

Hope and Life Satisfaction in Elementary School Students: Mediation Role of Affective Experiences

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Abstract

Life satisfaction is an important indicator of quality life of students. The aim of this study is to examine the mediation effect of positive and negative affect on the link between hope and life satisfaction in elementary school students. The sample consisted of 436 (204 female and 232 male) Turkish early adolescents recruited from among elementary school students in Turkey. Students were between 12 and 15 years ($M = 13$, $SD = .84$). Data were collected using the Children's Hope Scale, Positive and Negative Experience Scale, and Satisfaction with Life Scale. The results indicated that hope positively predicted positive affect and satisfaction with life and negatively predicted negative affect. The structural equation model results showed that positive and negative affect partially mediated the relationship between hope and satisfaction with life. The study results showed that hope and positive emotions are an important factor for life satisfaction of Turkish elementary school students. The practical implications and limitations of the present study are discussed.

Keywords: Hope, life satisfaction, positive and negative affect, positive school psychology, adolescence

People have general beliefs about their lives, which reflect their life satisfaction (Pavot et al., 1991). For adolescents, to overcome the obstacles of developmental properties and to establish positive ability to approach potential problems, it is important that they be satisfied in their lives (Çivitçi, 2014). Life satisfaction encourages young people to discover the world and life around them, to strive for personal development, and to face difficulties (Park, 2004). Studies indicate that adolescents who have higher levels of life satisfaction have higher self-esteem (Çivitci & Çivitci, 2009; Moksnes & Espnes, 2013; Salmela-Aro & Tuominen-Soini, 2009), self-efficacy (Suldo & Huebner, 2006; İköz & Telef, 2013), academic success (Crede, Wirthwein et al., 2015; Gilman & Huebner, 2006; Ng et al., 2015; Piko & Hamvai, 2010; Salmela-Aro & Tuominen-Soini, 2009; Shek & Li, 2016), and social support (Suldo & Huebner, 2006). Adolescents who have lower levels of life satisfaction face several psychological symptoms (Gilman & Huebner, 2006;

Telef, 2013a; Zullig et al., 2005).

People search for a direction and try to overcome stressful life events regardless of age. The innovation era, which we are currently experiencing, warrants investigating the positive qualities of people, as pointed out by positive psychology (Masten & Coatsworth, 1998; Rutter, 1993; Suldo & Huebner, 2004), to establish a healthier future orientation, live with more positive emotions, and actually hope (Snyder, 2002; Snyder et al., 2003) for self-actualization and life satisfaction. Additional research is needed, however, to clarify the role of hope and affective experiences in the development of satisfaction with life in adolescence. To this end, this study investigated the mediating role of positive and negative experience on the effect of hope on adolescents' satisfaction with life.

Hope and Life Satisfaction

In the past 20 years, remarkable developments occurred in the understanding of hope (Weis & Speridakos, 2011). Hope is the belief that one can find pathways to

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desired goals and become motivated to use those pathways (Snyder et al., 2005, p. 257). According to Snyder et al. (2003), hope reflects a person's perceptions of his/her capacity regarding clearly conceptualised objectives, developing special strategies to reach these objectives, and triggering and maintaining motivation to use these strategies. The foundations of the idea of hope are formed in early childhood years and develop as the subsequent objectives are achieved. Hope has vital importance for adolescents as well. During adolescence, young people are supposed to make many important choices. Hope is crucial in determining the results of these preferences (Snyder et al., 2002). Hope was also evaluated as a cognitive-motivational structure in the positive psychological development of youth (Valle et al., 2006). Individuals with high hope maintain their agency and pathways. On the other hand, when individuals with a low level of hope gradually encounter more powerful obstacles to their objective, they tend to decrease their agency and pathways to reach objectives. Furthermore, when individuals with high hope are compared with individuals with low hope, they assess the objectives and obstacles more positively and challengeably (Snyder et al., 1991).

Hope has many positive results. For example, it was detected that hope is an important predictor of the academic achievements of students (Ciarrochi et al., 2007; Day et al., 2010; Gilman et al., 2006; Snyder et al., 1997). Hopeful thoughts also positively affect self-esteem (Ciarrochi et al., 2007; Ling et al., 2016; Ling et al., 2015; Marques et al., 2009). Since hopeful children feel that they can reach their objectives, they have positive feelings about themselves, and children who believe that they cannot reach their objectives have negative feelings about themselves (Snyder et al., 1997). It was stated that developing hope could be an important objective for career consultants (Valero et al., 2015). Hope has a significant role in increasing the psychological health of an individual and protecting the individual in negative situations (Atik, 2009). Hope protects students against depression (Snyder et al., 1997; Wong & Lim, 2009), suicide risk (Wai et al., 2014), substance use (Brooks et al., 2016), school dropout (Worrell & Hale, 2001), and bullying (Atik, 2009). Hope also positively affects the well-being of a person. Study results show that individuals with high hope have high life satisfaction (Afzal et al., 2014; Bailey, Eng et al., 2007; Gilman & Huebner, 2006; Gilman, Dooley, & Florell, 2006; Ling et al., 2016;

Marque et al., 2009; Marques et al., 2013; Merkaš & Brajša-Žganec, 2011; Park et al., 2004; Peterson et al., 2007; Proctor et al., 2011; Valle et al., 2006). Taken together, the literature demonstrates that there might be a link between hope and life satisfaction in adolescents.

Affective Experiences, Hope, and Life Satisfaction

Affective experiences are categorized as positive and negative feelings (Watson et al., 1988). Positive emotions not only affect present well-being but also have powerful reflections for the future (Fredrickson, 2004). Positive emotions neutralize the effects of stressful life events. Thus, positive affect is connected with the meaning and purpose of life (Rutten et al., 2013). Being positive brings more social support for adolescents because they become more in touch with others (Gavriel-Fried & Ronen, 2016). On the contrary, adolescents who express higher negative emotions experience risky behaviors (Telef, 2014). For example, negative affect is found to be positively correlated with smoking (Tart et al., 2010). Lower negative affect results in high performance in adolescents to actualize their developmental tasks (Afzal et al., 2014). Several studies also indicated that affective experiences was associated with school-based outcomes, such as motivation, academic achievement, and school engagement, and school-related emotions was found a strong predictor of student positive school functioning (e.g., Arslan, 2019; Mega et al., 2014; Schutz & Lanehart, 2002; Weber et al., 2016). We therefore suggest that affective experiences may be associated with life satisfaction of students.

Although a positive relation was found between positive affect and life satisfaction (Kuppens et al., 2008; Liu et al., 2012), the relation between negative affect and life satisfaction was insignificant (Liu et al., 2012; Zhang, 2016). Moreover, higher life satisfaction levels resulted in higher capability of managing negative emotions in adolescence (Antaramian et al., 2008). The literature emphasizes that positive and negative affect are mediating variables in the relations of some variables with life satisfaction. For example, it was observed that positive and negative emotions partially mediate the relationships of optimism (Chang et al., 2003; Kapikiran, 2012; Libran & Piera, 2008) and forgiveness (Zhu, 2015) with life satisfaction. Positive and negative emotions fully mediate the relationships of gratitude (Sun & Kong, 2013) and emotional intelligence (Kong & Zhao, 2013) with life satisfaction. It was determined that positive emotions partially

mediate the relationships of neuroticism personal characteristic (Liu et al., 2012) and self-efficacy (Zhang, 2016) with life satisfaction. Afzal et al. (2014) determined that positive and negative affect play a mediating role between hope and subjective well-being in adolescence.

The Current Study

Given the literature sketched above, the purpose of this study is to test the concurrent mediation effects of positive and negative affect on the association between hope and life satisfaction in early adolescence. It is not clear in the literature whether hope leads to higher satisfaction or whether more hopeful people feel more positively or are more satisfied with life simply because they are more positively oriented. Therefore, it is important to investigate both positive and negative affect and hope levels together when examining their pathways towards satisfaction with life in adolescents. The aim of present study is to investigate the explanatory effect of hope levels and positive and negative emotion levels on adolescents' satisfaction with life levels. We proposed the following hypotheses: (1) Hope would significantly predict life satisfaction. (2) Hope would significantly predict positive affect. (3) Hope would significantly predict negative affect. (4) Positive affect and negative affect would mediate the influence of hope on life satisfaction.

Method

Participants

The sample consisted of 436 Turkish early adolescents recruited from among elementary school students in Izmir, Turkey. In the sample, 46.8% ($n = 204$) were female, and 53.2% ($n = 232$) were male; 28.2% ($n = 123$) were in 6th grade, 40.4% ($n = 176$) were in 7th grade, and 31.4% ($n = 137$) were in 8th grade. One hundred and forty-two of the students were 12 years old (32.6%), 163 were 13 years old (37.4%), 119 were 14 years old (27.3%), and 12 were 15 years old (2.8%). Students had a mean age of 13 years ($SD = .84$; ranging from 12 to 15 years).

Procedure

Data were collected by the researchers after ethical and principal permissions were gathered. Informed consent was obtained from all participants before completing the measures. Students did not place their names on the measures and were assured of the confidentiality of their responses. Three elementary schools were included in the study according to their attainability, transportability, and cooperation with the researchers. Scales were administered to the students in their

classrooms by the researchers after explaining how they should fill in the forms. Administration of the scales took 15 minutes for each student.

Measures

Children's Hope Scale. Hope was assessed using the Children's Hope Scale, which was developed by Snyder and colleagues (1997) to determine the permanent hope levels of children and early adolescents. The scale consists of six items expressing two subscales. One subscale is present pathways to goal attainment, and the other is present motivation to goal attainment as agency. In this 6-point Likert-type scale, the items range from never to always, sorted as "never = 1, rarely = 2, sometimes = 3, often = 4, frequently = 5, and always = 6." The highest score that can be obtained from the scale is 36, and the lowest is 6. The scale was standardized to Turkish culture by Atik & Kemer (2009). Construct validity results supported the two-factorial design of the scale as original and explained 58% variance. According to reliability studies, Cronbach's alpha coefficient was .74 for the total scale.

The Positive and Negative Experience Scale.

Positive and negative affect were assessed using the Positive and Negative Experience Scale. This short instrument was originally designed by Diener and colleagues (2010) to assess positive and negative affect and well-being. Each item of the Positive and Negative Experience Scale was scored on a scale between 1 and 5 where 1 represented "very rarely or never" and 5 represented "very often or always." The scale's adaptation into Turkish with adolescents and university students was conducted by Telef (2013b; 2015). The Cronbach's alpha coefficient attained in the reliability study of the scale was .84 for the positive experience dimension and .75 for the negative experience dimension (Telef, 2013b).

The Satisfaction with Life Scale. Life satisfaction was assessed using the Satisfaction with Life Scale (Köker, 1991). The scale is a measure of life satisfaction originally developed by Diener and colleagues in 1985. The SWLS consists of five items, each scored from 1 to 7 in terms of "strongly agree" to "strongly disagree." Items are summed for a total score, which ranges from 5 to 35, with higher scores reflecting more satisfaction with life. The Turkish version of the Satisfaction with Life Scale was adapted by Köker in 1991. Köker (1991) reported an internal consistency coefficient for the Turkish version of this scale to be .80.

Table 1. Correlation results and descriptive statistics

Variables	1	2	3	4	<i>M</i>	<i>SD</i>	α	Skew.	Kurt.
1. Life satisfaction	1				28.88	4.799	.754	-1.076	1.519
2. Negative affect	-.314**	1			14.059	4.382	.796	.918	1.595
3. Positive affect	.508**	-.279**	1		24.016	4.188	.785	-.877	.723
4. Hope	.516**	-.284**	.556**	1	27.658	6.630	.863	-.822	.159

** $p < .001$

In another study conducted with adolescents, Yetim (1993) found the internal consistency coefficients to be (α) .86.

Data Analysis

Before examining the structural equation analysis, preliminary analyses were conducted including descriptive statistics and Pearson’s product-moment correlation analysis. Structural equation analysis was then used to investigate the mediating role of positive and negative experiences in the relationship between hope and life satisfaction. Findings from the structural analysis were assessed using data-model fit indices and their criteria values (Comparative fit index [CFI], Tucker Lewis index [TLI], root mean square error of approximation [RMSEA; 90% confidence interval], and standardized root mean square residual [SRMR]).

The CFI and TLI scores $\geq .95$ were considered a good fit while those $\geq .90$ were assessed as acceptable. In addition, the SRMR and RMSEA values $\leq .05$ were considered a good data–model fit while those between .05 and .08 were described as acceptable (Kline, 2011). SPSS and AMOS version 22 were used to conduct all data analyses.

Results

Descriptive Statistics

Data analysis was conducted in two phases. In phase one analyses, we examined the descriptive statistics and correlations between variables using Pearson’s product-moment correlation analysis. Table 1 displays descriptive statistics and the correlations among hope, positive affect, negative affect, and life satisfaction.

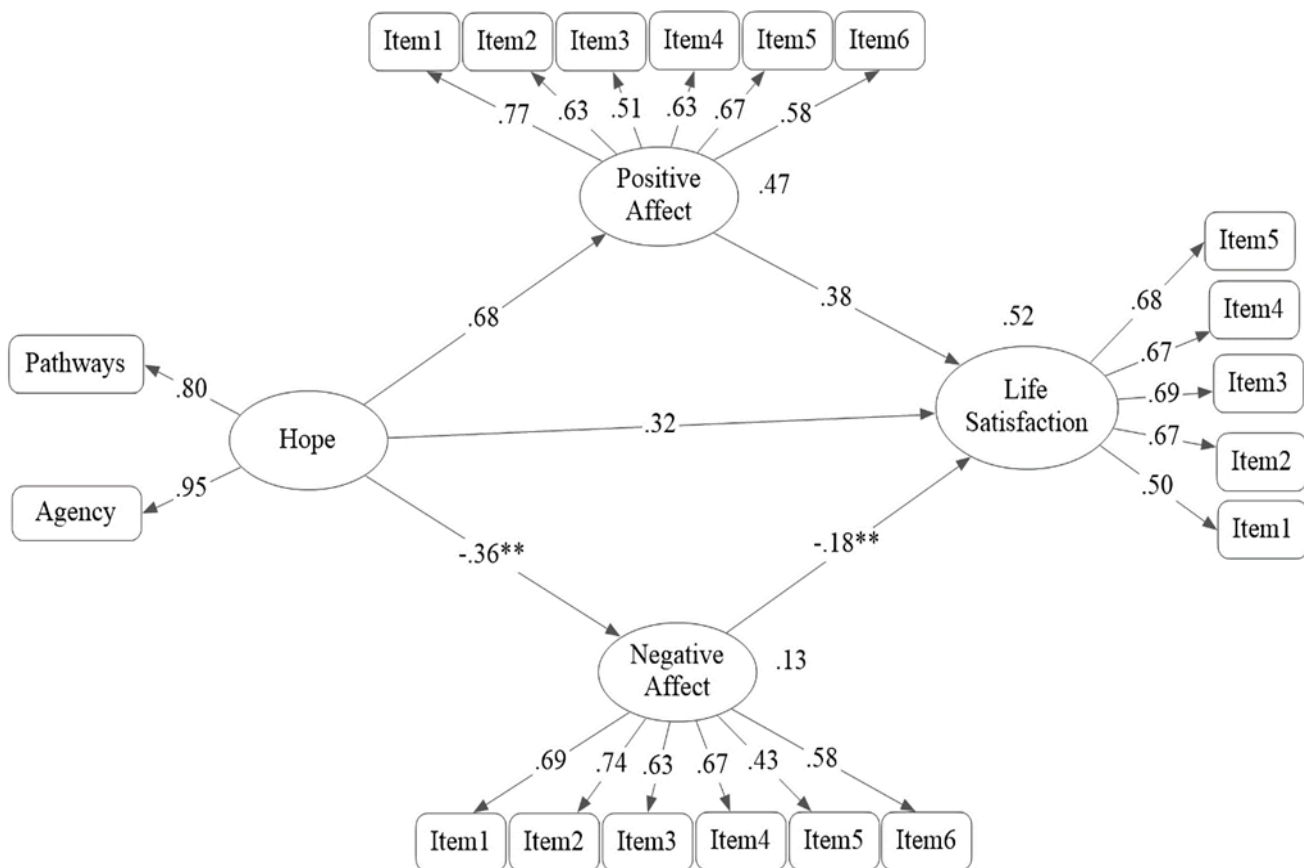


Figure 2. The mediation model

Descriptive statistics indicated that skewness and kurtosis scores ranged from -1.076 to 1.595 , and all variables were normally distributed (skewness and kurtosis $< |2|$ = relatively normal distribution). The internal reliability of the variables with the present sample was adequate with coefficients (α) ranging from $.75$ to $.86$. Findings from this analysis also indicated that hope was positively correlated with positive affect and life satisfaction and negatively correlated with negative affect, with scores ranging from $-.28$ to $.56$. Additionally, life satisfaction was positively correlated with positive affect and negatively correlated with negative affect ($r = .51$ and $-.31$, see Table 1).

Test of the Structural Model

In phase two analyses, structural equation modeling was used to investigate the mediating role of positive and negative experiences in the relationship between hope and life satisfaction. Before testing the structural model, a measurement model was conducted to examine the association between latent variables, which were identified using the scale's items.

Findings from the measurement model demonstrated the good data-model fit statistics as follows: $\chi^2 = 265.42$, $df = 146$, $p < .001$; SRMR = $.042$, RMSEA (90% CI) = $.043$ ($.035$ – $.052$), CFI = $.96$, TLI = $.95$. Then, the structural equation model was tested, indicating good data-model fit ($\chi^2 = 273.04$, $df = 147$, $p < .001$; SRMR = $.047$, RMSEA [90% CI] = $.044$ [$.036$ – $.053$], CFI = $.95$, TLI = $.95$). Following these findings, standardized estimate indicated that positive and negative experiences partially mediated the relationship between hope and life satisfaction. In this regard, hope positively predicted positive affect ($\beta = .38$, $p < .001$) and life satisfaction ($\beta = .58$, $p < .001$) and negatively predicted negative affect ($\beta = -.30$, $p < .001$). Furthermore, positive ($\beta = .36$, $p < .001$) and negative affect ($\beta = -.20$, $p < .001$) significantly predicted life satisfaction.

In addition, hope accounted for 47% of the variance in positive affect and 13% of the variance in negative affect. All variables together accounted for 52% of the variance in life satisfaction in the structural model. Taken together, these results demonstrate the partial role of positive and negative experiences in the effect of hope on life satisfaction in adolescents.

Discussion

The aim of this study is to examine the mediation effects of positive and negative affect on the link between hope and life satisfaction in elementary school adolescents. The results of the study indicated that

positive and negative emotions partially mediate hope and life satisfaction. Analyses showed that hope was positively correlated with life satisfaction. This result is in accordance with studies previously reporting the relationships between hope and life satisfaction (Afzal et al., 2014; Bailey et al., 2007; Gilman & Huebner, 2006; Gilman et al., 2006; Ling et al., 2016; Marques et al., 2009; Marques et al., 2013; Merkaš & Brajša-Žganec, 2011; Park et al., 2004; Peterson et al., 2007; Proctor et al., 2011; Valle et al., 2006). Hope has a significant effect on the well-being of a person (Yalçın & Malkoç, 2015). Hope protects people from stressful events by decreasing interiorized behaviors and increasing life satisfaction (Valle et al., 2006). According to Lagacé-Séguin and d'Entremont (2010), hope prevents increased depression and decreased life satisfaction in teenagers. According to Robinson and Snipes (2009), hopeful thoughts increase life satisfaction and protect people from negative life experiences. It was observed that hopeful adolescents are mentally healthier than hopeless ones (Afzal et al., 2014). Having sufficient goal-oriented energy enables people to have life satisfaction (Wong & Lim, 2009). As adolescents' positive expectations for the future increase, their well-being increases, too (Eryılmaz, 2011; Konu et al., 2002).

In the present study, hope is positively related to positive emotions and negatively related to negative emotions. The relationship between hope and positive emotions is stronger when compared to negative emotions. This finding is supported by the previous studies (Afzal et al., 2014; Snyder, 2002; Özer & Tezer, 2008). According to hope theory, realising the objectives successfully reveals positive emotions, and failure in reaching the objectives results in negative emotions and coping (Valle et al., 2006). Hope has a significant role in developing the emotional well-being of adolescents (Lagacé-Séguin & d'Entremont, 2010). Hope is a significant predictor of activating positive emotions and positive attribution styles and reducing negative affective experiences such as fear and hostility (Ciarrochi et al., 2007). Hope protects people from negative emotions at school (Weber et al., 2016). Hope results in successful coping by designing different strategies to handle negative incidents, obstacles in front of the goal, and various stressors easier (Merkaš & Brajša-Žganec, 2011). Students experiencing negative emotions have a more limited streams of thought and actions and, thus, may have fewer ways to achieve a goal (Franke et al., 2017). These results may be interpreted as indicating that Turkish adolescents

will be stronger and happier in life if they have higher hope levels and more positive emotions.

It was found that there was a positive relationship between positive affective experiences and life satisfaction and a negative relationship between negative emotions and life satisfaction. This finding is consistent with previous studies (Diener et al., 2010; Kapikiran, 2012; Kong & Zhao, 2013; Libran & Piera, 2008; Silva & Caetano, 2013; Sumi, 2014; Telef, 2013a; Telef, 2015). While a strong relation between positive emotions and life satisfaction is emphasized in some studies (Kuppens et al., 2008; Schimmack, 2008), the existence of a weak relation between negative emotions and life satisfaction is emphasized in other studies (Liu et al., 2012; Zhang, 2016). Results show that, while positive emotions increase the life satisfaction of adolescents, negative emotions decrease their life satisfaction. The study results suggest that positive and negative affect partially mediate the relationship between hope and life satisfaction. This means that the specific indirect effects of hope on life satisfaction via positive and negative affect were significant in Turkish early adolescents. That is, adolescents with higher levels of hope tended to experience more positive affect and less negative affect, which, in turn, resulted in an increase in their life satisfaction. Upon examining the model, it is observed that the indirect effect of positive emotions on life satisfaction is higher compared to negative emotions (see Figure 2). High positive emotions increase the power of the relation between hope and well-being (Afzal et al., 2014). Positive emotions ensure the increase of life satisfaction by building physical, intellectual, social, and psychological sources and developing the repertoire of thoughts and actions (Cohn et al., 2009; Fredrickson, 1998; Fredrickson et al., 2008; Lyubomirsky et al., 2005).

Some limitations in the current study should be addressed. The first is that the data relied exclusively on self-report measures. Although the measures were selected for their good reliability and validity, self-report measures are subjective by nature and vulnerable to bias. The use of multiple methods for evaluation may lower the influence of subjectivity. The second limitation is that this study used a cross-sectional design, which cannot determine a causal relationship, so interpretation of the results of mediation analysis on cross-sectional data must proceed with caution. Longitudinal and experimental studies would provide additional insights into relationships among hope,

affects, and life satisfaction. The third limitation is that the study group was composed of high numbers of elementary school students in Turkish culture, which limits the generalizability of the findings of the current study. Despite these limitations, the present study substantially extended our insight into a complicated interplay among hope and life satisfaction in early adolescence. Traditionally, school counselors have focused on removing the negative emotions that students have experienced. In the interventions for increasing the life satisfaction of youth, counselors should focus on increasing positive experiences rather than avoiding negative emotions (Zhang, 2016). Helping individuals to determine their objectives, protecting hopeful thoughts, and maintaining active motivation for objectives can be used to increase the life satisfaction of a person (Yang et al., 2016). There are study results indicating that intervention programs prepared for increasing hope increase the well-being of the youth and reduce psychological disturbances (see Weis & Speridakos, 2011). In this context, the intervention programs that school psychologists will implement to increase hope levels and positive emotions of youth may help students to increase their life satisfaction.

Compliance with Ethical Standards

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.


Declaration of Conflicting Interests

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References

- Afzal, A., Malik, N. I., & Atta, M. (2014). The moderating role of positive and negative emotions in relationship between positive psychological capital and subjective well-being among adolescents. *International Journal of Research Studies in Psychology*, 3 (3), 29–42. <https://doi.org/10.5861/ijrsp.2014.687>
- Antaramian, S. P., Huebner, E. S., & Valois, R. F. (2008). Adolescent life satisfaction. *Applied Psychology: An International Review*, 57(1), 112–126. <https://doi.org/10.1111/j.1464-0597.2008.00357.x>
- Arslan G. (2019). Positive psychological traits, school functioning, and psychological adjustment in elementary schoolchildren. *Journal of Psychologists and Counsellors in Schools*, 29(2), 139-150. <https://doi.org/10.1017/jgc.2018.24>
- Atik, G. (2009). Hope as a predictor of bullying. *Ankara University, Journal of Faculty of Educational Sciences*, 42 (1), 53-68.
- Atik, G., & Kemer, G. (2009). Psychometric properties of Children's Hope Scale: Validity and reliability study. *Elementary Education Online*, 8, (2) 379–390.
- Bailey, T. C., Eng, W., Frisch, M. B., & Snyder, C. R. (2007). Hope and optimism as related to life satisfaction. *The Journal of Positive Psychology*, 2(3), 168–175. <https://doi.org/10.1080/17439760701409546>
- Brooks, M. J., Marshal, M. P., McCauley, H. L., Douaihy, A., & Miller, E. (2016). The relationship between hope and adolescent likelihood to endorse substance use behaviors in a sample of marginalized youth. *Substance Use & Misuse*, 51(13), 1815-1819. <https://doi.org/10.1080/10826084.2016.1197268>
- Chang, E. C., Sanna, L. J., & Yang, K.-M. (2003). Optimism, pessimism, affectivity, and psychological adjustment in US and Korea: A test of a mediation model. *Personality and Individual Differences*, 34(7), 1195–1208. [https://doi.org/10.1016/S0191-8869\(02\)00109-5](https://doi.org/10.1016/S0191-8869(02)00109-5)
- Ciarrochi, J., Heaven, P. C., & Davies, F. (2007). The impact of hope, self-esteem, and attributional style on adolescents' school grades and emotional well-being: A longitudinal study. *Journal of Research in Personality*, 41(6), 1161–1178. <https://doi.org/10.1016/j.jrp.2007.02.001>
- Çivitçi, A. (2014). İlk ergenlikte öğrenci yaşam doyumu: okul psikolojik danışma ve rehberlik hizmetleri açısından bir değerlendirme [Students' life satisfaction in early adolescence: An evaluation in terms of school counseling]. *Millî Eğitim*, 43 (202), 5–18.
- Çivitçi, N., & Çivitçi, A. (2009). Self-esteem as mediator and moderator of the relationship between loneliness and life satisfaction in adolescents. *Personality and Individual Differences*, 47(8), 954–958. <https://doi.org/10.1016/j.paid.2009.07.022>
- Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., & Conway, A. M. (2009). Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion*, 9(3), 361–368. <https://doi.org/10.1037/a0015952>
- Crede, J., Wirthwein, L., McElvany, N., & Steinmayr, R. (2015). Adolescents' academic achievement and life satisfaction: The role of parents' education. *Frontiers in Psychology*, 6, 1-8. <https://doi.org/10.3389/fpsyg.2015.00052>
- Day, L., Hanson, K., Maltby, J., Proctor, C., & Wood, A. (2010). Hope uniquely predicts objective academic achievement above intelligence, personality, and previous academic achievement. *Journal of Research in Personality*, 44(4), 550–553. <https://doi.org/10.1016/j.jrp.2010.05.009>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901_13
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., et al. (2010). New wellbeing measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97, 143–156. <https://doi.org/10.1007/s11205-009-9493-y>
- Eryılmaz, A. (2011). Ergen öznel iyi oluşu ile olumlu gelecek beklentisi arasındaki ilişkinin incelenmesi [The relationship between adolescents' subjective well-being and positive expectations towards future]. *Düşünen Adam Psikiyatri ve Nörolojik Bilimler Dergisi*, 3(24), 209-215. <https://doi.org/10.5350/DAJPN2011240306>
- Franke, K. B., Huebner, E. S., & Hills, K. J. (2017). Cross-sectional and prospective associations between positive emotions and general life satisfaction in adolescents. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 18(4), 1075–1093. <https://doi.org/10.1007/s10902-016-9763-8>

- Fredrickson, B. L. (1998). What good are positive emotions? *Review of general psychology*, 2(3), 300–319. <https://doi.org/10.1037/10892680.2.3.300>
- Fredrickson, B. L. (2004). The broaden-and-build theory of positive emotions. *Philosophical transactions of the Royal Society of London. Series B, Biological sciences*, 359(1449), 1367–1378. <https://doi.org/10.1098/rstb.2004.1512>
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95(5), 1045–1062. <https://doi.org/10.1037/a0013262>
- Gavriel-Fried, B., & Ronen, T. (2016). Positive emotions as a moderator of the associations between self-control and social support among adolescents with risk behaviors. *International Journal of Mental Health and Addiction*, 14(2), 121–134. <https://doi.org/10.1007/s11469-015-9580-z>
- Gilman, R., & Huebner, E.S. (2006). Characteristics of adolescents who report very high life satisfaction. *Journal of Youth and Adolescence*, 35(3), 293–301. <http://dx.doi.org/10.1007/s10964-006-9036-7>
- Gilman, R., Dooley, J., & Florell, D. (2006). Relative levels of hope and their relationship with academic and psychological indicators among adolescents. *Journal of Social & Clinical Psychology*, 25, 166–178. <https://doi.org/10.1521/jscp.2006.25.2.166>
- İkiz, F. E., & Telef, B. B. (2013). The effects of socioeconomic status and gender besides the predictive effect of self-efficacy on life satisfaction in adolescence. *International Journal of Social Science*, 6(3), 1201–1216. <http://dx.doi.org/10.9761/JASSS897>
- Kapikiran, N. A. (2012). Positive and negative affectivity as mediator and moderator of the relationship between optimism and life satisfaction in Turkish university students. *Social Indicators Research*, 106(2), 333–345. <https://doi.org/10.1007/s11205-011-9807-8>
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. New York: The Guilford Press.
- Köker, S. (1991). *Normal ve sorunlu ergenlerin yaşam doyumu düzeylerinin karşılaştırılması* [A comparison of levels of satisfaction with life in normal and troubled adolescents]. Unpublished postgraduate dissertation, Ankara University, Institute of Social Sciences, Ankara.
- Kong, F., & Zhao, J. (2013). Affective mediators of the relationship between trait emotional intelligence and life satisfaction in young adults. *Personality and Individual Differences*, 54(2), 197–201. <https://doi.org/10.1016/j.paid.2012.08.028>
- Konu, A. I., Lintonen, T. P., & Rimpela, M. K. (2002). Factors associated with schoolchildren's general subjective well-being. *Health Education Research*, 17(2):155–65. <https://doi.org/10.1093/her/17.2.155>
- Kuppens, P., Realo, A., & Diener, E. (2008). The role of positive and negative emotions in life satisfaction judgment across nations. *Journal of Personality and Social Psychology*, 95(1), 66–75. <https://doi.org/10.1037/0022-3514.95.1.66>
- Lagacé-Séguin, D. G., & d'Entremont, M. R. L. (2010). A scientific exploration of positive psychology in adolescence: The role of hope as a buffer against the influences of psychosocial negativities. *International Journal of Adolescence and Youth*, 16(1), 69–95. <https://doi.org/10.1080/02673843.2010.9748046>
- Librán, E. C., & Piera, P. J. F. (2008). Variables cognitivas y afectivas como predictoras de satisfacción en la vida [Cognitive and affective variables as predictors of life satisfaction]. *Psicothema*, 20(3), 408–412.
- Ling, Y., Huebner, E. S., Fu, P., Zeng, Y., & He, Y. (2016). A person-oriented analysis of hope in Chinese adolescents. *Personality and Individual Differences*, 101, 446–450. <https://doi.org/10.1016/j.paid.2016.06.048>
- Ling, Y., Huebner, E. S., Liu, J., Liu, W. L., Zhang, J., & Xiao, J. (2015). The origins of hope in adolescence: A test of a social-cognitive model. *Personality and Individual Differences*, 87, 307–311. <https://doi.org/10.1016/j.paid.2015.08.016>
- Liu, Y., Wang, Z. H., & Li, Z. G. (2012). Affective mediators of the influence of neuroticism and resilience on life satisfaction. *Personality and Individual Differences*, 52(7), 833–838. <https://doi.org/10.1016/j.paid.2012.01.017>
- Lyubomirsky, S., King, L., & Diener, E. (2005). The Benefits of Frequent Positive Affect: Does Happiness Lead to Success? *Psychological Bulletin*, 131(6), 803–855. <https://doi.org/10.1037/0033-2909.131.6.803>

- Marques, S. C., Lopez, S. J., & Mitchell, J. (2013). The role of hope, spirituality and religious practice in adolescents' life satisfaction: Longitudinal findings. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, *14*(1), 251–261. <https://doi.org/10.1007/s10902-012-9329-3>
- Marques, S. C., Pais-Ribeiro, J. L., & Lopez, S. J. (2009). Validation of a Portuguese version of the children's hope scale. *School Psychology International*, *30*(5), 538–551. <https://doi.org/10.1177/0143034309107069>
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, *53*(2), 205–220. <https://doi.org/10.1037/0003-066X.53.2.205>
- Mega, C., Ronconi, L., & De Beni, R. (2014). What makes a good student? How emotions, self-regulated learning, and motivation contribute to academic achievement. *Journal of Educational Psychology*, *106*(1), 121–131. <https://doi.org/10.1037/a0033546>
- Merkaš, M., & Brajša-Žganec, A. (2011). Children with different levels of hope: Are there differences in their self-esteem, life satisfaction, social support, and family cohesion? *Child Indicators Research*, *4*(3), 499–514. <https://doi.org/10.1007/s12187-011-9105-7>
- Moksnes, U. K., & Espnes, G. A. (2013). Self-esteem and life satisfaction in adolescents—gender and age as potential moderators. *Quality of Life Research*, *22*(10), 2921–2928. <https://doi.org/10.1007/s11136-013-0427-4>
- Ng, Z. J., Huebner, S. E., & Hills, K. J. (2015). Life satisfaction and academic performance in early adolescents: evidence for reciprocal association. *Journal of School Psychology*, *53*(6), 479–491. <https://doi.org/10.1016/j.jsp.2015.09.004>
- Özer, B. U., & Tezer, E. (2008). Umut ve olumlu-olumsuz duygular arasındaki ilişkiler [Relationship between hope and positive-negative affect]. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, *23*, 81–86. Retrieved from <https://dergipark.org.tr/tr/pub/deubefd/issue/25428/268280>
- Park, N. (2004). The role of subjective well-being in positive youth development. *The Annals of the American Academy of Political and Social Science*, *591*(1) 25–39. <https://doi.org/10.1177/002716203260078>
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, *23*(5), 603–619. <https://doi.org/10.1521/jscp.23.5.603.50748>
- Pavot, W. G., Diener, E., Colvin, C. R., & Sandvik, E. (1991). Further validation of the Satisfaction with Life Scale: Evidence for the cross-method convergence of well-being measures. *Journal of Personality Assessment*, *57*(1), 149–161. https://doi.org/10.1207/s15327752jpa5701_17
- Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. E. (2007). Strengths of character, orientations to happiness, and life satisfaction. *The Journal of Positive Psychology*, *2*, 149–156. <https://doi.org/10.1080/17439760701228938>
- Piko, B. F., & Hamvai, C. (2010). Parent, school and peer-related correlates of adolescents' life satisfaction. *Children and Youth Services Review*, *32*(10), 1479–1482. <https://doi.org/10.1016/j.childyouth.2010.07.007>
- Proctor, C., Maltby, J., & Linley, P. A. (2011). Strengths use as a predictor of well-being and health-related quality of life. *Journal of Happiness Studies*, *12*, 153–169. <https://doi.org/10.1007/s10902-009-9181-2>
- Robinson, C., & Snipes, K. (2009). Hope, optimism and self-efficacy: A system of competence and control enhancing African American college student's academic well-being. *Multiple Linear Regression Viewpoints*, *35*(2), 16–26.
- Rutten, B. P., Hammels, C., Geschwind, N., Menne-Lothmann, C., Pishva, E., Schruers, K., van den Hove, D., Kenis, G., van Os, J., & Wichers, M. (2013). Resilience in mental health: linking psychological and neurobiological perspectives. *Acta Psychiatrica Scandinavica*, *128*(1), 3–20. <https://doi.org/10.1111/acps.12095>
- Rutter, M. (1993). Resilience: Some conceptual considerations. *Journal of Adolescent Health*, *14*(8), 626–631. [https://doi.org/10.1016/1054-139X\(93\)90196-V](https://doi.org/10.1016/1054-139X(93)90196-V)
- Salmela-Aro, K., Savolainen, H., & Holopainen, L. (2009). Depressive symptoms and school burnout during adolescence: evidence from two cross-lagged longitudinal studies. *Journal of youth and adolescence*, *38*(10), 1316–1327. <https://doi.org/10.1007/s10964-008-9334-3>

- Schimmack, U. (2008). *The structure of subjective well-being*. In M. Eid & R. J. Larsen (Eds.), *The science of subjective well-being* (p. 97–123). Guilford Press.
- Schutz, P. A., & Lanehart, S. L. (2002). Introduction: Emotions in education. *Educational Psychologist*, 37, 67–68. https://doi.org/10.1207/S15326985EP3702_1
- Shek, D. T. L., & Li, X. (2016). Perceived school performance, life satisfaction, and hopelessness: A 4-year longitudinal study of adolescents in Hong Kong. *Social Indicators Research*, 126(2), 921–934. <https://doi.org/10.1007/s11205-015-0904-y>
- Silva, A. J., & Caetano, A. (2013). Validation of the Flourishing Scale and Scale of Positive and Negative Experience in Portugal. *Social Indicators Research*, 110(2), 469–478. <https://doi.org/10.1007/s11205-011-9938-y>
- Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological Inquiry*, 13(4), 249–275. https://doi.org/10.1207/S15327965PLI1304_01
- Snyder, C. R., Feldman, D. B., & Rand, K. L. (2002). Hopeful choices: A school counselor's guide to hope theory. *Professional School Counseling*, 5(5), 298–308.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of personality and social psychology*, 60(4), 570–585. <https://doi.org/10.1037/0022-3514.60.4.570>
- Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., Danovsky, M., Highberger, L., Rubinstein, H., & Stahl, K. J. (1997). The development and validation of the Children's Hope Scale. *Journal of pediatric psychology*, 22(3), 399–421. <https://doi.org/10.1093/jpepsy/22.3.399>
- Snyder, C. R., Lopez, S. J., Shorey, H. S., Rand, K. L., & Feldman, D. B. (2003). Hope theory, measurements, and applications to school psychology. *School Psychology Quarterly*, 18(2), 122–139. <https://doi.org/10.1521/scpq.18.2.122.21854>
- Snyder, C. R., Rand, K. L., & Sigmon, D. R. (2005). Hope theory: A member of the positive psychology family. In C.R. Snyder, & S.J. Lopez (Eds.), *Handbook of positive psychology* (pp. 257–278). New York: Oxford University Press.
- Suldo, S. M., & Huebner, E. S. (2004). Does life satisfaction moderate the effects of stressful life events on psychopathological behavior during adolescence? *School Psychology Quarterly*, 19(2), 93–105. <https://doi.org/10.1521/scpq.19.2.93.33313>
- Suldo, S. M., & Huebner, E. S. (2006). Is extremely high life satisfaction during adolescence advantageous? *Social Indicators Research*, 78(2), 179–203. <https://doi.org/10.1007/s11205-005-8208-2>
- Sumi, K. (2014). Reliability and validity of Japanese versions of the flourishing scale and the scale of positive and negative experience. *Social Indicators Research*, 118, 601–615. Doi: 10.1007/s11205-013-0432-6
- Tart, C. D., Leyro, T. M., Richter, A., Zvolensky, M. J., Rosenfield, D., & Smits, J. A. (2010). Negative affect as a mediator of the relationship between vigorous-intensity exercise and smoking. *Addictive behaviors*, 35(6), 580–585. <https://doi.org/10.1016/j.addbeh.2010.01.009>
- Telef, B. B. (2013a). Ergenlerin yaşam doyumlarının ve psikolojik semptomlarının incelenmesi [Investigation of adolescents' life satisfaction and psychological symptoms]. *New Symposium Journal*, 51, 3–12.
- Telef, B. B. (2013b). The scale of positive and negative experience: a validity and reliability study for adolescents. *Anatolian Journal of Psychiatry*, 14, 62–68. <https://doi.org/10.5455/apd.36692>
- Telef, B. B. (2014). Ergenlerde olumlu ve olumsuz duygular ile riskli davranışlar arasındaki ilişkinin incelenmesi [Examining the relationship between positive and negative emotions and risky behaviors in adolescents]. *Kastamonu Education Journal*, 22(2), 591–604.
- Telef, B. B. (2015). The positive and negative experience scale adaptation for Turkish university students. *European Scientific Journal*, 11(14), 49–59.
- Valero, D., Hirschi, A., & Strauss, K. (2015). Hope in adolescent careers: Mediating effects of work motivation on career outcomes in Swiss apprentices. *Journal of Career Development*, 42(5), 381–395. <https://doi.org/10.1177/0894845314566866>

- Valle, M. F., Huebner, E. S., & Suldo, S. M. (2006). An analysis of hope as a psychological strength. *Journal of School Psychology, 44*(5), 393–406. <https://doi.org/10.1016/j.jsp.2006.03.005>
- Wai, C. M., Talib, M. A., Yaacob, S. N., Jo-Pei, T., Awang, H., Hassan, S., & Ismail, Z. (2014). Hope and its relation to suicidal risk behaviors among Malaysian adolescents. *Asian Social Science, 10*(12), 67. 10.5539/ass.v10n12p67
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*(6), 1063–1070. <https://doi.org/10.1037/0022-514.54.6.1063>
- Weber, M., Wagner, L., & Ruch, W. (2016). Positive feelings at school: on the relationships between students' character strengths, school-related affect, and school functioning. *Journal of Happiness Studies, 17*, 341–355.
- Weis, R., & Speridakos, E. C. (2011). A meta-analysis of hope enhancement strategies in clinical and community settings. *Psychology of Well-being: Theory, Research and Practice, 1*(5), 1-16. <https://doi.org/10.1186/2211-1522-1-5>
- Wong, S. S., & Lim, T. (2009). Hope versus optimism in Singaporean adolescents: Contributions to depression and life satisfaction. *Personality and Individual Differences, 46*(5-6), 648–652. <https://doi.org/10.1016/j.paid.2009.01.009>
- Worrell, F. C., & Hale, R. L. (2001). The relationship of hope in the future and perceived school climate to school completion. *School Psychology Quarterly, 16*(4), 370–388. <https://doi.org/10.1521/scpq.16.4.370.19896>
- Yalçın, İ., & Malkoç, A. (2015). The relationship between meaning in life and subjective well-being: forgiveness and hope as mediators. *Journal of Happiness Studies, 16*(4), 915–929. <https://doi.org/10.1007/s10902-014-9540-5>
- Yetim, Ü. (1993). Life satisfaction: A study based on the organization of personal projects. *Social Indicators Research, 29*(3), 277–289. <https://doi.org/10.1007/BF01079516>
- Zhang, R. P. (2016). Positive affect and self-efficacy as mediators between personality and life satisfaction in Chinese college freshmen. *Journal of Happiness Studies, 17*(5), 2007-2021. <https://doi.org/10.1007/s10902-015-9682-0>
- Zhu, H. (2015). Social support and affect balance mediate the association between forgiveness and life satisfaction. *Social Indicators Research, 124*(2), 671–681. <https://doi.org/10.1007/s11205-014-0790-8>
- Zullig, J., Valois, R. F., Huebner E. S., & Drane, J. W., (2005). Adolescent health-related quality of life and perceived satisfaction with life. *Quality of Life Research, 14* (6), 1573–1584. <https://doi.org/10.1007/s11136-004-7707-y>