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Mediator Role of Metacognitive Awareness in the Relationship between Educational Stress and School Burnout among Adolescents

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Abstract

Metacognition is accepted as a process that affect learning of students directly and is composed of metacognitive skills such as planning of learning, use, regulation and evaluation of learning strategies as well as information on the individual, duty and strategy variables. Educational stress is defined as reactions given by all individuals in the school to the problems they encounter as they carry out their duties and it has an impact on their success both at and outside of school. School burnout is handled in the dimensions of exhaustion against school demands, scornful attitude towards school and the inadequacy felt as a student. The aim of this study is to investigate the relationship between metacognition, educational stress and school burnout and the mediator role of metacognitive awareness in the relationship between educational stress and school burnout. The sample of 303 students was selected from 7th, and 8th grade students who were at 13, 14 and 15 years old at middle schools in Ağrı, Turkey. The Junior Metacognitive Awareness Inventory, the Educational Stress Scale and the School Burnout Scale were used for data collection. Pearson Product Moment Correlation Analysis was applied in order to determine relationship between the variables and simple, multiple/stepwise regression analysis were used to determine predictor roles of metacognition and educational stress on the school burnout. In correlation analysis, there are statistical significant correlations between metacognition, educational stress and school burnout. In stepwise regression analysis, metacognition is a mediator in relationship between educational stress and school burnout, and educational stress was strongest predictor of school burnout.

Keywords: metacognition, educational stress, school burnout, adolescents

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Ergenlerde Eğitim Stresi ve Okul Tükenmişliği Arasındaki İlişkide Üstbilişsel Farkındalığın Aracı Rolü

Öz

Bireyin görev ve stratejiler hakkındaki bilgilere ek olarak öğrenmeyi planlama, kullanma, düzenleme ve öğrenme stratejilerini değerlendirme gibi üstbiliş becerilerinden oluşan metabiliş, öğrencilerin öğrenmelerini doğrudan etkileyen bir süreç olarak kabul edilir. Eğitim stresi öğrencilerin okulda ya da okul dışındaki başarısını etkileyen, okul ile ilgili görevleri yerine getirmek için karşılaştıkları problemlere verilen bir reaksiyondur. Okul tükenmişliği ise bir öğrenci olarak yetersiz hissetme, okula karşı soğuma ve okul gerekliliklerine karşı tükenmeye dayanan bir kavramdır. Bu çalışmanın amacı eğitim stresi, okul tükenmişliği ve üstbiliş arasındaki ilişkiyi belirlemek ve eğitim stresi ile okul tükenmişliği arasındaki ilişkide üstbilişsel farkındalığın aracı rolünü incelemektir. Çalışmanın örneklemi, Ağrı ilinde ortaokula devam eden 7. ve 8. sınıflardan seçilmiş 303 öğrenciden oluşmaktadır. Veri toplamak amacıyla "Ortaokul Üstbilişsel Farkındalık Envanteri" ile "Eğitim Stresi ve Okul Tükenmişliği Ölçeği" kullanılmıştır. Değişkenler arası ilişkileri saptamak için Pearson Momenler Çarpımı Korelasyon analizi ve okul tükenmişiği üzerinde üstbiliş ve eğitim stresinin yordama gücünü tespit etmek için basit ve Çoklu/Aşamalı Regresyon analizi kullanılmıştır. Korelasyon analizi sonucuna göre; üstbiliş, eğitim stresi ve okul tükenmişliği arasında istatistiksel olarak önemli ilişkilerin olduğu, aşamalı regresyon analizi sonucuna göre ise; üstbilişsel farkındalığın, eğitim stresi ve okul tükenmişliği arasında aracı role sahip olduğu ve eğitim stresinin okul tükenmişliğinin güçlü bir yordayıcısı olduğu tespit edilmiştir.

Anahtar Sözcükler: üstbiliş, eğitim stresi, okul tükenmişliği, ergenler

Introduction

In this correlational research, I start by elucidating the notions of metacognition, educational stress and school burnout, and continue with the presentation of the assumptions of this research in relation to the study aim. Next, I exhibit the methods of the study followed by the findings. In the final part, I debate the research findings in association with the related literature.

Metacognition

In today's world, which hosts very rapid technological advancements and where a competitive mentality in obtaining information is popular, the significance of metacognitive skills in terms of education increases as new thoughts are put forward (Martinez, 2006). The concept of metacognition, which is used to mean "*thinking about thinking*" (Metcalfe & Shimamura, 1994), is defined as students being informed about cognitive processes, being aware of, managing and controlling the situation, which are necessary for successful learning (Livingstone, 1997).

According to Flavel (1979), metacognition has an important role on some variables such as verbal communication, reading and comprehension, language acquisition, internal control and self-regulation. We can assert that students figure out their teachers by using cognitive and metacognitive strategies in terms of learning. This situation, which can be called learning through self-regulation, appears as learning that enables students to take part in their learning actively by some methods (Schunk, 2008; Zimmerman, 1995). According to Niemi (2009), two main points were emphasized in studies conducted on metacognition. First one is knowledge of people about cognitive processes while the other one is metacognitive skills that enable controlling these processes. Learning through metacognitive skills should be handled not only with cognitive processes but also with social and emotional processes (Martinez, 2006). The reason is that will and willingness possessed at the point of individual differences demonstrate the relation of metacognitive skills not only with cognitive processes but also with social and emotional processes (Eisenberg, 2010). Arslan (2014) pointed out there is a relationship between self-regulation and metacognition. According to his findings, a strong relation specifically, individuals with high self-regulation levels use metacognition skills and processes at high level.

Metacognition is accepted as a process that affect learning of students directly and is composed of metacognitive skills such as planning of learning, use, regulation and evaluation of learning strategies as well as information on the individual, duty and strategy variables (Öz, 2005). Metacognitive skills contribute to students being aware of the learning processes and ensuring effectiveness by regulating these processes (Livingstone, 1997).

Educational Stress

According to Volpe (2000), existence of a certain level of stress in the organism was found necessary for a healthy life. Stress is defined as a state of tension that results from threat and pushing physical and mental boundaries of an organism (Cohen, Kessler, & Gordon, 1995; Lazarus & Folkman, 1984). These states of tension emerge in every environment where the individual is present (Lazarus & Folkman, 1984). One of the primary institutions where an individual spends most of his/her time is schools, where he/she continues his/her education life. While he/she endeavours to acquire the qualities that are crucial for him/herself and the society, the individual can be affected positively or negatively by all elements which he/she interacts with such as administrators, teachers, students, physical environments, etc. and can be stressed. While this stress is called academic stress for young adults (Kohn & Frazer, 1986), it is called educational stress (Sun, Dunne, Hou, & Xu, 2011) or school stress (Piekarska, 2000) for children and teenagers.

When studies conducted are examined, the situations which cause the greatest amount of stress in children and teenagers are family pressure (O'Connor & Spagnola, 2009) and homework given for academic success in educational environment (Garcia-Moya, Rivera & Moreno, 2013). It was stated by students that the fact that homework given by teachers take all of students' time prevent them from dealing with more important activities and cause students to develop negative attitude towards lessons and school (Moksnes, Byrne, Mazanov & Espnes, 2010).

Regarding stress and teachers or relation to teachers, it was shown that secondary school teachers encountered a high stress factor in the areas of student discipline, guidance and managing student behaviours compared to primary school students (Chan et al., 2010). The stressful situations encountered by teachers in relation to education are also reflected to students putting them under pressure.

School stress is defined as reactions given by all individuals in the school to the problems they encounter as they carry out their duties and it has an impact on their success both at and outside of school. School stress comprises of mental and physical stimulants that affect students' academic performance, efficiency and school targets positively and negatively (Naidoo et al, 2013).

Both the competition among students in the learning environment and their failure to communicate with their teachers can be listed as the reasons of the educational stress suffered by students (Nandamuri, 2013). In the research conducted in Eastern Europe about school stress, it was found that the factors that lead to school stress in children were caused by ill-intentioned and negligent attitudes and behaviours of teachers (Piekarska, 2000).

School Burnout

Burnout syndrome is defined as follows by Maslach and Jackson (1981, p.99).: *Ending of emotional sources of employees and their lack of psychological power to meet the demands because of the emotional exhaustion arising from over demanding expectations encountered among working people*. Burnout is not only a concept that can be confined to occupational area, but it is also a concept defined as chronic stress. Burnout, which is described as chronic stress and has such components as emotional exhaustion, scornfulness and inadequacy, can arise from occupational or non-occupational difficulties (Bianchi et al., 2014). From educational perspective, the burnout occurs when both teachers and students cannot find the power to achieve the responsibilities incumbent on them and this can be called school burnout (Ilbay, 2016; Sarıçam, 2015a).

School burnout is handled in the dimensions of exhaustion against school demands, scornful attitude towards school and the inadequacy felt as a student (Salmela-Aro, 2009; Salmela-Aro et al., 2014). Schaufeli et al. (2002) dealt with burnout in students in 3 dimensions: a) emotional burnout/exhaustion arising from school requirements (for example tiredness after returning from school and the lack of willingness to do anything) b) cynical attitudes towards school duties (for example, thinking that the school does not improve him/her and therefore not wanting to attend school); c) as a student, feeling inadequate (thinking that he/she will fail the exams or will not be able to do the homework).

Aypay and Eryılmaz (2011) argued that high school students have school burnout because of their families' negative attitudes, and therefore their subjective well-being levels decrease. The academic success required by the family and the school from students cause the perception that students should always be studying and any behaviour that is not consistent with studying results in the students to be blamed with being lazy. It was determined that this type of behaviour leads to many significant changes in terms of loss of interest to school and the student thinking that the school is boring, causing school burnout (Aypay, 2012).

According to Elkind (1987), if students are tranquil and silent when they come back from school, it can be assumed that these types of problems have occurred. One of the most important problems in students'burnout is the inappropriate methods used by teachers. The reason is that methods used on the children, especially the ones in preschool, are methods that enable learning in the natural process, where they can say that "they did it" or "they managed" to solve problematic situations. When methods *used for 7-year old children are used for 4-year old children*, this causes a great amount of stress and school burnout.

Present Study

Due to educational requirements, hard work is required at each stage of the education system, students are faced with tension, especially in the educational facilities. It is required for students to be informed of the methods to deal with

stressful situations that have a negative effect in terms of academic success and for them to gain experience on this field (Scott, 2011).

In a study conducted by Sun et al. (2011) in China, it was *presented* that educational stress has many factors and the importance of the support provided by consultants for the mental and behavioural well being of the students was emphasized. Also, the stressful situations experienced by students isolate them from school, in some cases causing depression (Moksnes et al., 2016), and in connection with this, an increase is observed in suicidal tendencies (Ang & Huan, 2006). Thus, the stress factors related to education should be explaned and implement programs that may provide a solution in relation with the subject. It is considered that the key term to be used in the programs created in order to prevent both school burnout and educational stress could be metacognition, because it has a structure that improves academic success by increasing the level of the learning performance (Van der Stel & Veenman, 2008).

Sarıçam (2015b) suggested that occasionally metacognition is perceived as a negative concept because of its negative consequences such as perceived stress and math anxiety (Kacar and Sarıçam, 2015b), while mostly it may be an positive structure for ensuring academic achievement (Coutinho, 2007; Young & Fry, 2008) and regulating learning process (Lai, 2011; Schneider, 2008; Veenman, Van Hout-Wolters, & Afflerbach, 2006). In other words, Sarıçam (2015b) emphasized that negative metacognitions cause negative components such as stress and unhappiness. Therefore, metacognitive awareness (in the context of the present study, it was accepted as a positive structure) may be associated with negative educational outputs such as educational stress and school burnout.

Determining the impact of metacognition on educational stress and school burnout would contribute to the literature significantly, as it will be a pioneer for the programs to be created. The main purpose of this correlational study is to examine the relationships between metacognition, educational stress and school burnout. Another pupose of the studty is to explain the mediator role of metacognition in the link between educational stress and school burnout. The following assumptions will be investigated for these purposes:

A_1: Metacognition is negatively associated with educational stress and school burnout.

A_2: Metacognition is negative predictor for educational stress.

A_3: Not only metacognition but also educational stress predict school burnout.

Method

Participants

The sample of 303 students was selected randomly from 7^{th}, and 8^{th} grade students who were at 13, 14 and 15 years old at middle schools in Ağrı, Turkey. 145

(47,85%) of participants are male while 158 (52,16%) of them are females. Students' ages range between 13 and 15 and the average age is 14.32.

Instruments

Junior Metacognitive Awareness Inventory Version B (jr mai)

This scale was developed by Sperling et al. (2002). Students in 6th, 7th, 8th and 9th grade was assessed via two version of Metacognitive Awareness Inventory for students'metacognition levels: Knowledge of cognition and regulation of cognition. Jr. MAI is a self-report measure which includes 18 items and it is a 5-point Likert-scale which ranges from 1 ("never") to 5 ("always"). The possible scores of this scale ranged from 18 to 90. Jr. MAI was adapted to Turkish culture by Karakelle and Saraç (2007). In this study the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .86 and it was observed a significant result on Bartlett's test of Sphericity (χ^2= 1986.87, p<.001). The amount of total variance explained was % 43.1% and the factor loadings ranged from .36 to .63. Cronbach's alpha internal consistency coefficient was found as .80 for scale. Test-retest reliability coefficient was .72. Corrected item-total correlations ranged from .38 to .60. Then, Aydın and Abuz (2010) made a validation study of Jr. MAI. The goodness of fit index values of the model were (χ^2 = 285.71, df=99, p = 0.000); RMSEA =.05, CFI = .91, GFI = .94, AGFI = .92, and RMR = .05. For the current research, the coefficient Cronbach's alpha was .76.

Educational Stress Scale (ESS)

Sun, Dunne, Hou, and Xu (2011) developed this scale and Celik, Akin and Saricam (2014) adapted to Turkish. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .81 and a significant result on Bartlett's test of Sphericity (χ^2 = 3488.103, p<.001, df=105). Factor loadings ranged from .41 to .91. Results of confirmatory factor analyses demonstrated that 16 items yielded five factor as original form and that the five-dimensional model was well fit (χ^2= 123.49, sd= 88 (χ^2/df=1.40), RMSEA= .03, NFI= .97, CFI= .99, IFI= .99, RFI= .96, GFI= .95, SRMR= .041). Cronbach's alpha internal consistency coefficient was found as .86 for whole scale, .87 for sub-dimension of pressure from study, .93 for sub-dimension of workload, .90 for sub-dimension of worry about grades, .90 for sub-dimension of self-expectation, .91 for sub-dimension of despondency. Test-retest reliability coefficient was .67 for whole scale. Corrected item-total correlations ranged from .40 to .57.

School Burnout Inventory (SBI)

This scale developed by Salmela-Aro, Kiuru, Leskinen, and Nurmi (2009), SBI was translated and adapted to Turkish by Akin, Sarıçam et al. (2013). The response format is a 6-point scale (1 = strongly disagree, 6 = strongly agree). Results of confirmatory factor analyses demonstrated that 9 items yielded three factors as

original form and that the three-dimensional model was well fit (χ^2=45.28, df=21, RMSEA=.061, NFI=.95, NNFI=.95, CFI=.97, IFI=.97, GFI=.97, SRMR=.038). But second study showed that 9 items yielded one factors and the one-dimensional model was well fit (χ^2= 68.78, df=25, p<0.001, RMSEA= .075, NFI= .96, NNFI= .97, CFI= .98, IFI= .98, RFI= .95, GFI= .95, AGFI= .92, and SRMR=.044). Factor loadings ranged from .41 to .83. Cronbach's alpha internal consistency coefficient was found as .85 for overall scale, .73 for exhaustion at schoolwork sub-scale, .69 for cynicism toward the meaning of school subscale, .60 for sense of inadequacy at school sub-scale. Test-retest reliability coefficient was as .75 for whole scale. Corrected item-total correlations ranged from .35 to .64.

Procedure

The instruments were administered in the classroom by the researcher. The participants completed the instruments during the students' class hour. Both verbal and written standard instructions were given to the students. Specifically, students were asked to be honest when responding to the instrument items and informed about the confidentiality of the collected data. The whole administration of the instruments took approximately 25 minutes in each classroom. Collected data was transferred *typed to* computer using software package program, Pearson Product Moment Correlation Analysis was applied in order to determine relationship between the variables and multiple regression analysis was used to determine predictor roles of metacognition and educational stress on the school burnout.

Results

Correlations between Metacognition, Educational Stress and School Burnout

Table 1

Descriptive Statistics, Cronbach's Alpha Coefficients, and Intercorrelations of the Variables

Variables	1	2	3
1. Metacognition	1		
2. Educational stress	-.57**	1	
3. School burnout	-.64**	.44**	1
Mean	63.08	45.02	28.80
SD	15.73	13.04	.9.74
Alpha	.76	.74	87

** Correlation is significant at the .01 level (2-tailed).

Table 1 shows that there are significant correlations between metacognition, educational stress and school burnout. Although metacognition is related negatively (*r*=-.64) to school burnout, educational stress is related positively (*r*=.44) to school burnout. Moreover, metacognition (*r*=-.57) was found negatively associated with educational stress.

Regression Analysis

For the second hypothesis, simple regression analysis was carried in which the dependent variable was educational stress and the independent variable was metacognition. This analysis is necessary for following mediation analysis procedure. According to finding, metacognition and educational stress (dependent variable) were negatively related (β= 0.57, t= 11.97, p < .001). Metacognition explained 32% total variance of educational stress. The results are shown in Table 2.

Table 2

The Regression Results of the Relationship between Metacognition and Educational Stress

Variables	**Unstandardized Coefficients**		**Standardized Coefficents**				
	B	**SE_B**	**β**	**t**	**R**	**R^2**	**F**
Metacognition	-.47	.039	-.57	-11.97*	-.57	.32	143.32*

Dv: Educational stress *p<.001

For the last hypothesis, multiple regression analysis was applied to assess which variables were the best predictors of school burnout. However, for multiple regression analysis, it is necessary to check some assumptions so as to rely on the estimation of the significance that is concluded by the study. In order to ensure the trustworthiness of the results the assumptions of normality, independence of errors, and multicollinearity were checked.

Firstly, the normal distribution of the variables indicate that the relationships are not distorted; thus by the skewness and kurtosis values the assumption of normality was checked. It was seen that among all variables the highest and the lowest skewness values were -.01, -.22, and -.24; besides the highest and the lowest kurtosis values were -.73, .04 and -.19, respectively. Thereby, as it is suggested by Tabachnick and Fidell (2001) it can be concluded that the normality assumption is not violated since all the values are close to zero (-3.00 < p < +3.00).

Secondly, Tabachnick and Fidell (2001) suggests that when the error terms are independent, the value that is obtained from Durbin-Watson test is expected to be close to 2. The results of this test for the present analysis was 1.98, indicating that the assumption of independence of errors was also not violated.

Finally, multicollinearity problem may occur in the study when any two variables in the model measure the same relationship or the same quantity. In other words, it indicates high correlation between variables. Hair, Black, Babin, Anderson, and Tatham (2006) declared that the value of Variance Inflation Factor (VIF) needs to be smaller than 10 and tolerance value greater than .10. In the present study, the highest value for Variance Inflation Factor was 1.48 and the lowest tolerance .67.

These values indicate that no multicollinearity is detected among the independent variables of present study.

Table 3 shows the results of multiple regression analysis where the independent variables were metacognition and educational stress scores, and the dependent variable was school burnout. In the first step, only educational stress was entered the equation, accounting for 40% of the variance in predicting school burnout. In second study, only metacognition was entered the equation, it explained 20% total variance of school burnout. In third study, both metacognition and educational stress were entered the equation; they explained 41% total variance of school burnout. That is to say, metacognition has 1% effect on total variance of school burnot in last equation. The standardized beta coefficients indicated the relative influence of the variables in the last model with metacognition and educational stress statistically significantly related to school burnout, and educational stress was strongest predictor of school burnout.

Table 3

Predictor Roles of Metacognition and Educational Stress: Multiple Regression Analysis with Dependent Variable School Burnout

	Variables	Unstandardized Coefficients		Standardized Coefficents				
		B	SE_B	β	t	R	R^2	F
1st step	Es	.47	.033	.64	14.27**	.637	.405	203.67**
2nd step	Mc	-.27	.032	-.44	-8.57**	.440	.197	73.53**
3rd step	Es	.42	.040	.57	10.53**	.644	.415	10575**
	Mc	-.07	.033	-.12	-2.25*			

***p<.001; *p<.05 Es: Educational stress; Mc: Metacognition*

The results of the multiple regression analysis demonstrated that educational stress was positively associated with school burnout (β= .64, t= 14.27, p = 0.000). However, when educational stress and metacognition were taken together in the regression analysis, the significance of the relationship between educational stress and school burnout (β = .57, t= 10.53, p = 0.000) decreased, yet the relationship between educational stress and school burnout was significant. The current model was tested using the Sobel z test. The purpose of this test is to verify whether a mediator carries the influence of an interdependent variable to a dependent variable. The Sobel z test is qualified as being a restrictive test, and as such, provides that the verified results are not derived from collinearity issues. In the present study, the test value verified was Z= 6.96818488; p = 0.000. According to Sarıçam (2015a), this result indicated a partial mediation. Therefore, it can be said that metacognition partially explains the relationship between educational stress and school burnout.

Results and Discussion

The main purpose of this study is to examine the relation between metacognition, educational stress and school burnout in adolescents. The secondary purpose is to determine the explanatory role of metacognition in the relationship between educational stress and school burnout. As a result of the study, a negative relation between metacognition and educational stress and school burnout was determined. In other words, as the level of metacognition increases, educational stress and school burnout levels would decrease, or vice versa. Another conclusion of the study proves that the explanatory role of educational stress and metacognition is important on school burnout.

The present findings supported the first and second assumptions so that metacognition was negatively associated with educational stress and school burnout. And also, metacognition was negative predictor for educational stress. These are consistent with the findings of previous studies (Spada, Gabriele, & Wells, 2009; Spada, Mohiyeddini, & Wells, 2008; Spada, Nikčević, Moneta, & Ireson, 2006; Spada, Nikčević, Moneta, & Wells, 2007), especially S-REF theory (Wells & Matthews, 1994; Wells & Matthews, 1996). It is sensible to assume that if individuals are aware of their metacognitive beliefs and could be able to control them, this awareness would be useful tool for coping negative emotions (such as burnout, stress, anxiety, depression and etc).

The present findings supported the third assumption, therefore, educational stress is a significant predictor for school burnout. This result seems to be related to previous studies that indicated students, who have higher educational stress, experience higher burnout levels (Lee, Puigm, Lea & Lee, 2013; MacGeorge, Samter & Gillihan 2005; Salmela-Aro, Kiuru, & Nurmi, 2008; Seiffge-Krenke, 2000). The results of these studies revealed the marked incidence of school-related burnout on adolescent school life (Walburg, 2014). Indeed, these studies indicate that the risk for internalized problems like anxiety (Silvar, 2001) and depression (Salmela-Aro, Savolainen & Holopainen, 2009) as well as educational stress (Salmela-Aro & Upadyaya, 2014) increases school-related burnout. This may be because educational stressor such as teachers, tests, homeworks and etc create extra burden for students.

Metacognition has an important role on the learning process of the student. It is especially directly related to the ways of learning and performance of students in the classroom (Pintrich, 2002). A student, who knows how to act in certain places, will not be confused and this would cause the stress factor to lose its impact. When we have analyzed the situations faced by students in the educational environment due to teachers and courses, we can see that they fall short of dealing with these stress factors and that this situation causes changes in their attitude towards school, causing school burnout (Moksnes et al., 2014). School burnout can be observed in students who develop a negative attitude towards courses due to the pressure created by peers, families and parents for obtaining academic success in school (Akın et al., 2013). In another study conducted by Sarıçam (2015a), it was determined that stress and

burnout causes a decrease in subjective vitality, in other words, that stress and school burnout is observed commonly in students, who do not have subjective vitality. It was determined that there is a positive correlation between subjective vitality, psychological well being and metacognition (Kiai, 2014; Keng, Smoski & Robinsa, 2011). Thus, positive metacognition would decrease educational stress and school burnout. In light of these considerations and outcome of the study, the 3 assumptions introduced in the beginning of the study were confirmed.

Conclusion and Recommendations

The importance of metacognitive skills is increasingly *high* in our days, a period when the world becomes more complex and new ideas are presented each minute (Martinez, 2006). Thus, one of the most important duties of schools is helping the students in gaining these skills with the help of certain programs. Inoue (2000) also reports that metacognitive skills start developing at the age of 5-7 and that this development continues with the increase in the level of education. Thus, the sooner the individuals are provided with metacognitive skills, the higher the educational quality will be, preventing the occurrence of educational stress and school burnout in students in the future.

The concept of metacognition is a concept that will facilitate and improve the effectiveness of the learning processes of all students from elementary school to university. Thus, it is required to present programs that will enable the development of the context of this concept in all levels of education. First of all, the students need to be faced with situations that will enable them to use their metacognitive skills, secondly, the teacher should think loudly in the classroom when resolving problems enabling students to take this as a model and finally an environment should be created for teachers to be taken as models by the students both cognitively and socially (Martinez, 2006).

In the study conducted by Elkind (1987), the critical importance of the methods used by teachers was emphasized as one of the main reasons for the occurrence of school burnout. Methods determined in accordance with the ages of the children will facilitate their learning process. Otherwise, the inappropriateness of the methods with regard to the age of the child may influence the attitude of the child towards school negatively. As teachers attempt to use the methods they use for elementary school students in the pre-school education institutions, where there are no desks or tables, school burnout is observed and this negative attitude towards school would not be eliminated but increase every single day.

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