Teacher Self Efficacy and Work Engagement: The Mediating Role of Psychological Well Being

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Abstract: The Covid-19 pandemic has forced teachers to change the learning process into online learning. Confidence in one's own abilities and also an interest in working is important, so teachers can face the demands for change and continue to carry out the teaching process according to learning targets. The purpose of this research is to describe the role of the mediator from the psychological well-being of teachers to teacher self-efficacy and work engagement of public-school teachers in Bandung City. This study used purposive sampling techniques and obtained 209 data from Bandung city public high school teachers. Data were collected using a teacher self-efficacy scale questionnaire with 24 items, work engagement with 17 items, and a psychological well-being questionnaire with 42 items. The reliability of each measuring instrument was 0.66, 0.85 and 0.91. The analysis technique used regression analysis and it was found that the results above indicated that there was no direct effect between teacher self-efficacy as a predictor of work engagement as outcomes ($p > 0.05$), and there was a significant mediation or indirect effect ($p < 0.05$). This means that there is complete mediation, which indicates that psychological well-being can act as a mediator between teacher self and work engagement.

1 INTRODUCTION

Teachers are professionals in carrying out formal education with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students both at the early age, basic education, and secondary education levels (Government of the Republic of Indonesia, 2008). During the COVID-19 pandemic, the task of teachers is increasingly challenging because they still have to achieve learning targets but with changes in learning methods that switch to the network. In addition to continuing to carry out teaching tasks, teachers need to improve skills in terms of technology and online learning methods, so that students remain interested in participating in the learning process and learning targets are still achieved. High school education is the foundation for entering college, so high school teachers have an obligation to form the analytical mindset needed in college. Changes in online learning pose problems for both high school teachers and students. Some teachers complained that not all students participated in online learning due to poor network, no internet quota to access learning, and boredom, so learning outcomes did not reach the minimum standard (Solahudin et al., 2020). On the other hand, the problems experienced by teachers are the lack of mastery of online learning technology, limited facilities and infrastructure, internet networks, costs, teacher saturation because they have to continue to motivate students to keep learning online (Pratama & Mulyati, 2020). The demands for change and challenges that must be responded very quickly make teachers need to have confidence that they have the ability to continue and control the changing learning process with all its challenges, and this is referred to as teacher self-efficacy, hereinafter referred to as teacher self-efficacy (TSE). According to Khan, teachers who are skilled in teaching practice will increase self-efficacy, and subsequently a high TSE will support student learning outcomes (Khan & Jahangir, 2019).

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Bandura said TSE is a teacher's belief in his or her ability to produce the expected level of engagement and student learning achievement, including for students who have problems with learning motivation. In this pandemic period, TSE is relevant to face changes in the online learning system. There are three dimensions of TSE (Ozder, 2011), (1) efficacy in student engagement; teachers need to have confidence in their ability to continue to motivate students to face learning in a boring network because they do not interact directly, (2) efficacy in instructional strategies; teachers have confidence to make interesting learning strategies according online learning, (3) efficacy in classroom management; teachers have confidence to remain able to control and manage the class and maintain student learning discipline in conditions not face to face. In the online learning system, it is difficult for teachers to monitor students, making it difficult for teachers to provide assessments related to their performance and learning outcomes. With the shortened asynchronous teaching time, the teacher also finds it difficult to control students' academic performance because the weight of the material is fixed but with a shortened time and many are shifted to independent assignments. On the other hand, the teacher's burden is increasing because the teacher is still obliged to correct more and more assignments. This higher work demands will affect the teacher's positive attitude in dealing with work and this is referred to as work engagement, hereinafter referred to as WE .

According to Khan, WE is a positive attitude that shows a worker's emotional, cognitive and physical attachment to work. Engelbrecht, 2006 explain that teachers who have WE are able to maintain their morale even when faced with frustrating situations (Bakker & Demerouti, 2008). During this pandemic, it is important for high school teachers to have a positive attitude at work to be able to maintain performance in facing frustrating situations due to changes in the learning system as well as demands and targets with the same load. According to Timms et al., 2011, TSE as a personal resource, is considered one of the important antecedents of job involvement. The opportunity to bring out competence in the workplace is essential for the emergence of work engagement (Chan et al., 2020a). Teachers who rated themselves higher in terms of TSE would be more involved in their work, experience more positive emotions, and reduce negative emotions towards their students (Burić & Macuka, 2018). Longitudinal studies show that teacher self-efficacy and job involvement influence each other (Salanova et al., 2011).

Teachers need TSE and WE in facing the demands of changing teaching methods in this pandemic. The demand for rapid change is a stressful situation in itself for the teacher. Given that the teaching profession has a high level of stress, Kyriacau (Kyriacou, 2001) stated that the psychological well-being of teachers is important so that teachers can continue to carry out their duties in the midst of quite pressing assignments in this pandemic. Teacher psychological well-being, hereinafter referred to as teacher psychological well-being (PWB), is a variable that effectively affects student learning outcomes (CANSOY et al., 2020). Seligman describes well-being as an effort to be peaceful and enjoy life, to be connected to life, to have satisfying relationships with others, to aim for a purpose, and to make life worthwhile. In addition, individual satisfaction with life is reflected through the emergence of positive feelings about the future and the ability to continue life functionally (Conway, 2012). Ryff, 1989 explains that well-being is different from feeling good, but welfare is being able to live a functional life (Kurt & Demirbolat, 2018). On the other hand, integrating social life with society, solidarity, and social acceptance strengthens the characteristics of well-being (Lee & Keyes, 2013). On the teacher side, positive TSE beliefs have been shown to result in increased PWB in terms of higher levels of job satisfaction and commitment and lower levels of stress and fatigue (Skaalvik & Skaalvik, 2019). TSE was found to a predictor of teacher psychological well-being (CANSOY et al., 2020). Chan's research 2020, results show that TSE is positively related to job satisfaction mediated by WE (Chan et al., 2020b). According to Isgars's research there is positive relationship between PWB and job satisfaction. When PWB is high, it is predicted that job satisfaction will also be high (Isgor & Haspolat, 2016). .

Based on the former research regarding the phenomenon, there is positive relation between TSE, PWB and WE variables. The situation of public high school teachers during this pandemic, the TSE, PWB and WE variables become psychological variables that are quite relevant to be studied, because this will encourage the welfare of teachers to carry out tasks amid the demands of the pandemic situation that must change. This study aims to see a model of the relationship that occurs between the three variables, especially for high school teachers in the city of Bandung. The model to be proposed in this study is whether the PWB variable can be a mediator for TSE to influence WE.

2 METHODS

2.1 Research Method

This study used a cross sectional research design, where the research design was carried out by measuring or observing at the same time. Data collection was carried out using a questionnaire distributed via google form for approximately one month.

2.2 Measures

2.2.1 Teacher Self Efficacy

The measuring instrument used to measure the TSE variable is from Megan Tschannen-Moran and Woolfolk-Hoy (1998) (Tschannen-Moran et al., 1998; Tschannen-Moran & Hoy, 2001) , namely the Teachers' Sense of Efficacy Scale (TSES) which was translated by previous researcher Anastasia Kristiani (2016), consisting of 24 items with item validity values. between 0.5-0.66 and reliability of 0.917 (Kontribusi Sumber-Sumber Self-Efficiancy, n.d.).

2.2.2 Psychological Well-Being

The second variable used the Psychological Well-Being Scale (PWBS) developed by Ryff, which was adopted and translated by the previous researcher Yovan Nuzki Pratama (2017) which consists of 42 items with the validity of the items between 0.270-0.66 and reliability 0.910.

2.2.3 Work Engagement

The third variable used work engagement which is an adaptation of the Utrecht Work Engagement Scale (UWES) made by Schaufeli and Bakker (2006), consisting of 16 items with a validity of 0.390 - 0.678 and reliability of 0.858 (Bakker et al., 2008).

2.3 Sampling Technique

This study used a purposive sampling technique, in which all public high school teacher respondents who met the population characteristics criteria had the same opportunity to be used as research samples, as many as 209 high school teachers in the city of Bandung. Population characteristics of this study are teachers who work in public schools as active permanent teachers. This research has received official permission from The Education Authorities of the West Java Government.

2.4 Mediation Analysis Method

This study used a simple mediation model test, involving only one variable to be the moderator variable, namely the psychological well-being variable. The patterns of the mediation model used in this study is as follows (Zhao et al., 2010):
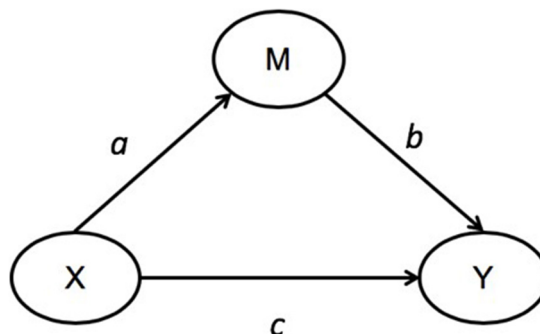

Figure 1: Simple mediation model. (Zhao et al., 2010).

Based on the simple mediation model above, the analysis of the effect of mediation will look at the following values:
1. c is a direct effect
2. The multiplication of a x b will produce an indirect effect
3. (a x b) + c will produce the total effect

This simple mediation analysis process will be carried out using the assistance of the JASP 0.14.1 program. The results of this mediation test will then be entered into the flow of analysis where the effects of the mediation will be seen based on the five existing categories, namely (Zhao et al., 2010):

i. Complementary (partial mediation) if a x b is significant, c is significant, and a x b x c is significant.
ii. Competitive (partial mediation) if a x b is significant, c is significant, but a x b x c is not significant
iii. Indirect-only (full mediation) if a x b is significant, but c is not significant
iv. Direct-only (no mediation) if a x b is not significant, but c is significant
v. No effect (no mediation) if a x b is not significant, c is not significant

2.5 Hypothesis

Psychological well being is a mediator of teacher self efficacy and work engagement.

3 RESULTS AND DISCUSSION

3.1 Participants

This study involved a total of 209 participants (male = 70; female = 139) who were teachers from public high schools in Bandung. The mean age of the male respondents was 48.557 (SD = 9.155) and the female respondents were 48.914 (SD = 9.481). Most of the respondents have a final bachelor degree education (77.5%) and the rest have master degrees (22.5%).

3.2 Mediation Analysis Results

Prior to the mediation analysis, a regression analysis was conducted between the TSE and PWB. This regression analysis aims to see whether PWB can be a mediator for TSE. The regression results showed that TSE could significantly predict PWB (B = 0.357; 95% CI [0.254.0. 469]; β = 0.4; t = 6,274; p <0.001). Next, a regression test is carried out to determine whether the PWB variable can have an effect on the WE variable (the dependent variable). The regression test results showed that PWB could have a significant effect on WE (B = 0.147; 95% CI [0.091,0.204]; β = 0.337; t = 5.158; p <0.001). These two regression results indicate that the PWB variable can be a mediator for TSE towards WE.
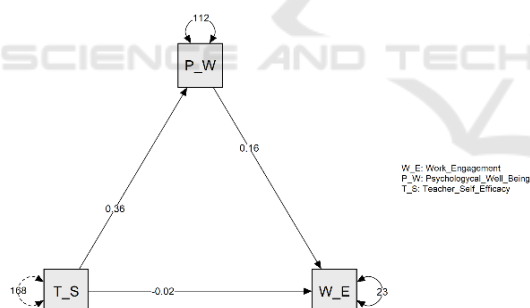

Figure 2: Mediation model of teacher self-efficacy (independent variable), psychological well-being (mediator), and work engagement (dependent variable).

Next, the mediation analysis is carried out on TSE (independent variable), PWB (mediator) and WE (dependent variable). The results of the mediation analysis show that TSE does not have a significant direct effect on WE (z = -0.671; p = 0.502). On the indirect effect side, the TSE path through PWB to WE shows a significant value (z = 3,928; p <0.001). This result means that the PWB variable can fully mediate the teacher self-efficacy with WE. The results of direct and indirect effects in the mediation analysis yield the total effect. In this study the results of the

total effect between the mediation models carried out were found to be insignificant (z = 1.378; p = 0.168).

3.3 Result

Based on these results, we find that the indirect effect (a x b) is significant, but the direct effect (c) is not significant, which indicates that the results of this mediation are in the indirect-only (full mediation) category. This indicates that psychological well-being can fully mediate teacher self-efficacy with work engagement. Psychological well-being can also be identified as a mediator consistent with the hypothesized theoretical framework. The results of the mediation model can be seen in Figure 2.

3.4 Discussion

Based on the findings related to TSE, WE and PWB for public high school teachers in Bandung, the results show that PWB is fully a mediator between TSE and WE for public high school teachers in Bandung. In this study TSE did not have a direct effect on teacher's WE, but if the TSE and WE variables were mediated by PWB, the relationship would be strong. These findings are something new related to research from Salanova (Salanova et al., 2011) which revealed that the efficacy and involvement in work influence each other. However, a strong relationship between TSE and WE must be mediated by PWB in order for the two relationships to be stronger. The findings of this study, it confirm the role of PWB as an important key for public high school teachers in Bandung. If a teacher has a psychological sense of well-being, it will lead to a strong involvement in carrying out his/her role during a pandemic. When a teacher has a strong attachment to his/her job, will do the job well even in a difficult pandemic situation. In accordance with research conducted by Ailleo (Aiello & Tesi, 2017), PWB acts as a personal resource that supports perception, identification, and work resources which in turn are related to WE. This shows that belief in the ability to teach as a teacher is not strong enough to lead teacher attachment to their work, especially during this pandemic. Confidence in the ability of teachers to organize their work must be accompanied by an appreciation of positive feelings regarding the psychological well-being of teachers so that teachers can create attachments to their work.

When teachers feel confident in their abilities and appreciate their psychological well-being, they will be engaged to their work so that they are able to manage and control their work which has an impact

on student learning outcomes. Teachers will still have great energy, high dedication and concentration at work and as aresult their productivity will not decrease even though they are working during a pandemic.

4 CONCLUSIONS

The findings in this study provide a clear direction that in order to create an attachment to work, teachers need to have psychology well-being. In Kang's research, WE has a positive correlation with PWB (Kang & Kwon, 2017). Cankir's research shows that WE becomes a partial mediator variable between PWB and job satisfaction (Arıkan & Çankır, 2019). For public high school teacher in Bandung, work engagement will arise when they feel they are experiencing PWB. According to Ryff, people who have PWB will have positive attitude towards themselves and their environment, able to make their own decisions, can manage the environment according to their conditions so they can maintain a positive attitude towards their environment. When teachers feels prosperous and have a positive attitude towards themselves and others with all the conditions they feel, it will lead to a positive attitude at work and create work engagement. In this research, TSE did not directly correlate with WE. In Minghui' s study,TSE show low correlation with WE (Minghui et al., 2018). TSE does not necessarily create WE, but need to be mediated by PWB, so that TSE can bring up WE.

Teachers need to have PWB so that their TSE and WE are formed. School managers also have a role in supporting the fulfillment of teacher. Teacher with PWB, are expected able to know and accept themselves, have a positive relationship with the people around them, have a purpose in life and be able to plan and organize their own lives. School administrators can improve the psychological well-being of teachers by giving proper awards for the performance of individual teachers, thus the resulting impact will be positive for the work of teachers in this difficult pandemic.

This research needs to be reviewed considering that this research was conducted in a specific situation, namely the Covid-19 pandemic. Different findings may be found in non-pandemic situations in the learning process. To expand the study, research can be carried out on a sample of private high school teachers in Bandung.

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