

Full Length Research Paper

Emotional intelligence and self-esteem as predictors of teacher self-efficacy

Harun Şahin

Division of Curriculum and Instruction, Department of Educational Science, Faculty of Education, Mehmet Akif Ersoy University, Burdur, Turkey.

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Teacher self-efficacy is related to teachers or pre-service teachers feeling competent in their profession. The purpose of this study is to examine the relationship between the pre-service teachers' self-efficacy perceptions and their emotional intelligence and self-esteem. The study group of the current research comprised a total of 212 pre-service teachers of whom 141 are females (66.5%) and 71 are males (33.5%) and whose ages range from 20 to 35. The study conducted with fourth year's students in Mehmet Akif Ersoy University and from Early Childhood Education, Elementary Teacher Education, Social Studies Teacher Education, and Mathematics Teaching Program. The data of the current study were collected by using Teacher Self-efficacy Belief Scale, The Emotional Intelligence Scale-Short Form and Rosenberg Self-Esteem Scale. In the analysis of the collected data, Pearson Product-moment Correlation Coefficient and multiple linear regression analysis were used. When the research results were examined, it was found that while some sub-dimensions of emotional intelligence (well-being, sociality and self-esteem) positively and significantly predict the pre-service teachers' self-efficacy level, some other dimensions (self-control and emotionality) do not significantly predict the self-efficacy level.

Key words: Teacher self-efficacy, emotional intelligence, self-esteem.

INTRODUCTION

Self-efficacy is an individual's perception of whether he/she can handle a specific job and first it was explored by Bandura (1977) in his social-cognitive theory. Moreover, self-efficacy belief determines how an individual will cope with his feelings, thoughts, and difficulties and forms his/her conviction about whether he/she he will succeed in a job. People with self-efficacy beliefs are more determined to successfully complete a job they are responsible for.

Self-efficacy can be researched as general self-efficacy as well as self-efficacy specific to the situation. The situation-specific self-efficacy can also be expressed as self-efficacy in specific issues such as academic or interpersonal (Chen et al., 2004; Scherbaum et al., 2006). The situation-specific concept also includes teachers and pre-service teachers' self-efficacy perceptions. Teacher self-efficacy is related to teachers or pre-service teachers feeling competent in their profession (Çapa et al., 2005).

E-mail: harunsahin@mehmetakif.edu.tr.

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Teacher self-efficacy is also related to the teacher's confidence in his/her capacity to ensure the participation of students hard to motivate and to promote their eagerness to learn. In this connection, it can be argued that even if a teacher or a pre-service teacher has the power to cope with a difficulty, if they do not believe in this power, they will fail (Tschannen-Moran and Woolfolk-Hoy, 2001; Ünüvar, 2010).

When the studies in the literature focusing on teacher and pre-service teacher self-efficacy are reviewed, it was discovered that there are some studies exploring different variables regarding teacher self-efficacy (Başer et al., 2005; Çalışandemir and Senemoğlu, 2005; Çapri and Çelikkaleli, 2008; Ekici, 2006; Girgin, 2017; Yeşilyurt, 2013). There are also some other studies investigating the relationships between teacher self-efficacy and pre-service teachers' metacognitive learning strategies (Baykara, 2011); problem solving skills (Gürten, 2011); professional anxieties (Girgin, 2017; Kafkas et al., 2010) and burn-out levels (Skaalvik and Skaalvik, 2010).

Bandura (1977) emphasizes that life experiences, verbal skills of individuals and their psychological state are influential in the development of self-efficacy. In this regard, it is thought that emotional intelligence may be related to self-efficacy. Emotional intelligence refers to the ability to define one's own and others' feelings, to motivate himself/herself and to manage his/her emotions in his/her intra-personal and inter-personal relations. Salovey and Mayer first used the concept of emotional intelligence in the academic circles in 1990 (Goleman, 2000). Emotional intelligence emphasizes the individual's ability to establish healthy communication and his/her social aspect. People who experience problems in their social relations generally become disoriented, which causes them to worry more and their mental health to deteriorate (Gross, 1998). Individuals with high levels of emotional intelligence can better understand the expectations, strengths, weaknesses and needs of others. In addition, these individuals can be more open to positive and negative experiences and more comfortable to deal with these experiences (Baltaş, 2006). Thus, it can be said that emotional intelligence is an important trait for teachers. In the literature, there are studies exploring the relationships between emotional intelligence and sense of humor, personality and well-being (Kazarian and Martin, 2004); psychological intimidation (Erdemir and Murat, 2014); and stress coping (Deniz and Yılmaz, 2006). Similar to emotional intelligence, the ability of the individual to arrive at better awareness of his/her expectations, strengths and weaknesses is related to self-esteem.

While the self is the individual's perception of himself/herself, the self-esteem is the unity of the individual's opinions about himself/herself and his/her expectations related to approval or disapproval of his/her opinions. If the person tends to evaluate himself/herself positively, then his/her self-esteem is relatively higher; yet, if he/she tends to evaluate himself/herself negatively,

then his/her self-esteem is relatively lower. Individuals with high self-esteem respect themselves, have close relationships and have strong coping skills (Baumeister et al., 2003; Rosenberg, 1965; Sam et al., 2010). When the literature focusing on issue of self-esteem is examined, it is seen that there are studies investigating the relationships between self-esteem and contact obstacles and life satisfaction (Tagay, 2015); loneliness and psychological well-being (Güloğlu and Karairmak, 2010); and communication skills and psychological well-being (Tagay and Karakelle, 2014).

According to Bacchini and Magliulo (2003), there is a significant relation between self-efficacy and self-esteem. Teacher's self-efficacy and self-esteem traits are very important for their personal and career development. Also self-efficacy and self-esteem increase person's oral communication and ability to cope with social problems (Verba et al., 1995). The purpose of the current study is to investigate the relationship between the pre-service teachers' teacher self-efficacy and their emotional intelligence and self-esteem. Although there is no consensus on which characteristics teachers should have, it seems that a great deal of research has been conducted on this subject in recent years. As is known, it is important for teachers to feel competent in their profession both for their professional satisfaction and for the success of their students. In addition, the education service provided by teachers with high self-efficacy will be more qualified (Bümen and Özaydın, 2013). It is the first study which brings into pre-service teachers' self-efficacy, emotional intelligence and self-esteem. As known, teacher training programs aim to improve pre-service teacher's field knowledge and competence and self-confidence for teaching. The current study aims to determine the variables thought to be predictors of the pre-service teachers' self-efficacy. The findings of the study are believed to make some contributions for researchers and teacher training programs.

METHODOLOGY

The current study employed the relational survey model. The relational survey model is used to determine the relationships between variables and to predict the possible outcomes. The correlation level between two or more variables is analyzed by means of statistical tests (Metin, 2014). The study made use of the standard multiple regression analysis in order to prove the power of the assessment of emotional intelligence self-esteem to predict self-efficacy of pre-service teachers. The dependent variable of this research is pre-service teacher's self-efficacy and independent variables are self-esteem and emotional intelligence.

Study group

The study group of the current research is comprised of a total of 212 pre-service teachers of whom 141 are females (66.5%) and 71 are males (33.5%) and whose ages range from 20 to 35. The study was conducted with fourth year's students in Mehmet Akif Ersoy University and from Early Childhood Education, Elementary

Teacher Education, Social Studies Teacher Education and Mathematics Teaching Program.

Data collection tools

Teacher self-efficacy scale

The teacher self-efficacy scale developed by Tschannen-Moran and Hoy (2001) and adapted to Turkish by Çapa et al. (2005) consists of 24 items and 3 sub-dimensions. The results of the confirmatory factor analysis indicate a good fit. The scale was first translated to Turkish by researchers having a good command of English and having worked in the field of self-efficacy. The Cronbach-alpha reliability values for the sub-dimensions of the scale are 0.82, 0.86, and 0.84. In the current study, Cronbach-alpha reliability coefficient of the scale was found to be 0.95.

Emotional intelligence scale-short form

The emotional intelligence scale-short form (TEQue-SF) developed by Petrides and Furnham (2000, 2001) and translated to Turkish by Deniz et al. (2013) is a 7-point Likert scale consisting of 20 items. The aim of the scale is to determine individuals' emotional competence levels. High scores taken from this scale indicate that the emotional competences are perceived as high and low scores mean that emotional competences are perceived as low. The scale's linguistic validity and equivalence were confirmed by the positive correlation between the scores taken from the English and Turkish versions of the scale. In order to test the construct validity of the scale, the exploratory factor analysis was conducted and as a result a four-factor construct (well-being, self-control, emotionality, and sociability) consisting of 20 items was obtained. The confirmatory factor analysis results of the scale indicate a good fit to the sampling. Internal consistency reliability coefficient of the scale was found to be 0.81 for the whole scale and test-retest reliability coefficient was found to be 0.86.

In the current study, Cronbach-alpha reliability coefficient was found to be 0.68 for the sub-dimension of well-being, 0.47 for the sub-dimension of sociability, 0.40 for the sub-dimension of emotionality, and 0.58 for the sub-dimension of self-control.

Rosenberg self-esteem scale

The Rosenberg self-esteem scale developed by Rosenberg (1965) and adapted to Turkish by Çuhadaroğlu (1986) and Tuğrul (1994) is a four-point Likert scale having five positive and five negative statements. The reliability of the scale was tested by calculating Cronbach-alpha coefficient and it was found to be 0.85, which is considerably high for such a short scale. In the adaptation study (Çuhadaroğlu, 1986), the Cronbach-alpha coefficient was reported to be 0.76. In the test-retest method conducted, four weeks after the adaptation study, the reliability coefficient was found to be 0.71. A high score taken from the scale after the reverse coded items were corrected indicates a high self-esteem. In the current study, the Cronbach-alpha reliability coefficient of the Rosenberg self-esteem scale was found to be 0.81.

Data collection and analysis

The data were collected in the 2016/2017 academic year. The scale was administered on a volunteer basis and the researchers went to classrooms to explain how the scales would be completed. The completion of the scales lasted for 30 min on average. The predicted variable of the study is teacher self-efficacy and

predicting variables are emotional intelligence and self-esteem. Univariate normal distribution conditions (kurtosis and skewness) before the analyses (multiple normal distribution and equilibrium conditions) were investigated before path analysis. Prior to the analysis of the data, four incomplete data were excluded from the data set. Furthermore, standardized z scores were considered while examining one-way extreme values. A total of 14 observations whose standardized z scores are outside the score interval of -3 and +3 were excluded from the data set. In the model, there should not be a correlation between the error terms. In this connection, first, the Durbin Watson value, which is expected to be between 1.5 and 2.5 and is used to test the auto-correlation in the model, was calculated and it was found to be 1.93 so there is no auto-correlation in the model, standard errors of b coefficients are very small and the regression assumptions is satisfied. The correlation between the variables of the study was tested with Pearson correlation coefficient and then standard multi-regression analysis was conducted to determine the extent to which emotional intelligence and self-esteem predict teacher self-efficacy. The research data were entered into SPSS 15 program and then analyzed in this program. The significance level was set to be 0.05 in the current study.

FINDINGS

Correlation coefficients showing the relationships between the variables and the results of the descriptive statistics conducted prior to the multiple standard regression analysis performed to determine whether the sub-dimensions of emotional intelligence, sociability, emotionality, self-control and well-being and self-esteem predict teacher self-efficacy are presented in Table 1.

As shown in Table 1, the independent variables have correlations with each other and with the dependent variable at the level of 0.01 and 0.05. The correlation values should not exceed 0.90 in terms of multi-correlation risk (Çokluk, Şekercioğlu and Büyüköztürk). Therefore, as there was no multi-correlation problem, the regression analysis was continued. The results of the standard multiple regression analysis conducted to determine whether emotional intelligence and self-esteem predict self-efficacy are shown in Table 2.

As shown in Table 2, emotional intelligence and self-esteem explain nearly 38% of the total variance in teacher self-efficacy of the pre-service teachers ($R=0.613$, $R^2=0.376$ $F(6-204) = 24.827$; $p<0.01$). The results of t-test conducted to test the significance of the regression coefficients show that emotional intelligence's sub-dimensions of well-being ($t = 5.453$, $p < 0.05$) and sociability ($t = 3.102$, $p < 0.05$) and self-esteem ($t = 2.589$, $p < 0.05$) significantly predict the self-efficacy level of the pre-service teachers in the positive direction. On the other hand, the sub-dimensions of emotionality ($t = -1.624$) and self-control ($t = -0.508$) were found to be not significantly predicting the self-efficacy level of the pre-service teachers. According to the standardized regression coefficients, the significant predictors of the self-efficacy level of the pre-service teachers can be given in order of importance as follows: well-being ($\beta = 0.374$), sociability ($\beta = 0.226$), and self-esteem ($\beta = 0.199$).

Table 1. Correlation coefficients between variables and descriptive statistics related to variables.

Variable	1	2	3	4	5	6	M	SD
1. Self-efficacy	-	0.554	0.419	0.119	0.204	0.471	162.7	26.7
2. Well-being	0.554	-	0.405	0.116	0.274	0.552	20.3	4.5
3. Sociability	0.419	0.405	-	0.503	0.407	0.546	20.6	4.2
4. Emotionality	0.119	0.116	0.503	-	0.418	0.407	18.9	4.3
5. Self-control	0.204	0.274	0.407	0.418	-	0.433	20.3	4.8
6. Self-esteem	0.471	0.552	0.546	0.407	0.433	-	33.4	5.2

Table 2. Multiple-Regression Analysis Results related to the Extent to which Emotional Intelligence and Self-esteem Predict Teacher Self-efficacy.

Variable	B	Sh	β	t	p
Self-efficacy	-	-	-	-	-
Well-being	2.200	0.403	0.374	5.453	0.00
Sociability	1.435	0.463	0.226	3.102	0.02
Emotionality	-0.649	0.421	-0.105	-1.542	0.12
Self-control	-0.181	0.356	-0.033	-0.508	0.61
Self-esteem	1.009	0.390	0.199	2.589	0.01

R= 0.613, R²=0.376, F₍₆₋₂₀₄₎=24.827; p<0.01.

The findings obtained from the standard multiple-regression analysis can be summarized as follows: well-being, sociability and self-esteem significantly predict the self-efficacy level of the pre-service teachers in the positive direction, while self-control and emotionality do not significantly predict it.

DISCUSSION

The findings of the current study revealed that well-being, one of the sub-dimensions of emotional intelligence, significantly and positively predicts the self-efficacy level of the pre-service teachers ($t=5.453$, $p<0.05$). Thus, it can be argued that with improving well-being, the pre-service teachers' self-efficacy level will also increase. What is meant with well-being, one of the sub-dimensions of emotional intelligence, is individuals' being aware of their strengths and believing that they can cope with difficulties in their lives; that is, their being positive. Individuals with high levels of well-being can cope with the stress more easily and can turn negative states into opportunities (Petrides and Furnham, 2003). Chan (2006) reported that there is a negative correlation between teachers' emotional burn-out levels and positive arrangement. Moreover, Mohzan et al. (2013) stated that academic achievement of the students with high levels of emotional intelligence is also high. In the current study, it was found that self-efficacy levels of the pre-service teachers whose well-being levels are high are also high. Also in literature, it is revealed that there is a significant correlation between self-efficacy and self-esteem (Bacchini and

Magliulo, 2003). It can be maintained that pre-service teachers having high levels of well-being will have high self-confidence and can evaluate positive and negative events more objectively.

Another finding of the current study is that one of the sub-dimensions of emotional intelligence, sociability significantly and positively predicts the self-efficacy levels of the pre-service teachers ($t=2.589$, $p<0.05$). In other words, the pre-service teachers having high levels of sociability also have high levels of self-efficacy. According to Petrides and Furnham (2003), people with high level of sociability can manage their relationships well and can comfortably and easily express themselves. People with high levels of sociability can show empathy and effect others' feelings as well. In their study, Çiftçi and Taşkaya (2010) found that there is a significant and positive correlation between the self-efficacy level of the pre-service classroom teachers and their communication skills. As individuals having high levels of sociability feel more comfortable in dealing with conflicts with others, in affecting them and communicating with them, their self-efficacy levels are expected to be high.

The findings of the current study revealed that self-efficacy levels of the pre-service teachers having high self-esteem ($t=3.102$, $p<0.05$) are also high self-esteem. When individuals trust their own performance, when they feel confident and when they believe that they will be successful, their self-efficacy levels also increase (Alderman, 1999). High self-esteem is related to successful adaptation to life events, positive emotions, self-control ability to accept criticism, and coping with stress, as well as not being overly critical of oneself or

others. One having self-confidence and trusting his/her own performance is related to self-esteem (Carr, 2004). In the current study, self-efficacy was found to be associated with self-esteem. In the literature, there are also some studies reporting that self-esteem and self-efficacy are related to each other (Aypay, 2010; Chen et al., 2004; Hajloo, 2014).

As is known, the high level of self-efficacy of pre-service teachers is gaining importance both in terms of teaching skills and their personal development. Teacher training programs at universities aim to improve the self-efficacy levels of pre-service teachers. According to the results of the current study, conducting activities that can develop pre-service teachers' emotional intelligence and self-esteem can play an important role in enhancing their self-efficacy. Training in what needs to be improved is conducive to improving self-efficacy, which in turn is conducive to building self-esteem. Moreover, the number of training programs organized to increase pre-service teachers' self-efficacy level can be increased and other variables that can be related to pre-service teachers' self-efficacy can be explored.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

REFERENCES

- Alderman KM (1999). *Motivation for achievement*. London: Lawrence Erlbaum Ass. Publication.
- Aypay A (2010). The adaptation study of general self-efficacy (GSE) scale to Turkish. *Inönü Univ. J. Fac. Educ.* 11(2):113-131.
- Bacchini D, Magliulo F (2003). Self-image and perceived self-efficacy during adolescence. *J. Youth Adolesc.* 32(5):337-350.
- Bandura A (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychol. Rev.* 84(2):191-215.
- Baser N, Günhan BC, Yavuz G (2005). A study on the comparison of the self-efficacy perceptions of pre-service elementary school teachers and elementary school teachers. 14th National Educational Sciences Congress, 28-30 September 2005, Pamukkale University, pp. 515-521.
- Baykara K (2011). A study on pre-service teachers' metacognitive learning strategies and teacher self-efficacy perceptions. *Hacettepe Univ. Educ. Fac. J.* 40:80-92.
- Chan DW (2006). Emotional intelligence and components of burnout among Chinese secondary school teachers in Hong Kong. *Teach. Teacher Educ.* 22(8):1042-1054.
- Chen G, Gully SM, Eden D (2004). General self-efficacy and self-esteem: toward theoretical and empirical distinction between correlated self-evaluations. *J. Organ. Behav.* 25:375-395.
- Çapa Y, Çakıroğlu J, Sarıkaya H (2005). The development and validation of a Turkish version of teachers' sense of efficacy scale. *Educ. Sci.* 30(137):74-81.
- Çalışandemir F, Senemoğlu N (2005). Pre-school teachers' competence in application in the city of Burdur. *Child Dev. Educ. J.* 1(2):65-74.
- Çapri B, Çelikkaleli O (2008). Investigation of pre-service teachers' attitudes towards teaching and professional self-efficacy beliefs in relation to gender, program and university. *Inönü Univ. Educ. Fac. J.* 9(15):33-53.
- Çiftçi S, Taşkaya SM (2010). The relationship between the pre-service classroom teachers' self-efficacy and communication skills. *E-J. New World Sci. Acad.* 5(3):921-928.
- Deniz ME, Yılmaz E (2006). Investigation of the relationship between university students' emotional intelligence and stress-coping styles. *Turk. Psychol. Counsel. Guidance J.* 25:17-26.
- Deniz ME, Özer E, Işık E (2013). Emotional intelligence scale –short form (TEIQUE-SF) reliability and validity study. *Educ. Sci.* 38(169).
- Ekici G (2006). A study on vocational high school teachers' teacher self-efficacy beliefs. *Educ. Res.* 24:87-96.
- Erdemir S, Murat M (2014). Investigation of the relationship between elementary school teachers' emotional intelligence levels and psychological intimidation they experience. *Mustafa Kemal Univ. Soc. Sci. Institute J.* 11(25):323-340.
- Girgin D (2017). The relations among musical instrument performance self-efficacy, self-esteem and music performance anxiety in pre-service music teachers. *Educ. Res. Rev.* 12(11):611-616.
- Girgin D (2017). An Analysis of Pre-service Music Teachers' Levels of Self-efficacy Belief About Their Musical Instrument Performance Considering a Number of Variables. *Ahi Evran Üniversitesi Kırşehir Eğitim Fak-ültesi Dergisi* 18(1):613-624.
- Goleman D (2000). *Emotional intelligence (17th edition)*. İstanbul: Varlık Yayınları.
- Gross JJ (1998). The emerging field of emotion regulation: An integrative review. *Rev. Gen. Psychol.* 2:271-299.
- Gürten E (2011). The effect of problem-based learning on problem solving skills and self-efficacy perception. *Hacettepe Univ. Educ. Fac. J.* (40):221-232
- Hajloo N (2014). Relationships between self-efficacy, self-esteem and procrastination in undergraduate psychology students. *Iran J Psychiatry Behav Sci.* 8(3):42-49.
- Kafkas ME, Açak M, Çoban B, Karademir T (2010). The relationship between the pre-service physical education teachers' self-efficacy perceptions and professional anxieties. *Inönü Univ. Educ. Fac. J.* 11(2):93-111.
- Kazarian SS, Martin RA (2004). Humour styles, personality, and well-being among Lebanese university students. *Eur. J. Personality* 18:209-219.
- Metin M (2014). *Scientific research methods in education from theory to practice*. Ankara: Pegem Akademi Yayıncılık.
- Mohzan Mohd MA, Hassan N, Hail NA (2013). The influence of emotional intelligence on academic achievement. *Proc. Soc. Behav. Sci.* 90:303-312.
- Petrides KV, Furnham A (2003). Trait emotional intelligence: Behavioral validation in two studies of emotion recognition and reactivity to mood induction. *Eur. J. Personality* 17(1):39-57.
- Rosenberg M (1965). *Society and the adolescent: Self-image*. Princeton: Princeton University Press.
- Sam N, Sam R, Öngen B (2010) Investigation of university students' environmental attitudes through the new environmental paradigm and self-esteem scale. *Akademik Bakış Dergisi, Sayı 21*.
- Scherbaum CA, Cohen-Charash Y, Kern MJ (2006). Measuring general self-efficacy: A comparison of three measures using item response theory. *Educ. Psychol. Measure.* 66(6):1047-1063.
- Skaalvik EM, Skaalvik S (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teach. Teacher Educ.* 26:1059-1069.
- Tagay Ö (2015). Contact disturbances, self-esteem and life satisfaction of university students: A structural equation modelling study. *Euras. J. Educ. Res.* 59:113-132.
- Tagay Ö, Karakelle S (2014). Self-esteem and communication skills as predictors of psychological resilience for Turkish vocational school students. *Cypriot J. Educ. Sci.* 9(4):307-315.
- Tschannen-Moran M, Woolfolk Hoy A (2001). Teacher efficacy: Capturing an elusive construct. *Teach. Teacher Educ.* 17(7):783-805.
- Ünüvar P (2010). Comparison of parents and teachers' opinions about family participation works. *Kastamonu Educ. J.* 18 (3):719-730.
- Verba S, Scholzman KL, Brady HE (1995). *Voice and equality: Civic voluntarism in American politics*. Cambridge, MA: Harvard University Press.
- Yeşilyurt E (2013). Pre-service teachers' teacher self-efficacy perceptions. *Electronic Soc. Sci. J.* 12(45):88-104.