ANALYSIS OF EDUCATION LEVEL, EXPERTISE AND WORK EXPERIENCE ON EMPLOYEE PERFORMANCE

Anggreani Kharimatuz Zahro, Andik Priyanto, Luluk Solikha

[1]Akademi Komunitas Teknologi Syarifuddin
[2,3]STIE Jaya Negara Tamansiswa

ABSTRACT

The purpose of this study is to analyze and determine the influence of education level, Expertise and work experience on employee performance. The population in this study were employees in eight companies in Malang Regency with a minimum of one thousand employees per company. The sampling technique was carried out by purposive sampling. There were 100 respondents who came from employees at the supervisor level and at the upper level. In addition, respondents also had a minimum of one year of work experience. The analysis technique in this study was to use inferential statistics from multiple regression analysis through t-test and F-test. This study found that (1) there is a positive and significant influence of the education level variable on Employee Performance; (2) there is a positive and significant influence between the Expertise variable on Employee Performance; (3) there is a positive and significant influence of the work experience variable on Employee Performance; (4) There is a simultaneous positive and significant influence of the education level, Expertise and work experience variables on employee performance; and (5) work experience is a variable that has a dominant influence on Employee Performance.

Keywords: education level, expertise , work experience, performance

INTRODUCTION

Every resource a company possesses must be managed appropriately to achieve maximum overall performance for the benefit of the company. One company resource that is dynamic in its management is human resources. Human Resource Management (HRM) plays a role in developing human resources so that they behave as the primary drivers of the company's operations. Human resource performance will not produce optimal results if it does not meet the company's expectations.

Therefore, the existence of human resources needs to be monitored and their quality developed . Efforts to realize this are through the development of human resources as planners and implementers in the company. By developing the quality of human resources it is hoped that employee can improve its performance.

Competition in an industry between companies has impacted the demands for company performance to be produced more effectively and efficiently. Employees are expected to be not only capable, competent, and skilled, but also... should have the will and sincerity to work effectively and efficient. Work capabilities must be supported by adequate levels of education and work experience to support these objectives . Employee performance will determines the success of the company's activities . The company will be able to survive in competitive environment when supported with competent and experienced employees Expertise in their field and level of education as

the basis for work and work experience as the main support for completing work tasks and problems. Based on the problems mentioned previously, the author intends to take the topic and title of research "The Influence of Education Level, Expertise and Work Experience on Employee Performance. "

LITERATURE REVIEW
Level of education

A person's activities to develop their abilities, attitudes, and behaviors for their future life , manifested in their level of education. This level of education also aims to foster integrity or personal development. The integrity referred to here relates to physical, intellectual, emotional, and moral integrity.

Educational level refers to the academic achievements and recognition or degrees earned by an individual. An employee's educational level can increase organizational competitiveness and improve organizational performance (Hariandja, 2002). According to Ranupandojo (2004) , educational level is an activity carried out to increase knowledge. general employees including in it are increasing mastery of theory and skills to solve problems for achieving goals.

Various literature and developments in economics show that there is evidence that a person's level of education is associated with the potential for positive career development, including salary levels, promotions, development opportunities and job mobility (Cappelli, 2000; Ng *et al* ., 2005). This is because most organizations use education level as an indicator of a person's skill level or productivity (Benson *et al* ., 2004) and they often use it as a consideration in recruitment decisions.

Hariandja (2002) stated that the dimensions of measuring educational level are educational background and knowledge perspective. Educational background refers to the ongoing educational stage, which is assessed based on an employee's developmental level. Having an educational level enables a person to possess certain knowledge and skills, enabling them to solve problems. Knowledge perspective is the part that concerns the learning process to acquire and improve skills outside the existing educational system in a relatively short time, using methods that prioritize practice over theory. Another opinion states that the dimensions of educational level are (1) formal education dimension with the indicator being the last level of education completed by every worker includes elementary, middle, high school and college height, and (2) the dimension of informal education level with indicators of attitude and personality which is formed from family and environment (Widi , 2011).

Expertise

According to Robbins and Judge (2015) Expertise is the capacity employees to perform various tasks is in a job. Another opinion states that Expertise is a person's talent to do physical work or mental Which possessed by people to carry out work (Ivancevich *et al.,* 2013). Thus, all of a person 's abilities in principle consist of two components, namely mental abilities and physical abilities. Mental or intellectual abilities are the abilities needed to carry out activities. mental. Physical Expertise is the Expertise needed to do something. tasks that require endurance or stamina, dexterity, perfect strength and skills . Gibson *et al* . (2012) stated that Expertise is the potential of employees to perform various tasks and jobs. The existence of Expertise consists of personal aspects of a person to achieve performance. These personal aspects include

characteristics , motives, value systems, attitudes, knowledge and skills where Expertise will direct the behavior which then determines performance.

According to Robert R. Katz (1974), there are three forms of basic abilities that a person must have to carry out tasks as a worker in order to achieve the results desired by the organization. These three basic abilities are (1) technical skills as knowledge and mastery of activities that related to the process and procedures concerning work and work tools; (2) *human skills* as the Expertise to work in a group atmosphere in which the organization feels safe and free to convey problems; and (3) conceptual skills as the Expertise to conceptually see the advantages and importance of a particular condition or situation . Possession of these three things explains that employees who have them can support the achievement of the vision and the organization's mission to quickly progress and develop rapidly . The abilities that a person possesses will make him different from others. have average or mediocre abilities.

Work experience

Martoyo (2007) defines work experience as the length of time an employee has worked at the workplace, starting from the time they were accepted at the workplace. working until now. In other words, experience work is a period of time or duration someone works in an organization. According to Handoko (2014) experience work is the mastery of knowledge and employee skills measured by length of service, level of knowledge and skills that employees have. Experience can only be gained through the workplace.

Foster (2001) states that the dimensions of work experience can seen from the length of time or period Work, level of knowledge and skills owned and type of work. Work experience adequate will help employees to complete the work. Work experience both provide expertise and skills work based on the time period in carrying out the job. The longer a person works, the more experience they gain in their work. With more experience, they will have a better grasp of their work and be able to complete it better. Work effectiveness can also be achieved well.

Performance

According to Mangkunegara (2017) , Employee Performance is the quality of work results. and quantity achieved by a person employees to carry out their duties in accordance with the responsibilities given to him. According to Prawirosentono (2008) performance is the result of work completed by a person or group of people in an organization according to its duties and responsibility in efforts to achieve the organization's objectives legally, without violating legal provisions and in accordance with morals and ethics. Core task performance refers to the basic tasks required of a particular job.

According to Mangkunegara (2017) , factors that influence achievement Performance is the Expertise factor and motivation factor. Expertise factor consists of potential Expertise (IQ) and reality capExpertise (knowledge + skill). Motivational factors are the attitudes of leaders and employees towards the work situation in their organizational environment. Those who have a positive attitude (pro) towards the work situation will show high work motivation and on the other hand, if they have a negative (contra) attitude towards their work situation will show low work motivation. Working situation The terms referred to include, among other things, work relations, work

facilities, policies leadership, work leadership patterns and working conditions. Stone (2004) explains that employee performance is determined by factors, namely Expertise, skills, knowledge, employee experience and personality and work perceptions.

RESEARCH METHODS

The population comprised employees at eight companies in Malang Regency, each with a minimum of one thousand employees. The sampling technique employed purposive sampling, a non-random sampling technique. Respondents were typically supervisors and above. They also had worked for at least one year at their last job. This study involved one hundred respondents . Data were measured using a questionnaire or list of questions structured based on a theoretical framework in the form of a Likert scale with five rating scales. Twenty questions represented the four variables involved in the study. The analysis technique employed inferential statistics included validity tests, reliExpertise tests, classical assumption tests, multiple regression analyses, and t-tests and F-tests.

RESULTS AND DISCUSSION

In terms of description, the profile of the 100 respondents was found to be 63% male and 37% female. In addition, for educational levels, 2% were junior high school graduates; 52% high school graduates; 37% undergraduate; and 9% postgraduate. Based on length of service, 21% of respondents had worked for 1-5 years; 48% of respondents had worked for 6-10 years; and 31% of respondents had worked for more than 10 years.

Validity testing aims to determine the degree to which the measurement scale functions accurately, precisely, and precisely in accordance with the research objectives. If the measuring instrument can perform its function properly, it can have a high level of validity. In this study, the threshold for each question item is set to be valid if the corrected item-total correlation value is greater than 0.3.

The SPSS data processing results revealed that each statement item was above the 0.3 threshold. Therefore, no questions were dropped from their original format. Consequently, each question item in the questionnaire was declared valid.

Table 1
Validity Test Variables

No	Variables	R	Validity
1	X.1.1	0.886	Valid
2	X.1.2	0.622	Valid
3	X.1.3	0.635	Valid
4	X.1.4	0.801	Valid
5	X.2.1	0.835	Valid
6	X.2.2	0.747	Valid
7	X.2.3	0.734	Valid
8	X.2.4	0.459	Valid
9	X.2.5	0.352	Valid
10	X.2.6	0.742	Valid
11	X.3.1	0.862	Valid
12	X.3.2	0.684	Valid

13	X.3.3	0.736	Valid
14	X.3.4	0.672	Valid
15	Y.1.1	0.470	Valid
16	Y.1.2	0.817	Valid
17	Y.1.3	0.729	Valid
18	Y.1.4	0.843	Valid
19	Y.1.5	0.852	Valid
20	Y.1.6	0.308	Valid

SPSS output source

ReliExpertise is tools used For know level reliExpertise from tool measure . The more tall mark reliExpertise so tool the measurement used is also more reliable For used in research furthermore or different places . The method used is with provisions alpha value above 0.6.

Table 2
ReliExpertise Test

No	Variables	Alpha	ReliExpertise
1	X.1	0.755	Reliable
2	X.2	0.659	Reliable
3	X.3	0.707	Reliable
4	Y	0.763	Reliable

SPSS output source

ReliExpertise test results show that mark coefficient reliExpertise every variables more big from value 0.6. With thus results answer respondents can reliable . This is show that when done same research at the same time different so respondents will give same answer .

Normality test For know data distribution from formation a regression model . A good regression model if the data in the research has normal data distribution or approaching normal. One of the method For see normality is using one sample Kolmogorov-Smirnov test, at the level significant 0.05 or 5%. If the resulting significance > 0.05 then distribution the data stated normally distributed . The results of SPSS processing are shown Table 2 below This .

Table 3
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters [a,b]	Mean	.0000000
	Standard Deviation	2.90777786
Most Extreme Differences	Absolute	.119
	Positive	.119
	Negative	-.059
Test Statistics		.179
Asymp . Sig. (2-tailed)		.111

a. Test distribution is Normal.

b. Calculated from data.

SPSS output source

Table 3 shows that the SPSS output states the value Kolmogorov-Smirnov of 0.179 with a value of significant 0.111. With Thus the resulting regression model worthy used . Next is an autocorrelation test . Autocorrelation is defined as the correlation between members of a series ordered by time (as in time series data) or space (a set of data). To determine whether an autocorrelation problem exists, the Durbin-Watson statistical method is used.

Table 4
Durbin-Watson
Model Summary [b]

Model	Durbin-Watson
1	1,973 [a]

[a.] Predictors: (Constant), X.3, X.2, X.1

[b] . Dependent Variable: Y

of the SPSS calculations carried out by the author obtained a Durbin-Watson of 1.973 as shown in Table 4. This value is between 1.01 and 2.46, which means that the regression model in this study is free from autocorrelation .

The heteroscedasticity test aims to determine whether there is unequal variance in the residuals from one observation to another in the regression model. This is done by observing the scatterplot of the dependent variable. Figure 3 shows that the points on the scatterplot are spread out and located on each side of the Y-axis. Therefore, it can be concluded that there is no heteroscedasticity.
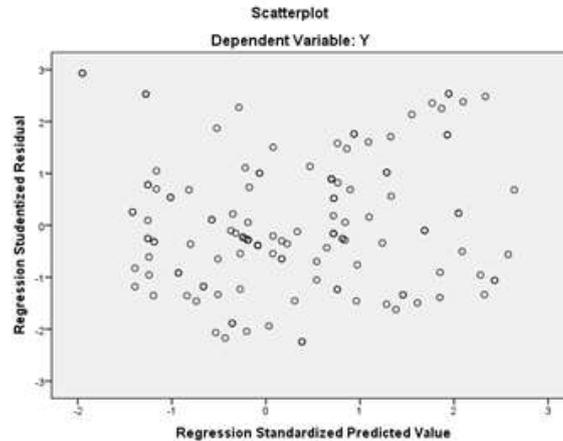

Figure 3Scatterplot Dependent Variable

multicollinearity test aims to determine the existence of a linear relationship between independent variables in a regression model. This can be done by observing the tolerance value and VIF value from SPSS output . If the tolerance value is less than 1 and the VIF is between 1 and 2, then the research model equation does not show symptoms of multicollinearity.

Table 5
Multicollinearity of Variables

Model	Collinearity Statistics	
	Tolerance	VIF
X . 1	. 704	1. 421
X . 2	. 7 60	1,450
X.3	.780	1,418

a. Dependent Variable: Y

SPSS output source

Table 5 shows that the tolerance value obtained is less than 1 and the VIF value is between 1 and 2. Thus, it can be stated that the equation of this research model does not show symptoms of multicollinearity.

The next stage is hypothesis testing. Four hypotheses will be validated. The F-test is used to examine the simultaneous influence of the independent variables—education level, Expertise, and work experience—on employee performance. This F-test is conducted by comparing probExpertise significance values with a threshold of 0.05. The results of the calculations using SPSS software are shown in Table 6 below.

Table 6
ANOVA [a]

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	838,498	3	279,499	32,055	.000 [b]
Residual	837,062	96	8,719		
Total	1675,560	99			

[a.] Dependent Variable: Y
[b.] Predictors: (Constant), X.3, X.2, X.1

SPSS output source

Based on the results of the F test conducted by comparing the probExpertise significance value with the specified limit of 0.05. From the results of the comparison of these values in Table 6 , a value of 0.000 was obtained, which means it is below the limit of 0.05. Thus, it can be stated that at the real level of α = 0.05, the level of education, Expertise and work experience have a significant influence simultaneously on Employee Performance. The hypothesis that states that the level of education, Expertise and work experience have a simultaneous influence on Employee Performance is proven true.

The t-test is used to examine the partial influence of the independent variables, namely education level, Expertise, and work experience, on employee performance as the dependent variable . The results of calculations using SPSS software are as shown in Table 7 below .

.

Table 7
Coefficients [a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant)	3.131	1,709		1,832	.070
X.1	.182	.080	.196	2,283	.025
X.2	.303	.131	.260	2,307	.023
X.3	.387	.121	.359	3,203	.002

[a] . Dependent Variable: Y
SPSS output source

Based on the results of the t-test conducted by comparing the probExpertise significance value of each independent variable with the specified limit of 0.05. From the results of the comparison of these values in Table 7 , a value of 0.025 was obtained for the education level variable, a value of 0.023 for the Expertise variable and a value of 0.002 for the work experience variable, which means it is below the limit of 0.05. At the significance level of $\alpha = 0.05$, the level of education, Expertise and work experience have a partial significant influence on the dependent variable, namely Employee Performance, or in other words, at the significance level of 5%, the hypothesis stating that the level of education, Expertise and work experience have a partial significant influence on Employee Performance, is proven true. Based on Table 7 , it is also known that the regression equation formed is as follows. Y = 3.131 + 0.182 X1 + 0.303 X2 - 0.387 X3

From this equation, it can be seen that employee performance continues to increase by 3.131 along with the increasing fulfillment of education levels by 0.182 ; Expertise by 0.303 and work experience by 0.387 . From this equation, the independent variables can also be determined. which has a dominant influence on the dependent variable as seen from the highest regression coefficient value among the independent variables, namely work experience of 0.387 or greater than the regression coefficient of the education level variable of 0.182 and Expertise of -0.303 . The work experience variable is the independent variable that has the most dominant influence on Employee Performance.

The partial coefficient (R) value is 0.70 7 or 7 0.7 %. This value is positive and very close to 1 so that it can be stated that there is a strong unidirectional relationship between the independent variables, namely education level, Expertise and work experience to the dependent variable, namely Employee Performance. The coefficient of determination serves as a measure of the accuracy of the regression results to the group of observational data . R² measures the proportion of total variation in Y explained by the regression model. Thus, the measurement to determine the contribution of the three independent variables to the dependent variable is based on the R-squared value. Similar to the coefficient of determination, which ranges from 0 to 1, the R-squared value also shows that the closer it is to 1, the better the contribution. The SPSS output shows the results as in Table 8 below.

Table 8
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	.707 [a]	.500	.485	2,953

[a.] Predictors: (Constant), X3, X2, X1
SPSS output source

In the calculation results that have been described before, the R Square coefficient value of 0.500 indicates a fairly strong influence between the independent variables and the dependent (dependent) variables. The coefficient value of 50 % indicates that this multiple regression model whose independent variables consist of education level (X1), Expertise (X2) and work experience (x3) has contributed 50 % to the formation of the dependent variable, namely Employee Performance. While the remaining 50 % is determined by other factors such as job training, work attitude, work commitment, cooperation, discipline, organizational culture, work environment and so on.

The three independent variables studied showed a significant influence on employee performance. First, education level significantly influences employee performance. The results of this study are in accordance with the results of previous studies, including those from Ferris (1982); Ivancevich and McMahon (1977); Truxillo *et al* . (1998); Cote (2006); Hargis *et al* . (2006); Janssen (2000); Nafukho and Hinton (2003); Karatape (2006); and Kahya (2007). The results of these studies indicate various influences of education level on core task performance, even workers with higher education tend to contribute more effectively to non-core activities in the workplace as well.

Expertise has been shown to significantly influence employee performance. This is consistent with the findings of Aisha *et al* . (2013) and Githinji (2014) . Employees' Expertise to adapt depends on their willingness to adjust their behavior based on environmental changes that improve job performance. This study found that there is an influence of work experience on employee performance, but effectiveness lies in the strong relationship that also exists between personal characteristics and adaptExpertise.

The third independent variable is work experience which has been proven to have a significant influence on Employee Performance. This finding is in accordance with the results of research conducted by Borman *et al* . (1993); Quińones *et al* . (1995); Dokko *et al.* (2009); Dragoni et al. (2011) and Githinji (2014) which stated that from the skills and abilities of employees to learn from previous work experiences, it was identified that there is a relationship between job performance and employee work experience. This result also supports Van Vugt's statement (2006) which explains that the work environment requires special knowledge including certain targets that are more likely to be controlled by older or experienced individuals so that currently there is a relationship between age, experience, knowledge, and leadership.

CONCLUSION
Following are the findings of this study. There is a positive and significant influence of the variable education level on employee performance. There is a positive and significant influence of the variable Expertise on employee performance. There is a

positive and significant influence of the variable work experience on employee performance. There is a simultaneous positive and significant influence of the variables of education level, Expertise, and work experience on employee performance. Work experience is the variable with the dominant influence on employee performance.

REFERENCE

Benson GS, Finegold D, Mohrman S. 2004. You paid for the skills, now keep them: Tuition reimbursement and voluntary turnover. *Academy of Management Journal* , 47, 315–331.

Borman, WC, MA Hanson, SH Oppler, ED Pulakos, LA White. 1993. Role of Early Supervisory Experience in Supervisory Performance. *Journal of Applied Psychology* Vol 78(3) 443–449.

Cappelli P. 2000. A market-driven approach to retaining talent. *Harvard Business Review* , 78, 103–111

Aisha , Atya Nur . , Pamoedji Hardjomidjojo, and Yassierli. 2013 . Effects of Working Expertise, Working Conditions, Motivation and Incentive on Employees Multi-Dimensional Performance. *International Journal of Innovation, Management and Technology* vol. 4, no. 6, pp. 605-609, 2013.

Cote S, Miners CTH. 2006. Emotional intelligence, cognitive intelligence, and job performance. *Administrative Science Quarterly* , 51, 1–28

Dokko, Gina., Wilk L. Steffanie and RothbardP. Nancy. 2009. Unpacking prior experience: How career history affects job performance. *Organization Science* , 20, pp. 51–68.

Dragoni, L., Oh, I., Vankatwyk, P., & Tesluk, PE 2011. Developing executiveleaders: The relative contribution of cognitive Expertise, personality, and the accumulation of work experience in predicting strategic thinking competency. *Personnel Psychology* , 64, pp. 829–864.

Ferris KR. 1982. Educational predictors of professional pay and performance. *Accounting, Organization and Society* , 7, 225–230

Foster, Bill. 2001. *Coaching for Improving Employee Performance* . Jakarta: PPM. Kansius.

Gibson, J. L, Ivancevich, J.M., Donnelly, J.H., & Konopaske, R. 2012. *Organizations: Behavior, structure, processes* (14th ed.). New York, NY: McGraw-Hill Irwin

Githinji, A. 2014. Effects of Training on Employee Performance: A Case Study of the United Nations Support Office for the African Union Mission in Somalia (Doctoral dissertation, United States International University-Africa).

Handoko, T. Hani. 2014. *Fundamentals of Production and Operations Management* , 1st edition. Yogyakarta: BPFE.

Hargis MB, Baltes BB, Fried Y, Levi A. 2006. Race differences in termination at work: The role of educational inequality. *Journal of Business and Psychology* , 20, 587–598.

Hariandja, Marihot T. E, 2002. *Human Resource Management* . Jakarta: Grasindo.

Ivancevich JM, McMahon JT. 1977. Education as a moderator of goal setting effectiveness. *Journal of Vocational Behavior* , 11, 83–94.

Ivancevich, M. John, Konopaske. Robert and Matteson, T. Michael. 2013. *Organizational Behavior and Management* , 10 edition, McGraw-Hill Education

Janssen O. 2000. Job demands, perceptions of effort-reward fairness and innovative work behavior. *Journal of Occupational and Organizational Psychology* , 73, 287– 302.

Kahya E. 2007. The effects of job characteristics and working conditions on job performance. *International Journal of Industrial Ergonomics* , 37, 515–523.

Karatape OM, Tekinkus M. 2006. The effects of work-family conflict, emotional exhaustion, and intrinsic motivation on job outcomes of front-line employees. *International Journal of Bank Marketing* , 24, 173–193.

Katz, Robert. L. 1974. Skills of an Effective Administrator. *Harvard Business Review* , 52, 90-102.

Mangkunegara, A. Anwar Prabu. 2017. *Human Resource Management* . Bandung: Rosdakarya Youth.

Martoyo, Susilo. 2007. *Human Resource Management* , 5th edition, First Printing, BPFE Yogyakarta.

Nafukho FM, Hinton BE. 2003. Determining the relationship between drivers' level of education, training, working conditions, and job performance in Kenya. *Human Resource Development Quarterly* , 14, 265–283.

Ng TWH, Eby LT, Sorensen KL, Feldman DC. 2005. Predictors of objective and subjective career success: A meta-analysis. *Personnel Psychology* , 58, 367–408.

Prawirosentono, Suryadi. 2008. *Employee Performance Policy* . Yogyakarta: BPFE

Quińones, Miguel A., Ford, J. Kevin, Teachout, Mark S. 1995. The Relationship between Work Experience and Job Performance: A Conceptual and Meta-Analytic Review. *Personnel Psychology* , Volume 48, Issue 4, pages 887–910, December 1995

Ranupandojo. 2004. *Human Resource Management* . BPFE, Yogyakarta.

Robbins, Stephen P. and Timothy A. Judge. 2015. *Organizational Behavior* , 16 [th] Edition, Pearson

Stone, Raymond J. 2004. *Human Resource Management* . 5 [th] edition, Wiley California

Truxillo DM, Bennett SR, Collins ML. 1998. College education and police job performance: A ten-year study. *Public Personnel Management* , 27, 269–280.

Werther, William B, and Keith Davis, 2004, *Human Resources and Personnel Management* , Sixth, McGraw-Hill, Inc, New York.