Measuring the influence of short teaching practicum to the student teachers' sense of self-efficacy

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Abstract: Teachers' sense of self-efficacy has been linked positively to their performance and their students' achievement. This sense of self-efficacy is influenced by the teachers' teaching experiences. One of the first official teaching experiences for the student teachers of English Education was the short teaching program in secondary schools during their university study. It is usually held in the seventh semester. This research aimed at measuring the student teachers' sense of self-efficacy consisting on three aspects: classroom interaction, classroom management, and teaching instruction. There were 62 respondents who met the requirements to be surveyed in the program. This research employed English Teachers' Sense of Efficacy Scale (ETSES) survey by Chacon (2005). The survey was administered twice, pre and post teaching practicum program. After that, the data were analysed using a paired t-test at significance level of 10 per cent. The results of engagement, management, and instruction strategy efficacy were 0.598, 0.062, and 0.206 respectively. These result indicated that the teaching program influenced the classroom management efficacy significantly whereas the other two, engagement and instruction strategy efficacy were influenced positively but not significant. In addition, general teaching efficacy increased but it was not significant.

Keywords: Self-Efficacy, ETSES Survey, Teaching Experience

Introduction

Self-efficacy is the centre of social cognitive theory proposed by Albert Bandura (1977, 1997). It becomes the people's determinant factor in their achievement. He states that the reciprocal relationship of personal, behaviour, and environment will determine people's achievement. He defines self-efficacy as a belief on one's ability to accomplish a given task in a specific domain. Bandura (1986) states that the amount of effort people put on a target depends on their result they want to achieve; the highest the target, the more effort they put.

In education, research on teachers' self-efficacy has become a concern because teachers' self-efficacy influences teaching and learning process. Bandura (2007), and Gibson and Dembo (1985) explain that teachers' self-efficacy is the level of the teachers'

belief on their ability both to affect their students' learning and to promote learning to their students. Similarly, Tschennen-Moran, Woolfolk Hoy and Hoy (1998) define teachers' self-efficacy as the teacher's belief on their

capability to achieve the learning outcome even among the unmotivated and resistant students. According to the experts' definitions, it can be inferred that teachers' self-efficacy will play an important role on their teaching and students. However, research on English teacher self-efficacy is not familiar construct yet in Indonesia (Syamsu, 2017).

Due to the importance of teachers' self-efficacy, it is essential to identify the continuum of its growth. Martin (1989) reported that the start of the self-efficacy growth was in the early of undergraduate education. Furthermore, the efficacy has actually begun to grow in the first year of their undergraduate study and it strives continually until the last year of the teaching programme (Spector, 2004; Hoy and Woolfolk, 1990; and Wenner, 2001). This indicates that education programme has very essential role in the development of the student teachers self-efficacy.

During their study, it is crucial to have teaching practice for prospective teachers because it was believed to be the most beneficial aspect of their preparation before they entered the profession (Borko and Mayfield, 1995). The teaching practice helps them to understand the real challenge in their future job.

Furthermore, Woolfolk-Hoy and Burke-Spero (2005) asserted that mastery experiences effect the development of the students' teaching self-efficacy. There are two reasons to support this argument; first is that they have opportunities to examine their teaching capabilities. Second is that they have an opportunity to observe teachers and peers who can be used as a model for them. This according to Bandura (1997) will be one the most effective ways of enhancing self-efficacy. It is called vicarious experiences which can build the students' concept on teaching.

Research on university students who are studying in education program was conducted by Mototi, Junqueira, and Odora (2013). They studied the third year students from different teaching programme in two different universities in South Africa. They compared the self-efficacy in the two universities' students. employed teacher self-efficacy scale. The result indicated that generally their students' selfefficacy was high. This research examined the self-efficacy in general. A more detail research was done by Black (2015). He researched the student teachers' self-efficacy after joining a six week teaching practicum. The result indicated that 20 out of 22 felt more confident, high selfefficacy, after the program. The other two did not have a positive self-efficacy but they believe with more teaching experiences their efficacy will be higher.

However, research by Black (2015) did not measure the students' self-efficacy in three aspects; classroom management, teaching instructional, and classroom engagement. Therefore, it is important to find out the correlation between the teaching practicum and the three aspects of self-efficacy. It will show the aspect(s) which get the most influenced of the teaching practicum. In this way, developing student teachers self-efficacy can be more straightforward.

Method

The object of this research was the seven semester or the four year students of English Education Major, Faculty of Letters, Universitas Muslim Indonesia (UMI). Besides that the research participants had to meet two requirements; first, they should undertake or enrol in the teaching practicum unit, known as PKM 2 in UMI and they had to be active in teaching in the appointed schools.

In total, there were 74 students who enrolled in the teaching practicum unit, but those who met the requirements were 65 participants. Due to the small number of research participants, this research employed census sampling method. All the 65 students were surveyed.

This research employed one of the most widely used scalescalled Teachers' Sense of Self-Efficacy (TSES) by Tschennen-Moran and Woolfolk Hoy (2001). They tested its validity to their student teachers and in service teachers in different schools. The result indicated that the Cronbach's alpha was 0.94. Six years later, Tschannen-Moran and Woolfolk Hoy (2007) did another validity test and the result obtained was almost similar 0.95. These two validity tests could be used to support the claim that TSES is a valid self-efficacy scale for teachers. The scale measures the teachers' sense of self-efficacy under three aspects; classroom management, instructional, classroom teaching and engagement. Each aspect consists of 8 questions, so overall there are 24 questions.

Chacon (2005) modified TSES into English Teachers' Sense of Efficacy Scale (ETSES). It makes the scale change into a specific context, English teachers. He did it by adding the word "English" and substituting the word "school word" into "learning English" in questions number 1,2,3,4,6,7,9,10, and 12. Also, instead of using 24 questions as its original, the ETSES used 12 question where each aspect of self-efficacy represented by 4 questions. The chosen questions were the 4 best representing the measured aspect. To respond the questions, participants were prepared with 5 responses with a-9 point scale; 1-Nothing, 3-Very Little, 5-Some Influence, 7-Quite, 9-Agreat Deal.

Before administering the survey, researcher did a cognitive interview to check either respondent would understand all the questions in the English format or not. The result of the cognitive interview indicated that some words such as "how much", "quite" and "to what extent" could not be understood well. As a consequence, this led to misunderstanding. Therefore, the

questionnaire was translated into Indonesian Language. After being translated, cognitive interview was run again to ensure that the respondent would understand all the prompts. After this there were only a few minor mistakes. Then the questionnaire was improved and ready to administer. In addition, translating the ETSES into Bahasa Indonesia is an effort to avoid bias responses. The bias could be caused by culture differences (King, Murray, Solomon & Tandon, 2004).

The questionnaire was administered to 65 respondents and it was given twice; pre and post teaching practicum. The gap was 3 months from pre and post survey.

After completing all the research procedures, all the data were collected and ready to be analysed using SPSS data analysis. This research employed paired t-test. It was used because the same group of respondents responded the questionnaire before and after the teaching practicum. After the data were collected then the analysis and comparison were performed.

However, before doing the paired t-test, the normality data were checked to see the distribution. If all the analys ed data were in the bell shape, the data were ready to analyse.

Tabel 1. Descriptive statistic

		Class	T	
		Class B1	class C1	otal
	Male	0	17	17
Sex	Female	34	11	45
	Total	34	28	62

The result of the statistical analysis before and after the student teachers' teaching practicum in three aspects was compared. The comparison showed which three aspects, instructional strategies, classroom management, or classroom engagement were influenced significantly. The significant factor was 10 per cent or 0.1. If the alpha value was higher than 0.1, it can be inferred that the teaching practicum did not influence the student teachers' sense of self-efficacy significantly. However, if the alpha value was less than 0.1, it meant that the

teaching practicum influences the student teachers' self-efficacy.

Findings and Discussion

Findings

The students of English Education, batch 2014, enrolled in the teaching practicum unit in their seventh semester. In UMI, this unit is called Praktek Kegiatan Mengajar (PKM) 2. After enrolling, they were divided into 2 classes, B1 and C1. B1 was a mixed sex class whereas B1 was a female class.

The students in both classes were the object of this research. In the B1 class, there were 37 students but 2 of them were excluded because they were batch 2015 students. This research observed the students who enrolled 2014. In the class C1, there were 35 students. Of which, 28 students met the criteria to be respondents. The rest was not included because 2 students did teach at schools even though they registered in the programme. 5 of them were not students from batch 2014. The total respondents were 65 students. After the survey was administered, 62 students responded to there were questionnaire. 2 did not complete the survey and the other one was sick. In the survey, the students did not write their names. This is in order to avoid bias response from them.

The head of English Education major randomly chose the students to teach in lower and upper secondary schools. Once the students were assigned to teach in one school either in the lower or upper secondary schools they would teach there for three months.

The following table showed the respondents distribution according to their sex.

It can be seen that the sex distribution was far difference. There were 45 female students (73%). The male students were 17~(27%).

Self-Efficacy Pre and Post Teaching Practicum Analysis

Before analysing the obtained data, their normal distribution should be analysed. The data cannot be analysed if they did not meet the normal distribution data set. The following shows the result of the normality test in the three aspects of self-efficacy.

In the following table, classroom engagement labelled with engagement, classroom management labelled with Management, and teaching instructional labelled with InstStra.

Table 2. Descriptive Statistic of Normal Distribution in Each Variable

		_	Diff_Ma nagement	_	Diff_Effica cy
N	Valid	62	62	62	62
IN	Missing	0	0	0	0
Mea	n	.10	.27	.15	.16
Skev	vness	490	300	.014	300
	Error of wness	.304	.304	.304	.304

Kurtosis		.588	020	.340	245
Std.	Error	of .599	.599	.599	.599
Kurtosis		.399	.399	.399	.399

According the presented table above, the normal distribution in the three tested variable met the normality assumption. It can be justified from the skewness and kurtosis value where both values

because the score were in between -2 up tp 2 (Gravetter and Wallnau, 2014).

The result indicated that the Kweness value in the Engagement, management, and instructional strategies were -0.490, -0.300, and 0.014 respectively and the Kurtosis value were 0.588, -0.020, and -0.245 respectively. After the normal distribution data were met, the paired t-test was ready to proceed.

The following is the result of the paired t-test

Table 3T-Test of The Three Variables Pre and Post Teaching PracticumPaired Samples Statistics

		Mean	N	Std.	Std. Error Mean
				Deviation	
Pair 1	Engagement_Post	3.7460	62	.58410	.07418
ran 1	Engagement_Pre	3.6895	62	.67552	.08579
Pair 2	Management_Post	3.930108	62	.6535934	.0830064
Pair 2	Management_Pre	3.6976	62	.67922	.08626
Pair 3	Inst_Stra_Post	3.7460	62	.66913	.08498
Pair 3	Inst_Stra_Pre	3.5887	62	.72725	.09236
Pair 4	Efficacy_Post	3.807551	62	.5314664	.0674963
Pall 4	Efficacy_Pre	3.658602	62	.5651357	.0717723

Table 4 Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Engagement_Post & Engagement_Pre	62	.121	.347
Pair 2	Management_Post & Management_Pre	62	048	.713
Pair 3	Inst_Stra_Post & Inst_Stra_Pre	62	.039	.766
Pair 4	Efficacy_Post & Efficacy_Pre	62	.112	.386

Table 5 Paired Sample t-Test

				Paired Difference	es				
				Std. Error	90% Confidence Interval of the Difference				
		Mean	Std. Deviation	Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Engagement_Post - Engagement_Pre	.05645	.83766	.10638	12123	.23414	.531	61	.598
Pair 2	Management_Post - Management_Pre	.2325269	.9647873	.1225281	.0278781	.4371757	1.898	61	.062
Pair 3	Inst_Stra_Post - Inst_Stra_Pre	.15726	.96902	.12307	04829	.36281	1.278	61	.206
Pair 4	Efficacy_Post - Efficacy_Pre	.1489492	.7311588	.0928573	0061428	.3040412	1.604	61	.114

According to the table above, there was an increase in the three aspects of self-efficacy. This means that the teaching practicum has a positive influence on the students' self-efficacy. However, to identify the significant influence, the p value has to be smaller than 0.1.

The table portrayed the detail values of the student teachers before and after the teaching practicum. The mean for engagement aspect was 0.5645 whereas its p value was 0.598 (>0.1). This means that the teaching practicum did not influence students' self-efficacy significantly because the p value was more than 0.1. The mean score for management was 0.2325269 and the p value was 0.062 (<0.1). It indicates that teaching practicum had a significant influence to the students' self-efficacy because the p value was less than 0.1. The last self-efficacy aspect was self-efficacy for instructional strategies, the mean was 0.15726. It showed a positive increase after the teaching practicum whereas the p value was 0.206 (>0.1) meaning that the influence was not significant.

It can be also inferred from the data above about the general teaching self-efficacy has mean improvement, 0.1489492 with p value was 0.114 (>0.1). This indicated that the general teachers' sense of self-efficacy increase after the teaching practicum but the influence was not significant because the p value was more than 0.1.

According to the data description, it can be concluded in three points. First, the two aspects of self-efficacy; classroom engagement and teaching instructional increase but its increase was not that significant to increase the student teachers who participated in the three months teaching practicum. Second, the classroom management self-efficacy of the students increased significantly. It means that the teaching practicum has not only positive but also significant to enhance the student teachers' selfefficacy. Last, generally the student teachers' sense of self-efficacy increase after they followed the teaching practicum, but the increase was not significant.

Discussion

The findings of this research suggested that a three month teaching practicum in secondary schools positively influence to the student teachers' sense of self-efficacy. Of the three aspects of self-efficacy, the management aspect was the only aspect which was influenced significantly. In addition, the general self-efficacy was also increased a little bit and it was not influenced significantly.

There were two possible reasons why self-efficacy in classroom management was always becoming the highest self-efficacy in many studies. First, it has a direct correlation with the teaching experience. The longer teaching experiences had by a teacher the higher their self-efficacy in classroom management (Byrne, 2017). Second, it was the absence of correlation between language proficiency and classroom management (Marashi & Azizi-Nassab, 2018).

There was one research which had similar object, the influence of teaching practicum in the student teachers' self-efficacy. However, this study conducted by Black (2015) did not measure the three aspects of self-efficacy because the measure self-efficacy through a reflection. Interestingly, the study reported that the teacher candidates' efficacy generally increased after a six week teaching practicum. It is similar with the present study where the general efficacy of the student teachers' who participated in the three months teaching practicum increased.

Conclusion and suggestion

One of the most influential activities for the student teachers' self-efficacy in teaching is the short teaching practicum in secondary schools. In the Universitas Muslim Indonesia, vast majority of English Education students enrol in teaching practicum known as Praktek Kerja Mengajar (PKM) 2 in their seventh semester. The result of the research indicated that the student teachers who participated in the teaching practicum generally increased but it was not significant. In addition, the result of the research analysis on the influence of teaching practicum to the three aspects of self-efficacy; classroom engagement, classroom management instructional strategies, showed that the teaching practicum increased three aspects of teaching self-efficacy. Of the three aspects, the classroom management efficacy is the only one which is influenced significantly. In addition, the general efficacy increased a little.

For further research, the student teachers who teach in lower and secondary schools have to be separated. It is because they face different age students.

Acknowledgment

The writers would like to thank to Lembaga Penelitian dan Pengembangan Sumberdaya (LP2S) Universtias Muslim Indonesia for funding this research. This research was part of internal research scheme in Universitas Muslim Indonesia for the new lecturers.

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