



Teacher Self-Efficacy Training to Improve Teachers' Work Engagement

Irnanda Wijayanti

Universitas Surabaya, Surabaya, Indonesia

Correspondence: E-mail: imandawijayanti.eics@gmail.com

ABSTRACT

This experimental study examines the effect of teacher self-efficacy training to increase work engagement among teachers. Participants in this training were 16 teachers from the level of playgroup/kindergarten, and lower grade primary level. Work Engagement is measured using the Work and Well Being Survey (UWES) attitude scale, while Teacher Self Efficacy is measured using the Norwegian Teacher Self Efficacy Scale (NTSES). The results showed that there were differences in the level of understanding of participants' knowledge about work engagement and teacher self-efficacy before and after training, through the results of statistical tests with the Wilcoxon non-parametric SPSS 16.0 program 0.001 (sig. <0.05). Based on the correlation test for the two variables, the results of the pre-test (0.502) and post-test (0.507) were obtained. Based on T-test, the results of the significance level of work engagement is 0.183 (sig.> 0.05) and the significance level of teacher self-efficacy is 0.131 (sig.> 0.05), which means that there is no difference in the level of work engagement and teacher self-efficacy on the participants before and after attending the training. The finding shows the training materials provide new insights for the training participants in terms of knowledge level. However, the training has not increased work engagement level, probably caused by the matter of the social desirability bias and performance bias in this research.

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1. INTRODUCTION

The main task of teachers as professional educators is to educate, teach, guide, direct, train, assess, and evaluate students on the formal education path (Matnuh, 2017). Mastery of competence and application of knowledge and skills of teachers, will determine the achievement of the quality of the student learning process (Asiah, 2016). Not only in terms of knowledge, the teacher also plays a role in assisting students in achieving developmental tasks and guiding them in character building, so that students grow as whole individuals with all their own uniqueness (Khalilah, 2017).

Teachers have an important role in the educational process and student growth and development (Zahro, 2015). The attachment of teachers to work is fundamental so that they can carry out their profession optimally. Work engagement or work engagement according to Schaufeli et al. (Schaufeli, et al., 2006) is a positive state of mind and feelings related to the work done. Work engagement is evidenced by enthusiasm, dedication, and focus at work.

From the results of observations and interviews in the field, it turns out that not all teachers show work engagement or attachment to the work they are doing. This can be seen from the existence of teachers who are still less enthusiastic in carrying out teaching and learning activities in the classroom, delays in completing teacher task targets related to learning activities, as well as errors found due to lack of understanding of class handling or students or lack of focus in doing work. The low work engagement affects the performance of teachers in carrying out their roles.

Based on the findings of these conditions, the authors raised the topic of increasing work engagement to answer the needs of schools to have professional teachers with good work performance and to help teachers develop themselves optimally.

In the JD-R Model theory (Bakker and Demerouti, 2017), personal resources, which include self-efficacy, optimism, resilience, and self-esteem, play an important role in work engagement which then affects individual work performance. In line with this theory, Skaalvik and Skaalvik (Skaalvik and Skaalvik, 2014) in their research, state that there is a positive relationship between teacher self-efficacy and work engagement. Increased work engagement is carried out through teacher self-efficacy training. Bandura (Skaalvik and Skaalvik, 2014) explains that self-efficacy is an individual's assessment or belief about his ability to organize and take action in fulfilling certain tasks or performances. Furthermore, teacher self-efficacy is defined by Skaalvik and Skaalvik (Skaalvik and Skaalvik, 2007) as teachers' beliefs about their ability to design, organize, and deliver activities to achieve educational goals.

The general objective of the Teacher Self Efficacy training is to increase work engagement or work engagement of teachers in the profession they are currently living. The specific objectives of this training consist of two aspects, namely knowledge and attitude (Myori, et al., 2019). Viewed from the knowledge aspect, this training aims to increase teachers' understanding of work engagement and self-efficacy as well as increase teacher knowledge regarding teacher professional duties which include giving instructions, adapting instructions according to students' individual needs, motivating students, enforcing discipline, cooperate with colleagues and parents, and how to deal with change and challenges. Meanwhile, in terms of attitude, this training aims to give teachers the initiative to design learning activities in accordance with the developmental tasks and needs of students, so that teachers are aware of mistakes that have been made while carrying out their duties, so that teachers have the will to build assertive communication

with colleagues. Parents so that good cooperation is established, and so that teachers have the initiative to set future targets for self-improvement and progress through reflection results (Natsir, et al., 2018).

2. LITERATURE REVIEW

2.1 Work Engagement

Work engagement according to Schaufeli and Bakker (Schaufeli, et al., 2006) is a positive state of mind and feelings related to the work done. Work engagement is evidenced by enthusiasm, dedication, and focus at work.

There are three dimensions to work engagement:

1. Vigor. Vigor is characterized by high morale and mental strength in completing work, as well as a willingness to put forth all efforts in work and persist in spite of difficulties.
2. Dedication. Dedication is characterized by enthusiasm, inspiration, pride, and challenge in work.
3. Absorption. Absorption is characterized by high concentration and one's involvement in doing work. At work, time seems to pass quickly and it is difficult to separate yourself from work.

Schaufeli and Bakker (Schaufeli and Bakker, 2004) state that work engagement is formed by two main factors, namely job demands and job resources. Job demands are physical, psychological, social and organizational aspects of work that require continuous physical, cognitive and emotional effort. Job resources are physical, social, psychological, or organizational aspects of work that can reduce job demands in related to employee psychological sacrifice, influence the achievement of goals, and stimulate development and learning (Ayu, et al., 2015). Further research by Bakker and Demerouti (Bakker and Demerouti, 2008) also confirms that engagement is related to personal resources. Personal resources are positive self-resources related to resilience and refer to their ability to control and have a positive impact on their environment. In the JD- R Model theory (Bakker and Demerouti, 2017), personal resources, which include self-efficacy, optimism, resilience, and self-esteem, play an important role in work engagement which then affects individual work performance.

2.2 Teacher Self-Efficacy

Bandura (Skaalvik and Skaalvik, 2007) explains that self-efficacy is an individual's assessment or belief about his ability to organize and take action in fulfilling certain tasks or performances. Still according to Bandura (Setiadi, 2007), there are four sources of information that make an important contribution to the formation of self- efficacy:

- (1) experiences of personal success (enactive mastery experiences),
- (2) successful experiences of others who are used as models (vicarious experiences),
- (3) praise and social rewards (verbal persuasion and other related social recognitions), and
- (4) individual psychological and affective states (physiological and affective states).

Furthermore, teacher self- efficacy is defined by Skaalvik and Skaalvik (2007) as teachers' beliefs about their ability to design, organize, and deliver activities to achieve educational goals. Based on Bandura's theory of self-efficacy (Erawati, 2012) and findings relevant to the factors that influence teacher self-efficacy, three groups of influencing factors are obtained, namely demographic factors, instructional experience, and personal. There are

nine variables consisting of three demographic variables, namely age, socioeconomic status, and length of teaching (Erawati, 2012). There are six variables that measure ethnicity, religiosity, perception (teaching competence, teacher welfare, and teacher certification), and achievement index. Favorable conditions in terms of demographics, having diverse instructional experiences, and positive affective qualities will increase teacher self-efficacy. According to Skaalvik and Skaalvik (Skaalvik and Skaalvik, 2014), there are six dimensions of teacher self-efficacy related to the professional duties of teachers:

1. Giving instructions. This dimension focuses on the teacher's belief that he is able to provide instructions, explain the material so that students achieve an understanding of the instructions or material delivered.
2. Adapt instructions to individual student's needs. This dimension relates to the teacher's belief that he or she is able to teach or educate students according to the needs and uniqueness of each student. Teachers are expected to have an understanding of their needs.
3. Motivating students. Optimal learning is highly dependent on student motivation. It is one of the teacher's tasks to encourage students to have high motivation in learning.
4. Maintaining discipline. Discipline is needed to support the smoothness or success of learning. Teachers play a major role in enforcing discipline through the rules imposed in the classroom or at school.
5. Cooperate with colleagues and parents. The cooperation of teachers with parents and co-workers is very necessary in the continuity of the teaching and learning process.
6. Coping with change and challenge. Teachers are required to always change according to the times and survive in the face of difficulties found in work.

The results of Prieto's research (Federici and Skaalvik, 2011) show that self-efficacy can significantly predict work engagement as measured by UWES. In a meta-analysis study Halbesleben in Federici and Skaalvik, self-efficacy is considered to have a positive relationship with work engagement with an estimated correlation of 0.50 ($p < 0.01$). Another study conducted by Simbula et al. (Simbula, et al., 2011) concluded that self-efficacy has an influence on one's work engagement, and vice versa.

In line with previous research, Skaalvik and Skaalvik (Skaalvik and Skaalvik, 2014) suggest that there is a relationship between teacher self-efficacy and work engagement. The results showed that teacher self-efficacy positively predicts the level of work engagement. A high level of self-efficacy can increase a person's level of work engagement.

3. METHODS

This study uses an experimental method through training. The trainees are Playgroup and Kindergarten teachers (preschool level) and elementary school teachers in grades 1- 3 (lower class primary level) because these two levels are the earliest levels where children begin to recognize and enter the school environment for pre- school children and the level where primary children begin formal learning with reading and writing activities that they must master as the basis for learning for the next level. The number of training participants was 16 teachers from KB/TK (pre-school) and SD (primary) levels. The age range of participants is between 22-48 years with a working period of less than 1 year-14 years. The training was carried out in two meetings. The entire training is divided into 5 material sessions.

The material presented in this training is related to the professional duties of a teacher which are summarized in the 6 dimensions of Teacher Self Efficacy according to Skaalvik and Skallvik: giving instructions, adapting instructions according to students' individual needs, motivating students, enforcing discipline, collaborating with colleagues and parents, and face change and challenges.

The training materials and methods divided into five sessions are as follows:

Tabel 1. The training materials and methods

Session	Dimension	Learning Material	Method
1	Giving Instructions & Adapting Instructions to Student's Needs	Stages and tasks of child development, visual-auditory-kinesthetic learning style	Lecturing, Multimedia, Paper Assignment in Group, Presentation
2	Giving Instructions & Motivating Student	Giving right instructions and motivation	Lecturing, Multimedia, Sharing & Q&A
3	Maintaining Discipline	Appropriate and consistent enforcement of discipline and classroom management based on Baumrind parenting	Lecturing, Multimedia, Sharing & Q&A
4	Cooperating with Colleagues & Parents	Assertive communication model	Lecturing, Paper Assignment in Pair, Group Sharing & Reflection
5	Coping with Change & Challenge	Adversity Quotient	Lecturing, Games, Paper Assignment: Reflection & Self Report

The training evaluation consists of evaluating the reaction level, learning knowledge level and attitude. Evaluation of the reaction level was measured using a questionnaire on the implementation of the training, the evaluation of the level of learning knowledge was measured using a questionnaire on material related to the variables of work engagement and teacher self efficacy to measure the mastery of the material by participants before and after the training, while the evaluation of the level of learning attitude was measured using two attitude scales.

Work Engagement as the dependent variable was measured using the Work and Well Being Survey (UWES) attitude scale. The attitude scale includes three measurement dimensions: vigor, dedication, and absorption with a total of 17 statement items about how individuals feel at work. The attitude scale was adapted into Indonesian and adapted to the conditions of the trainees. There are 6 attitude answer choices used in this scale: Never, rarely, sometimes, Often, Very Often, and Always.

Teacher Self Efficacy as an independent variable was measured using the Norwegian Teacher Self Efficacy Scale (NTSES) attitude scale. The attitude scale includes 6 measurement dimensions: instruction, adapt instruction to individual needs, motivate students, maintain discipline, cooperate with colleagues and parents, and cope with change with a total of 24 statement items about how confident individuals are about statements related to professional duties as teachers. The attitude scale was adapted into Indonesian and adapted to the conditions of the trainees. There are 4 attitude answer choices used in this scale: Not Sure, Not Sure, Sure, Very Sure.

The acquisition of data on the level of learning knowledge and attitudes of trainees regarding work engagement and teacher self-efficacy was then measured using a series of statistical tests with the SPSS 16.0 program to determine whether there were differences in the level of knowledge among participants before and after training and to determine whether there were differences in the levels of work engagement and teachers' self-efficacy before and after training. Correlation test was also conducted to determine whether there was a correlation between the two variables of work engagement and teacher self-efficacy before and after training.

3. RESULTS AND DISCUSSION

Based on data from a questionnaire that measures the reaction level of the training participants, the evaluation results show that the training theme is interesting and in accordance with the needs of the participants, but the material presented needs to be more in-depth.

A series of statistical tests to determine the difference in the level of learning knowledge of participants before and after the training showed a normality test result of 0.019, which means that the data distribution was not normal (sig. <0.05), then continued with the Wilcoxon non-parametric test and obtained the result of 0.001 (sig. < 0 0.05) which means that there is a significant difference in participants' understanding related to knowledge of the two variables of work engagement and teacher self-efficacy before and after training. These results indicate that the training materials provide new knowledge insights for the trainees.

Tabel 2. Tests of normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
EVA_PRE	.243	16	.012	.866	16	.024
EVA_POST	.267	16	.003	.860	16	.019

a. Lilliefors Significance Correction

Tabel 3. Rank

		N	Mean Rank	Sum of Ranks
EVA_POST - EVA_PRE	Negative Ranks	1 ^a	1.00	1.00
	Positive Ranks	14 ^b	8.50	119.00
	Ties	1 ^c		
	Total	16		

a. EVA_POST < EVA_PRE; b. EVA_POST > EVA_PRE; c. EVA_POST = EVA_PRE

Tabel 4. Test Statistics^b

	EVA_POST - EVA_PRE
Z	-3.383 ^a
Asymp. Sig. (2-tailed)	.001

a. Based on Negative Ranks; b. Wilcoxon Signed Ranks Test

Furthermore, to measure the level of learning attitude, the authors conducted a statistical test to find out whether there was a difference in the level of work engagement and teacher

self-efficacy of the participants before and after the training. However, previously the authors conducted a correlation test to determine whether there was a correlation between the two variables of work engagement and teacher self-efficacy before and after training.

Tabel 5. Correlations I

		PRE_WE	Pre_TSE
PRE_WE	Pearson Correlation	1	.502*
	Sig. (2-tailed)		.048
	N	16	16
Pre_TSE	Pearson Correlation	.502*	1
	Sig. (2-tailed)	.048	
	N	16	16

*. Correlation is significant at the 0.05 level (2-tailed).

Tabel 6. Correlations II

		POST_WE	Post_TSE
POST_WE	Pearson Correlation	1	.507*
	Sig. (2-tailed)		.045
	N	16	16
Post_TSE	Pearson Correlation	.507*	1
	Sig. (2-tailed)	.045	
	N	16	16

*. Correlation is significant at the 0.05 level (2-tailed).

From the correlation test of the two variables, the results obtained were 0.502 for the pre-test and 0.507 for the post-test, which means that the two variables of work engagement and teacher self-efficacy have a fairly high correlation. The following are the results of the test of differences in the work engagement and teacher self-efficacy variables before and after training.

Tabel 6. differences in the work engagement and teacher self-efficacy variables

Uji Statistik	Taraf Signifikansi	DV: WORK ENGAGEMENT	IV: TEACHER SELF EFFICACY
Uji normalitas	Sig. > 0,05	Sig. 0,010	Tidak normal
Uji beda*	Sig. < 0,05	Sig. 0,183	Tidak signifikan

*. Uji beda menggunakan non-parametrik Wilcoxon

The significance level of 0.183 (sig. > 0.05) on the work engagement variable shows that there is no significant difference in the level of work engagement among participants before and after attending the training. The significance level of 0.131 (sig. > 0.05) on the teacher self efficacy variable shows that there is no significant difference in the level of teacher self efficacy for participants before and after attending the training. Based on the results of the evaluation of the level of learning knowledge, there are significant differences related to the level of knowledge of participants about the two variables of work engagement and teacher self-efficacy before and after training. These results indicate that the training materials provide additional insight into new knowledge for the trainees. This is reinforced by the input

from the training participants so that more training with such materials is held in order to equip teachers in carrying out their professional duties.

However, based on the results of statistical tests from the acquisition of data on attitude scale filling by training participants, it was found that there was no significant difference in the level of work engagement and teacher self-efficacy of the participants before and after the training. The same results were obtained in the test per dimension of the two variables, even though if viewed from the results of the correlation test, the two variables of work engagement and teacher efficacy have a fairly high correlation. Likewise, when viewed from the results of the mean, there is actually an increase in the level of work engagement and teacher self-efficacy of the participants before and after the training, only the difference in the mean scores in the two variables is small.

Furthermore, the authors observed that before being given training, most of the participants were in the medium/high category on both variables, both work engagement and teacher self-efficacy. This means that based on these categorizations, their level of work engagement and self-efficacy is quite good. In exploring the needs of participants through observations and interviews, it was found that there was a tendency for low work engagement for teachers, which was evident from the lack of morale from some teachers and the less than optimal performance of teachers. Meanwhile, the results of the pre-test stated that most of the participants had sufficient/high work engagement. So there is a discrepancy between the results of observations and interviews with the attitude scale data obtained by participants regarding their level of work engagement.

The author analyzes the discrepancy between the initial data acquisition and filling in the attitude scale by participants due to bias in this training. According to Simundic (2013) bias is a form of deviation from data collection, data analysis, interpretation, and publication of existing facts, which causes errors in making conclusions. Bias can occur intentionally or unintentionally. Sarniak (2015) states that bias in the research process can be caused by respondents and researchers, or both. One of the types of bias put forward is the social desirability bias, in which respondents answer questions with answers that are generally accepted or preferred.

A module entitled Sources of Error and Bias discusses performance bias, which is a bias that arises when participants show different attitudes or behaviors because they know that they are part of a research project. This is in line with the concept of the Hawthorne effect where participants do not behave as usual because they are aware that they are part of the study. Due to the discrepancy between the initial data and the attitude scale of the participants, social desirability bias and performance bias may occur in this training. When participants fill out the attitude scale or even attend training, they are more likely to show a cooperative or acceptable attitude or behavior.

4. CONCLUSION

From the statistical evaluation results, it was concluded that teacher self-efficacy training was not effective in increasing the work engagement of trainees. However, the training materials provided made a positive contribution to the participants regarding their professional duties as teachers.

5. RECOMMENDATION

Educators and lecturers have high enthusiasm in equipping themselves with psychological themes that are very much needed for the world of education, so it is hoped that counselors,

psychologists, or psychology graduates need to be more involved in socializing the development of psychology, especially in the world of education.

Related to the provision of training, it is necessary to extract more in-depth data on the needs of training participants, not only from school leaders but from prospective trainees or other related parties, so as to produce effective training to improve certain variables to be changed. In addition, more careful preparation is needed in terms of questionnaire selection and data collection techniques in order to avoid many biases that can affect the results of the training.

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