

Emotional Self-Efficacy Scale : Psychometric Properties of Turkish Version

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Abstract

This study demonstrate the reliability and validity of a measurement designed to evaluate middle school-aged students' emotional self-efficacy. A sample of 315 middle school-aged students' from public schools in a Sakarya-Turkey. In order to determine the construct validity of the scale, Confirmatory Factor Analysis (CFA) was performed to 27-item Emotional Self-Efficacy Scale (ESES) for the study. A correlated four-dimension including the factors were fit using maximum likelihood estimation. Results indicated that the model was well fit ($\chi^2=715.93$, $sd=267$, $p=0.00$, $RMSEA=.07$). In conclusion, ESES showed the proof of both accuracy and, including internal consistency and validity - reliability scores. Potential implementation for the ESES and further studies are discussed.

Keywords: Emotion, self-efficacy, factor analysis.

Self-efficacy is the basic concept of social learning theory and is self-awareness of the individual. It is that the individuals compare their capabilities with the designated performance and execute courses of action according to the situation. It is also individuals' belief about themselves to deal with the challenges they encounter. In short, it can be defined as self-knowledge or knowing oneself (Korkmaz, 2016). Self-belief of the individual is an important determinant of performance according to self-efficacy concept which forms the basis of social learning theory. Perceived self-efficacy plays an important role in processing the emotional intelligence and thus emotional self-efficacy contributes to effectively process, understand and manage the emotional information (Caprara, Di Giunta, Eisenberg, Gerbino, Pastorelli, & Tramonta, 2008). Self-efficacy consists of one's self-beliefs about their capability of performing at a designated level (Bandura, 2000). Self-efficacy affects the cognitive and motivational processes besides behaviors. Individuals with higher levels of self-efficacy are more likely to be more competent in initiating the required behaviors, more patient in the face of challenges and succeed in managing relevant new behaviors. High levels of emotional self-efficacy was found to be related with various positive effects including job satisfaction and performance (Judge & Bono, 2001). Being capable of perceiving, understanding and managing one's own feelings also affects understanding the other's feelings (Qualter, 2015). Emotional self-efficacy is defined as the capability to prevent negative feelings or re-establishing a usual emotional state (Hessler & Katz, 2010; Muris, 2001).

Emotional self-efficacy includes one's capability to avoid negative situations and self-help skills (self-positive talk, remaining calm) (Zullig, 2016). Emotional self-efficacy consists of two components as ability to manage negative emotional states and express positive feelings. Individuals with low self-efficacy levels have difficulties in coping with negative feelings in distress and thus experience serious situational depression (Bandura, Caprara, Barbaranelli, Gerbino & Pastorelli, 2003). Individuals' positive self-assessment affects emotional self-efficacy. This situation also reduces the symptoms of depression (Dou, Wang, Li, & Liu, 2016). In the studies conducted, individuals with high levels of self-efficacy were found to engage in less risky behavior and substance abuse and suicide attempts were less frequent (Valois, Zullig, & Kammermann, 2013). Eating disorders are associated with low levels of emotional self-efficacy (Zullig, 2016). Perceived ability is effective in managing negative feelings and is psychologically beneficial. Emotional self-efficacy is negatively associated with anxiety and depression. Emotional self-efficacy help students to manage

negative feelings and experience less test anxiety. In this context, emotional self-efficacy positively affects academic success (Galla & Wood, 2012). According to the research conducted, anxiety hampers cognitive abilities such as memory and there is a negative correlation between anxiety and academic success (Eysenck, Derakshan, Santos, & Calvo 2007). Stress does not have the same impact on all students. Students with high self-efficacy who can cope with negative feelings experience less stress (Galla & Wood, 2012). Emotional intelligence is defined as the ability to understand and express feelings, transform negative emotions into positive emotions and merge them in thought and behavior and understanding also the others feelings (Matthews, Emo, Funke, Zeidner, Roberts, & Costa, 2006). Petrides and Furnham (2003) noted that emotional self-efficacy is one aspect of emotional intelligence. Bandura (1986) accepted emotional self-efficacy as a combination of self-efficacy and emotional intelligence. An individual who is able to establish a good balance between their emotions and thoughts can also understand the others' emotions and thoughts and this ability makes them successful in life (Goroshit & Hen, 2014). High emotional self-efficacy contributes to life satisfaction, academic success, positive thinking, individuals' belief in their social competence and managing emotions (Schunk, 2005).

Emotional is influential also in finding jobs and career planning (Pool & Qualter,2013). The important role of emotional intelligence on academic achievement and employment of graduates theoretically makes it possible to improve them. In one of their study, Pool and Qualter (2012) managed to enhance emotional intelligence and emotional self- efficacy levels of university students. In the study, activities for understanding emotions, managing emotions, defining one's own emotions, understanding others' emotions, perceiving emotions in facial expressions and body language were carried out. In this context, efforts should be made to enhance emotional intelligence and emotional self-efficacy levels of students.

Method

Study group

Emotional Self Efficacy Scale (ESES) was implied 315 middle school students. Sample of the study consists of 154' (% 49) female and 161 (%51) male students.

Measures

Emotional Self Efficacy Scale (ESES). The ESES developed by Kirk et al. (2008) composed 32 items. Pool and Qualter (2012) comprised a 27-item version of the ESES.

Cronbach's alpha for the four dimensions ranged from .79 to .89. As part of the scale adaptation study, the original form of the items were converted to Turkish by the researcher and opinions were obtained from expert lecturers in the education and psychology field. Within the scope of the research, confirmatory factor analysis, corrected item-total correlations, and reliability, internal consistency coefficient (cronbach alpha) were examined.

Results

Item analysis and reliability

The emotional self-efficacy scale was analyzed for item total correlations coefficients of the distinguishing the items. The overall internal consistency coefficient of the scale was .91. Item total correlations findings were presented in Table 1.

Table 1

ESSE Corrected Item Total Correlation Coefficients

Items	<i>r_{jt}</i>	Items	<i>r_{jt}</i>	Items	<i>r_{jt}</i>
1	.46	11	.52	21	.57
2	.47	12	.53	22	.58
3	.58	13	.56	23	.37
4	.55	14	.53	24	.56
5	.49	15	.58	25	.55
6	.50	16	.56	26	.57
7	.54	17	.51	27	.56
8	.42	18	.54		
9	.56	19	.56		
10	.56	20	.52		

Confirmatory Factor Analysis. Confirmatory factor analysis was used to determine the relationship between the data obtained from the Turkish form of the emotional self-efficacy scale and the extent to which the theoretical structure was explained. The obtained fit indexes ($\chi^2 = 715.93$, $sd = 267$, $p = 0.00$, $RMSEA = .07$) show that the four-dimensional emotional self-efficacy scale well fits. Standardized regression coefficients of confirmatory factor analysis are given in Figure 1.

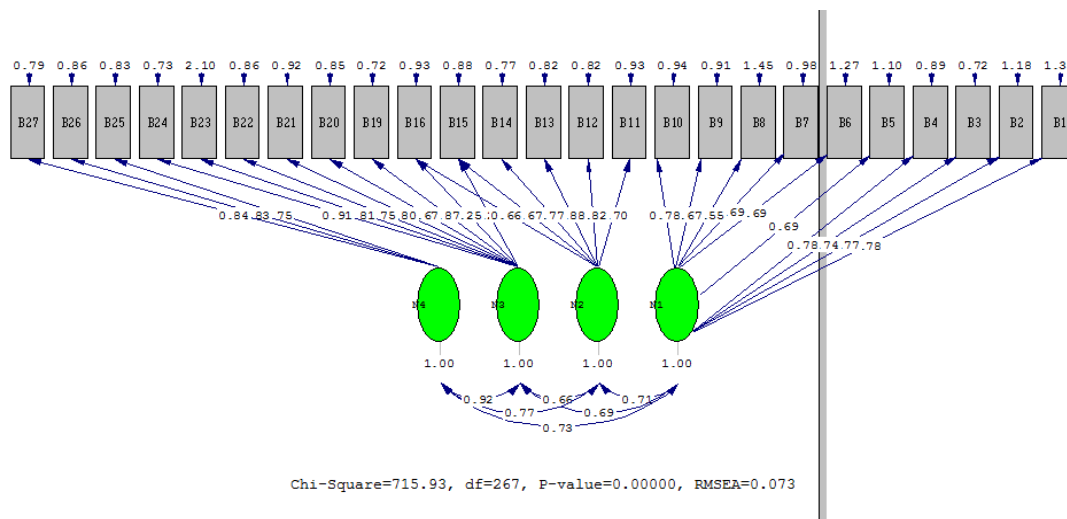


Figure 1: Coefficients of ESES

Discussion

This study aimed to adapt Emotional Self-Efficacy Scale developed by Qualter, Pool, Gardner, Ashley-Kot, Wise, and Wols (2015) to Turkish and to examine the validity and reliability of the Turkish version. The scale was applied to 315 middle school students. The scale has four sub-dimensions as using and managing emotions, recognizing and understanding one’s own emotions, perceiving others’ emotions and perception of feelings through facial expressions and body language. Cronbach alpha coefficient of the scale was calculated as .83 for using and managing emotions sub-dimension, .82 for recognizing and understanding one’s own feelings sub-dimension, .82 for perceiving others’ emotions sub-dimension and .70 for perception of feelings through facial expressions and body language sub-dimension. It can be said that the internal consistency coefficients obtained are consistent with the internal consistency coefficients obtained in similar scale studies. It was also seen that internal consistency coefficients of using and managing emotions, recognizing and understanding one’s own emotions, perceiving others’ emotions and perception of feelings through facial expressions and body language sub-dimensions produced similar results in those studies (Totan, İköz, & Karaca, 2010; Qualter ve et al., 2015; Kirk, Schutte, & Hine,2008; Caprara et al., 2008; Choi, Kluemper, & Sauley, 2013).

In this study, the sub-dimension of perception of feelings through facial expressions and body language was found to be lower than the other dimensions as it was in the original study. Self-efficacy related scale studies were found when literature was examined (Muris, 2001). However, the emotional dimension of self-efficacy scales is limited. Although social and academic self-efficacy is important for research on emotional disorders, emotional self-

efficacy is crucial (Muris, 2001). Muris (2001) developed a general self-efficacy scale measuring social self-efficacy, academic self-efficacy and emotional self-efficacy. The scale which consists of 24 items was applied to 330 middle school students. The overall internal consistency coefficient of the scale was .88. When its sub-dimensions were examined the reliability coefficient of emotional self-efficacy is .86. Reliability coefficient supports the study. Valois and Zullig (2013) adapted the self-efficacy scale developed by Murriss (2001) on Dutch adolescents to American adolescents. In his work he studied the 7-item emotional self-efficacy sub-dimension. As a result of the adaptation study, it became clear that it is a reliable scale as a short measure of emotional self-efficacy. The study suggested that the scale can be used in studies on social emotional learning. Kirk, Shutte and Hine (2008) developed the "Emotional Self-Efficacy" scale, which makes it possible to evaluate emotional intelligence and self-efficacy concepts together. The scale was applied to 207 adults. At the end of the reliability studies, the internal consistency coefficient of the scale was found to be .96 and the test-retest reliability coefficient of the two-week search was found to be .85.

Findings support the findings of the study. Totan, İkiz and Karaca (2010) adapted the Emotional Self-Efficacy Scale developed by Kirk, Shutte and Hine (2008) to Turkish. The scale was applied on 411 university students. The researchers found that the scale has a theoretical structure that consists of four dimensions as Perceiving Emotions, Using Emotions to Facilitate Thinking, Understanding Emotions and Managing Emotions. Internal consistency and test retest reliability studies have proved that the scale is a stable measurement tool. All these findings support the results of reliability and validity study on emotional self-efficacy scale. Literature review showed that there were studies that shows self-efficacy affected academic success positively, that it has positive effects on mental health and facilitated life satisfaction and positive thinking (Dou, Wang, Li, & Liu, 2016; Schunk, 2005; Galle & Wood, 2012). In this context, school staff and parents should conduct studies to increase emotional self-efficacy levels of the students. School psychologists can make individual and group counseling using the emotional self-efficacy scale. The emotional self-efficacy scale can be used in studies on school climate, psychosocial screening studies, and social-emotional learning studies. It can be used to determine emotional self-efficacy level in career planning, employment studies, individual psychological counseling (Pool & Qualter, 2013). In addition, this scale can also be use to determine the effectiveness of psycho-education programs such as anger control, conflict resolution, communication skills. The scale was applied on middle school-aged students', and the reliability validity studies can be applied on older samples.

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Appendix: Duygusal Öz-Yeterlilik Ölçeği

Her sorunun karşısında bulunan;(1) Kesinlikle katılmıyorum (2) Katılmıyorum (3) Kararsızım (4) Katılıyorum (5) Kesinlikle Katılıyorum anlamına gelmektedir

1	Kötü bir ruh halinde olduğum zaman kendimi nasıl daha iyi hissedeceğimi bilirim.	1	2	3	4	5
2	Mutsuz olduğum zaman kendimi tekrar nasıl mutlu edeceğimi bilirim.	1	2	3	4	5
3	İyi ruh halini birçok yeni fikirler üretmek için kullanmayı bilirim.	1	2	3	4	5
4	Birçok yeni fikirler üretmek için ihtiyacım olan ruh haline geçiş yapabilirim.	1	2	3	4	5
5	Gerektiğinde ruh halimi içimde olduğum duruma göre değiştirebilirim. Örneğin kendimi üzgün ya da mutlu hissedebilirim.	1	2	3	4	5
6	Stresli olduğum zaman duygularımı nasıl kontrol edeceğimi bilirim.	1	2	3	4	5
7	Okulda gerektiği zaman kendimi nasıl sakin hissedeceğimi ve nasıl odaklanabileceğimi bilirim.	1	2	3	4	5
8	Kızgın olduğumda sakinleşebilirim.	1	2	3	4	5
9	Sorunların çözümünde yaratıcı olmak için iyi duyguları nasıl kullanacağımı bilirim.	1	2	3	4	5
10	Kendimi enerji dolu hissedebilirim ve iyi spor yapmak için motive edebilirim.	1	2	3	4	5
11	Bana farklı duygular hissettirenin ne olduğunu söyleyebilirim	1	2	3	4	5
12	Mutsuz hissettiğim zaman buna neyin sebep olduğunu söyleyebilirim.	1	2	3	4	5
13	Mutsuz ya da kızgın hissettiğim zaman bunu söyleyebilirim.	1	2	3	4	5
14	Mutlu hissettiğim zaman bunu söyleyebilirim.	1	2	3	4	5
15	Duygularımın değişiminin nedenini söyleyebilirim	1	2	3	4	5
16	Kendimi neyin iyi hissettirdiğini söyleyebilirim.	1	2	3	4	5
17	Diğer insanları neyin mutlu ettiğini bilirim.	1	2	3	4	5
18	Kızgın hisseden birinin sakinleşmesine nasıl yardımcı olacağımı bilirim.	1	2	3	4	5
19	İnsanların o anki hislerinin nedenini kestirebilirim.	1	2	3	4	5
20	Birinin hayvanı kaybolduğunda ya da bir yakını kaybettiğinde olumlu düşünmesine yardım edebilirim.	1	2	3	4	5
21	Diğer insanları mutsuz hissettirenin ne olduğunu söyleyebilirim.	1	2	3	4	5
22	Birisi mutsuz hissettiği zaman onu nasıl neşelendireceğimi bilirim.	1	2	3	4	5
23	Diğerlerinin neden duygu değişimi yaşadığını bilirim.	1	2	3	4	5
24	Birisi hoş bir duygu yaşadığı zaman anlayabilirim.	1	2	3	4	5
25	Yüzümdeki ifadelerin hangi duyguları yansıttığımı bilirim.	1	2	3	4	5
26	Diğer insanların bedenlerindeki değişikliklere bakarak ne hissettiklerini söyleyebilirim.	1	2	3	4	5
27	Bedensel tepkilerime bakarak kendi hislerimi söyleyebilirim.	1	2	3	4	5