

# Teacher Efficacy and Commitment in Teaching Arabic: A Correlational Study

Eficacia docente y compromiso en la enseñanza del árabe: un estudio correlacional

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## ABSTRACT

The current study explores the validity and reliability of the instrument used in assessing teachers' efficacy in teaching Arabic and also their commitment to teaching. The study also examined Arabic teaching efficacy in relation to teacher commitment. The study involved 252 teachers out of 487 teachers from 57 National Religious Secondary Schools throughout Malaysia. A structural equation modeling with AMOS was employed to investigate the effects of hypotheses model. Confirmatory factor analysis supported the adequacy of the constructs of teacher efficacy and teacher commitment and found that the two constructs were multidimensional constructs with four underlying dimensions respectively. The findings also showed that teacher efficacy influence teacher commitment. Several essential theoretical implications for developing and enhancing teachers in the Malaysian Secondary Arabic education context have arisen from the current study.

**Keywords:** teaching Arabic, TAFL, Religious Secondary Schools

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## RESUMEN

El estudio actual explora la validez y confiabilidad del instrumento utilizado para evaluar la eficacia de los maestros en la enseñanza del árabe y también su compromiso con la enseñanza. El estudio también examinó la eficacia de la enseñanza del árabe en relación con el compromiso del profesor. El estudio involucró a 252 maestros de 487 maestros de 57 escuelas secundarias religiosas nacionales en toda Malasia. Se empleó un modelo de ecuación estructural con AMOS para investigar los efectos del modelo de hipótesis. El análisis factorial confirmatorio apoyó la idoneidad de las construcciones de la eficacia y el compromiso de los docentes y encontró que las dos construcciones eran construcciones multidimensionales con cuatro dimensiones subyacentes, respectivamente. Los hallazgos también mostraron que la eficacia del maestro influye en el compromiso del maestro. Del estudio actual se desprenden varias implicaciones teóricas esenciales para el desarrollo y la mejora de los docentes en el contexto de la educación árabe secundaria en Malasia.

**Palabras clave:** enseñanza del árabe, TAFL, escuelas secundarias religiosas.

## Introduction

Teacher efficacy is an essential construct in teaching and learning. Researchers in education have recognized that teacher efficacy has strong relationship with various aspects of teaching” and learning (Tschannen-Moran & Hoy, 2001; Tschannen-Moran, Hoy, & Hoy, 1998). Berman, McLaughlin, Bass, Pauly, & Gail Zellman (1977) defined Teacher efficacy as teacher’s judgment of his or her abilities in achieving the desired results of student engagement and learning, even though there are some students who are having difficulties and are not motivated. It is also referred to as the teacher’s conviction that his or her teaching meet the expectation and can influence student” learning (Guskey & Passaro, 1993).

High efficacious “teachers are able to face and master challenging tasks. They enhance and support their efforts to deal with failure and quickly recover their sense of efficacy after failure or hindrances. They can positively influence student attainment despite a possible challenging situation (such as students who come from low social economy status families or a shortage of resources). High efficacious teachers also believe that unmotivated students are teachable if teachers devote” extra effort. In contrast, low efficacious teacher will avoid difficult or challenging tasks which they notice as personal menaces. They have weak commitments and are not able to pursue their goals. When encountering obstacles, they tend to loosen their efforts and quickly surrender, and are not able to concentrate on how to accomplish their tasks successfully. They believe that they have inadequate capability to affect student learning and attainment. They also believe that student performance is outside their control and students’ success depends on the external environment. They also believe that there is little effort they can do to teach difficult students and prepare them to improve student learning.

Teacher efficacy “researches have been widely examined by many researchers in various contexts and subject areas. For instant, it has been explored in the Science education field (Bleicher, 2004; McKinnon, Moussa-Inaty, & Barza, 2014; Van Aalderen-Smeets, Van Der Molen, & Asma, 2012), Mathematic (Tran et al., 2012), physical education (Ozkan, Dalli, Bingol, Metin, & Yarali, 2014) and Teaching English to Speakers of Other Languages (TESOL) (Chacón, 2005; J. Lee, 2009). However, in the field of Teaching Arabic as a Foreign Language (TAFL), the investigation into teacher efficacy and its relation to teacher commitment is very uncommon. Therefore, it is crucial to pursue” a study in this area.

Examining teachers’ efficacy in teaching Arabic and its relation to their commitment seem to be particularly relevant and beneficial in the Malaysian context where Arabic is taught in the government secondary school setting. Similarly, the important of research in teacher efficacy among Arabic language teacher is important as researchers have argued that teacher development is the key to successful implementation.

According to Coladarci (1992), teachers' efficacy influence teacher commitment, and teacher commitment is found to affect student achievement (Louis, 1998). Quality education can be attained through the efforts of enthusiastic and immensely committed teachers. There are multiple forms of teacher commitment (Singh & Billingsley, 1998): commitment to profession, school and students (Firestone & Rosenblum, 1988) and commitment to the teaching field (Billingsley, 1993). Therefore, the purposes of this study were two folds: 1) to examine the validity and reliability of CFA model of teacher efficacy and teacher commitment; 2) to explore Malaysian secondary school teachers' efficacy that may influence their commitment to carry out Arabic teaching tasks.

### **Research on Teachers' Efficacy and Their Commitment**

Self-efficacy refers to people beliefs about their own abilities to execute a certain course of action meaningfully (Bandura, 1997). Extensive study claims that self-efficacy is a crucial impact on human accomplishment in varied fields, including education, health, sports, and business (Bandura, 1977). In the field of educational research, teachers' self-efficacy affect the daily lives of teachers and their commitment (Coladarci, 1992).

Teachers' quality and performance have been the main concern. The quality education is not only dependent on teachers' academic qualification, knowledge of subject matter, skills of teaching and pedagogy but also dependent on their motivation and commitment to teaching (Manning & Patterson, 2005). In other words, the teaching quality is controlled by teachers' knowledge, competence, pedagogy skills as well as by their excitement, enthusiasm and commitment to teaching (Rikard, 1999). Teacher commitment is closely associated with the concept of internal motivation. Teachers who are highly committed and motivated tend to be loyal to their organization. They have a willingness to become members of their organization to work significantly more diligent. Tyree (1996) underscored that the willingness to stay in an organization will lead to the involvement with, and also loyalty to the organization.

Data from several sources have shown the relationship between teacher efficacy and teacher commitment (J. C. K. Lee, Zhang, & Yin, 2011; Rots, Aelterman, Vlerick, & Vermeulen, 2007; Tschannen-Moran & Hoy, 2001). These two constructs play an essential role in research on teachers' behaviour. More importantly, previous findings demonstrated that teacher efficacy has an important role in affecting teacher commitment in school (Canrinus, Helms-Lorenz, Beijaard, Buitink, & Hofman, 2012; Caprara, Barbaranelli, Steca, & Malone, 2006; Chi, Yeh, & Choum, 2013).

As investigated by Rots et al. (2007) on 209 teacher education graduates from Belgium, by utilizing structural equation model approach, the study found that teacher efficacy positively correlated to teacher commitment. Teachers with higher level of efficacy demonstrate higher level of commitment in their work. Similarly, Chan, Lau, Nie, Lim, & Hogan (2008) used SEM approach to investigate 2130 primary school teachers and 1587 secondary school teachers in Singapore. The research findings showed that teacher efficacy was positively related to teacher commitment in both group of teachers.

### **Method**

#### **Measure**

Teacher efficacy is a multidimensional construct. It is designed to measure the respondents' teaching efficacy in teaching Arabic. It has 25 items in four (4) dimensions: Teacher efficacy for language use, teacher efficacy for classroom management, teacher efficacy for teaching strategies and teacher efficacy for student engagement. The first dimension, which is, teacher efficacy for language use, is self-constructed instrument. The other three dimensions, most of them, are adopted from Teachers' Sense of Efficacy Scale (TSES) by Tschannen-Moran & Hoy (2001) with some modification to suit the Arabic teaching context in Malaysia, few new items were added for the study. Respondents are required to rate the statements on a seven-point Likert scale, ranging from not at all to always.

Teacher commitment consists of 23 items comprising of four dimensions that intend to measure the dimension of teacher commitment in teaching Arabic language. The instrument is adopted from a

few resources with some modification so that it is appropriate to use for Arabic language teacher (see Celep, 2000; Greenhaus & Simon, 1977; Mowday, Steers, & Porter, 1979)). The instrument contains a seven-point Likert type scale ranging from very strongly disagree (1) to very strongly agree (7).

### Sample

There are a number of literatures that proposed a large sample size when conducting factor analytic procedure especially for confirmatory factor analysis (CFA) using structural equation modeling (SEM). Hoelter (1983) and Garver & Mentzer (1999) suggested a 'critical sample size' of 200. Hoe (2008) concluded, as a general rule of thumb, any number above 200 is understood to provide adequate statistical power for data analysis. According to Schumacker & Lomax (2010) after reviewing several published SEM research, they found that the sample size between 250 to 500 subjects is enough for the effective use of SEM where the complexity of the model enhances the required the sample size.

The population of the study consisted of 487 teachers in National Religious Secondary Schools in Malaysia. Based on Krejcie and Morgan's table for determining sample size, the minimum sample size for the 480 population is 214 teachers (Krejcie & Morgan, 1970) (at 95 confidence interval and 5% margin of error). Due to the complexity of the model, 252 teachers were randomly selected as the sample.

The 48 items instrument involved 252 respondents consisting of 100 (39.7%) male and 152 (60.3%) female teachers. The number of female teachers was larger than the number of male teachers. This seems to reflect the current phenomenon of female teachers having an impact on the teacher population in the Malaysian secondary school setting. According to the Basic School Information by Ministry of education, Malaysia, the total number of teachers working in Malaysian public secondary school as of December 2014 was 181747 (Education Management Information System, 2015). Seventy percent of them were females and 30% were males.

### Data Analysis

The proposed model is estimated by Covariance Based SEM, which is a powerful multivariate technique for analysing measurement model. The measurement model is estimated using confirmatory factor analysis (CFA) to test whether the latent variables possess sufficient construct validity.

CFA is used to validate Teacher Efficacy scale in terms of convergent and discriminant validity (Worthington & Whittaker, 2006). Convergent validity measures the extent to which indicators of a specific construct share a high proportion of variance in common (Hair et al., 2010). According to Hair et al. (2010), there are three statistical measures in determining the convergent validity: (a) standardized factor loadings, (b) average variance extracted (AVE), and (c) construct reliability (CR). Standardized factor loading signifies the correlation between the variables and the factors. Meanwhile, AVE is a measure of convergence among a set of items denoting a latent construct in Structural Equation Modeling (SEM). It is computed as an average percentage of variance explained among the items of a construct (Hair et al., 2010). CR refers to a measure of reliability and internal consistency of the items that represent a latent construct in SEM. The adopted cut-off values of these three statistical measures are as follows: (a) Standardized factor loading ( $\lambda$ ) is .50 and above, AVE is .50 and above, and Composite Reliability is .70 and above. All the cut-off values are recommended by Hair et al. (2010).

### Results

#### CFA for Multidimensional Constructs of Teacher Efficacy and Teacher Commitment

Teacher efficacy "has four (4) underlying dimensions; efficacy for language use (ELU), efficacy for classroom management (ECM), efficacy for teaching strategies (ETS) and efficacy for student engagement (ESE). The dimension of efficacy for language use has nine (9) indicators, efficacy for classroom management and efficacy for student engagement has five (5) indicators each, whereas

efficacy for teaching strategies has six (6) indicators.

Teacher commitment has four underlying dimensions; commitment to profession (Profession), commitment to teaching field (Teaching), commitment to school (School) and commitment to student (Student). With the exception of the commitment to profession, each dimension has six indicators. The dimension of commitment to profession has five indicators.

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**Table 1:** Summary of the fit indices of the multidimensional constructs of teacher efficacy and teacher commitment

Fit Indices	Accepted Fit	Teacher Efficacy	Teacher Commitment
Ch. Sq Ratio	≤ 3	3.468	2.684
TLI	≥ .90	0.855	0.863
CFI	≥ .90	0.869	0.878
RMSEA	≤ .08	0.099	0.087

Based on Table 1, the result of two constructs for teacher efficacy and teacher commitment indicate a poor model fit. Although the normed chi square for the teacher commitment construct felt within the suggested range of ≤3.0, but the other fit indices were found to have insufficient value. The TLI and CFI felt below the cut-off value of ≥.90. The RMSEA was above the threshold value of ≤0.08.

Investigation of standardized residual covariance showed that several items have excessively high values. Therefore, the decision was made to drop items that have standardized residuals covariance bigger than 20 and the CFA model of teacher efficacy and teacher commitment were re-specified. Out of nine items from *ELU*, four items were removed. Similarly, two items were removed from *ECM* and *ESE* and three items was removed from *ETS*. In term of teacher commitment construct, initially, there were 23 items for four dimensions. Each dimension has six items except for the dimension of commitment to profession that has five items. Two items were dropped from the dimension of commitment to profession and three items were taken out from the rest of the dimensions. Overall, out of 23 items, 11 items were removed to obtain a model fit because they showed low factor loading or high covariance value.

The overall revised model for both constructs showed an improved model fit which was compatible with the data. Table 2 summaries the result of the fit indices of the revised model.

**Table 2:** Summary of the fit indices of the multidimensional constructs of teacher efficacy and teach-

## er commitment (Revised Model)

Fit Indices	Accepted Fit	TSE Revised Model	TC Revised Model
CMIN/DF	$\leq 3$	2.535	2.364
TLI	$\geq 0.90$	0.940	0.953
CFI	$\geq 0.90$	0.953	0.966
RMSEA	$\leq 0.08$	0.078	0.074

Further analysis is needed to examine the internal reliability and convergent validity of the model. The values “for composite reliability (CR) and average variance expected (AVE) are needed in order to obtain the convergent validity. All the composite reliability values are above 0.70 and the average variance extracted (AVE) is all above 0.50. Therefore, the CFA model of teacher efficacy and teacher commitment have the evidence for internal reliability and convergent validity. It can be concluded that convergent validity and internal reliability for the revised model of teacher efficacy and teacher commitment have been established. Based on the fit indices, internal reliability and convergent validity of the revised model of teacher efficacy and teacher commitment, the analysis showed that the construct of teacher efficacy and teacher commitment are valid and reliable. Thus, we can proceed to explore the second-order factor that could possibly substantiate the construct of teacher efficacy and teacher commitment.

Overall, as indicated in Table 3, the model was adequately fit with CFI and TLI which go beyond the threshold value. In addition, the value of RMSEA is below the cut-off point and the normed chi-square is within the proposed range ( $\leq 3$ ). Therefore, the existence of the second-order factor would allow the researcher to justify a rather strong relationship showcased by the first-order factors.

**Table 3:** Summary of the fit indices of the multidimensional constructs of teacher efficacy and teacher commitment (Second Order)

Fit Indices	Accepted Fit	TSE 2nd Order	TC 2nd Order
CMIN/DF	$\leq 3$	2.579	2.464
TLI	$\geq 0.90$	0.939	0.950
CFI	$\geq 0.90$	0.951	0.962
RMSEA	$\leq 0.08$	0.079	0.076

### *Structural Model – Teacher Efficacy and Teacher Commitment*

The model was tested to analyze the structural model of teacher efficacy and teacher commitment. The structural model was measured through Maximum Likelihood (ML) estimation. The results of the goodness-of-fit indices indicated that the structural model fit the data sufficiently with all fit indices demonstrating plausible values. The normed chi-square ( $\chi^2/df$ ) = 1.979, and RMSEA = .062, fall within the acceptable range of  $\leq 3$  and  $\leq .08$  respectively indicating a good model fit of the model. The other fit indices were also found to have sufficient value indicating a good model fit. The TLI = .929 and CFI = .936 were above the cut-off value of  $\geq .90$ . The coefficient parameters estimates were then measured to test the model. The standardized estimates were significant ( $\beta = .784, p < .001$ ).

The results explained that teacher efficacy significantly influence teacher commitment. In other words, teacher commitment whether to their profession, teaching field, student and school was influenced by their self-efficacy belief. Teachers with high sense of efficacy tend to be more committed to the teaching, profession, school and students. In other words, the more efficacious teachers rated themselves in language use, classroom management, student engagement and instructional strategies, the more committed they are toward school, student, profession and teaching field. Perceived efficacy for

using language, engaging students, designing instructional strategies and managing classroom seems to increase as teacher commitment increases.

This study is in consistent with Coladarci (1992), Rots et al. (2007) and Steven Randall Chesnut & Burley (2015) results. In line with the self-efficacy beliefs proposed by Bandura (1997), this study verifies and corroborates the research proposing teacher self-efficacy beliefs can be used to forecast teacher commitment (Steven R. Chesnut & Cullen, 2014).

In view of Bandura (1997) social cognitive theory, efficacy influences the way people feel, think, behave and inspire themselves. Teachers with high sense of efficacy are inclined to approach those activities due to the capacity to the success they have, have more persistent in teaching effort, set plausible working goals and try harder to find solutions to solve problem (Goddard & Goddard, 2001; Ross & Gray, 2006).

Teacher commitment, which can be explained as teachers' belief of choosing teaching as a continuous career, is important for developing student-centered instruction, enlightening their professionalism and thereby attaining the goal of cultivating student learning.

### **Significant implication of the research**

This study provides the evidence of the relationship between teacher self-efficacy and teacher commitment. Most previous research used correlation and regression analysis to see the relationship and prediction between teacher efficacy and teacher commitment (Steven Randall Chesnut & Burley, 2015). Significant methodological implications comprise the choice of statistical analysis. The present study utilized structural equation modeling (SEM) in the analysis. By applying SEM, the current research was able to show the joint impact of teacher efficacy and the teacher commitment. Additionally, SEM consider the measurement error variance, as a result, the relationship between the constructs in the hypothesized model become more appropriate (Bollen, 1989).

SEM concisely, not only presents a way to examine the relationships in the hypothesized model concurrently, but it also oversees the measurement error in the scales that evaluate the constructs in the model.

### **Recommendation for future research**

More research using the similar instrument as the current study is suggested for comparison purposes. It is suggested to replicate this study with different types of secondary school teacher samples in Malaysia such as National Secondary School teachers and Government Assisted Secondary School teachers. In that way, the findings of the current study concerning the validity and reliability of the instruments and also the relationships of Arabic teaching efficacy with commitment could be made a comparison with future studies.

Further research is required in order to ascertain other possible factors that contribute to teacher efficacy. The teaching experience should be examined to see how years of experience effect the development of teacher efficacy and under what circumstances efficacy is maintained and enhanced. More precisely, it would be useful to investigate the role of such dimensions as teachers' Arabic language enhancement, enthusiasm to teach, and in-service training in sustaining and improving teacher efficacy.

The current study employed quantitative research design in investigating the relationship between teacher efficacy and teacher commitment. It is recommended to conduct a research that examine thoroughly about teachers' efficacy and commitment through observation and in-depth interview. A mixed-method design will be welcome for this purpose.

Much research is required to investigate the levels of Arabic competency that secondary school teachers need in order to teach secondary Arabic. A need analysis and in-depth observation of teaching performance in the real Arabic classes in various contexts would be indispensable.

## Conclusion

There were two main purposes of the article. Firstly, to investigate the validity and reliability of CFA model of teacher efficacy and teacher commitment. Second, to determine the significant relationship between the construct of teacher efficacy and teacher commitment.

Based on the validity of CFA model of teacher efficacy and teacher commitment, the CFA model of the two-construct is valid and reliable. It was found that the CFA model of teacher efficacy and teacher commitment produced four inter-correlated dimensions respectively.

The current study demonstrated the necessity of teacher efficacy in shaping their positive attitudes and commitment. The findings suggest that teacher efficacy has a positive influence on teacher commitment. In other word, the current study shows that teachers who are confident in their foreign language abilities, are found to be more committed either to profession, school, teaching and student. This line of research should be carried on and prolonged further because language is the most underlying means for communication that is powerfully related to an individual's confidence.

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