



The Influence of Personality, Leadership Style, and the Decision-Making Process on Employee Performance

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Abstract

This research aims to examine the influence of personality, leadership and decision making on employee performance at PDAM Makassar City. The method used in this research is a structural equation model with a total of 66 respondents consisting of men and women. Based on data analysis, it was found that personality and leadership had a positive and significant effect on employee performance, while decision making did not show a significant effect. Validity and reliability tests show that all indicators are suitable for use, with Cronbach alpha values above 0.70. The data normality test shows a normal distribution, and the multicollinearity test shows there is no correlation between the independent variables. The heteroscedasticity test does not show symptoms of heteroscedasticity, which indicates a good regression model. The T test shows that personality and leadership variables have a significant effect on performance, while decision making does not have a significant effect. The F test shows that the independent variables simultaneously have a significant effect on employee performance. The coefficient of determination (R²) value of 0.677 indicates that the model has a strong relationship between the independent variable and the dependent variable. Based on these findings, it is recommended to improve personality training programs, leadership qualities, and improve decision-making processes to improve overall employee performance.

Introduction

Management can be defined as a series of activities that involve planning, organizing, directing and controlling organizational resources (including humans, finances, time, technology) to achieve predetermined goals. Management involves the process of making strategic and operational decisions, coordinating various functions and departments within the organization, motivating and directing employees to work effectively and efficiently, and monitoring organizational performance to ensure goal achievement.

Apart from that, management also involves the application of managerial principles such as strategic and tactical planning, rational decision making based on accurate and relevant information, division of tasks and determining authority and responsibility for each member of the work team. Management also includes making organizational policies and implementing them consistently to achieve the desired results. It can be concluded that literally management is a situation where managers are responsible for managing resources in order to achieve organizational goals in an effective (achieving desired results) and efficient way (using resources as effectively as possible). Furthermore, effective management can contribute to improving employee performance. Research has shown that managers who provide social support, provide constructive feedback, and provide necessary resources can increase

employee motivation and job satisfaction, thereby positively impacting their performance (Davidescu et al., 2020).

The relationship between management, personality, leadership, decision making, and its impact on employee performance can be complex and vary depending on the specific organizational context and industry (Hamid, 2023). However, several studies have shown a significant relationship between these factors. Such as research conducted by Luky et al. (2021) at PDAM Makassar City, where in the research he conducted it was found that the influence of leadership was very significant on employee performance, or research conducted Ibrahim et al. (2023) with the title of the research results which stated that performance increased Makassar City PDAM employees are influenced by the organizational culture and leadership behavior at the Makassar City PDAM Office.

Effective management can contribute to improving employee performance (Riyanto et al., 2023). Research has shown that managers who provide social support, provide constructive feedback, and provide necessary resources can increase employee motivation and job satisfaction, thereby positively impacting their performance. Furthermore, specifically individual personality can also influence employee performance (Peiró et al., 2020; Mihalache & Mihalache, 2022). For example, individuals with a high level of self-awareness tend to have greater responsibility for their work and are more disciplined in achieving work goals. Individuals with high levels of extroversion may find it easier to get along and communicate with their work team. Further strategic leadership In decision making it can also influence employee performance. Leaders who are able to develop a long-term vision for the organization and make strategic decisions effectively tend to create an inspiring work environment and empower their employees to achieve organizational goals well (Lasrado & Kassem, 2021).

The Regional Drinking Water Company Office (PDAM) is a public institution responsible for providing drinking water and sanitation services to the community (Orbawati et al., 2022). Like other organizations, PDAM performance is very important to meet the community's need for clean, quality water (Miranti, 2022). In improving PDAM performance, personality factors and strategic leadership are aspects that need to be considered. Individual personality can influence how a person thinks, plans, manages time, adapts to change, and makes decisions effectively. Meanwhile, strategic leadership helps in formulating appropriate business goals and strategies and creates a strong organizational culture. However, there is still limited knowledge about the influence of personality and strategic leadership through the decision-making process on performance at PDAM offices (Zulkarnaen, 2024). Therefore, this study will investigate the relationship between these three factors. The influence of leadership on employee performance in an organization is very significant.

The decision making process is an important step in PDAM management which involves analyzing the situation of drinking water supply and sanitation in the PDAM service area, identifying alternative actions to improve clean water services to the community, evaluating the risks and socio economic impacts of each alternative action and selecting the best solution (Keeler et al., 2012). to achieve organizational goals in providing quality drinking water services efficiently. Through a deeper understanding of the interaction between the personality factors of individuals who work in PDAM offices and the role of leaders in designing business strategies through decision-making processes, PDAM management will provide new insight into how to increase their effectiveness in providing quality drinking water services on an ongoing basis (Paparang & Rumokoy, 2015). The results of this research can also provide practical guidance for managers or leaders at PDAM offices on how to select employees based

on personality characteristics that are relevant to certain responsibilities such as planning infrastructure development or meeting community needs.

Furthermore, the Makassar City Regional Drinking Water Company (PDAM) as one of the companies operating in the field of providing clean water needs in Makassar has a strong commitment to implementing an integrated quality control concept in a strategy that has been prepared in order to fulfill customer desires. However, this concept faces its main obstacle in relation to controlling its human resources, especially in terms of leadership in making decisions which will later have an impact on employee performance where with good employee performance the organization's goal of fulfilling customer desires can be achieved well.

Methods

Research Design

The research methodology used in this study is quantitative research that focuses on achievement of the research objectives which centres on how personality, leadership style and decision making affect performance of employees working for the Regional Drinking Water Company (PDAM) in Makassar City. The selected method of research is aimed at the clear and systematic investigation of hypotheses and interrelationships between factors in a scientific and quantitative manner. They all analysed the research from a quantitative perspective. This approach was chosen because it makes it possible to quantify the study variables and to fashion hypotheses concerning the relationships of the latter. Quantitative research is ideal for this study since it attempts to measure the relationship between personality traits, leadership styles and decision making styles and marginal returns on employees' performance to the existing body of knowledge.

Instrument Development

Table 1. Measurement Instruments

Construct	Description	Scale	Source	Cronbach's Alpha
Personality	Assesses various aspects of behaviour including one's level of self-orientation, flexibility and accountability.	Likert scale of agreeing-disagreeing statement with an option of strongly disagree = 1 and strongly agree = 5.	Discourage own-brand contents as suggestions for patrons Peiró et al. (2020)	0.787
Leadership Style	Evaluates such leadership skills as vision and support of the team.	Five-item Likert-type scale with range from 1 (Strongly Disagree) to 5 (Strongly Agree)	Modified from Lasrado & Kassem (2021)	0.790
Decision-Making	Assesses the quality of decision making processes according to the extent of their openness and comprehensiveness.	Measurement scales: used 5-point Likert scale, ranging from 1 end of strongly disagree to 5 at the agreeing end.	(Mishra & Min, 2010)	0.796
Employee Performance	Checks on the end results such as the achievement of set goals and standards of performance.	Likert scale from 1 to 5, where 1 = strongly disagree and 5 = strongly agree.	The questions are adopted from the study by Riyanto et al. (2021).	0.785

All the constructs in this study were operationalised using research instruments that have been found to be reliable in earlier work. The Personality scale is selected from the Peiró et al. (2020) list due to the focus on the aspects that are a direct concern viewed in the context of job performance, such as self-ensuring and flexibility. The scale on Leadership Style used in the present study refers to transformational leadership that is important in a strategic strategic organizational context as described by Lasrado & Kassem (2021).

For Decision Making, the scale from Mishra & Min (2010) was used because it focus on the process of Decision Making, including all people involve, which is important for organization such as PDAM that come from public sector. Last was Employee Performance that was measured on a scale from Riyanto et al. (2021) which includes both employee's performance results focused on their tasks, and the overall indicators in an organization.

The internal consistencies of proposed scales were calculated by Cronbach's alpha and all the constructs had satisfactory alpha values more than 0. 70, hence the scales are appropriate for the examination.

Sampling and Data Collection

The category of population involved in this study comprises of PDAM Makassar City employees. The research covers only employees in the general division where secretarial work is likely to be predominant. This meant that a purposive sampling technique was adopted in a bid to make sure that the sample involved was relevant to the set research objectives. The questionnaires were distributed to 80 individuals, but only 66 filled in the questionnaires and these were considered useful and the response rate worked out to be 82 percent. 5%. This sample size is quite reasonable for SEM in which the minimum sample size varies depending on the complexity of the model to be used.

This study employs a quantitative approach of data collection, and the actual data gathering for the study was undertaken systematically over a two months' period amongst employees of the Regional Drinking Water Company (PDAM) in Makassar City. The study was conducted among the participants from the general division, a department that mainly deals with administrative activities that helped in capturing the needed context for the study hence assessing the interrelatedness of the constructs to establish the impact of personality, leadership style, decision making and performance.

The general division was selected purposively because administrative management and leadership of this division is central to the functioning of the organization and making of key decisions. Employees within this division are normally offer to perform tasks that involve heavy coordination, strategic decision-making and following direction from leaders. This made them ideal candidates for evaluating the effects of leadership and the decision making processes in affecting the employee behaviors most especially in a public sector organization where the bureaucratic structures are rampant.

Distribution and Administration

So as to provide wide coverage and at the same time, taking into account the difference in the employees' preferences and abilities, the questionnaire was administered in a dual fashion both online and on paper. This dual approach was necessary a the end since some of the employees may not be able to access digital means or are more comfortable with paper filled out forms.

In the course of the study, all the subjects under the study received an official notification on the study goals and the need to participate in the study in a letter. This communication stressed on the fact that the participation in the study is not mandatory and all participants will be

assured of the anonymity and confidentiality of the responses they made. Reasonably, this way the study wanted to avoid biases stemming from perceived or actual unethical practices of the study, in general, and from its authors, in particular, by addressing these ethical consideration at the very beginning of the study, which could help building general trust between the participants and the authors and, therefore, the likelihood of getting honest and truthful answers would be maximized.

The electronic questionnaires were developed in electronic format and sent through the company's internal email which hence improved access and submission to the questionnaires. In order to encourage contribution, the structure of the questionnaire was straightforward with detailed instructions and an understandable sequence of questions to reduce the time spent by the subjects on the investigation of the questionnaire. Employing the same format for the rest of the questionnaires, the department heads gave out the hard copies and provided envelopes for the returned completed questionnaires for the purpose of confidentiality.

The authors used a two-month time window for the completion of the questionnaire which was considered as enough because of the different working hours and work load of the employees. This time also gave an opportunity for follow up reminders that were mechanized and given to the non-respondents. Such prompt were used to make sure that as many participants as possible responded, without applying too much pressure on them.

Response Rate and Data Handling

All the 80 questionnaires distributed were collected back duly filled up and hence a high response rate of about 82% was achieved. 5%. High response rate can be attributed to proper selection of the approach to distribution of the questionnaires and sufficient number of follow-up e-mails sent to the participants to remind them about the study.

After that, the received questionnaires filled in by the eligible participants were carefully reviewed. In each questionnaire every question was reviewed as to its answer and any that were left blank were ensured one was completed and answered to the best of ability. Since questionnaires had some missing, ambiguous, or otherwise less consistent values, the responses excluded from the study dataset. Such a cautious approach was necessary to guarantee that data collected at the next stages would be clean and absolute that is, it did not contain mistakes that might appear if people fail to give comprehensive answers.

The validated responses were then consistently key at the secured database that was optimized to capture quantitative data adequately. To address the issue of measurement error, data entered in the database was cross checked to reduce chances of transcription errors that are likely to distort the results obtained from participants. It formed the basis for the subsequent statistical analysis in which the patterns of the constructs personality, leadership style, decision-making and performance were established.

Data Analysis

In this study, the data analysis done involved the use of multiple regression analysis and this was conducted by the aid of SPSS software. Multiple regression analysis was adopted because it enables the assessing of the correlation between several independent variables (personality, leadership, and decision-making) on one dependent variable (employee performance). This lets the assessment of not only individual effects of the independent variables on the dependent variable but also the cumulative effects of all of them an important criterion for testing the hypothesis and finding out which factors are affecting the performance of the employees.

T-Test and Hypothesis Testing

In order to find out the significance of each independent variable t-tests were carried out. While the t- test allows comparing b the means of the dependent variable to determine whether a particular independent variable has a statistical significance on the dependent variable. The level of significance was determined at 5% level of confidence, that is ($\alpha = 0.05$). The significance value (Sig t) for each independent variable was compared to this threshold: The significance value (Sig t) for each independent variable was compared to this threshold:

Depending on the specified value of p, the conditions for which $\text{Sig } t < 0.05$ are: 5, Therefore the hypothesis that the independent variable has an effect on the level of the employees' performance is accepted.

If $\text{Sig } t > 0.05$, it is concluded that the null hypothesis is accepted meaning that the independent variable has no effect on the dependent variable the employee performance.

Findings of the impact analysis of personality and leadership performed on dependent variable namely 'employee performance' demonstrated more significant positive correlation of the two factors with 'Sig t' values of 0.001 and 0.000, respectively. Hence it is clear that use of Decision making did not produced any systematic effect although the corresponding Sig t value is 0.770, thus disapproving the hypothesis according to the same number.

F-Test and Model Significance

In order to compare all the coefficients of determination between the model and its intercept, an F-test was used to test the significance of the whole model. This test establishes if all the independent variables have an impact on the dependent variable when they are all taken in to consideration. The F-test compares the model's calculated F value with the critical F value from the F-distribution table: The F-test compares the model's calculated F value with the critical F value from the F-distribution table:

If F calculate large or greater than table F value & if $\text{Sig } F < 0.05$, it means that the null hypothesis is rejected hence implying that the independent variables have an effect on the dependent variable.

The analysis to the fourth hypothesis revealed that various independent variables that includes personality, leadership style and decision making has a significant influence on employee performance as indicated by F-test result of $F = 43.371$; $\text{Sig} = 0.000$.

Coefficient of Determination (R^2)

The robustness of the regression model was checked with the help of coefficient of multiple determination, R^2 . R^2 indicates the proportion of variance in the dependent variable that can be explained by the independent variables: R^2 indicates the proportion of variance in the dependent variable that can be explained by the independent variables:

An R^2 value close to 1 supports for the strong model which has significant explanatory variable.

R^2 that is closer to 0 represent a weaker model.

In the examination of the research, it was noted that the value of R^2 was as low as 0.077, indicating that 7.7%. The outcome of the analysis of the model is that 7.7% of the variation in the performance of the employees can be predicted by the model. This implies that there was fairly strong link between the independent variables which were used in the research and specifically the employee performance.

Assumption Tests

To ensure the validity of the regression analysis, several assumption tests were conducted: To ensure the validity of the regression analysis, several assumption tests were conducted:

Normality: Another test as to the nature of the residuals was conducted by use of Kolmogorov-smirnov test and the normal probability plot, and both enabled the discovery that the residuals were normally distributed.

Multicollinearity: Preliminary screening was conducted in order to establish the presence of multicollinearity; hence Variance Inflation Factor (VIF) coefficients were computed. The VIF ratios were less than 10 for all the variables, hence minimizing the effect of multicollinearity.

Heteroscedasticity: Another graphical analysis that is carried involved the use of scatterplot of residuals to identify potential heteroscedasticity. There were no systematic trends identifiable in the residuals, the variance of the residuals was evenly distributed across the range of the fitted values, the model was homoscedastic.

Result and Discussion

Respondent Profile

In chapter IV, a descriptive data profile from this research is presented, then continued with statistical data analysis which is used to answer research problems by testing the hypotheses that have been proposed in chapters II and chapter III. The data analysis tool used is structural equation modeling. The number of respondents was 66 people consisting of men and women. The characteristics of respondents in this study based on gender are presented in the table below:

Table 1. of Respondents Based on Gender

No	Gender	Frequency	Percentage %
1	Man	31	47%
2	Woman	35	53%
Amount		66	100%

Based on the table above, it appears that the respondents in this study were dominated by women, namely 53%. Meanwhile, male respondents were 47%. This is because the respondents used in this study were employees in the general division whose activities were more related to administration. The distribution of the questionnaires was carried out over a period of 2 months, where 80 questionnaires were distributed, but based on the sampling technique used in this research, 66 questionnaires could be processed.

Feasibility Test (Validity Test and Reliability Test)

The validity test is used to assess a questionnaire's validity, which is determined by the extent to which the questionnaire statement is capable of accurately capturing the intended measurement. Meanwhile, the reliability test assesses the degree to which a measuring equipment can consistently provide similar findings when measurements are repeated on the same topic. The choice criteria involves comparing the Corrected Item - Total Correlation value to the r table value at a significance level (α) of 0.05, namely 0.244. If the value of Corrected Item - Total Correlation exceeds the threshold value of r table, then the indicator is considered genuine. Conversely, if the value is lower than the threshold, the indicator is deemed invalid (Sürücü & Maslakci, 2020). Furthermore, the reliability test assesses the precision of the data, while for reliability testing, the alpha coefficient value is compared to a threshold of 0.70

(Sürücü & Maslakci, 2020). The table below presents the validity and reliability testing results obtained from calculations using the SPSS software.

Table 2. of Questionnaire Validity and Reliability Test Results

Variable	Items (Indicator)	Items to total Corelation	Reliability Cronch alpha
Personality (X1)	X1.1	0.414	0.787
	X1.2	0.409	
	X1.3	0.379	
	X1.4	0.500	
	X1.5	0.425	
	X1.6	1	
	X1.7	0.725	
Leadership (X2)	X2.1	0.680	0.790
	X2.2	0.613	
	X2.3	0.683	
	X2.4	0.703	
	X2.5	0.634	
	X2.6	1	
	X2.7	0.276	
Decision making (X3)	X3.1	0.436	0.796
	X3.2	0.439	
	X3.3	0.660	
	X3.4	0.776	
	X3.5	0.744	
	X3.6	1	
	X3.7	0.439	
Employee Performance (Y)	Y.1	0.412	0.785
	Y.2	0.369	
	Y.3	0.612	
	Y.4	0.801	
	Y.5	0.758	
	Y.6	1	
	Y.7	0.497	

According to the t table provided, it indicates that all observed indicators are legitimate. This is evident from the item to total correlation value being more than the r table value of 0.244. This demonstration demonstrates the suitability of all observable indicators as variables. Sürücü & Maslakçi (2020) asserts that a construct or variable is considered dependable if it yields a value (Cronbach alpha) greater than 0.70. All coefficients (Cronbach's alpha) in the table above have values greater than 0.70, indicating that the research variables, namely personality, leadership, decision making, and employee performance, are reliable and have high reliability. Therefore, they can be considered highly accurate for use as variables in a study.

Data Normality Test

The next data test aims to assess the degree of normalcy of the data used in this study. In order to proceed with regression modeling, it is necessary to ensure that the data meets the assumption of normality. An effective regression model exhibits a data distribution that is either normal or closely approximates normality. Normality may be assessed by examining the distribution of data points along the diagonal axis of a graph or by analyzing the histogram of the residuals. If the variable follows a normal distribution, then the plot will show a distribution

centered around the line (aligned with the 45-degree line). The importance of normally distributed data may be determined by utilizing the one sample Kolmogorov-Smirnov test as a data normality test. By using decision-making guidelines: The significance value, also known as the probability value or sig, is less than 0.05, indicating that the distribution is not normal. If the significance value, also known as the p-value, is greater than 0.05, then the distribution is considered to be normal.

The table below presents the one sample Kolmogorov-Smirnov test, which is used to assess the normality of data.

Table 3. One-Sample Kolmogorov-Smirnov Test

Unstandardized Residuals		
Normal Parameters ^{a, b}	Mean	,0000000
	Std. Deviation	1.75064930
Most Extreme Differences	Absolute	,155
	Positive	,155
	Negative	-,073
Statistical Tests		,155
Asymp. Sig. (2-tailed)		,000 ^c

Data normality testing using the *one sample Kolmogorov-Smirnov test*, we can get a normal distribution, but to strengthen the data normality test, researchers also use the Normal PP Plot Regression test in SPSS, as presented in the following figure:

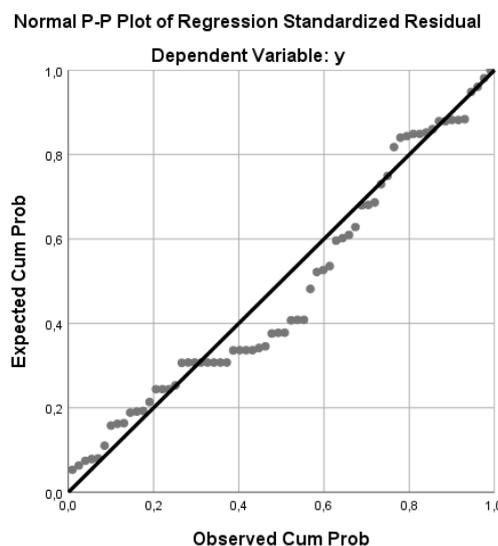


Figure 1. Data normality testing

Multicollinearity Test

The next test carried out in this research is multicollinearity, which is the existence of a perfect linear relationship between several or all independent variables. The multicollinearity test aims to test whether the regression model finds a correlation between independent variables. A good regression model should not have correlation between independent variables (Mishra & Min, 2010). This test is carried out to detect whether or not there is multicollinearity in the regression model, which can be seen from the tolerance value and *variance inflation factor* (VIF) value.

A regression model that is free of multicollinearity has a VIF value below 10 and a *tolerance value* above 0.1. The results of the multicollinearity test on SPSS are as follows:

Table 4. the multicollinearity test on SPSS

Model		Collinearity Statistics	
		Tolerance	VIF
1	x1	,669	1,496
	x2	,761	1,314
	x3	,604	1,655

Based on the test results in the table above, it can be concluded that in this study all the independent variables used did not experience multicollinearity because all tolerance values for each variable were above 0.1, namely (0.669 X1, 0.761 X2, 0.604 also below the number 10, namely (1,496 X1, 1,314 X2, 1,655).

Heteroscedasticity Test

The subsequent examination conducted in this study is the heteroscedasticity test, which tries to determine if there is a disparity in variance across observations in a regression model. If the variance between observations remains constant. Either homoscedasticity or heteroscedasticity is absent. An effective regression model is characterized by homoscedasticity, meaning it does not exhibit heteroscedasticity (Strich et al., 2021). An approach to identify the existence of heteroscedasticity involves examining the scatterplot relationship between the dependent variable and its residuals for any discernible pattern. If the graph shown by these points has a discernible pattern, then it indicates the presence of heteroscedasticity. Conversely, if the pattern seems random and evenly distributed, then suggests the absence of heteroscedasticity. Heteroscedasticity may be detected by using the Glejser test, which involves regressing the absolute value of the residual on the independent variable (Setiawan et al., 2021). If the estimated p-value is larger than the predetermined significance level of 5% (Alpha), then there is no presence of heteroscedasticity. However, if the estimated p-value is smaller than the predetermined significance level of 5%, it may be inferred that the regression model exhibits heteroscedasticity. The findings of the heteroscedasticity test are shown in the scatterplot graph shown in the next figure.

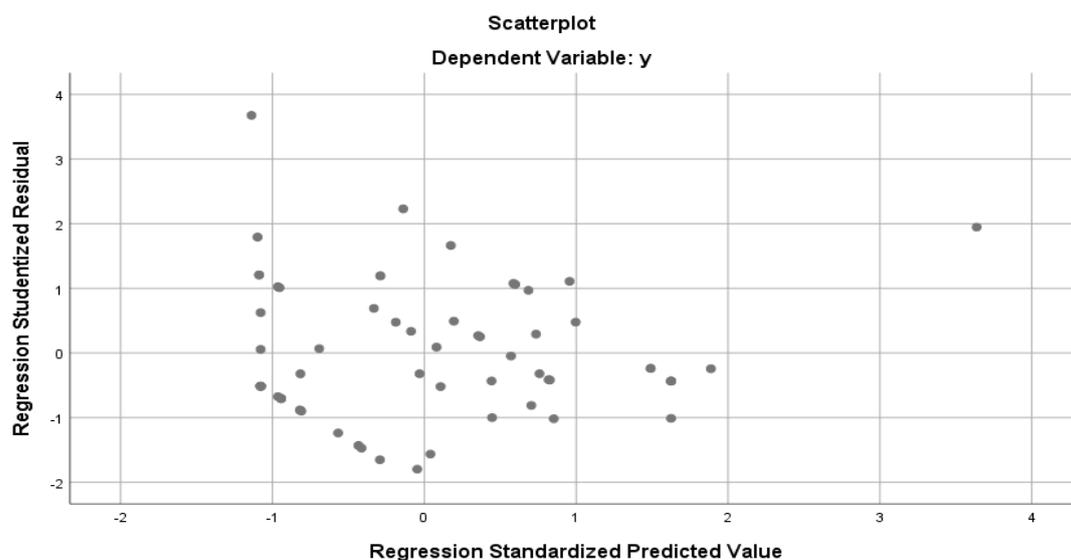


Figure 2. Heteroscedasticity Test

Based on the appearance of the *scatterplot graph* where the distribution of points on the graph is random and scattered, it can be concluded that the dependent variable *and* its residuals do not have symptoms of heteroscedasticity, which means the regression model of this research is good and worthy of being continued.

Test

The subsequent examination required for this study is the t-test, which is used to assess individual independent variables that possess a prominent impact at a significant level of 5%. The t-test is conducted to determine if the hypothesis in the study is accepted or rejected. Hypothesis testing is conducted by doing regression analysis using the SPSS software. This involves comparing the significance level (Sig t) of each independent variable with a significance level (α) of 0.05. If the significance threshold (Sig t) is less than $\alpha = 0.05$, then the hypothesis is accepted, indicating that the independent variable has a statistically significant impact on the dependent variable. Conversely, if the significance level (Sig t) exceeds $\alpha = 0.05$, the hypothesis is rejected, indicating that the independent variable does not have a substantial impact on the dependent variable. The outcomes of the t-test analysis are shown in the following table:

Table 5. t-test analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,048	,950		1,104	,274
	x1	,340	,100	,300	3,403	,001
	x2	,664	,081	,679	8,208	,000
	x3	-,025	,087	-,027	-,294	,770

According to the provided table, it is evident that the premise of this research is that personality has a somewhat favorable impact on the performance of PDAM Makassar City workers. This is allowed due to the significance value. The value of the personality variable (X1) is 0.001, which is smaller than 0.05. This variable has a positive effect on performance, as indicated by the positive t value of 3.403. Therefore, the hypothesis that Leadership has a partially positive effect on the performance of PDAM Makassar City employees is accepted. Additionally, the second hypothesis in the research is also accepted based on the significance level. The value of t is less than 0.05, namely 0.000, and it has a beneficial impact on employee performance. This is shown by the computed t-value for this variable, which yields a positive value of 8.208 after being processed in SPSS. The third hypothesis, which states that decision making has a partially positive impact on the performance of PDAM Makassar City employees, is rejected based on the statistical analysis. The significance value (sig.) of 0.770 is greater than the threshold of 0.05, and the calculated t value of -294 does not meet the requirements for hypothesis testing as outlined in the previous chapter.

F test

The next step involves conducting the F test to determine whether the independent variable has a significant impact on the dependent variable (Y) and to determine the acceptance or rejection of the fourth hypothesis in this study. The presentation involves comparing the probabilities derived from the analysis of variance table with a significance level of 0.05. If the probability value is less than 0.05, the conclusion is to reject the null hypothesis (H0) and adopt the alternative hypothesis (Ha). The research hypothesis is denoted as "Ha". This implies that it is possible to demonstrate concurrently that the independent variable has an impact on the

dependent variable and vice versa. If the probability value is greater than 0.05, then the choice supports the acceptance of the null hypothesis (Ho). This implies that there is statistical evidence to indicate that the independent variable has no significant influence on the dependent variable. The table displays the outcomes of the F test conducted in this study.

Table 6. F-test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	418,062	3	139,354	43,371	,000 ^b
	Residual	199,210	62	3,213		
	Total	617,273	65			

Based on the table above, it can be seen that the fourth hypothesis in this research, namely " personality, leadership and decision making, simultaneously influence the performance of PDAM Makassar City employees", is accepted because the calculated F value (43,371) is greater than the F table value (2,511) and The significance value is smaller than 0.05, namely 0.000, so it can be concluded that the variables of personality, leadership and decision making simultaneously influence the performance of PDAM Makassar City employees.

Coefficient of Determination (R²)

The last assessment to be conducted on the regression model of this study is the coefficient of determination (R²). In this multiple linear model, we will examine the collective impact of the independent factors on the dependent variable by analyzing the coefficients' magnitude. Based on the high magnitude of the overall coefficient of determination (R²) approaching one, it may be concluded that the model is stronger. This elucidates the correlation between the independent variable and the dependent variable. Conversely, when the value of R² is closer to one, it indicates that the model well describes the connection between the independent variable and the dependent variable. On the other hand, as the value of R² approaches 0, it indicates that the independent factors have a lesser impact on the dependent variable. The table displays the results of the coefficient of determination test (R²).

Table 7. Determination test (R²).

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	,823 ^a	,677	,662	1,793	,677	43,371

According to the model summary table provided, the R square value for the variables in this study is 0.677. Referring to the previously mentioned conditions, a higher R square value indicates a stronger model in explaining the relationship between the independent variables and dependent variable. Therefore, based on the high R square value, we may infer that there is a significant correlation between the independent variable and the dependent variable in the research.

Analysis of the processed data using SPSS reveals a positive relationship between personality and the performance of PDAM employees (Kahfi et al., 2024). The research findings indicate that personality has a significant and positive impact on the performance of PDAM Makassar City employees. According to Torkzadeh & Dehghan (2016), individual personality traits might influence a person's capacity to provide high-quality customer service, work effectively in teams, and handle their professional obligations (performance). Moreover, based on the

conducted research, it is evident that the leadership style has a positive and significant impact on the performance of PDAM Makassar City employees (Ibrahim et al., 2023). This is supported by the data analysis in SPSS, which indicates a positive and significant correlation. The obtained significance value is less than 0.05, further confirming the significance of the relationship. According to Jumani et al. (2023), if there is a strong correlation between leadership style in decision making and employee performance in a firm, the leadership style will have a positive and substantial impact on the performance of Makassar City PDAM personnel. Effective leadership has a crucial role in guiding and empowering people, particularly in the current environment of openness and uncertainty.

Then finally in this research, from the results that have been obtained regarding the relationship between decision making and employee performance, it was found that the two have a relationship but it is not significant, this is because the Makassar City PDAM office feels more that personality and leadership style influence their performance compared to decision making, where this condition is related to what was expressed by Terry in Hafni et al. (2022). Effective decision making needs to be done by a leader in a company. In making decisions, a leader must pay attention to various aspects, for example, he needs to pay attention to situations and conditions, pay attention to various models, styles, processes and no less important, he needs to pay attention to methods and stages systematically, so that if we reflect on this theory, we can see its continuity. In the selection process, there are individual models/personalities, leadership styles that greatly influence the performance of an employee, especially PDAM Makassar City employees.

The large effect size found for personality traits on employee performance is consistent with a vast line of research on individual differences in organizational research (Zell & Lesick, 2022). For instance, such characteristics as self-organization, flexibility, and responsibility are highly valued to improve workers' productivity because rigidity can impair innovation in certain industries or offices. This has a support from the theoretical frameworks described by Peiró et al. (2020) where it is stated that personality influences the role performance, especially with regards to the complexity and bureaucracy of the environment.

However, this study also has implications for calling into question the extra emphasis on technical skills and the underlying procedures in the context of the public sector organizations (Carlsson-Wall et al., 2022). The implications of the study are that in organisations that can be characterised by bureaucratic organisational culture, such as the PDAM Makassar City that operates within a strict regulatory framework, elements of personality that enable organisational accommodation are even more important. This therefore calls for the increased use of personality assessments in addition to the technical abilities in the recruitment and development of the human resource in the public sector organisations (Peiró et al., 2020).

The results regarding leadership preferences add to the literature also in the sphere of the transformational leadership theory. Extensive literature exist about how leadership affects performance also emphasise about the kind and supportive leadership which motivates contributes to the success of an organisation (Lasrado & Kassem, 2021). It has been posited in prior research for the significant influence of leadership in determining employee indications, especially within the environment of public sector where the setting conventionally undermines adaptability and creativity due to the powerhouse of hierarchical association (Ibrahim et al., 2023).

The contribution of this study is the notion that there may be circumstances in which leadership can overcome the absence of a favourable structure at the organisational level (Schulze & Pinkow, 2020). Where decision-making is seen as mechanistic or bureaucratic, appropriate

leadership might be seen as positively instrumental in buffering or even developing performance. This finding supports the opinion stating that, the same way leadership may be essential in compensating for the limitations of bureaucracy in large organisations, leadership (Lasrado & Kassem, 2021).

In practical terms, these conclusions are vast since they reflect the knowledge gap in the practical management of organizations in countries where official decision makers pay more attention to the paperwork than to employees' well being and needs (Dwivedi et al., 2024; Karcher et al., 2022). On the basis of established relationship between personality traits and performance, the study recommends that personality assessments should be incorporated into the recruitment and development practices of public sector organisations. This could entail the application of psychometric tests in order to determine specific traits that are in accord with the muster of certain positions particularly those in highly changeful and especially stressful (Peiró et al., 2020).

After that, the study extends the use of transformational leadership in the management of public sector. Managers who can paint a picture, facilitate, and encourage growth will help counter the issues associated with bureaucratic work settings (Parker & Schmitz, 2022). This finding aligns with a broader body of leadership, which posits that transformational leaders are most effective from a change perspective and give great results in environments that pose challenges (Lasrado & Kassem, 2021). Thus, leadership development programs within the public sector organisation should extend beyond the administrative training, and promote formation of the transformational leadership traits. These may include leadership development initiatives, peer coaching as well as focused training programs regarding leadership for creating the future generation of leaders in the public sector (Ibrahim et al., 2023).

Concisely, the studies dealing with decision-making processes offer more optimistic picture. In contrast with most of the prior research, this study did not identify any positive correlation between the degree of decision making and the level of the employee performance (Dawood et al., 2023; Lindblom et al., 2020). This result implies that to a certain extent other factors such as leadership style, culture and political structure that are inherent in structure of PDAM Makassar City a centralized and a highly bureaucratic organization may hamper the decision making processes. The present study supports the research carried out by Strich et al. (2021) where they noted that in mechanistic work arrangements, suggestion and participation may not yield similar results as those established in organic structures due to the perception of the employees that their input is just a formality.

The above conclusion leads to a reconsideration of the ways in which decision-making strategies operate and are recognized in public business entities (Stritch et al., 2020). If decision-making is perceived as a process that occurs from above, in total disregard to frontline realities, its impact on performance can be minimal. The public sector organisations might have to look into more decentralised decision making approaches or have to ensure that they enhance communication and organisational transparency in order to make the employees feel the difference that they make (Setiawan et al., 2021).

It may be considered as rather unexpected and quite surprising that decision-making processes neither influenced nor affected the level of employees' performance (Hayden et al., 2021). This is an interesting contrast to most of the literature on organizational behavior where decision making is portrayed as being at the heart of organizations success (Rivera, 2020; Tabesh & Vera, 2020). This could be so due to, for instance, the process of decision making in organizations such as PDAM Makassar City which are highly centralized and hierarchical organizations in which most of the decisions are made at the top managerial levels in

consultation with lower level employees. Such an approach could mean that the effectiveness of decision making is less likely to affect employee behaviour, which is in contrast to the positive association between decision making and performance suggested by the research (Strich et al., 2021).

This entails that in such organizations decision making may be viewed as a bureaucratic task that may not necessarily have any direct on performance (Rockman, 2020). Employees can have a perception that their opinion is unimportant in the decision-making process when their opinion is not considered, this can make them disinterested in the process and this could be the reason why decision making did not feature in this study. This interpretation is backed up by the study by Orbawati et al. (2022) in which he noted that since most organizations have formal structures that make them hierarchical, then decision making affects performance with reference to the culture of the organization and perception the workers have on the process (Cherian et al., 2021; Prasetyo et al., 2021).

This is rather surprising but can be seen as implying new opportunities for further investigation into the ways that organisational culture and communication can enhance or inhibit the link between decision-making and performance (Abubakar et al., 2019; Zheng et al., 2010). Further research could examine whether the types of decision-making autonomy are expressed in the forms of decentralization or more participation foster higher performance in the same organizational environments. On the other hand, research could explore ways in which improving on the amount of openness provided to employees regarding decisions made within the work setting might positively affect the behaviour of employees and ensure organisational productivity despite the highly autocratic structures in organisations (Setiawan et al., 2021).

Despite the findings presented in this study, there are some limitations that should be discussed. This feature somewhat restricts the generality of the findings due to the choice of a single public sector organisation (Swinkels, 2020). Thus, certain generalisations drawn from the characteristics of PDAM Makassar City, such as its bureaucratic structure and public service function, may not apply to other organisations, especially those of the private sector, or organisations that are not characterized by a highly centralised decision making (McMullin, 2021; Felício et al., 2021). Future research could try to address this limitation by undertaking a similar study in different organizations in the public sector and other industries and see whether the results obtained will be similar to those found in the present study.

However, some limitations should be mentioned concerning the use of self-organised and self reported data: this approach can be questionable in terms of validity as sometimes people can provide inflated data about their performance or register reactions that are perceived as socially acceptable. A few suggestions that may help design even more cogent comparative research studies in the future include: future studies may garner strength in supplementing self-reported information with more total performance appraisal and organizational data as offered by supervisors and organizational performance (Lasrado & Kassem, 2021; Han & Moynihan, 2022). This would help to have a more correct estimate of relationships between personality, leadership, decision-making, and performance.

Conclusion

The impact of personality on the performance of PDAM Makassar City personnel is somewhat beneficial, as shown by the acceptable Sig value. The result for the personality variable (X1) is less than 0.05, namely 0.001. Additionally, the positive t value of 3.403 indicates that this variable has a positive influence on performance. Leadership has a somewhat favorable impact on the performance of workers at Makassar City PDAM. The second hypothesis in the study

was also confirmed, as shown by the significance level. The value of t is less than 0.05, namely 0.000, and it has a beneficial impact on employee performance. This is shown by the computed t-value for this variable, which yields a positive value of 8.208 after being processed in SPSS. The act of creating (X3) has a somewhat favorable impact on the performance of workers at PDAM Makassar City, as shown by a significant value. The result of 0.770 is more than the threshold of 0.05, indicating that the third hypothesis of this study is rejected. This decision is based on the computed t value of -294, which does not match the parameters for hypothesis testing outlined in the previous chapter. The statement "Personality, leadership, and decision making simultaneously impact the performance of PDAM Makassar City employees" is supported by statistical analysis. The calculated F value (43.371) exceeds the F table value (2.511), and the significance value is less than 0.05 (specifically, 0.000). Therefore, it can be concluded that the variables of personality, leadership, and decision making collectively influence the performance of PDAM Makassar City employees.

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