The Role of Perceived Social Support and Gratitude in Prediction of Student Engagement among High School Students

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Abstract: This study aims to examine the prediction power of gratitude and perceived social support for student engagement in high school students. The study was conducted on a total of 303 high school students. The data of the study were collected through the Gratitude Scale, Student Engagement Scale and Perceived Social Support Scale. Data analysis was conducted using the Pearson Product-Moment Correlation Coefficient and Multiple Regression Analysis. According to the results of this study, gratitude and perceived social support positively predict student engagement. According to the multiple regression analysis, thegratitude and perceived social support scores of the students significantly predicted their engagement to school and explained 37% of their school engagement. Moreover, perceived social support explained 57% of student engagement, while gratitude explained 12%. In the light of these findings, psychological counselors can do individual and group work to increase gratitude. Psychological counselors can organize training and seminars for teachers and families so that teachers and families can become aware of the social support their students perceive and develop supportive attitudes and behaviors towards students.

Keywords: Student engagement, gratitude, perceived social support

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Lise Öğrencilerinde Okula Bağlılığın Yordanmasında Algılanan Sosyal Destek ve Minnettarlığın Rolü

Özet: Bu çalışmanın amacı, lise öğrencilerinde minnettarlık ve algılanan sosyal desteğin öğrencilerin okul bağlılığını yordama derecesini ortaya koymaktır. Araştırma 303 lise öğrencisi üzerinde yürütülmüştür. Araştırma verilerini toplamak için Minnettarlık Ölçeği, Öğrencinin Okula Bağlılığı Ölçeği ve Algılanan Sosyal Destek Ölçeği kullanılmıştır. Verilerin analizi Pearson Momentler Çarpımı Korelasyon Katsayısı ve Çoklu Regresyon Analizi ile gerçekleştirilmiştir. Araştırma sonuçlarına göre minnettarlık ve algılanan sosyal desteğin, öğrencilerin okul bağlılığını pozitif yönde yordadığı bulunmuştur. Çoklu regresyon analizi sonuçlarına göre öğrencilerin algıladıkları sosyal destek ve minnettarlık puanları okula bağlılıklarını yordamakta olup, okul bağlılığının %37'sini açıklayabilmektedir. Ayrıca algılanan sosyal destek okul bağlılığının %57'ini açıklarken, minnettarlık, %12'sini açıklayabilmektedir. Bu bulgular ışığında, psikolojik danışmanlar minnettarlığı artırıcı bireysel ve grup

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çalışmaları yapabilirler. Öğretmenlerin ve ailelerin öğrencilerin algıladıkları sosyal desteğin önemi konusunda farkındalık kazanabilmesi ve öğrencilere karşı destekleyici tutum ve davranışlar geliştirebilmeleri için okul psikolojik danışmanları öğretmen ve ailelere eğitim ve seminerler düzenleyebilir.

Anahtar Kelimeler: Öğrencinin okula bağlılığı, minnettarlık, algılanan sosyal destek.

GİRİŞ

The concept of student engagement, conceptualized in the 1980s to understand and reduce students' reluctance for school, alienation from school and abandonment of school (Finn & Zimmer, 2012; Frederics, Blumenfeld & Paris, 2004). Student engagement is the active participation of the student in the learning process through thought, emotion and action. Engagement is related to the student's feelings about school and his approach to his / her learning. In other words, it involves the meaning that a student places on the concept of school, the value he / she gives to school and learning or his / her devotion to and investment in learning. Student engagement is a multi-faceted structure with academic, behavioral, cognitive and psychological dimensions (Appleton et al., 2006), and is seen as one of the best predictors of learners' learning and personal development (Carini, Kuh & Klein, 2006). Among these dimensions, academic commitment is defined as the amount of time spent on assignments, the number of credits earned, etc. (Christenson et al., 2008). Behavioral engagement can be achieved by participating in academic and social activities. Behavioral engagement is thought to be very important in achieving positive academic outcomes and preventing abandonment of school (Fredrickset al., 2004). Cognitive engagement, self-regulation, understanding the importance of school, students' investment in learning and desire for a challenge, etc. comprise cognitive features (Fredricks et al., 2005). Psychological (emotional) engagement expresses the emotional reactions of students to school, teachers, and friends (Fredricks et al., 2004). Also, emotional states such as a love of school, a feeling of belonging to school, and a feeling of being a member of a group are part of psychological commitment. Psychological engagement can range from simple liking to deep appreciation of school (Fredrickset al., 2004). Psychological engagement to school is related to positive emotions such as the student's interest and happiness in the classroom, while it is also associated with negative emotions such as emotional breakdown, student boredom, and anxiety (Patrick, Ryan & Kaplan, 2007).

Research shows that student engagement plays a critical role in the development of positive outcomes such as increased academic success in children and adolescents and the development of new social skills (Mahatmya *et al.*, 2012). According to Newman (1992), students with higher school engagement had positive relationships with their teachers and friends, a positive perspective, internal motivation and a high chance of attaining their personal and academic goals, while students with lower school engagement had low attendance, low self-esteem, negative attitudes, low grades, and were more likely to abandon school In addition, the student's attachment to school is also associated with

increased psychological well-being (Furlong, Sharkey, Quirk & Dowdy, 2011) and reduced likelihood of participating in risk behaviors such as substance use (Henry & Thornberry, 2010) and school victimization (Skues, Cunningham & Pokharel, 2005). As seen, the importance of student engagement is high not only for the student's academic competence, learning and success, but also for his / her socialization, life satisfaction and effective learning life (Lewis *et al.*, 2011).

There are many factors influencing student engagement (Appleton *et al.*, 2008; Fredericks *et al.*, 2004). These include factors such as school discipline practices, family and peer attitudes towards school, and classroom and school contexts. The direction of the home, school or peer relationships of the learners can effect their success in school and their commitment to school in positive or negative ways (Anderson *et al.*, 2004; Furrer & Skinner, 2003). For example, positive support for peer victimization and learning from the home environment when dealing with rejection is related to increased school engagement (Christenson & Anderson, 2002). Reschly *et al.* (2008) found that positive and negative feelings in school effected the level of cognitive and psychological engagement of students with positive emotional experiences was found to be higher. In addition, Reschly and her colleagues (2008) found out that students with low levels of attachment had more negative feelings in the school setting. The positive emotional experiences at school. It is, therefore, necessary to understand the factors that will enhance positive emotional experiences at school. It can be said that gratitude, one of the positive emotional experiences, is a factor in a student's engagement to school.

Gratitude provides an essential contribution to understanding how emotional attachment and positive relationships can increase school engagement (Furlong, Froh, Muller & Gonzalez, 2014). Gratitude is the thankfulness felt in the face of someone's kind and helpful behavior. Persons are grateful if they are aware of the goodness shown towards them and pass it on to those responsible for it (Emmons, 2004). However, gratitude does not always require a personal connection; it may also be directed at supernatural or human beings (God, the universe, nature, animals, etc.) (Emmons & Crumpler, 2000). Therefore, gratitude is a personal tendency in recognizing and responding to positive emotions (worthiness and enthusiasm, etc.) when the person benefits from other people or assets (Emmons, McCullough & Tsang, 2007; McCullough, Emmons & Tsang, 2002). It has been found that gratitude is associated with a wide range of social and personal benefits including improved physical and mental health, psychological well-being, and prosocial behaviors (Ma *et al.*, 2017).

In many studies conducted on adults (Emmons & McCullough, 2003; McCullough *et al.*, 2002; Overwalle*et al.*, 1995; Watkins *et al.*, 2003; Wood *et al.*, 2007), it is determined that individuals with high levels of gratitude have a number of positive characteristics. According to Watkins *et al* (2003), increasing levels of gratitude in adults decrease levels of burnout, depression, anxiety, jealousy and materialism while increasing levels of life satisfaction, optimism, hope, satisfaction, endurance and

happiness. In addition, gratitude interacts with the creation of social resources, such as increased social commitment (Algoe, Haidt & Gable, 2008; Wood *et al.*, 2008), which is perceived by positive social feelings such as increased attachment feelings, forgiveness, compassion, trust and empathy (Dunn & Schweitzer, 2005; Hill & Allemand, 2011; McCullough *et al.*, 2001). Also, gratitude has been identified as a moral reinforcer motivating people to exhibit positive social behaviors (McCullough *et al.*, 2001).

Gratitude also has positive effects on the school and classroom environment (Howells, 2014). Researchers have found that gratitude can help students adapt to the school environment in an academic, behavioral, cognitive, and emotional way (Froh, Bono & Emmons, 2010). It has been found (Bono & Froh, 2009; Froh, Yurkewicz & Kashdan, 2009; Froh & Bono, 2008) that students with a high level of gratitude can reach their goals, have more optimism andperceived social support from their family and peers, and alsothat their life satisfaction levels, success motivation and academic achievements are higher, whereas learning burnout is lower.

Gratitude facilitates students' engagement to school in the following ways: academic: grateful students' grade averages are higher (Froh *et al.*, 2011); behavioral: grateful students are more prosocial (Froh, Kashdan *et al.*, 2009); cognitive: grateful students place more meaning on life (Froh, Kashdan *et al.*, 2010); and emotional: grateful students express more positive emotions (Froh, Kashdan *et al.*, 2010).

Students who participated in gratitude activities reported that they had more connection with the subject and teacher, while their levels of commitment and motivation also increased (Howell, 2012). It was found that the students who participated in gratitude development programs obtained more satisfaction from school experiences than the ones who did not participate (Froh *et al.*, 2008). Thus, gratitude encourages students to be associated with school by creating links between the students' friends and teachers and motivating the student to continue at school, which can be a factor contributing to the student's commitment to school. (Froh *et al.*, 2014)

Another factor related to school engagement is social support (Garcia-Reed, Reed & Peterson, 2005). Social support is defined as information allowing one to believe that someone is a member of a social network, is loved, appreciated and valued, and has mutual obligations (Cobb, 1976). Perceived social support is the cognitive perception that the individual believes that he or she is a reliable link to other individuals and will be supported by them (Kef, 1997). In other words, it is the belief that social support will be available when needed (Sarason & Sarason, 1985). While the individual's family, relatives, friends, neighbors, ideological, religious or ethnic groups and the community in which the individual lives constitute social support resources (Cohen & Wills, 1985).

Important social support resources for students are listed as their families, friends and teachers (Yıldırım, 1998). The studies conducted on students show that the social support perceived by the

students from their family, friends, and teachers is positively related to school satisfaction (DeSantis King, Huebner, Suldo & Valois, 2006; Rosenfeld et al., 2000), school engagement (Mengi, 2011; Garcia-Reed, Reed & Peterson, 2005; Wang & Eccles 2012; Woolley & Bowen 2007), academic achievement (Plybon et al., 2003; Yıldırım, 2006), school adjustment (Rueger, Malecki & Demaray, 2008; Woolley & Bowen, 2007), academic self-efficacy (Alliman-Brissett & Turner 2010; Ruegar, Malecki & Demaray, 2008), academic adjustment (Rueger, Malecki, & Demaray, 2010) and negatively related to behavioral problems (DeSantis King, Huebner, Suldo & Valois, 2006; Rockhill et al., 2009), depressive symptoms (Rockhill et al., 2009; Yıldırım, 2007), and school anxiety (Torsheim, Aaroe & Wold, 2003). As can be seen from the results of the researches carried out, social support has a positive effect on students' school life. The school engagement of students with sufficient social support levels perceived as coming from different sources (family, friends, and teachers) is also positively affected. However, studies on school engagement and perceived social support have found that in increasing students' sense of belonging to school, their school engagement and their school satisfaction, the perceived support from their teachers has more effect than the perceived support from their families and friends (Brewster & Bowen, 2004; Eccles & Midgley, 1989; Ekşioğlu, Sürücü & Arastaman, 2009; Garcia-Reed, Reed & Peterson, 2005; Walker & Greene, 2009; Woolley & Greene, 2009;Woolley, Kol & Bowen 2009).

It has been shown in previous research findings that perceived social support (Mengi, 2011; Garcia-Reed, Reed & Peterson, 2005; Wang & Eccles 2012; Woolley & Bowen 2007) and gratitude (Froh *et al.*, 2011) are related to school engagement. However, no research finding has been reported in the literature that investigates the prediction of perceived social support and gratitude for student engagement in high school students. In this context, within this study, which is regarded to be guiding the researchers and the practitioners, it is aimed to investigate whether the level of student engagement differs or not in terms of the perceived social support and gratitude during the high school. The following questions were asked to fulfill this purpose:

(1) Is there a significant relationship among the school engagement, gratitude of students and their perceived level of social support?

(11) Are students' gratitude and perceived social support levels a significant predictor of their school engagement?

METHOD

Research Model

A causal-comparative design was used in this study. The causal-comparative design is a research model that examines cause-effect relationships that have emerged, or which exist between certain variables (Fraenkel, Wallen & Hyun, 2012). Accordingly, the independent variables of the

research are (i) the degree of gratitude and (ii) perceived social support of the students, while the dependent variable is school engagement.

Participants

This research was carried out on a total of 303 students in 1st and 2nd grade in Bursa Gürsu Anatolian High School. As seen in Table I, 53.8% of the students are female, and 46.2% are males.

Table 1 Participants

Grade	Female		Male		Total	Total		
	n	%	п	%	n	%		
Grade 1	78	51.0	75	49.0	153	100		
Grade 2	85	47.9	65	53.6	150	100		
Total	163	53.8	140	46.2	303	100		

Instruments

Three instruments were used in the research.

Student Engagement Instrument (SEI-Student Engagement Instrument): The instrument was developed by Appleton *et al.* (2006) and adapted to Turkish by Önen (2014). In the instrument, the cognitive and psychological dimensions of the learner's attachment to school are measured, and a 4-point Likert-type grading (1: strongly agree, 4: strongly disagree) is used, consisting of 35 items. In the ratings, items 18 and 32, which measure external motivation, are reverse coded so that higher scores indicated higher levels of engagement. Six factors were extracted ($\chi 2 = 2780.05$, df = 545, CFI = .96, RMSEA = .065), family support for learning, control and relatedness of school work, teacher-student relationship, peer support for learning, academic desires and goals for the future, and external motivation. The Cronbach alpha values of the subscales ranged from .76 to .88 (Appleton *et al.*, 2006). The Cronbach alpha values in the Turkish form ranged from .70 to .85 (Önen, 2014).

Perceived Social Support Scale (ASRS-R): The Perceived Social Support Scale developed by Yıldırım (1997) and revised by Yıldırım (2004) was used in determining the level of social support perceived by the students. In this study, a version of scale revised in 2004 was used. The scale consists of three sub-factors namely, family, teachers and friends and a total of 50 items. The internal consistency coefficient of the scale was .93 for the whole scale; it was calculated as .94 for the family dimension, .93 for the teacher dimension and .91 for the friend dimension. 47 items on the scale are positive, while three items are negative. Accordingly, the total score is obtained by reverse scoring three items of the scale. The minimum score, which can be obtained from the instrument is 50 and the maximum score is 150. High points mean high perceived social support.

Gratitude Scale (GQ):The Gratitude Scale was developed by McCullough *et al.* (2002) for determination of students' gratitude levels. Questionnaire measures the extent to which people report

gratitude. Originally the scale has six items rated on a 7-point likert-type scale ranging from 1 ("strongly disagree") to 7 ("strongly agree") (McCullough et al., 2002). Higher scores on Gratitude Scale mean higher levels of gratitude. Four factors comprising of Gratitude Scale, namely, intensity, frequency, span and density. Intensity reflects "feeling more intensely grateful than would someone less disposed toward gratitude". Frequency reflects "reporting feeling grateful many times each day". Span reflects "the number of life circumstances for which a person feels grateful during a given time". Lastly, density reflects "the number of persons to whom one feels grateful for a single positive outcome" (Yüksel & Oğuz Duran, 2012). McCullough and collegues (2002) revealed that Cronbach's alpha coefficients for whole scale ranged from. 76 to .84. Turkish version of GQ was adapted by Yüksel & Oğuz Duran (2012). This version of the scale was constituded by five items with good psychometrics for reliability and validity statistics [GFI=0.97, CFI= .94, AGFI=0.90, SRMR = 0.04, RMSEA=0.10]. Cronbach's coefficients for total scale was found to be .66 for this sample.

Analysis of data

In the analysis of the data, the Pearson product moments correlation was used to determine the level of relationship among students' school engagement, gratitude and their perceived social support. Multiple regression analysis was conducted to determine whether students' gratitude and perceived social support levels were a significant predictor of school engagement. Before applying regression, assumptions of multiple regression were checked. The data were examined for normality by the Kolmogorov-Smirnov test. Kolmogorov-Smirnov test indicated normality of distributions of test scores for all tests in the current study. Outliers are cases that have data values that are very different from the data values for the majority of cases in the data set. Outliers were investigated using Mahalanobis distance. A case is outlier if the probability associated with its D2 is .001 or less (Tabachnick & Fidell, 2001). Multi-collinearity was checked by the variance inflation factors (VIF). All the VIF values were less than 10 (Tabachnick & Fidell, 2001), which indicated that there was no multi-collinearity

FINDINGS

Findings obtained in the research are listed according to research questions:

Relationship Among the Students' School Engagement, Gratitude and Their Perceived Social support

The first research question of the study was "Is there a significant relationship among the students' school engagement, gratitude and their perceived social support?" Findings related to this research question are given in Table 2.

Factors	1	2	3	4	5	6	7	8	9	10	11	12
Student Engagemen	t Instru	ment										
1–Family support	-											
for learning												
2-Control of	.45**	-										
school work												
3–Student-teacher	.45**	.56**	-									
relationship	20**	2644	~ 4 * *									
4–Peer support for learning	.29**	.36**	.54**	-								
5–Academic	56**	.55**	30**	31**	_							
desires and goals	.20		,									
6–External	04	12*	08	12*	.06	-						
motivation												
7-Total	.67**	.82**	.83**	.63**	.71**	02	-					
Perceived Social Su	pport S	cale										
8–Family	.55**	.28**	.27**	.21**	.31**	07	.40**	-				
9–Friends	.08	.19**	.17**	.38**	.09	10	.23**	.17**	-			
10-Teachers	.28**	.40**	.64**	.40**	.24**	04	.56**	.24**	.27**	-		
11-Total	.45**	.44**	.57**	.47**	.32**	09	.60**	.67**	.60**	.80**	-	
Gratitude Scale												
12-Total	.20**	.14*	0.21* *	.19**	.13*	.08	.24**	.15**	.13*	.13*	.19**	-

Table 2 Pearson Product Moments Correlation Matrix between Students' Engagement, Perceived

 Social Support and Gratitude Scores

n =303, p<.05, **

p<.01*

Table 2 shows Pearson products moments correlation analysis results to determine whether there was a significant relationship among students' scores for engagement to school, perceived social support and gratitude scores. Accordingly, significant positive correlations were found between students' total scores for student engagement instrument and their total scores of Perceived Social Support Scores [r = .60] and total Gratitude Scores [r = .24]. Significant positive relationships were found between the students' total Perceived Social Support Scores and their total Gratitude Scores [r = .19].

Students' Gratitude and Perceived Social Support Levels a Significant Predictor of Their School Engagement

The second research question of the study was "Are the students' gratitude and perceived social support levels a significant predictor of their school engagement?" Findings related to this problem are given in Table 3.

Table 3 Results of Multiple Regression Analysis between Students' Engagement to School, Perceived

 Social Support and Gratitude

Engagement to School	В	SHB	β	t	Р	
Constant	36.95	4.82		7.65	.00	
1-Perceived Social Support	.45	.03	.57	12.24	.00	
2–Gratitude	.26	.09	.12	2.73	.00	

n=302, R=.60, R²=.37, F=88.34, p<.01

Table 3 shows the results of multiple regression analysis conducted to determine the extent to which the students' perceived social support and gratitude levels predict their engagement to school. To make multivariate regression analysis, it needs to ensure the assumptions of the analysis. Firstly, results of the Pearson product moment correlation analysis which is used to determine existence of a possible multicollinearity between the independent variables (perceived social support and gratitude) showed that all of the correlation coefficients were calculated as <.70 (see table 2). These values indicate no multicollinearity between the independent variables (Sipahi, Yurtkoru & Çinko, 2006). Also, homoscedasticity assumption is ensured by the scatterplot of error terms and the independent variables. Furthermore, in order to check distribution of the error terms, defined as difference between observed and predicted values of the dependent variable (engagement to school), it is determined that Q-Q plots have normal distribution. As seen in the table, the perceived social support and gratitude scores of the students are significantly predictive of their commitment to school and accounts for 37% of school engagement [R = .42, R2 = .18, F = 37.66, p <.01]. Also, perceived social support accounts for 57% of school engagement, while gratitude accounts for 12%. In the regeression model of the study, coefficient of the constant term is calculated as 36.95 and it is significant (p<0.01). Regression model coefficient of percevied social support variable is 0.45, with a p-value of 0.00 in the t-test. Because it is smaller than 0.05, the coefficient is significant at 5%. Regression model coefficient of the gratitude variable is calculated as 0.26 with a p-value of 0.00. Regression formula of the model is as following: Engagement to School = 36.95 + ((0.45 *Perceived Social Support) (0.26 x Gratitude)).

DISCUSSION AND CONCLUSION

Gratitude and perceived social support variables were found to be predictors of student engagement according to the results obtained in this study, in which gratitude and perceived social support variables significantly predicted the student engagement variable. This result is in parallel with studies (Froh*et al.*, 2008; Froh*et al.*, 2014; Howell, 2012) that show a positive relationship between gratitude and student engagement. It has been shown in the literature students with high gratitude levels obtain higher academic averages and more satisfaction from school experiences (Froh *et al.*, 2008). It is stated that grateful students can reach their goals, have more optimism and perceived social support from their families and peers, and also that their levels of life satisfaction, success motivation and social relations are higher, whereas learning burnout is lower (Bono & Froh, 2009; Froh & Bono, 2008; Froh, Yurkewicz & Kashdan, 2009; Froh *et al.*, 2011). In this respect, gratitude may make an important contribution to students in making them happy at school, establishing healthy relationships with their teachers and friends, having positive thoughts about school, and gaining satisfaction from school activities. Given that one of the factors affecting student engagement is positive feelings in school, grateful students may be more committed to school.

There is a positive correlation between perceived social support and student engagement in this study, which is consistent with findings in other studies in the literature (Garcia-Reed, Reed &

Peterson, 2005; Mengi, 2011; Woolley & Bowen, 2007). According to this result, it can be said that as the social support perceived by the students increases, their level of engagement to school increases. According to the findings in this study, perceived social support explains 57% of student engagement. This rate is important and should be taken into account in any application that aims to increase students' school engagement. Besides, it was found that the social support resource which is mostly related to the student's engagement to school is the perceived teacher support. Many studies in the literature (Brewster & Bowen, 2004; Eccles & Midgley, 1989; Ekşioğlu, Sürücü & Arastaman, 2009; Garcia-Reed, Reed & Peterson, 2005; Walker & Greene, 2009; Woolley, Kol & Bowen, 2009) also shed light on this finding.

As a result, gratitude and perceived social support are found to be important predictors of students' engagement to school in this research, and thus increasing gratitude and perceived social support could contribute to the school engagement of the students. In this context, it is important for psychological counselors and teachers to do work towards increasing gratitude in students. Teachers can integrate gratitude activities into their lessons. Psychological counselors can do individual and group work to increase gratitude. There are a number of gratitude practices that can lead to enhanced gratitude such as counting blessing (Emmons & McCullough, 2003), appraisal of benefit exchanges (i.e.grateful thinking) (Froh *et al.*, 2014),gratitude journals (Emmons & McCullough, 2003), a gratitude visit (Emmos, 2004) and many other practices. School psychologists can organize training and seminars for teachers and families so that teachers and families can become aware of the social support perceived by their students and develop supportive attitudes and behaviors towards students

REFERENCES

- Algoe, S. B., Haidt, J., and Gable, S. L. (2008). Beyond reciprocity: Gratitude and relationships in everyday life. *Emotion*, 8(2), 425–429.
- Alliman-Brissett, A., and Turner, S. (2010). Racism, parent support, and math-based career interests, efficacy, and outcome expectations among African American adolescents. *The Journal of Black Psychology*, *36*(2), 197-225.
- Anderson, A. R., Christenson, S. L., Sinclair, M. F., and Lehr, C. A. (2004). Check and connect: The importance of relationships for promoting engagement with school. *Journal of School Psychology*, 42(2), 95-113.
- Appleton, J., Christenson, S., and Furlong, M. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, *45*(5), 369–386.
- Appleton, J. J., Christenson, S. L., Kim, D., and Reschly, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the student engagement instrument. *Journal of School Psychology*, 44(5), 427 – 445.
- Bono, G., andFroh, J. (2009). Gratitude in school: Benefits to students and schools. In R. Gilman, E. Huebner and M. J. Furlong (Eds.), *Handbook of positive psychology in schools* (pp. 77-88). New York: Routledge

- Brewster, A. B., and Bowen, G. L. (2004). Teacher support and the school engagement of Latino middle and high school students at risk of school failure. *Child and Adolescent Social Work Journal*, 21(1), 47-67.
- Carini, R. M., Kuh, G. D., and Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education*, 47(1), 1-32.
- Christenson, S. L., Reschly, A. L., Appleton, J. J., Berman-Young, S., Spangers, D., and Varro, P. (2008).
 Best practices in fostering student engagement. In A. Thomas, and J. Grimes (Eds.), *Best practices in school psychology V* (pp. 1099-1120). Washington, DC: National Association of School Psychologists.
- Christenson, S. L., and Anderson, A. R. (2002). Commentary: The centrality of the learning context for students' academic enabler skills. *School Psychology Review*, *31*(3), 378 393.
- Cobb, S. (1976). Social support as a moderator of life stress. PsychosomaticMedicine, 38(5), 300-314.
- Cohen, S., and Wills, T. A. (1985). Stress, social support and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357.
- DeSantis King, A. L., Huebner, S., Suldo, S. M., and Valois, R. F. (2006). An ecological view of school satisfaction in adolescence: Linkages between social support and behavior problems. *Applied Research in Quality of Life*, 1(3-4), 279–295.
- Dunn, J. R., and Schweitzer, M.E. (2005). Feeling and believing: The influence of emotion on trust. *Journal of Personality and Social Psychology*, 88(5), 736-748.
- Eccles, J. S., and Midgley, C. (1989). Stage-environment fit: Developmentally appropriate classrooms for young adolescents. In C. Ames and R. Ames (Eds.), *Research on motivation in education: Vol. 3. Goals and cognitions* (pp. 13–44). New York: Academic Press.
- Ekşioğlu, S., Sürücü, M. ve Arastaman, G. (2009). Lise öğrencilerinin okula bağlılıklarını yordayan değişkenlerin incelenmesi. *XVIII. Eğitim Bilimleri Kurultayı*, 1-3 Ekim, İzmir: Ege Üniversitesi.
- Emmons, R.A. (2004). Gratitude. In M. E. P. Seligman and C. Peterson (Eds.), *The VIA taxonomy of human strengths and virtues* (pp. 553–568). New York: Oxford University Press.
- Emmons, R. A., and Crumpler, C. A. (2000). Gratitude as a human strength: Appraising the evidence. *Journal of Social and Clinical Psychology*, *19*(1), 56–69.
- Emmons, R. A., McCullough, M. E. and Tsang, J. (2007). The assessment of gratitude. In J.Lopez and C.
 R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp.327-341), Washington DC: APA.
- Emmons, R. A. and McCullough, M. E. (2003). Counting blessings versus burdens: An empirical investigation of gratitude and subjective wellbeing in daily life. *Journal of Personality and Social Psychology*, 84(2), 377–389.
- Finn, J. D. and Zimmer,K. S. (2012). Student engagement: What is it? Why does it matter? In S.L.Christenson, A. L. Reschly, and C. Wylie (Eds.), *Handbook of Research on Student Engagement* (pp.97-133). New York: Springer.
- Fraenkel, J. R. ;Wallen, N. E. and Hyun, H. H. (2012) *How to design and evaluate research in education*. Eight Edition. New York: McGraw-Hill
- Fredericks, J. A., Blumenfeld, P. C. and Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59-109.

- Fredericks, J. A., Blumenfeld, P. C., Friedel, J. and Paris, A. (2005). School engagement. In K. A. Moore and L. Lippman (Eds.), What do children need to flourish?: Conceptualizing and measuring indicators of positive development(pp.305-321). New York: Kluwer Academic.
- Froh, J. J., and Bono, G. (2008). The gratitude of youth. In S. J. Lopez (Ed.), *Positive psychology: Exploring the best in people Vol.* 2 (pp. 55–78). Westport, CT: Greenwood.
- Froh, J. J., Sefick, W. J. and Emmons, R. A. (2008). Counting blessings in early adolescents: An experimental study of gratitude and subjective well-being. *Journal of School Psychology*, 46(2), 213–233.
- Froh, J. J., Kashdan, T. B., Ozimkowski, K. M. and Miller, N. (2009). Who benefits the most from a gratitude intervention in children and adolescents? Examining positive affect as a moderator. *Journal of Positive Psychology*, 4(5), 408–422.
- Froh, J. J., Yurkewicz, C. andKashdan, T. B. (2009). Gratitude and subjective well-being in early adolescence: Examining gender differences. *Journal of Adolescence*, *32*(3), 633-650.
- Froh, J. J., Bono, G. and Emmons, R. A. (2010). Being grateful is beyond good manners: Gratitude and motivation to contribute to society among early adolescents. *Motivation &Emotion*, *34*(2), 144-157.
- Froh, J. J., Kashdan, T. B., Yurkewicz, C., Fan, J., Allen, J. and Glowacki, J. (2010). The benefits of passion and absorption in activities: Engaged living in adolescents and its role in psychological wellbeing. *Journal of Positive Psychology*, 5(4), 311–332
- Froh, J. J., Emmons, R. A., Card, N. A., Bono, G. and Wilson, J. A. (2011). Gratitude and the reduced costs of materialism in adolescents. *Journal of Happiness Studies*, *12*(2), 289-302.
- Froh, J. J., Bono G., Fan, J., Emmons, R.A., Henderson, K., Harris, C., et.al. (2014). Nice thinking! An educational intervention that teaches children how to think gratefully. *School Psychology Review*, 43(2), 132-152.
- Furlong, M. J., Sharkey, J. D., Quirk, M. and Dowdy, E. (2011). Exploring the protective and promotive effects of school connectedness on the relation between psychological health risk and problem behaviors/experiences. *Journal of Educational and Developmental Psychology*, 1(1), 18-34.
- Furlong, M., Froh, J. J., Muller, M. and Gonzalez, V. (2014). The role of gratitude in fostering school bonding. In D. Shernoff and J. Bempechat (Eds.), *Engaging youth in schools: Empirically-based* models to guide future innovations. Volume 113 (pp. 58-79). New York: Teachers College Record.
- Furrer, C. and Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95(1), 148–162
- Garcia-Reid, P., Reid, R. and Peterson, N. A. (2005). School engagement among Latino youth in an urban middle school context: Valuing the role of social support. *Education and Urban Society*, 37(3), 257– 275.
- Henry, K. L and Thornberry, T. P. (2010). Truancy and escalation of substance use during adolescence. *Journal of Studies on Alcohol and Drugs*, 71(1), 115–124.
- Hill, P. L andAllemand, M. (2011). Gratitude, forgivingness, and well-being in adulthood: Tests of moderation and incremental prediction. *The Journal of Positive Psychology*, 6(5), 397-407.
- Howell, K. (2012). Gratitude in education: A radical view. Rotterdam: Sense Publishers.
- Howells, K. (2014). An exploration of the role of gratitude in enhancing teacher-student relationships. *Teaching and Teacher Education*, 42, 58-67.

- Kashdan, T. B., Uswatte, G. and Julian, T. (2009). Gratitude and hedonic and eudaimonic well-being in Vietnam War veterans. *Behaviour Research and Therapy*, *44*(2), 177-199.
- Kef, S. (1997). The personal networks and social supports of blind and visually impaired adolescents. *Journal of Visual Impairment and Blindness*, 91(3), 236-244.
- Lewis, A. D., Huebner, E. S., Malone, P. S. and Valois, R. F. (2011). Life satisfaction and student engagement in adolescents. *Journal of Youth and Adolescence*, 40(3), 249-262.
- Ma, L., Tunney, R. J. and Ferguson, E. (2017). Does gratitude enhance prosociality?: A meta-analytic review. *Psychological Bulletin*, 143(6), 601-635.
- Mahatmya, D., Lohman B. J., Matjasko J. L. and Farb, A. F. (2012). Engagement across developmental periods. In S. L. Christenson, A. L. Reschly and C. Wylie (Eds.), *Handbook of Research on Student Engagement* (pp.45-65). New York:Springer.
- McCullough, M. E., Emmons, R. A. and Tsang, J. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82(1), 112-127.
- McCullough, M. E., Kilpatrick, S. D., Emmons, R. A. and Larson, D. B. (2001). Is gratitude a moral affect? *Psychological Bulletin*, *127*(2), 249-266.
- Mengi, S. (2011). Ortaöğretim 10. ve 11.sınıf öğrencilerinin sosyal destek ve özyeterlik düzeylerinin okula bağlılıkları ile ilişkisi. Yayınlanmamış Yüksek Lisans Tezi, Sakarya Üniversitesi, Eğitim Bilimleri Enstitüsü, Sakarya.
- Newmann, F. (1992). Higher-order thinking and prospects for classroom thoughtfulness. In F. Newmann (Ed.), *Student engagement and achievement in American secondary schools* (pp. 11-39). New York: Teachers College Press.
- Overwalle, F. V., Mervielde, I. and De Schuyter, J. (1995). Structural modeling of the relationships between attributional dimensions, emotions, and performance of college freshmen. *Cognition and Emotion*, 9(1), 59–85.
- Önen, E. (2014). Öğrencinin okula bağlılığı ölçeği: Türk ortaokul ve lise öğrencileri için uyarlama çalışması. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 5(42), 221-234.
- Patrick, H., Ryan, A. M. and Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of Educational Psychology*, 99(1), 83– 98.
- Plybon, L. E., Edwards, L., Butler, D., Belgrave, F. Z. and Allison, K. W. (2003). Examining the link between neighborhood cohesion and school outcomes: The role of support coping among African American adolescent girls. *Journal of Black Psychology*, 29(4), 393-407.
- Reschly, A. L., Huebner, E. S., Appleton, J. J. andAntaramian, S. (2008). Engagement as flourishing: The contribution of positive emotions and coping to adolescents' engagement at school and with learning. *Psychology in the Schools*, 45(5), 419–431.
- Rockhill, C. M., Stoep, A. V., McCauley, E. and Katon, W. J. (2009). Social competence and social support as mediators between comorbid depressive and conduct problems and functional outcomes in middle school children. *Journal of Adolescence*, *32*(3), 535-553.
- Rosenfeld, L. B., Richman, J. M. and Bowen, G. L. (2000). Social support networks and school outcomes: The centrality of the teacher. *Child and Adolescent Social Work Journal*, *17*(3), 205–226.

- Rueger, S. Y., Malecki, C. K. and Demaray, M. K. (2008). Gender differences in the relationship between perceived social support and student adjustment during early adolescence. *School Psychology Quarterly*, 23(4), 496–514.
- Rueger, S. Y., Malecki, C. K. and Demaray, M. K. (2010). Relationship between multiple sources of perceived social support and psychological and academic adjustment in early adolescence: Comparisons across gender. *Journal of Youth and Adolescence*, 39(1), 47–61.
- Sarason, I. G. and Sarason, B. R. (1985). Social support-Insights from assessment and experimentation. In I. Sarasonand B. R. Sarason (Eds.), *Social support: Theory, research and applications* (pp. 39-50). Boston: MartinusNijhoff.
- Sipahi, B., Yurtkoru, E. S., ve Çinko, M. (2006). Sosyal bilimlerde SPSS'le veri analizi. İstanbul: Beta
- Skues, J. L., Cunningham, E. G. and Pokharel, T. (2005). The influence of bullying behaviours on sense of school connectedness, motivation and self-esteem. *Australian Journal of Guidance and Counselling*, 15(1), 17-26.
- Tabachnick, B. G., & Fidell, L. S. (2001). Using multivariate statistics. Boston: Allyn and Bacon.
- Torsheim, T., Aaroe, L. E. andWold, B. (2003). School-related stress, social support, and distress: Prospective analysis of reciprocal and multilevel relationships. *Scandinavian Journal of Psychology*, 44(2), 153–159.
- Walker, C. and Greene, B (2009). The relations between student motivational beliefs and cognitive engagement in high school. *The Journal of Educational Research*, *102*(6), 463-471
- Wang, M. T. and Eccles, J. S. (2012). Social support matters: Longitudinal effects of social support on three dimensions of school engagement from middle to high school. *Child Development*, 83(3), 877-895.
- Watkins, P. C., Woodward, K., Stone, T. and Kolts, R. D. (2003). Gratitude and happiness: The development of a measure of gratitude and its relationship with subjective well-being. *Social Behavior and Personality*, 31(5), 431–452.
- Wood, A. M., Joseph, S. and Linley, P. A. (2007). Coping style as a psychological resource of grateful people. *Journal of Social and Clinical Psychology*, *26*(9), 1076-1093.
- Wood, A. M., Maltby, J., Gillett, R., Linley, P. A. and Joseph, S. (2008). The role of gratitude in the development of social support, stress, and depression: Two longitudinal studies. *Journal of Research in Personality*, 42(4), 854 – 871.
- Woolley, M.E. and Bowen, G.L. (2007). In the context of risk: Supportive adults and the school engagement of middle school students. *Family Relations*, 56(1), 92-104.
- Woolley, M., Kol, K. and Bowen, G. (2009). The social context of school success for Latino middle school students: Direct and indirect influences of teachers, family, and friends. *Journal of Early Adolescence*, 29(1), 43-70.
- Yıldırım, İ. (1997). Algılanan sosyal destek ölçeğinin geliştirilmesi güvenirliği v egeçerliği. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 13, 81-88.
- Yıldırım, İ. (1998). Akademik başarı düzeyleri farklı olan lise öğrencilerinin sosyal destek düzeyleri. *Psikolojik Danışma ve Rehberlik Dergisi*, 2(9), 33-38.
- Yıldırım, İ. (2004). Algılanan sosyal destek ölçeğinin revizyonu. Eğitim Araştırmaları Dergisi, 17, 221-236.

- Yıldırım, İ. (2006). Akademik başarının yordayıcısı olarak gündelik sıkıntılar ve sosyal destek. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, *30*, 258-267.
- Yıldırım, İ. (2007). Depression, test anxiety and social support among Turkish students preparing for the university entrance examination. *Eurasian Journal of Educational Research*, 29, 171-184.
- Yüksel, A. and Oğuz Duran N. (2012). Turkish adaptation of Gratitude Questionnaire. *Eurasian Journal of Educational Research*, 46, 199-216.