

Determinant of Employee Performance in Public Organization: The Case of Dessie City Municipality Office

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Abstract

Employee performance is significant role to achieve mission and vision of public, non-public and private organization. The main objective of this study is to examine the determinant of employee performance in the public organization; the case of Dessie city municipality office. In implementing of these internal practices; the office tested a problem of motivation practice, leadership, working environment and employee performance. This research problem was studied through the use of a descriptive and explanatory research design. To achieve the objective of the study 170 sample employees were selected from 312 total populations of municipality office employees through the stratified random sampling technique. The four independent variables incorporated for this study were training, motivation, leadership, and work environment. The study employed quantitative and qualitative approach and used primary data was collected using a questionnaire and secondary data obtained from offices annual report and BSC. The collected data was processed using SPSS v 20, and presented using frequency tables, bar charts, and pie charts, and analyze through descriptive and inferential data analysis techniques. The results have shown that the opinion of the respondent statistics analyses disagreed about motivation, leadership, and work environment and agree about training. Pearson correlation indicated that there is a high positive, and significant relationship between motivation and employee performance. Training and leadership were moderately positive relationship. The work environment had a small but definite positive linear relationship with employee performance. The findings of multiple linear regression training, motivation, leadership, and work environment greatly affected employee performance. This study recommended that the Dessie city municipality office better to give training to employee, utilize motivation practice, leadership, and work environment factors for increasing their employee performance. The Ethiopian government better to supported by the budget to solve problem of motivation and work environment.

Keywords: training, motivation, leadership, working environment, employee performance

1. Introduction

Many scholars and practitioners in the broad field of management have argued that human asset in the 21st century is the most valuable and volatile asset any organization can possess (Owoyele, 2017). An organization's success or failure is highly determined by effective and efficient utilization of resources such as human, material, financial, and information resources at its disposal (Oshagbemi, 2010). There seems to be a performance crisis in public service, while there is a need to produce service delivery that is good or bad (Nabukeera, Ali & Raja, 2014).

The quality of employees is an important influence on performance (Fauzilah 2011). James and Jones (1994), many studies have confirmed that adaptation to the work environment is an important factor for the success of employees at their jobs. Likewise, Akinyele (2017) studied that the performance of employees in Nigeria is affected by many factors that come from both inside and outside of the organization such as leadership, earning, training, promotion opportunities, working environment, motivation, employee-employer relationship, leadership commitment, and organizational communication.

According to Abeje T. and P. Narayan (2015) study civil servants shows that in the most Amhara national regional state; have weak working culture, do not care whether they help the public or not, entered lately, chat with their colleagues, and went out early before the end of the regular work, without doing any value-adding work to their organization except misusing the internet and telephone services for their usage.

Moreover, the current public service delivery trend of the Ethiopian public service organizations can be regarded as inefficient performance; it is characterized as a time-consuming, costly, incompetent, non-responsive, and non-dynamic scenario (Fassil, 2016). That in-sufficient performance and ineffectiveness strategies also the common features of most civil servants and employees in the Dessie town. This results in the civil service department in the zone, administrative performance is classified as medium and low employee performance based on BSC (Fassil, 2016).

However, depending on the employee scenario and the employee conditions, the performance impacts, the work performed at a different degree. But the levels and impacting scenarios of the employees on working performance and customer satisfaction have not properly studied in the previous studies.

Some studies (Haile 2013; Mohamad, 2011), have been studied and investigated factors on employee performance and organizational effectiveness. Among these factors, training is one method of improving the performance of employees. But the impacting levels of the training on employee performance were not empirically studied and investigated.

As Amina H. (2009) stated in their journal that office design is very vital in terms of increasing employee productivity, Comfortable and ergonomic office design motivates the employees and increases their performance substantially. The employee of the municipality office was still not comfortable office and setting arrangement, necessary materials supply to accomplish their job, receive child care assistance in your office, safety and security of employee and good relationships among colleagues in the office. Also many studies focus on single sub variable or two sub variables determinant of employee performance, and there is no sufficient research conducted on factors determining performance in the Dessie city municipality office. It is therefore essential to generate relevant evidence through a detailed study highlighting solutions to improve employee performance. This research was tried to describe the determinants of employee performance in the Dessie city municipality office. Specifically, it tries to determine the effect of training, motivation, leadership, and work environment. Secondly, this study was drawn some recommendations and indicate directions for further research.

Based on the above statement of the problem the researcher tried to investigate the following four basic research questions:

- a. What is the effect of training on employee performance?
- b. What is the effect of Motivation on employee performance?
- c. What is the effect of leadership on employee performance?
- d. What is the effect of the working environment on employee performance?

The overall objective of this study is to examine the determinant of employee performance in the public organization; the case of Dessie city municipality office.

- a. To examine the effect of training on employee performance.

- b. To investigate the effect of Motivation on employee performance.
- c. To identify the effect of leadership on employee performance.
- d. To identify the effect of the working environment on employee performance.

The hypotheses of this research are as follows:

Ho1: Training has no effect on employee performance.

Ho2: Motivation has no effect on employee performance.

Ho3: Leadership has no effect on employee performance.

Ho4: The Working environment has no effect on employee performance.

2. Methodology

2.1 Research Design

In this study descriptive as well as explanatory were used.

2.2 Source Data

The researcher used both primary and secondary data.

2.3 Research Instrument

One hundred seventy-six sets of questionnaires were distributed to the respondents and 170 questionnaires were collected back and 6 questionnaires were uncollected and not complete and used for the analysis of data by 170 respondents.

2.4 Target Population

In this study, there were 312 target populations in the Dessie city municipality office (Dessie City Administration Human Resource manual, 2020). Among these 176 employees were used.

2.5 Sampling Method and Sample Size Determination

2.5.1 Sampling Methods

To select the intended number of samples of respondents, a Stratified sampling technique was adopted to find the correct representation of the municipality office of Dessie City.

2.5.2 Sample size

This formula was used to calculate the sample size taking into account a 95 percent confidence level, 5 percent precision level, and total population size.

$$\text{Sample size } n = \frac{N}{1+N(e^2)}$$

Consequently, the ultimate figure computed as:

$$\text{Sample size } n = \frac{312}{1+312(0.05^2)} = \frac{312}{1+0.78} = \frac{312}{1.78} = 175.28 \approx 176$$

3. Method and Data Analysis

The method that was employed for data analysis is descriptive as well as inferential statistics. Frequency, mean, standard deviation, and percentage were used for descriptive analysis purposes. Correlation and multiple regression analysis were used for inferential statistical analysis purpose. The results were summarized and presented using tables, graphs, and pictures.

All the information gathered through the questionnaire was analyzed by using SPSS version 20.

4. Result

4.1 Correlation Analysis

Correlation analysis, in this study, determines the strengths of the relationship between independent variables (training, motivation, leadership, and work environment) and dependent variable (employee performance). This means that as the score of one variable increases the score of the other variable decreases (Hoy, 2010). Regarding the magnitude of the correlation coefficient, Cohen (1988) stated the below table.

Table 1. Correlation coefficient size

Coefficient range	Strength of Association
± 0.50 to ± 1.00	strong
± 0.30 to ± 0.49	Moderate
Below ± 0.29	Small

Source: Cohen (1988)

Table 2. Pearson correlation between dependent and independent variable

Correlations

	Training	Motivation	Leadership	Work environment	Employee performance
Training	1				
Motivation	.131	1			
Leadership	.209**	.132	1		

Work environment	Pearson Correlation	-.074	.024	.293**	1	
	Sig. (2-tailed)	.339	.761	.000		
Employee performance	Pearson Correlation	.471**	.693**	.442**	.169*	1
	Sig. (2-tailed)	.000	.000	.000	.028	

** . At level 0.01 (2-tailed), the correlation is significant.

* . At level 0.05 (2-tailed) the correlation is significant.

4. 2 Correlation Analysis Results

Training variable to employee performance variable: "A Pearson's correlation was run to determine the relationship between training and employee performance. There is a moderate, positive correlation between training and employee performance ($r = .471$, $p = .000$, $p < .05$). "Thus, training is associated with employee performance.

Motivation practice variable to employee performance variable; Motivation has a strong relationship with employee performance. There is a strong, positive correlation between motivation and employee performance ($r = .693$, $p = .000$, $p < .05$). "Thus, motivation is associated with employee performance.

Leadership to employee performance variable: leadership has a moderate, positive relationship with the employee performance variable. There is a moderate, positive correlation between leadership and employee performance ($r = .442$, $p = .000$, $p < .05$). "Thus, Leadership has associated with employee performance.

Work environment variable to employee performance variable: Work environment has a small or weak relationship with the employee performance. There is a small, positive correlation between work environment and employee performance ($r = .169$, $p = .028$, $p < .05$). "Thus, the work environment has associated with employee performance.

4.3 Assumptions of Regression Analysis

Prior to the subject, the data to regression analysis assumption test/diagnostic test were first carried out on the collected data to establish if it is conformed to the required assumptions. In this study normality, multicollinearity, linearity, and autocorrelation tests were conducted to undertake regression analysis.

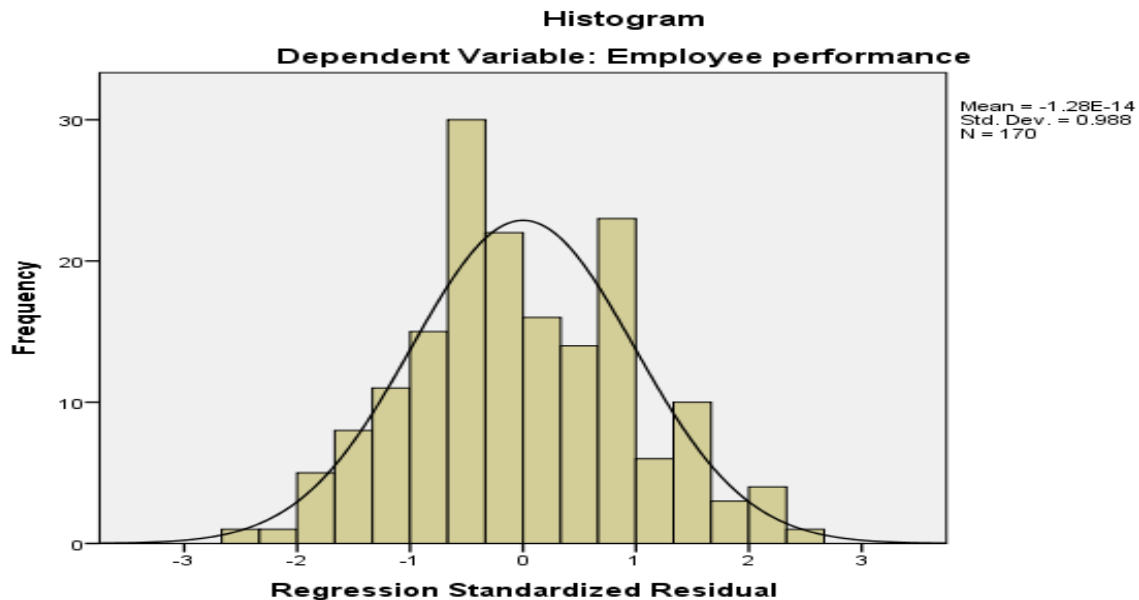
4.3.1 Normality Test

According to Stevens (2009) screening for normality is an important early step when conducting a multiple regression, as residuals are normally distributed is assumed. Figure 1 shows below the results on the normality test of the dependent variable employee performance.

It is evident that employee performance was normally distributed as the normality distribution diagram is normally distributed shown in figure 6 above. This assumption is used to determine

whether the residuals are normally distributed. This can be tested by looking at the Histogram. To say the Normality assumption of this study is met, the Histogram should be symmetric along with the center zero. In this case, Histogram is symmetric; indicating that assumption of normality is met and this type of data was, therefore, suitable for all types of statistical analysis.

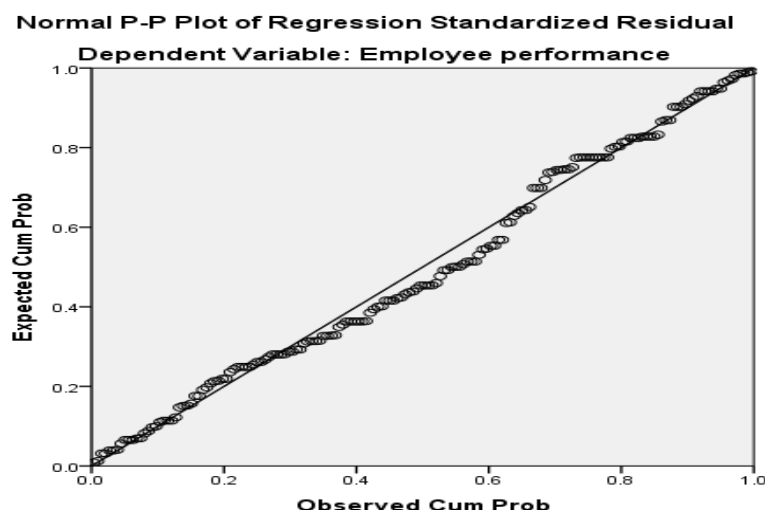
Figure 1. Histogram



4.3.2 Linearity Test

In the Normal Probability Plot, it is assumed that points will lie in a reasonably straight diagonal line from bottom left to top right.

Figure 2. Normal p-p plot



This would suggest no major deviations from normality. As we have seen in figure 7 above, the normality test for this data, the plot is normally distributed. In normality, the residuals should have a straight-line relationship with predicted dependent variable scores (Pallant, 2005). As it is revealed the residuals have a straight-line relationship with the predicted dependent variable

scores and we can conclude that the relationship between the dependent and independent variables is linear.

4.3.3 Multicollinearity Test

To make sure that there is low co-linearity, the values of Tolerance and VIF

Table 3. Multicollinearity test of multiple linear regression analysis

No	Items	Tolerance	VIF
1	Training	.926	1.080
2	Motivation	.971	1.029
3	Leadership	.851	1.174
4	Work environment	.895	1.117

According to Pallant (2005), tolerance indicates to what extent the independent variables do not explain much of the variability of a specified independent variable and the value should not be small (more than 0.10) to indicate the absence of co-linearity. In addition to that, VIF, the inverse of tolerance value, should have a value of less than 10 to avoid any concerns of co-linearity (Pallant, 2005). Hence, the values in should be checked table 15 above indicates there is no co-linearity problem because all Tolerance values are above 0.1 and all VIF values are less than 10. Therefore, these tests reflect that the variables used in the study are free from the multi co-linearity problem.

4.3.4 Autocorrelation

It is an assumption that the value of residuals to be independent of one another (or uncorrelated). To check this assumption, we need to look at the regression output of the model summary box. Durbin-Watson statistic uses to test the assumption that our residuals are independent (or uncorrelated). This statistic can vary from 0 to 4. For no Autocorrelation assumption, the Durbin-Watson statistic value needs to be close to 2.

Table 4. Results of Durbin-Watson statistics

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.847 ^a	.717	.711	189	1.616

According to Palant (2005), Assumption, Durbin-Watson statistic value needs to be close to 2. The value of zero indicates positive autocorrelation. A value towards four indicates negative autocorrelation; a score around two indicates the absence of autocorrelation. Whereas we see in table 16 above the Durbin – Watson Statistic is given as 1.616 which is a score near 2. And this suggests that the model is free from autocorrelation. The calculated model can, therefore, be relied upon confidently for inferences and statistical purposes.

4.4 Regression Analysis

Regression analysis is a statistical method for dealing with the formulation of a mathematical model describing the relationship between variables that can be used to forecast dependent variable values given the independent variable values. Following on from Field (2005), regression analysis is a model that is used to predict the value of the dependent variable from one or more independent variables. Regression analysis is conducted to test the effect of independent variables (training, motivation, leadership, and work environment) on a dependent variable (employee performance).

4.4.1 Model Fit

Fitness of the models has been checked via a percentage of variance explained by adjusted R², by the model's predictors. In assessing the fitness of the model, it is considered that higher R² values explain more variance of the model which eventually leads to a better model fit.

Table 5. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.847 ^a	.717	.711	.189

a. Predictors: (Constant), Work environment, Motivation, Training , Leadership

b. Dependent variable: Employee performance

4.4.2 ANOVA Test

Table 6. ANOVA test

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	14.963	4	3.741	104.734	.000b
	Residual	5.893	165	.036		
	Total	20.857	169			

a. Predictors: (Constant), training, motivation, leadership, work environment,

b. Dependent Variable: employee performance

According to the above table, the factors (training, motivation, leadership, and work environment) significantly predict the dependent variable (employee performance) with F=104.734 and sig=0.000. F-test is used to find out the overall probability of the relationship between the dependent variable and all the independent variables. Meaning that null hypothesis is rejected and conclude that all independent variables effect the dependent variable, and decide

that the regression model best fitted the data at a significance level of 0.000.

4.4.3 Regression Coefficient

According to Pallant, (2005), in constructing the regression equation it is appropriate to use the unstandardized Beta coefficient, while to compare the contribution of each independent variable it is appropriate to use the standardized Beta coefficient.

Table 7. Regression coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	.266				
Training	.323	.040	.345	8.016	.000
Motivation	.174	.012	.611	14.559	.000
Leadership	.146	.025	.258	5.755	.000
Work environment	.033	.014	.104	2.387	.018
a. Dependent Variable: employee performance					

According to Pallant (2005), in constructing the regression equation it is appropriate to use the unstandardized Beta coefficient, while to compare the contribution of each independent variable it is appropriate to use the standardized Beta coefficient. the above regression analysis result table 19, the unstandardized beta coefficient implies that how intensely the four independent variables (Training, Motivation, Leadership and Work environment) significantly and positively effect of the dependent variable (employee performance), or the relative importance of each independent variable in predicting the dependent variable. From the result of regression analysis, the regression equation obtained is as follows.

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \epsilon$$

Employee performance = 0.266 + 0.323 (training) + 0.174 (motivation) + 0.146 (leadership) + 0.033 (work environment).

4.5 Hypothesis Testing

Based on the below table 20 significance value is used to test the effect of each of the independent variables on employee performance separately. Based on this if sig. value is less than the p-value ($p < 0.05$) it is concluded that independent variables have a significant impact on employee performance.

According to the table, training has a beta coefficient value of ($\beta = 0.323$, $p = .000$, $P < 0.05$). This indicates that training is one of the essential factors of improving employee performance in the Dessie city municipality office. Based on the above result; H1: training has a significant effect

on employee performance is supported and H01 training has not effect employee performance was rejected.

Table 8. The result of the survey is presented in the table below (Hypothesis Test)

Research Hypotheses	Regression Analysis result	Result
Ho1: Training has no effect on employee performance.	(P = .000, p< 0.05)	Ho1 Rejected
Ho2: Motivation has no effect on employee performance.	(P=.000, p <0.05)	Ho2 Rejected
Ho3: Leadership has no effect on employee performance.	(P = .000, p <0.05)	Ho3 Rejected
Ho4: working environment has no effect on employee performance	(P = 0.014, p <0.05)	Ho4 Rejected

In addition, motivation coefficient Beta value ($\beta = 0.174$, $p=.000$, $p< 0.05$). It is most important variable to enhance employee performance of the Dessie city municipality office. As a result, H2; motivation has a significant effect on employee performance is supported, and H02; motivation has no effect on employee performance was rejected.

The regression analysis also leadership has beta value ($\beta = 0.146$, $p=.000$, $P< 0.05$), and is an important variable in employee performance in Dessie city municipality office. Hence H3; leadership has a significant effect on employee performance is supported, and H03; leadership has no effect on employee performance was rejected.

Working environment has a coefficient Beta value ($\beta = 0.033$, $p=.014$, $P< 0.05$). It is an important variable of employee performance in the Dessie city municipality office but a small contribution to it. Based on the regression result, H4; work environment has a significant effect on employee performance was supported and H04; work environment has no effect on employee performance was rejected.

5. Discussion

There is a positive relationship between training, motivation, leadership and work environment, and employee performance. The research result exhibits four independent variables (training, motivation, leadership, and work environment) that have a significant effect on the dependent variable (employee performance). Each variable is described as follows.

5.1 Training Effect on Employee Performance

States that Training has a positive and significant effect on employee performance in the Dessie city municipality office. Therefore, it can be concluded that; Ho1 Training has no effect on employee performance is rejected. This means I want to experience the best training in the municipality office. The findings of this study are in line with research conducted by Getamesay (2016), Haile (2013), Mutate (2014), Campbell and Wiernik (2015) Swabra A. (2014) Elnaga and Imran (2013) Ollukkaran & Gunaseelan (2012), Sunita & Srija (2015) states that argued that the direct determinants of performance are role-specific knowledge, skill, and choice

behavior regarding the direction, intensity, and duration of effort is training. Employee Training is effectively considered important when it comes to performance improvement of employees since it enhances employee level and competency of the organization and it provides support when it comes to filling the gap between what exactly is performance if required and what performance is happening, that is a gap between the performance that is desired and the actual performance of the employee. The main objective of the training is to enhance the skill, knowledge, attitude, and ability of employees to increase employee performance and achieve the organization's goal. Without training, employees do not have a strong understanding of their responsibilities and duties. However, improving the performance of employees in the municipality office needs to improve the training.

4.2 Effect of Motivation on Employee Performance

Based on the research finding, motivation has a positive and significant effect on employee performance in the Dessie city municipality office. According to the findings of the study null hypothesis (motivation has no effect on employee performance) was rejected. All motivation practice was useful and important for building and maintaining employee performance. That means employee performance is benefited from the basis of all motivational initiatives. The findings of this study are in line with research conducted by Mullins (2007), Demissie (2016), Fissum (2018), Malate (2014), Gatamesay (2016), Nguyen, Dang, & Nguyen (2014) Abeje T. (2015) states that motivation with consistent and direct compensating plans of employee performance. States that argued conducted a study in which rewards, recognition, education, and loyalty, salary, advance are motivated to employees they receive for high performance.

4.3 Effect of Leadership on Employee Performance

The study indicates the moderate, positive, and significant effect of leadership on employee performance in the Dessie city municipality office. According to the findings of the study null hypothesis (leadership has no effect on employee performance) was rejected. These results indicate that the leadership style should consider the employee performance and mission & vision of the office, to satisfy customers. The democratic leaders are discussing with employees about the most important values, give regular feedback for the task. Impartial treat to every employee, give freedom to decision making to employees deity and responsibility on the organization. The results of the regression analysis show a positive value coefficient means a positive influence between leadership and employee performance.

4.4 Effect of Work Environment on Employee Performance

The Pearson correlation and regression analysis show a positive and significant effect of work environment on employee performance in DCMO. Based on this result null hypothesis (work environment has no effect on employee performance) was reject. The Objects to identify the effect of work environment factors on employees' performance in which the researchers revealed that the work environment has a positive and significant relationship with employees' performance, with correlation is 0.169, then moderate relation. The finding is consistent with the research conducted by (Birhane (2016), Gatamesay (2016), Brenner (2004), Fissum (2018), which stated that the work environment had a positive and significant impact on employee performance based on safety and healthy employee, physical factor like space, seating arrangement, air-condition, and lighting, the social relationship among employees.

5. Conclusion

In this finding of the study, there is a lack of motivation practice, democratic leadership style,

and a comfortable work environment of DCMO. Furthermore, from the results of the correlation analysis conclude that there is a strong and positive relationship between the dependent variable (employee performance) and the independent variable (training, motivation, leadership, and work environment) as well as all the independent variables are the statistically significant effect of employee performance in DCMO. As well as training, motivation, leadership, and work environment are an effect on employee performance

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