

# The Influence of E-Learning Training on Teacher Performance with Motivation as an Intervening Variable

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## ABSTRACT

Education is a central factor in the quality of human resources. The quality of teachers in Indonesia is still relatively low. Low quality has an impact on low teacher performance. The solution to this issue is for teachers to attend training programs organized by both the government and private institutions. This research is ex post facto research. The research design utilizes a questionnaire and documentation as data collection instruments. The research population consists of elementary school teachers who participated in e-learning training at e-guru academy Batch 1, totaling 200 participants. The sampling technique employed in this research is simple random sampling, resulting in a total of 70 research samples. The research results indicate that e-learning training has a positive and significant impact on motivation with a contribution of 29.2%. E-learning training significantly influences performance with a contribution of 22.8%, and motivation has a positive and significant impact on performance by 50.4%. However, the influence of e-learning training on teacher performance through motivation has been found to be non-significant.

**Keywords:** E-learning training, motivation, teacher performance

## INTRODUCTION

Human resources (HR) in Indonesia are still considered low. According to The World Bank, Indonesia's human capital index in

2022 ranks 130th out of 199 countries and is ranked 6th in ASEAN<sup>1</sup>. This indicates that resources in Indonesia still lag far behind other countries.

Teachers are central figures in education. Teachers can be considered as central figures in education due to their role in facilitating and driving the learning process<sup>2</sup>. According to UNESCO's Global Education Monitoring (GEM) Report 2016, Indonesia ranks 10th out of 14 developing countries in terms of the quality of its education, with Indonesian teachers ranking 14th out of 14 developing countries in terms of teacher quality.<sup>3</sup>

Teachers can be said to be the central figure in education, because of their role in driving and facilitating learning<sup>2</sup>. According to Chetty, He found that students taught by highly effective teachers are more likely to go to college, earn more, live in higher income neighborhoods, save more money for retirement<sup>4</sup>. This potential for highly effective teachers to significantly improve the lives of their students makes it important for researchers and policymakers to properly understand the factors that contribute to a teacher's effectiveness. This suggests that teachers have a very central role.

The quality of a teacher refers to the level of excellence of an educator in delivering education and instruction to students to fulfill their duties and responsibilities both within

and outside the school<sup>5</sup>. The quality of a teacher can be observed through their competencies. Competence serves as the foundation for assessing the overall quality of a teacher.<sup>6</sup> Teacher competence is conceptualized as a framework that depicts the specific personal qualities required by teachers to meet the high demands of their profession.<sup>7</sup>

Considering the still insufficient quality of teachers, it undoubtedly has an impact on the low quality of human resources. There are many factors that can influence the low quality of teacher performance in Indonesia. Such as low salaries, which means there is minimal attention to teachers in Indonesia by the government. Additionally, many teachers are not up-to-date with technology. We are currently in the era of the Fourth Industrial Revolution, which requires the education sector to update its infrastructure, methods, and learning strategies to align with the times. The presence of technologically challenged teachers makes it difficult for educators to think more progressively because current technology can enhance a teacher's performance.

Teacher motivation is the power that drives teachers to carry out their duties in educating, teaching, guiding, directing, training, and evaluating students. Based on a preliminary study conducted by Handayani & Rasyid in 2015, several high school teachers in Wonosobo district have low work motivation. This is caused by several factors such as teachers' working hours that are not in accordance with the provisions of 37.5 hours per week. An indication of the lack of optimal teacher work motivation can also be seen from some teachers who leave teaching assignments, leaving empty hours without giving replacement assignments. In addition, there are many teachers whose rank or grade until they retire is stuck at IV A, and they have not been promoted for more than eight years. In Wonosobo district, more than 86% of teachers in class IV A are unable to advance their careers because they are not motivated to produce scientific papers and do not complete learning tools as a

manifestation of their professional competence<sup>8</sup>.

One form of non-formal education is training, and training activities provide significant benefits to participants when managed effectively<sup>9</sup>. Therefore, non-formal education is available for teachers to enhance their quality through training. The government's efforts to improve teacher quality, such as implementing PKG (Teacher Activity Centers), MGMP (Subject Teacher Councils), and KKG (Teacher Work Groups), enable teachers to share expertise in addressing teaching-related issues.<sup>10</sup>

Considering the low quality of education in Indonesia, it means that the training conducted by the government is perceived as not yet meeting the competence needs of teachers required today. Therefore, teachers are expected to sharpen their skills on their own. In enhancing their skills, educators can participate in training provided by private institutions, one of which is through e-guru. E-training has its own advantages and disadvantages. Online training is more practical and efficient as it allows participants to train flexibly from home; however, unstable internet connectivity can be a hindrance to the training process<sup>11</sup>. The problem with online learning and teaching is that it often isn't thoroughly considered; the concepts of digital literacy and digital pedagogy are largely unexplored, and there is seldom a push for deep thinking from course instructors or teaching staff, who receive minimal support.

Based on the aforementioned issue concerning the perceived subpar performance of teachers, the author is interested in exploring whether teachers who undergo training at e-guru can influence teacher performance, with motivation as an intervening variable. This research is titled 'The Influence of E-Learning Training.

## **MATERIAL AND METHODS**

### **Research Sample**

The sample in this research consists of elementary school teachers who participated

in the e-learning training at e-guru academy Batch 1, totaling 70 participants.

### Research Design

This research employs a quantitative approach. Quantitative research involves numerical data and statistical analysis<sup>12</sup>. The type of research in this research is *ex post facto* research, where this research was conducted after the event had occurred. The variables examined in this research are the independent variable (X), the intervening variable (Z), and the dependent variable (Y). The independent variable (X) in this research is the e-learning training program, the intervening variable (Z) is motivation, while the dependent variable (Y) is teacher performance.

### STATISTICAL METHODS

The testing in this research was conducted using the SPSS (*Statistical Program Of Social Science*) v.22 for Windows application. The steps taken included preliminary tests, which were tests for normality, multicollinearity, and heteroskedasticity. Subsequently, to test the hypotheses, a path analysis test was employed.

### RESULT

#### The Influence of E-learning Training on Motivation

The simple regression equation obtained is  $Z_2 = 0.269X + 11185$ . This equation indicates that the coefficient value of X is 0.269, which means that if E-learning training increases by 1 point, motivation will increase by 0.269 points. The equation above provides an illustration that when E-learning training becomes more positive or better, it will enhance motivation. The Sig value in this research is 0.000, which means there is a significant influence between the E-learning training variable and the motivation variable. This is based on the significance value of  $< 0.05$ , indicating a significant influence. To determine the hypothesis results, a t-test was conducted by comparing the calculated t-value with the t-table value. Based on the

table above, it is found that the calculated t-value is greater than the t-table value, which means the hypothesis is accepted.

#### The Influence of Motivation on Teacher Performance

The simple regression equation obtained is  $Z_2 = 0.616X + 33214$ . This equation indicates that the coefficient value of X is 0.616, which means that if motivation increases by 1 point, then performance will increase by 0.616 points. The equation above provides an illustration that when self-motivation becomes more positive or better, it will enhance performance.

The Sig value in this research is 0.000, which means that there is a significant influence between the motivation variable and the teacher performance variable. This is based on the significance value of  $< 0.05$ , indicating a significant influence. To determine the hypothesis results, a t-test was conducted by comparing the calculated t-value with the t-table value. Based on the table above, it is found that the calculated t-value is greater than the t-table value, which means the hypothesis is accepted.

#### The Influence of E-learning Training on Teacher Performance with Motivation as an Intervening Variable

The path analysis results indicate that training can have a direct impact on teacher performance and can also have an indirect impact, namely from training to motivation (as an intervening variable), and then to teacher performance. The calculation of the magnitude of the direct impact, indirect impact, and total impact of training on teacher performance is as follows:

The direct influence of X on Y

$$= p_1 = 0,556$$

The indirect influence of X on Y through Z<sub>2</sub>

$$= p_2 \times p_3 = 0.017168$$

Total influence

$$= p_1 + (p_2 \times p_3) = 0.573168$$

The direct influence of X on Y is greater than the indirect influence of X on Y through Z<sub>2</sub>. To determine whether the indirect influence

or mediation indicated by the product of coefficients ( $p_2 \times p_3$ ) is significant or not, it was tested using the Sobel test through the Sobel test web calculator, resulting in the following outcome:

Sobel test statistic: 0.31449497  
One-tailed probability: 0.37657257  
Two-tailed probability: 0.75314513

From the results above, it can be observed that the computed t-value is less than the t-table value, indicating that there is an influence, but it is not statistically significant.

## DISCUSSION

### The Influence of E-learning Training on Motivation

In the concept of non-formal education, a training and learning system consists of interconnected components within a system. This system relates to inputs, processes, and outputs<sup>13</sup>. In this research, inputs can come from students, instructors, training objectives, training materials, and others. The learning process is the activity of the training learning process. The output is a change in the behavior of training participants, which is an increase in motivation as a result of the e-guru academy's training learning process.

Skinner's theory says that behavior change is not caused by internal human abilities but is caused by stimulus factors that cause responses (Rifa'i, 2016). The relationship of the research results to Skinner's theory lies in the behavior caused by the stimulus, where the stimulus in this case is e-learning training. When individuals already feel that the training provides benefits to their self-development, then the individual or in this study the participants respond in the form of behavioral changes, namely increasing motivation<sup>14</sup>.

This research demonstrates that the better the quality of training, the higher the motivation within the participants. This research aligns with several other studies that have been conducted, which have found that training has a positive and significant impact on motivation<sup>15</sup>. Another research conducted by Meidita (2019) concurs with this; the

research was conducted on employees at PT. Perkebunan Nusantara IV (Persero) Medan and yielded training that had a positive and significant impact.<sup>16</sup>

### The Influence of Motivation on Teacher Performance

Teacher's work motivation is the drive or desire that arises from an individual teacher to educate, teach (plan, implement, and evaluate), guide, direct, and train students to the best of their ability, harnessing all available potential. The enhancement of teacher's work motivation is essential because motivation is the most critical factor in achieving goals. In educational organizations, the work motivation of elementary school teachers is highly needed for the smooth execution of the learning process and the attainment of educational objectives, thus improving teacher performance.

This research proves that motivation is capable of improving teacher performance. This means that the higher the motivation, the higher the performance. Research conducted by Tampubolon & Yanti Parinduri at SMP Negeri 2 Tanjung Balai shows that the work motivation variable has a positive influence on teacher performance, with a contribution of 74.8%<sup>17</sup>. The positive effect indicates that the better the work motivation, the better the teacher's performance. This is in line with Farisi's research, which partially showed that motivation has a positive and significant effect on the performance of employees at PT. Perkebunan Nusantara V (Persero) Kebun Tanah Putih, Riau Province<sup>18</sup>.

### The Influence of E-learning Training on Teacher Performance with Motivation as an Intervening Variable

The hypothesis testing results indicate that the obtained t-value in the Sobel test is 0.31449497, which is smaller than the critical t-value (1.667). This means that there is no influence of training on performance through motivation, and thus, the sixth hypothesis is rejected. In other words, the motivation

variable does not play a mediating role. E-learning is an effective tool for transferring knowledge and has the potential to surpass conventional teaching methods. E-learning training assists learners and instructors in the educational environment. E-learning training provides convenience as it can be done anytime and anywhere without spatial or temporal constraints. Therefore, e-learning training can directly enhance teacher performance.

This research indicates that the variable E-learning training directly influences performance, but it does not necessarily have to go through motivation. The intervening variable is not particularly important in this research. It is evident here that motivation does not serve as an intervening variable in the relationship between training and performance. This means that motivation does not play a significant role in this research model, i.e., motivation does not mediate the relationship between training and teacher performance. This leads to the conclusion that training directly enhances performance without the need for training followed by motivation and then an increase in performance.

This research is not in line with the research conducted by Escher who found that after the training, all tasks improved through increased self-efficacy and motivation.<sup>19</sup> The qualitative data analysis also indicates that training within one's profession and within an authentic multiprofessional team is an essential factor for motivation. This research demonstrates that training through high motivation has been proven to enhance an individual's performance.

Teachers with high motivation will continually enhance their competencies. Therefore, teachers participate in e-learning training to augment their competencies and knowledge of the latest curriculum. Hence, the influence of training on performance does not necessarily have to go through motivation first because teachers already possess high motivation.

## **CONCLUSION**

Based on the above research, it was found that E-learning training has a positive and significant effect on motivation, with an effect size of 29.2%. This means that E-learning training is able to enhance teachers' motivation. Additionally, motivation has a positive and significant impact on teacher performance, with an effect size of 50.4%. This indicates that motivation can improve teacher performance. However, E-learning training on teacher performance through motivation was found to be non-significant, as indicated by the t-value of 0.31449497, which is less than the critical t-value. Therefore, the hypothesis is rejected, indicating that in this research, it is an intervening variable.

## **SUGGESTION**

For other researchers, adding additional variables that may influence the performance of teachers, which were not examined in this research.

### ***Declaration by Authors***

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