603	
Y1.8	0.604	

The conclusion is that all indicators in the articulation of variables are considered valid if seen from the table which shows the consequences of the legitimacy test on the installment computing factors, monetary proficiency, and monetary efficiency perspective with the assessment results that have been determined. more prominent than r table 1.

Questionnaire Reliability Test

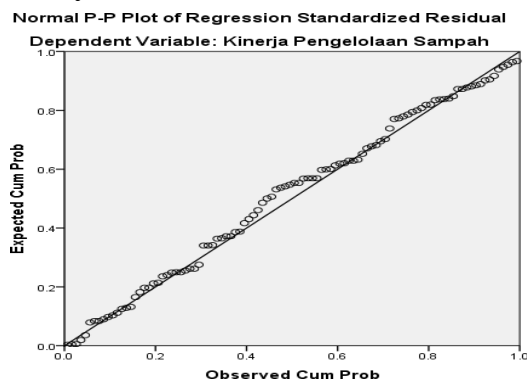
Variable	Cronbach's Alpha	N of items	Information
individual characteristics (X1)	0.790	8	Reliable

Human Resources Competence (X2)	0.832	8	
Compensation (X3)	0.819	8	

Performance (Y)	0.830	8	
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If the Cronbach Alpha value of all variables is greater than 0.700 as seen in the table above from the reliability test, then it can be concluded that the four variables are stated to be reliable.

Classical Assumption Test Normality Test



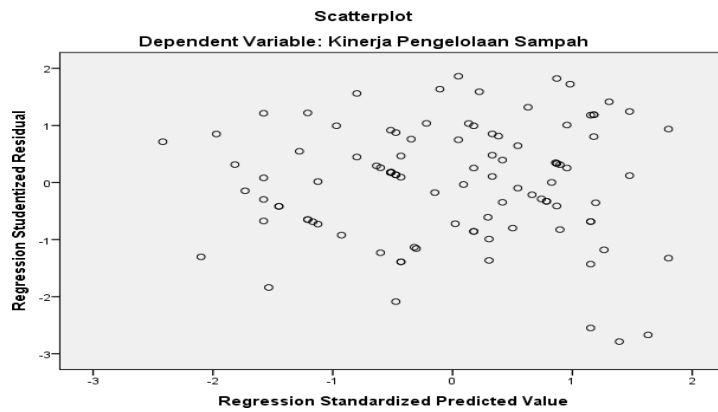
Judging from the picture above, you can see the results of the normality test using the Likelihood Plot where the small dots or smears are near the corner line. corners or pay attention to the slashes, so that the quality of the rest is always better.

Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
individual characteristics	.496	2.017
Human resources competency	.027	37.606
compensation	.027	36.371

Based on the table above, the results of the multicollinearity test show that all factors have a tolerance value of > 0.10 and a VIF value of < 10 . The regression model used in this study does not show signs of multicollinearity if the tolerance value is greater than 0.10 and all VIF values are less than 10

Heteroscedasticity Test



Thus, it can be concluded that there are no problems and symptoms in the heteroscedasticity test

Multiple Linear Regression Analysis

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients
		B	Std. Error	Beta
1	(Constant)	4.648	3.111	
	Individual Characteristics	.730	.126	.604
	Human Resources Competence	.526	.474	.500
	Compensation	-.416	.473	-.390

Dependent Variable: Waste Management Performance

Based on the table above, the following regression equation models are obtained:

$$Y = 4.648 + 0.730(X_1) + 0.526(X_2) - 0.416(X_3)$$

Determination Coefficient Analysis (R²)

Model	R Square	Adjusted R Square	Std. Error of the Estimate
1	.482	.466	2.71803

a. Predictors: (Constant), Compensansi, Karakteristik Individuals, Human Resources Competer

Based on the table above, it is known that the coefficient of determination (R^2) is as large as 0.482 or the magnitude of the influence given by variables (X1), (X2), and (X3) on (Y) is as large as 48.2% = (0.482 Converted to persen). The remaining value of 51.8% is influenced by other variables not discussed in this research.

F Test (Simultaneous)

Model	Sum of Squares	df	Mean Square	F	Sig.
1	660.824	3	220.275	29.817	.000 ^b
Regression	n				
	Residual	709.216	96		7.388
	Total	1370.040	99		

a. Dependent Variable: Waste Management Performance

b. Predictors: (Constant), Compensation, Individual Characteristics, Human Resource Competence

Source: Processed SPSS Output Data, 2024.

Based on the table above, it is known that F count 29.817 > F table 2.698 with a significance level of 0.000. The magnitude of the significance value of 0.000 from the results is <0.05. It is concluded that (X1), (X2) and (X3) simultaneously (together) have an effect on Variable (Y) at the Environmental Service of South Bangka Regency..

T-Test (Partial)

Coefficients

Model	Standardized Coefficients Beta	t	Sig.
1	1.494	.138	
(Constant)			
Individual Characteristics	.604		5.792

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.500	H u m a n	1.110	.270
	R e s o u r c e s C o m p e t e n c e		
	C o m p e n s a t i o n		
-.390		-.880	.381

Based on the table above, it is known that the partial significance test t for each variable is as follows:

1).Individual Characteristics Payment

The t table value is obtained from the formula $df = N-k-1 = 100-2-1 = 97$; $\alpha = 5\%$ (0.050). Based on the results of the partial significance analysis of t in the table, the test results obtained a calculated t value for the variable (X1) of $5.792 > t$ table, which is 1.984, meaning H1 is accepted. The test results also obtained a significance value of $0.000 < 0.050$, which means that (X1) has an effect on the variable (Y).

2).Human Resources Competer

The t tabel value is obtained from the formula $df = N-k-1 = 100-2-1 = 97$; $\alpha = 5\%$ (0.050). Based on the results of the partial significance analysis of t in the above table, the test results show that the calculated t value for the variable (X2) is $1.110 > t$ table.l, namely 1.984, meaning that H2 is rejected. The test results have a significance value of $0.270 < 0.050$, which means that (X2) has no influence on the variable (Y).

3). Compensation

The ttable value is obtained from the formula $df = N-k-1 = 100-2-1 = 97$; $\alpha = 5\%$ (0.050). Based on the results of the partial significance analysis t in the table, the results of the test of the role of the calculated t value for the variable (X3) are $-880 > t$ table, which is 1.984, meaning that H3 is rejected. The results of the test of the role of the calculated t value significance of $0.381 < 0.050$ which means that (X3) has no effect on variable (Y).

4. CONCLUSION

Conclusion

1. There is an influence of individual characteristics, human resource competencies, and compensation on the performance of waste management at the Environmental Agency.
2. There is an influence of individual characteristics on employee performance in waste management at the Environmental Agency.
3. There is an influence of human resource competencies and compensation on employee performance in waste management at the Environmental Agency.

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Berikut adalah kebaruan (novelty) dari artikel PDF berjudul *"The Influence of Individual Characteristics, Competence, and Work Environment on Employee Performance through Work Motivation"* dalam bahasa Inggris:

Novelty of the Research:

This study presents a distinctive contribution to the body of knowledge in human resource management by integrating individual characteristics, competence, and work environment as direct and indirect predictors of employee performance through the mediating role of work motivation. The novelty of this research lies in its comprehensive model that simultaneously examines these variables within a single structural equation modeling framework, which is relatively underexplored in prior studies, particularly in the context of government employees in regional Indonesia.

Furthermore, this research emphasizes the importance of work motivation as a crucial intervening variable, offering empirical evidence that motivation not only acts as a bridge but also amplifies the effect of individual traits and environmental factors on performance. By applying this model, the study contributes a fresh perspective to performance improvement strategies, making it especially valuable for policymakers and organizational leaders in the public sector.

References

- Aboejowono, A. (1985). *Pengelolaan sampah menuju ke sanitasi lingkungan dan permasalahannya: Wilayah DKI Jakarta sebagai suatu kasus*. Jakarta.
- Afandi, P. (2018). *Manajemen sumber daya manusia (Teori, konsep, dan indikator)*. Pekanbaru: Zanafa Publishing.
- Edison, E., Anwar, Y., & Komariyah, I. (2016). *Manajemen sumber daya manusia*. Bandung: Alfabeta.
- Kembuan, O., & Mewengkang, A. (2018). PKM pemberdayaan masyarakat melalui sistem informasi desa SEA II, Kecamatan Pineleng, Kabupaten Minahasa. *Jurnal ABDIMAS*, 11(3), 221–228.
- Putra, A. (2020). *Peran bank sampah dalam meningkatkan pembangunan lingkungan bersih, hijau dan sehat melalui pemberdayaan ekonomi masyarakat (Skripsi)*. Universitas Muhammadiyah Sumatera Utara.
- Sedarmayanti. (2017). *Perencanaan dan pengembangan SDM untuk meningkatkan kompetensi, kinerja, dan produktivitas kerja*. Bandung: Refika Aditama.
- Setiawan, S. A. (2015). *Application of Human Resources Information System (HRIS) Impact on the Performance of Employees at PT Bank BJB, Tbk* (Diploma thesis). Universitas Komputer Indonesia.
- Sugiyono. (2014). *Metode penelitian kuantitatif, kualitatif dan R&D*. Bandung: Alfabeta.
- Suwati, Y. (2013). Pengaruh kompensasi dan motivasi kerja terhadap kinerja karyawan pada PT. Tunas Hijau Samarinda. *E-Journal Ilmu Administrasi Bisnis*, 1(1), 1–14.
- Swasto, B. (2011). *Manajemen sumber daya manusia*. Malang: UB Press.
- Wibowo. (2014). *Manajemen kinerja*. Jakarta: Raja Grafindo Persada.

