Research Article

Effect of Hope on Resilience in Adolescents: Social Support and Social Connectedness as Mediators

İlhan Çiçek[1]

Abstract

The purpose of this study was to investigate the mediating role of social support and social connectedness between hope and resilience in adolescents. A total of 413 high school students (57.1% girls; $M= 17.31$, $SD= 1.61$) participated in the study. Participants completed the Children's Hope Scale (CHS), Brief Resilience Scale (BRS), Brief Perceived Social Support Questionnaire (BPSSQ), and Social Connectedness Scale (SCS). The results showed that there was a positive significant correlation between social support, resilience, social connectedness, and hope. In addition, according to the gender variable, it is seen that the resilience and hope scores of the boys are significantly higher than the girls. On the other hand, no significant difference was found in social connectedness and social support in terms of gender. The results mediation analysis showed that hope significantly and positively predicted social connectedness, social support, and resilience. Also, social connectedness positively and significantly predicted social support, and social support was a significant predictor of resilience. Most importantly, social support and social connectedness acted as mediating roles in the relationship between hope and resilience. These results suggest that social connectedness and social support are two important sources in developing resilience. This has important implications for research and practice.

Keywords: Hope, resilience, social support, social connectedness, adolescents

In the extant literature, resilience has been defined in various ways (Hall et al., 2002). Resilience is the firm stance of an individual against stressful situations and the ability to recover following negative experiences (Smith et al., 2008). As a process, resilience is the ability to cope with the difficulties and adapt new situations and managing situations. Furthermore, resilience is defined as a personality trait that provides an individual with improvement after the traumatic events (Bonanno, 2004; Masten & Wright, 2010). A resilient individual can exhibit a function above the norms despite problematic situations (Tusaie & Dyer, 2004). Resilience displays a significant function to improve well-being mental health (Arslan, 2016; Yildirim, 2019). To date, studies have shown that resilience is significantly and positively associated with social support (Kong et al., 2021; Salami, 2010; Smith

et al., 2008; Turgut & Çapan, 2017), social connectedness (Bostan & Duru, 2019; Dang, 2014), positive childhood experiences, self-efficacy, and self-esteem (Arslan, 2015a; Arslan & Balkıs, 206; Kocatürk & Çiçek, 2021), forgiveness (Aziz & Yıldırım, 2020), hope (Kirmani et al., 2015; Uysal et al., 2017), cognitive coping (Wu et al., 2013), optimism (Smith et al., 2008), psychological well-being (Arslan, 2019; Yildirim, 2019; Yıldırım & Arslan, 2020), subjective well-being (Bostan & Duru 2019; Yıldırım & Tanrıverdi, 2020), and meaning in life (Arslan & Yıldırım, 2021; Sagone & De Caroli, 2014; Smith et al., 2008). However, there is a negative relationship between resilience and self-blame, social and physical problems, pessimism and negative interaction (Smith et al., 2008), social anxiety and fear (Wu et al., 2013), academic stress (Hernandez et al., 2019; Smith at al.,

[1]Department of Child Development, Batman University, Health College, Batman, Turkey

Corresponding Author: İlhan Çiçek, Department of Child Development, Batman University, Health College, Batman, Turkey
Email: cicekilhan7272@gmail.com

2008), psychological stress (Dang, 2014) and post-traumatic stress disorders (Salami, 2010). These suggest that having a high level of resilience equips an individual to coping with many negative situations.

The concept of hope includes two dimensions: will and pathways. The former refers to an individual's belief and imagination that are needed to reach a purposed target. The later refers to an individual's perception and motivation that s(he) has a sufficient capacity to create beneficial ways to cope with obstacles. Hope is a mechanism utilized to cope with difficulties of life (Snyder, 2002; You et al., 2008). Hope helps individuals with psychological disorders to increase their positive feelings and carry on their adaptive behaviours (Snyder et al., 2006). Hope contains information and purposes related to cognition (Folkman, 2010). In addition, it helps individuals to create aims, make realistic plans, and use inner and outer motivation sources effectively (Moulden & Marshal, 2005; Wrobleski & Snyder, 2005). A high-level hope has positive effects on various well-being and mental health outcomes such as happiness (Belen, Yildirim & Belen, 2020; Genç & Arslan, 2021), life satisfaction (Kirmani et al., 2015, Munoz et al., 2017; Satici, 2016), resilience (Collins, 2008; Kirmani et al., 2015; Satici, 2016), optimism (Yarcheski & Mahon, 2016), self-efficacy (Phan, 2013), social support and self-respect (Zhou et al., 2018) and quality of life (Hammer et al., 2009). Griggs and Walker (2016) found a positive relation between hope and coping skills, self-respect, life quality and resilience in adolescents. They also reported that adolescents with a high level of hope are more skillful in managing psychological problems, coping with difficulties, and reaching to their goals. This suggests that hope is an adaptive construct that has positive effects on various domains of life and contributes to fulfillment of one's life.

Social Connectedness and Social Support as Mediators

The concept of social connectedness is a state of feeling related that allows people to feel themselves worthy and important part of society (Lee & Robbins, 1998). Social connectedness has a crucial function in developing meaningful relations with others (Lee, Dean & Jung, 2008). People have tendency to develop sense of belonging, connectedness, and inner security (Kohut, 2009). Social connectedness is a basic human need. Meeting this basic need contributes to development of relaxation and well-being and reduction of psychological distress (Hagerty et al., 1993). Social

connectedness plays a key role for mental and emotional health of an individual at every aspect of life (Arslanb, 2015b; Cornwell et al., 2008; Lee & Robbins, 1998; Stavrova & Luhmann, 2016). Social connectedness is a basic phenomenon reflecting the connection of an individual with the social environment (Lee et al., 2001). Individuals with high levels of social connectedness experience less difficulties in building social relationships with others and highly engage in social activities which promote healthy psychosocial development. Individuals with poor social connectedness experience maladaptive behavioural and emotional problems and poor relations with others (Lee & Robbins, 1998). Research on adolescents demonstrated that adolescents with high level social connectedness are able to effectively adapt to their environments (Duru, 2008b). Empirical evidence shows that social connectedness is related with many psychological variables. Social connectedness has a significant function in strengthening social support and reducing loneliness and adjustment problems (Duru, 2008a). Research also reported that there is a positive and significant relationship between social connectedness and optimism (Yıldırım et al., 2021), resilience (Nitschke et al., 2021; Scarf, 2017), hope (Williamson et al., 2007), social support (Duru, 2008b; Reyes et al., 2020), well-being (Arslan, 2018; Jose, 2012; O'Donnell et al., 2021) and subjective well-being (Arslan, 2018a). These results suggest that social connectedness is an important protective factor that promotes healthy functioning.

The concept of social support is defined as a psychological and physical support received by family, friends, and significant others. Social support plays a significant role in minimizing psychological pressure and tension on individuals and improving their abilities to adapt to environment (Cobb, 1976). Social support can be assessed as emotional, subjective and empirical processes (Mak & Kim, 2011; Zimet et al., 1988). Social support can be considered emotional, financial and personal help provided by family, friends, and others (Bowen et al., 2015; Zimet et al., 1988). This assistance helps to individuals to use their coping strategies in a more effective way (Hodges & Winstanley, 2012; Yildirim et al., 2020). Studies showed that social support has many positive functions and promotes well-being (Arslan, 2021; Alshehri et al., 2020; Brausch & Decer, 2014; Watson et al., 2019). Social support has a positive relation with hope (Zhou et al., 2018; Xiang et al., 2020), social interaction (Yıldırım, 2020), post-traumatic growth and self-

respect (Salami, 2010; Zhou et al., 2018; Zhou & Wu, 2016), well-being (Arslan, 2018b; Yarcheski, Mahon & Yarcheski, 2001), optimism (Xie et al., 2018), subjective well-being (Xie et al. ,2017), social connectedness (Duru, 2008b), and life satisfaction and resilience (Achour & Nor, 2014). Furthermore, studies documented a negative relationship between social support and negative mental health outcomes such as depression (Bell et al., 2018; Chang et al., 2018), stress (Ortega, 2002), anxiety (Moghtader & Shamloo, 2019), and post-trauma stress disorder (Salami, 2010). For example, in a study conducted on adolescents, Frederic et al. (2018) found that there is a negative relationship between social support and depression and social support functions as a potential protective factor against development of symptoms of depression.

Current Study

The purpose of this study was to examine mediating roles of social support and social connectedness between hope and resilience in adolescents. Many studies have shown that social support and social connectedness have positive effects on adolescents' mental health and well-being (Arslan, 2018; Adler-Constantinescu et al., 2013; Chang et al., 2018; Lambling et al., 2017; Stumblingbear-Riddle & Romans, 2012; Zhou et al. al., 2018) and that they have protective functions against negativities (Chang et al., 2018; Fredrick et al., 2018; Zhou et al., 2018). However, evidence regarding the mechanism underlying this relationship is limited. Therefore, it would be important to understand mediating roles of social support and social connectedness with hope and resilience. Moreover, COVID-19 pandemic had psychological, social and educational effects on adolescents and college students (Adnan & Anwar, 2020; Chen et al., 2020; Çiçek, 2021; Çiçek et al., 2021; Çiçek et al., 2020; Gazmararian et al., 2021; Imran et al., 2020; Tanhan, 2020; Tanhan et al., 2020; Waters et al., 2021; Zhang et al., 2020). Thus, it would be important to understand the associations between above-mentioned variables in the face of adversity like the current pandemic. For this purpose, four hypotheses were defined for the study: (i) Hope would positively and significantly predict social connectedness, social support and resilience, (ii) Social support and social connectedness would positively and significantly predict resilience, (iii) Social connectedness would positively and significantly predict social support, (iv) Social support and social connectedness play mediating roles between hope and resilience.

Measures

Brief Perceived Social Support Questionnaire (BPSSQ). The BPSSQ was developed by Kliem et al., (2015) and includes 6 items scored on a 5-point Likert ranging from 1 (not true at all) to 5 (very true). (e.g. "I have friends with whom I can share my joys and sorrows"). High scores on the scale show a high level of perceived social support. Yıldırım and Çelik-Tanrıverdi (2021) adapted the BPSSQ to Turkish and provided good evidence of reliability and validity. Cronbach alpha coefficient for the scale in this study was .90.

Brief Resilience Scale (BRS). The BRS was developed by Smith et al. (2008) and consisting of 6 items rated on a 5-point Likert-type scale. (e.g. "It takes a long time to recover from the negative effects of my life"). Each response ranges from 1 (strongly disagree) to 5(strongly agree). High scores obtained from the scale indicate that individuals' resilience and resistance to negativities are high. The adaptation of the scale to Turkish was done by Doğan (2015). In this study, Cronbach's alpha value of the scale was.75.

Social Connectedness Scale (SCS). The SCS was developed by Lee and Robbins (1995) and includes 7 items that are scored on a 6-point Likert scale (ranging from 1 = totally agree to 6 = totally disagree). (e.g. "I feel disconnected from my surroundings"). High scores on the scale refer to a high level of social connectedness. The scale was adapted into Turkish by Duru (2007). In this study, the Cronbach's alpha value of the scale was .88.

Children's Hope Scale (CHS). The CHS was developed by Synder et al. (1997) and comprises 6 items rated on a 6-point Likert Scale (ranging from1=Never to 6= always). (e. g. "I know that I can find methods or ways to solve the problem, even if others want to give up"). The adaptation of the scale into Turkish was conducted by Atik and Kemer (2009). In the Turkish adaptation the scale includes will and pathways dimensions. In this study, a total score of the scale was computed. The Cronbach's alpha value of the scale was found to be .82 in this study.

Data Analysis

Prior to testing the mediation model, preliminary analyses were performed to examine descriptive statistics, the assumptions of normality, and correlations between the study variables. Skewness and kurtosis values were checked to examine the assumption of normality, and scores of these statistics lower than <|1| are considered as acceptable level for normality (Field, 2009; Tabachnick & Fidell, 2013).

Pearson product-moment correlation was carried out to examine the relationships between the variables of this study. After examining preliminary analyses and correlations for the study variables, mediation analyses were utilized to examine direct and indirect relationships between the variables and test the mediating roles of social support and social connectedness in the association between hope and adolescents' resilience (Model 6) using the PROCESS macro version 3.5 (Hayes, 2018) for SPSS. The indirect effects in the model were assessed using bias-corrected bootstrapping approach with a 95% confidence interval (Hayes, 2018; Preacher & Hayes, 2008). All study analyses were conducted using SPSS version 25 for Windows.

Results

Preliminary Analyses

Results from preliminary analyses showed that skewness values ranged between -.37 and .13, and kurtosis values ranged between -.82 and .09. These results suggest that all study measures had relatively normal distribution. Pearson correlation results demonstrated that hope was significantly and positively associated with social connectedness (r= .27), social support (r= .34), and resilience (r= .42). Resilience was also significantly and positively related to social connectedness (r=. 28) and social support (r= .34). Finally, social connectedness was positively related to social support (r= .48). Descriptive statistics and correlation analysis results reporting the relationships between the variables of study are shown in Table 1.

Table 1. Descriptive statistics and correlation results

Scales	1.	2.	3.	4.
1. Hope	–	.34**	.27**	.42**
2. Social support		–	.48**	.34**
3. Social connectedness			–	.28**
4. Resilience				–
Mean	34.34	54.48	29.07	18.65
SD	6.63	17.61	10.70	4.47
Skewness	-.37	-.30	-.11	.13
Kurtosis	-.40	-.80	-.82	.09
Internal reliability estimates (α)	.82	.90	.88	.75

**All correlation coefficients significant at level p<.001.

Additionally, according to the gender variable, it shows that the resilience and hope scores of boys differ significantly from those of girls. In other hand, no significant difference was found in social connectedness and social support in terms of gender.

Testing Mediation Model

After examining descriptive statistics and correlation analysis, the mediating effects of social support and social connectedness on the relationship between hope and resilience were examined. Mediation analysis results indicating the direct and indirect effects of hope on resilience through social support and social connectedness are presented in Table 2. Findings from mediation analyses revealed that hope had a significant predictive effect on social connectedness (β = .27) and social support (β = .23). Social connectedness was also a significant predictor of adolescents' social support (β = .41). Hope explained 7% of the total variance in social connectedness and hope and connectedness accounted for 27% of the total variance in social support. These results indicate that social connectedness mediates the effect of hope on social support, and adolescents with social connectedness are more likely to have high levels of social support.

The results of mediation analyses additionally showed that resilience was significantly predicted by social support (β = .17) and social connectedness (β = .11). Hope had also a significant predictive effect on resilience (β = .33), as shown in Figure 1. Hope, social support, and social connectedness, together, accounted for 23% of the total variance in adolescents' resilience. Additionally, social support and social connectedness partially mediating between hope and resilience in adolescents. These results suggest that social connectedness and social support are important resources in promoting resilience among high school adolescents. Specifically, social support serves as a unique factor in supporting resilience. The indirect effect for both mediators in the model were significant (standardized total indirect effect = .09, SE = .02 [BootCI = .05, .13]).

Discussion

The purpose of this study was to investigate whether social support and social connectedness play mediating roles in the relationship between hope and resilience in adolescents. The results supported the hypotheses of this study. The results of the study show that hope positively and significantly predicted social connectedness, social support and resilience.

Table 2. Unstandardized direct and indirect coefficients for the mediation model

	Consequent			
	M_1 (Social connectedness)			
Antecedent	Coeff.	SE	t	p
X (Hope)	.44	.08	5.72	<.001
Constant	18.40	1.93	9.52	<.001
	$R^2 = .07$			
	$F = 32.71; p < .001$			
	M_2 (Social support)			
X (Hope)	.60	.12	5.11	<.001
M_1 (Social connectedness)	.68	.07	9.46	<.001
Constant	20.17	3.12	6.46	<.001
	$R^2 = .27$			
	$F = 76.62; p < .001$			
	Y (Resilience)			
X (Hope)	.24	.03	7.14	<.001
M_1 (Social connectedness)	.05	.02	2.22	.026
M_2 (Social support)	.05	.01	3.40	<.001
Constant	8.85	.91	9.68	<.001
	$R^2 = .23$			
	$F = 4.59; p < .001$			

Indirect effects of hope on resilience

	Effect	SE	BootLLCI	BootULCI
Hope–>connectedness–> resilience	.02	.01	.01	.10
Hope–>support–> resilience	.03	.01	.01	.05
Hope–>connectedness–> support–> resilience	.01	.01	.01	.05

Note. SE = standard error. Coeff = unstandardized coefficient. X = independent variable; M = mediator variables; Y = dependent variables. Number of bootstrap samples for percentile bootstrap confidence intervals: 5000
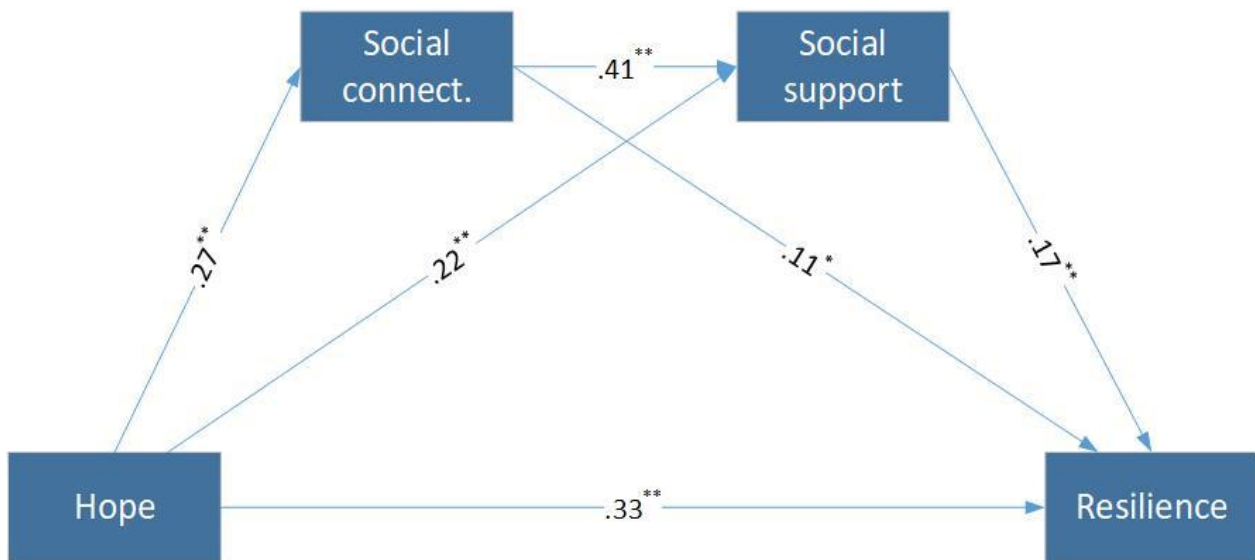

Figure 2. Standardized direct and indirect effects indicating the mediating roles of social connectedness and social support in the association between hope with resilience
Note. *p<.05, **p<.001.

These results are consistent with earlier studies (Li & Kirmani et al., 2015; Xiang et al., 2020). For example, Zhou et al. (2018) found that hope positively predicted social support among adolescents. Likewise, Zhou et al. (2018) found that social support was positively predicted by hope which mediated the relationship between social support and post-traumatic stress disorder in adolescents. Another study by Liu et al. (2020) revealed that hope had a positive effect on school engagement, and as children's hope levels increase, their level of school engagement also increases. Furthermore, Griggs and Walker (2016) reported a positive and significant relationship between hope and resilience. This suggests that hope has many

positive effects on adolescents' psychological health. Similarly, Hidayat and Nurhayati (2019) documented that resilience was positively predicted by hope which explained 27.8% of the total variance in resilience. These results collectively support the notion that having a high level of hope substantially affects the resilience of individuals in a positive way.

The results also support the hypothesis that social connectedness and social support positively affect resilience. Similar results as to this hypothesis were obtained in previous research findings (Chang & Yarnal, 2018; Hidayat & Nurhayati, 2019; Kwon, 2018; O'Neill et al., 2020; Rahat & İlhan, 2016; Salami, 2010; Wilks, 2008; Yıldırım & Çelik-Tanriverdi, 2021). For instance, Achour and Nor (2014) found that there was an association relationship between social support and resilience among high school students. In another recent study, Turgut and Çapan (2017), found that school belonging, and social connectedness significantly predicted resilience in a large sample of high school students. Similarly, studies highlighted that perceived social support from family and peers is an important predictor of high school students' resilience (Arastaman & Balcı, 2013; Bostan & Erdinç, 2019; Sabouripour & Roslan, 2015). The relationships among the above-mentioned variables have also been confirmed in experimental studies. For example, Scarf et al. (2017) revealed that social connectedness and social support have a positive effect on adolescents' resilience. In a study conducted by Arslan and Allen (2021) on secondary school students, belonging to school was found to be positively predicted resilience. In summary, all these results show that social connectedness and social support are two important psychological factors in strengthening and improving the resilience of individuals.

Research findings showed that social connectedness positively and significantly predicts social support. As social connectedness levels of adolescent's increase, their social support levels increase, and they feel more confident. Social connectedness is an important positive predictor of social support among adolescents (Cao et al., 2018; Lee et al., 2017). Collectively, individuals' feeling of belonging and connectedness contributes to their social support.

Finally, the results obtained from this study suggest that the relationship between hope and resilience was mediated by social support and social connectedness. This result shows that social connectedness and social support are two important

parameters in strengthening the positive aspects of individuals and improving their psychological health. There is scarcity of evidence regarding simultaneous effects of social connectedness and social support in the relationship between the analysed variables (Duru, 2008b; Hashemi et al., 2020). Despite this, it is important to note that there are studies examining the mediating roles of social connectedness and social support between many variables separately (Gallagher et al., 2014; Hou et al., 2021; Kapıkıran, 2013; Nilsen et al., 2013; Yuan et al., 2018; Zhang et al., 2021; Zhao et al., 2018). For example, Chen et al. (2017) found that social support and self-esteem mediated the relationship between parental attachment and life satisfaction in high school students aged 10-20 years. Arslan (2018) found that social connectedness mediated the relationship between psychological maltreatment and subjective well-being. Likewise, You et al. (2008) revealed that school engagement played a mediating role in the relationship between hope and life satisfaction. Kong et al. (2021), established that social support mediates the relationship between continuous gratitude and subjective well-being and is an important source in increasing gratitude and subjective well-being in adolescents. Furthermore, Wang and Xu (2017) revealed that social support has a mediating role between resilience and quality of life. Liu et al. (2020) determined that the effect of school engagement on reducing the victimization of students and increasing their psychological well-being levels is important. The positive role of social connectedness on important life outcomes has been also established in the face of adversity. For example, Yıldırım et al. (2021) found that social connectedness and optimism mediated the relationship between coronavirus stress and COVID-19 burnout. In summary, high levels of social connectedness and social support make a great contribution to greater hope and strengthen resilience.

Limitations

This study is not without limitations. First, the data for this study were collected during the COVID-19 pandemic and in a classroom environment. Therefore, not all students had a chance to participate in the survey as most students did not come to school due to the pandemic. Second, the data for the study were collected from those who were residing in a city center located in south-eastern Turkey. Thus, the results of this study cannot be generalized to all high school students. It would be important to conduct new studies with larger groups and in different cities. Third, the study group

consists of only high school students. Future studies should conduct studies by including primary and secondary school students. Finally, self-report scales were used to collect data for the study. As such, the participants may have marked their answers biasedly. In this regard, different research methods such as interview and focus groups can be used in future research.

Conclusion

The results of the study show that there are positive and significant relationships between social support, social connectedness, hope and resilience in adolescents. A high level of resilience is supported through social connectedness and social support. A high level of hope enables adolescents to possess strong social connectedness, social support, and resilience. Most importantly, social connectedness and social support played a key mediating role in the relationship between hope and resilience of adolescents. Adolescents' positive expectations about the future, high sense of belonging and connectedness, and sufficient support from their social environment affect the development of students' resilience levels positively.

Compliance with Ethical Standards

Ethical Standards

All study procedures involving human participants followed institutional and/or national research committee ethical standards and the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The research was approved by Batman University/Turkey Ethics Committee.

Funding

Conflicts of Interest/Competing Interests

The author declare that they have no conflict of interest.

ORCID

İlhan Çiçek https://orcid.org/0000-0003-0266-86-56

References

Achour, M., & Nor, M. R. M. (2014). The effects of social support and resilience on life satisfaction of secondary school students. *Journal of Academic and Applied Studies*, *4*(1), 12-20.

Adler-Constantinescu, C., Beşu, E. C., & Negovan, V. (2013). Perceived social support and perceived self-efficacy during adolescence. *Procedia-Social and Behavioral Sciences*, *78*, 275-279.

Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Journal of Pedagogical Sociology, and Psychology*, *2*(1), 45-51.

Alshehri, N. A., Yildirim, M., & Vostanis, P. (2020). Saudi adolescents' reports of the relationship between parental factors, social support and mental health problems. *Arab Journal of Psychiatry*, 31(2), 130–143. doi-10.12816/0056864

Arastaman, G., & Balcı, A. (2013). Investigation of high school students' resiliency perception in terms of some variables, *Educational Sciences: Theory & Practice, 13*(2), 922-928.

Arslan, G. (2015). Ergenlerde psikolojik sağlamlık: Bireysel koruyucu faktörlerin rolü. *Türk Psikolojik Danışma ve Rehberlik Dergisi, 5*(44), 73-82.

Arslan, G. (2015b). Psikolojik istismar, Psikolojik sağlamlık, Sosyal Bağlılık ve Aidıyet Duygusu Arasındaki İlişki. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 1*(36), 47-58.

Arslan, G. (2016). Psychological maltreatment, emotional and behavioral problems in adolescents: The mediating role of resilience and self-esteem. *Child Abuse & Neglect, 52,* 200-209.

Arslan, G. (2018a). Psychological maltreatment, social acceptance, social connectedness, and subjective well-being in adolescents. *Journal of Happiness Studies*, *19*(4), 983-1001.

Arslan, G. (2018b). Social exclusion, social support and psychological wellbeing at school: A study of mediation and moderation effect. *Child indicators research, 11*(3), 897-918.

Arslan, G. (2019). Mediating role of the self–esteem and resilience in the association between social exclusion and life satisfaction among adolescents. *Personality and Individual Differences, 151,* 109514.

Arslan, G. (2021). Psychological maltreatment and spiritual wellbeing in Turkish college young adults: exploring the mediating effect of college belonging and social support. *Journal of Religion and Health, 60*(2), 709-725.

Arslan, G., & Allen, K. A. (2021). School victimization, school belongingness, psychological well-being, and emotional problems in adolescents. *Child Indicators Research*, 14, 1501-1517.

Arslan, G., & Balkıs, M. (2016). Ergenlerde duygusal istismar, problem davranışlar, öz-yeterlik ve psikolojik sağlamlık arasındaki ilişki. *Sakarya University Journal of Education, 6*(1), 8-22.

Arslan, G., & Yıldırım, M. (2021). A longitudinal examination of the association between meaning in life, resilience, and mental well-being in times of coronavirus pandemic. *Frontiers in Psychology*, *12*,645597.10.3389/fpsyg.2021.645597

Atik, G., & Kemer, G. (2009). Çocuklarda umut ölçeği'nin psikometrik özellikleri: Geçerlik ve güvenirlik çalışması. *İlkogretim Online*, *8*(2). 379-390.

Aziz, I. A., & Yıldırım, M. (2020). Investigating relationship between psychological trait resilience and forgiveness among internally displaced persons. *Psychology, Community & Health*, *8*(1), 263-274. https://doi.org/10.5964/pch.v8i1.313

Bell, C. M., Ridley, J. A., Overholser, J. C., Young, K., Athey, A., Lehmann, J., & Phillips, K. (2018). The role of perceived burden and social support in suicide and depression. *Suicide and Life-Threatening Behavior*, *48*(1), 87-94.

Belen, H., Yildirim, M., & Belen, F. S. (2020). Influence of fear of happiness on flourishing: Mediator roles of hope agency and hope pathways. *Australian Journal of Psychology, 72*(2), 165-173.

Bonanno, G. A. (2004). Loss, trauma and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist, 59*(1), 20-28. https://doi.org/10.1037/0003-   066X.59.1.20

Bostan, B. C., & E, Duru. (2019). Ergenlerde algılanan psikolojik istismar ile öznel iyi oluş ilişkisinde psikolojik sağlamlık ve sosyal bağlılığın rolü. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, *47*, 205-224.

Bowen, P. G., Clay, O. J., Lee, L. T., Vice, J., Ovalle, F., & Crowe, M. (2015). Associations of social support and self-efficacy with quality of life in older adults with diabetes. *Journal of Gerontological Nursing*, *41*(12), 21-29.

Brausch, A. M., & Decker, K. M. (2014). Self-esteem and social support as moderators of depression, body image, and disordered eating for suicidal ideation in adolescents. *Journal of Abnormal Child Psychology*, *42*(5), 779-789.

Cao, C., Meng, Q., & Shang, L. (2018). How can Chinese international students' host-national contact contribute to social connectedness, social support and reduced prejudice in the mainstream society? Testing a moderated mediation model. *International Journal of Intercultural Relations*, *63*, 43-52.

Chang, C. W., Yuan, R., & Chen, J. K. (2018). Social support and depression among Chinese adolescents: The mediating roles of self-esteem and self-efficacy. *Children and Youth Services Review*, *88*, 128-134.

Chang, P. J., & Yarnal, C. (2018). The effect of social support on resilience growth among women in the Red Hat Society. *The Journal of Positive Psychology*, *13*(1), 92-99.

Chen, F., Zheng, D., Liu, J., Gong, Y., Guan, Z., & Lou, D. (2020). Depression and anxiety among adolescents during COVID-19: A cross-sectional study. *Brain, Behavior, and Immunity*, *88*, 36.

Chen, W., Zhang, D., Pan, Y., Hu, T., Liu, G., & Luo, S. (2017). Perceived social support and self-esteem as mediators of the relationship between parental attachment and life satisfaction among Chinese adolescents. *Personality and Individual Differences*, *108*, 98-102.

Cobb, S. (1976). Presidential address: Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*(5), 300-314.

Cornwell, B., Laumann, E. O., & Schumm, L. P. (2008). The social connectedness of older adults: A national profile. *American Sociological Review*, *73*(2), 185-203.

Çiçek, İ., Tanhan, A., & Tanrıverdi, S. (2020). COVID-19 ve eğitim. *Milli Eğitim Dergisi*, *49*(1), 1091-1104.

Çiçek, İ., Tanriverdi, S., Şanli, M. E., & Bulus, M. (2021). Parental attitudes and socio-demographic factors as predictors of smartphone addiction in university students. *International Journal of Psychology and Educational Studies*, *8*(2), 158-169.

Çiçek, İ. (2021). Mediating role of self-esteem in the association between loneliness and psychological and subjective well-being in university students. *International Journal of Contemporary Educational Research*, *8*(2), 83-97.

Dang, M. T. (2014). Social connectedness and self-esteem: Predictors of resilience in mental health among maltreated homeless youth. *Issues in Mental Health Nursing*, *35*(3), 212-219.

Doğan, T. (2015). Kısa psikolojik sağlamlık ölçeği'nin Türkçe uyarlaması: Geçerlik ve   güvenirlik

çalışması. *The Journal of Happiness & Well-Being*, *3*(1), 93-102.

Duru, E. (2007). The adaption of social connectedness scale Turkish culture. *Eurasian Journal of Educational Research, 26*, 85–94.

Duru, E. (2008a). Yalnızlığı yordamada sosyal destek ve sosyal bağlılığın rolü. *Türk Psikoloji Dergisi, 23*(62), 15-24.

Duru, E. (2008b). The predictive analysis of adjustment difficulties from loneliness, social support, and social connectedness. *Educational Sciences: Theory and Practice*, 8(3), 849-856.

Field, A. (2009). *Discovering statistics using SPSS*. Sage publications.

Folkman, S. (2013). Stress, coping, and hope. In *Psychological aspects of cancer* (pp. 119-127). Springer, Boston, MA.

Fredrick, S. S., Demaray, M. K., Malecki, C. K., & Dorio, N. B. (2018). Can social support buffer the association between depression and suicidal ideation in adolescent boys and girls? *Psychology in the Schools*, *55*(5), 490-505.

Gallagher, M., Prinstein, M. J., Simon, V., & Spirito, A. (2014). Social anxiety symptoms and suicidal ideation in a clinical sample of early adolescents: Examining loneliness and social support as longitudinal mediators. *Journal of Abnormal Child Psychology*, *42*(6), 871-883.

Gazmararian, J., Weingart, R., Campbell, K., Cronin, T., & Ashta, J. (2021). Impact of COVID-19 pandemic on the mental health of students from 2 semi-rural high schools in Georgia. *Journal of School Health*, *91*(5), 356-369.

Genç, E., & Arslan, G. (2021). Optimism and dispositional hope to promote college students' subjective well-being in the context of the COVID-19 pandemic. Journal of Positive School Psychology, 5(2), 87-96. https://doi.org/10.47602/jpsp.v5i2.255

Griggs, S., & Walker, R. K. (2016). The role of hope for adolescents with a chronic illness: an integrative review. *Journal of Pediatric Nursing*, *31*(4), 404-421.

Hagerty, B. M., Lynch-Sauer, J., Patusky, K. L., & Bouwsema, M. (1993). An emerging theory of human relatedness. *Image: The Journal of Nursing Scholarship*, *25*(4), 291-296.

Hall, C. W., Spruill, K. L., & Webster, R. E. (2002). Motivational and attitudinal factors in college students with and without learning disabilities. *Learning Disability Quarterly*, *25*(2), 79-86.

Hammer, K., Mogensen, O., & Hall, E. O. (2009). The meaning of hope in nursing research: A meta-synthesis. *Scandinavian Journal of Caring Sciences*, *23*(3), 549-557.

Hashemi, N., Marzban, M., Sebar, B., & Harris, N. (2020). Religious identity and psychological well-being among middle-eastern migrants in Australia: The mediating role of perceived social support, social connectedness, and perceived discrimination. *Psychology of Religion and Spirituality*, *12*(4), 475.

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.

Hernández, A. L., Escobar, S. G., Fuentes, N. I. G. A. L., & Eguiarte, B. E. B. (2019). Stress, self-efficacy, academic achievement and resilience in emerging adults. *Electronic Journal of Research in Educational Psychology*, *17*(47), 129-148.

Hidayat, N., & Nurhayati, S. R. (2019). The Effect of Social Support and Hope on Resilience in Adolescents. *Humaniora*, *10*(3), 219-225.

Hodges, K., & Winstanley, S. (2012). Effects of optimism, social support, fighting spirit, cancer worry and internal health locus of control on positive affect in cancer survivors: a path analysis. *Stress and Health*, *28*(5), 408-415.

Hou, T., Yin, Q., Xu, Y., Gao, J., Bin, L., Li, H., ... & Ni, C. (2021). The mediating role of perceived social support between resilience and anxiety 1 year after the COVID-19 Pandemic: Disparity between high-risk and low-risk nurses in China. *Frontiers in Psychiatry*, *12*.

Imran, N., Zeshan, M., & Pervaiz, Z. (2020). Mental health considerations for children & adolescents in COVID-19 Pandemic. *Pakistan Journal Of Medical Sciences*, *36*(COVID19-S4), S67.

Jose, P. E., Ryan, N., & Pryor, J. (2012). Does social connectedness promote a greater sense of well-being in adolescence over time? *Journal of research on adolescence*, *22*(2), 235-251.

Kapıkıran, Ş. (2013). Loneliness and life satisfaction in Turkish early adolescents: The mediating role of self-esteem and social support. *Social Indicators Research*, *111*(2), 617-632.

Kirmani, M. N., Sharma, P., Anas, M., & Sanam, R. (2015). Hope, resilience and subjective well-being amongcollege going adolescent girls. *International Journal of Humanities & Social Science Studies*, *2*(1), 262-270.

Kocatürk, M., & Çiçek, İ. (2021). The effect of positive childhood experiences on   psychological

resilience of university students: The mediating role of self-esteem. *Journal of Psychologists and Counsellors in Schols*. Manuscript accepted for publication.

Kohut, H. (2009). *How does analysis cure?*: University of Chicago Press.

Kong, F., Yang, K., Yan, W., & Li, X. (2021). How does trait gratitude relate to subjective well-being in Chinese adolescents? The mediating role of resilience and social support. *Journal of Happiness Studies*, *22*(4), 1611-1622.

Kwon, J. (2018). Mediating Effect on the Relationship between the Mental Health and Well-being of High School Students Focused on Resilience, Self-esteem, and Social Support. *Journal of The Korean Society of Integrative Medicine*, *6*(4), 47-61.

Lamblin, M., Murawski, C., Whittle, S., & Fornito, A. (2017). Social connectedness, mental health and the adolescent's brain. *Neuroscience & Biobehavioral Reviews*, *80*, 57-68.

Lee, B., Kwon, O., Lee, I., & Kim, J. (2017). Companionship with smart home devices: The impact of social connectedness and interaction types on perceived social support and companionship in smart homes. *Computers in Human Behavior*, *75*, 922- 934.

Lee, R. M., & Robbins, S. B. (1995). Measuring belongingness: The Social Connectedness and the Social Assurance scales. *Journal of Counselling Psychology, 42*(2), 232–241.

Lee, R. M., & Robbins, S. B. (1998). The relationship between social connectedness and anxiety, self-esteem, and social identity [Editorial]. *Journal of Counseling Psychology,45*(3),338–345

Lee, R. M., Dean, B. L., & Jung, K. R. (2008). Social connectedness, extraversion, and subjective well-being: Testing a mediation model. *Personality and Individual Differences*, *45*(5), 414-419.

Lee, R. M., Draper, M., & Lee, S. (2001). Social connectedness, dysfunctional interpersonal behaviors, and psychological distress: Testing a mediator model. *Journal of Counseling Psychology*, *48*(3), 310-318.

Liu, Y., Carney, J. V., Kim, H., Hazler, R. J., & Guo, X. (2020). Victimization and students' psychological well-being: The mediating roles of hope and school connectedness. *Children and Youth Services Review*, *108*, 104674.

Mak, A. S., & Kim, I. (2011). Korean international students' coping resources and psychological adjustment in Australia. *OMNES: The Journal of Multicultural Society*, *2*(1), 56-84.

Masten, A. S., & Wright, M. (2010). Resilience over the lifespan: Developmental perspectives on resistance, recovery, and transformation. In J. W. Reich, A. J. Zautra & J. S. Hall (Eds.), *Handbook of Adult Resilience* (p. 213–237). Guilford Press.

Moghtader, L., & Shamloo, M. (2019). The correlation of perceived social support and emotional schemes with students' social anxiety. *Journal of Holistic Nursing and Midwifery*, *29*(2), 106-112.

Moulden, H. M., & Marshall, W. L. (2005). Hope in the treatment of sexual offenders: The potential application of hope theory. *Psychology, Crime & Law*, *11*(3), 329-342.

Munoz, Ricky T., Chan M. Hellman, and Kara L. Brunk (2017). The relationship between hope and life satisfaction among survivors of intimate partner violence: The enhancing effect of self-efficacy. *Applied Research in Quality of Life* 12 (4), 981-995.

Nilsen, W., Karevold, E., Røysamb, E., Gustavson, K., & Mathiesen, K. S. (2013). Social skills and depressive symptoms across adolescence: Social support as a mediator in girls versus boys. *Journal of Adolescence*, *36*(1), 11-20.

Nitschke, J. P., Forbes, P. A., Ali, N., Cutler, J., Apps, M. A., Lockwood, P. L., & Lamm, C. (2021). Resilience during uncertainty? Greater social connectedness during COVID-19 lockdown is associated with reduced distress and fatigue. *British Journal of Health Psychology*, *26*(2), 553-569.

O' O'Donnell, A. W., Stuart, J., Jose, P. E., & Homel, J. (2021). Trajectories of substance use and well-being in early and middle adolescence shaped by social connectedness. *Journal of Research on Adolescence*.1-21.
https://doi.org/10.1111/jora.12620

O'Neill, E., Clarke, P., Fido, D., & Vione, K. C. (2020). The role of future time perspective, body awareness, and social connectedness in the relationship between self-efficacy and resilience. *International Journal of Mental Health andAddiction*,1-11.
https://doi.org/10.1007/s11469-020-00434-6

Ortega, D. M. (2002). How much support is too much? Parenting efficacy and social support. *Children and Youth Services Review*. *24*(11), 853–876.

Phan, H. P. (2013). Examination of self-efficacy and hope: A developmental approach using latent

growth modeling. *The Journal of Educational Research*, *106*(2), 93-104.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirecteffects in multiple mediator models. *Behavior research methods*, *40*(3), 879-891.

Rahat, E., & İlhan, T. (2016). Coping Styles, Social Support, Relational Self-Construal, and Resilience in Predicting Students' Adjustment to University Life. *Educational Sciences: Theory and Practice*, *16*(1), 187-208.

Reyes, M. E. S., Davis, R. D., Chua, C. A. P. Q., Olaveria, G. L., Pamintuan, L. J. E., Serrano, M., ... & Tan, J. L. E. C. (2020). Relative importance of social support and social connectedness as protective factors of suicidal ideation among selected Filipino late adolescents. *Suicidology Online*, *11*(1).

Sabouripour, F., & Roslan, S. B. (2015). Resilience, optimism and social support among international students. *Asian Social Science*, *11*(15), 159.

Sagone, E., & De Caroli, M. E. (2014). Relationships between psychological well-being and resilience in middle and late adolescents. *Procedia: Social and Behavioral Sciences, 141*, 881-887.

Salami, S. O. (2010). Moderating effects of resilience, self-esteem and social support on adolescents' reactions to violence. *Asian Social Science*, *6*(12), 101.

Satici, S. A. (2016). Psychological vulnerability, resilience, and subjective well-being: The mediating role of hope. *Personality and Individual Differences*, *102*, 68-73.

Scarf, D., Hayhurst, J. G., Riordan, B. C., Boyes, M., Ruffman, T., & Hunter, J. A. (2017). Increasing resilience in adolescents: the importance of social connectedness in adventure education programmes. *Australasian Psychiatry*, *25*(2), 154-156.

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P. ve Jennifer Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15, 194- 200.

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The Brief Resilience Scale: Assessingthe ability to bounce back. *International Journal of Behavioral Medicine, 15*(3), 194-200.

Snyder, C. R. (2002). Hope theory: Rainbows in the mind. *Psychological inquiry*, *13*(4), 249- 275.

Snyder, C. R., Hoza, B., Pelham, W. E., Rapoff, M., Ware, L., & Danovsky, M. (1997). The development and validation of the Children's Hope Scale. *Journal of Pediatric Psychology*, 22 (3) 399 – 421.

Stavrova, O., & Luhmann, M. (2016). Social connectedness as a source and consequence of meaning in life. *The Journal of Positive Psychology*, *11*(5), 470-479.

Stumblingbear-Riddle, G., & Romans, J. S. (2012). Resilience among urban American Indian adolescents: Exploration into the role of culture, self-esteem, subjective well-being, and social support. *American Indian and Alaska Native Mental Health Research: The Journal of the National Center*, *19*(2), 1-19.

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics (6th ed.)*. Pearson.

Tanhan, A. (2020). COVID-19 sürecinde Online Seslifoto (OSF) yöntemiyle biyopsikososyal manevi ve ekonomik meseleleri ve genel iyi oluş düzeyini ele almak: OSF'nin Türkçeye uyarlanması. *Electronic Turkish Studies*, *15*(4), 1030-1085.

Tanhan, A., Yavuz, K.F., Young, J.S., Nalbant, A., Ar slan, G., Yıldırım, M…..,& Çiçek, İ. (2020). A proposed framework based on literature review of online contextual mental health services to enhance wellbeing and address psychopathology during covid-19. *Electronic Journal of General Medicine*, 17(6), em254.

Turgut, Ö. & ÇAPAN, B. E. (2017). Ergen Psikolojik Sağlamlık Düzeyinin Yordayıcıları: Algılanan Sosyal Destek ve Okul Bağlılığı. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, (44), 162-183.

Tusaie, K., & Dyer, J. (2004). Resilience: A historical review of the construct. *Holistic nursing practice*, *18*(1), 3- 10.

Uysal, V., Göktepe, A. K., Karagöz, S., & İlerisoy, M. (2017). Dinî başa çıkma ile umut, hayat memnuniyeti ve psikolojik sağlamlık arasındaki etkileşim üzerine bir araştırma. *Marmara Üniversitesi İlâhiyat Fakültesi Dergisi*, *52*(52), 139-160.

Wang, Z., & Xu, J. (2017). Association between resilience and quality of life in Wenchuan Earthquake Shidu parents: The mediating role of social support. *Community mental health journal*, *53*(7), 859-863.

Waters, L., Allen, K. A., & Arslan, G. (2021). Stress-related growth in adolescents returning to school

after Covid-19 school closure. *Frontiers in Psychology*, *12*.

Watson, R. J., Grossman, A. H., & Russell, S. T. (2019). Sources of social support and mental health among LGBT youth. *Youth & Society*, *51*(1), 30-48.

Wilks, S. E. (2008). Resilience amid academic stress: The moderating impact of social support among social work students. *Advances in Social Work*, *9*(2), 106-125.

Williamson, I., Sandage, S. J., & Lee, R. M. (2007). How social connectedness affects guilt and shame: Mediation by hope and differentiation of self. *Personalityand Individual Differences*, *43*(8), 2159-2170.

Wrobleski, K. K., & Snyder, C. R. (2005). Hopeful thinking in older adults: Back to the future. *Experimental Aging Research*, *31*(2), 217-233.

Wu, L. M., Sheen, J. M., Shu, H. L., Chang, S. C., & Hsiao, C. C. (2013). Predictors of anxiety and resilience in adolescents undergoing cancer treatment. *Journal of advanced nursing*, *69*(1), 158-166.

Wu, L. M., Sheen, J. M., Shu, H. L., Chang, S. C., & Hsiao, C. C. (2013). Predictors of anxiety and resilience in adolescents undergoing cancer treatment. *Journal of Advanced Nursing*, *69*(1), 158-166.

Xi, X., Wang, Y., & Jia, B. (2017, May). The Effect of Social Support on Subjective Well- being: Mediator roles of self-esteem and self-efficacy. In *2017 3rd International Conference on Humanities and Social Science Research (ICHSSR 2017)* (pp. 487-499). Atlantis Press.

Xiang, G., Teng, Z., Li, Q., Chen, H., & Guo, C. (2020). The influence of perceived social support on hope: A longitudinal study of older-aged adolescents in China. *Children and Youth Services Review*, *119*, 105616.

Xie, X., Wang, X., Zhao, F., Lei, L., Niu, G., & Wang, P. (2018). Online real-self presentation and depression among Chinese teens: Mediating role of social support and moderating role of dispositional optimism. *Child indicators research*, *11*(5), 1531-1544.

Yarcheski, A., & Mahon, N. E. (2016). Meta-analyses of predictors of hope in adolescents. *Western Journal of Nursing Research*, *38*(3), 345-368.

Yarcheski, A., Mahon, N.E. and Yarcheski, T.J., 2001. Social support and well-being in early adolescents:

The role of mediating variables. *Clinical Nursing Research*, *10*(2), pp.163-181.

Yildirim, M. (2019). Mediating role of resilience in the relationships between fear of happiness and affect balance, satisfaction with life, and flourishing. *Europe'sJournal of Psychology*, *15*(2), 183-198.

Yıldırım, M. (2020). Confidence in Social Interactions Among Turkish Adults Living in the United Kingdom. *Muhakeme Dergisi*, *3*(2), 92-102. Doi: 10.33817/muhakeme.825488

Yıldırım, M., & Arslan, G. (2020). Exploring the associations between resilience, dispositional hope, preventive behaviours, subjective well-being, and psychological health among adults during early stage of COVID-19. *Current Psychology*. https://doi.org/10.1007/s12144-020-01177-2

Yıldırım, M., & Tanrıverdi, F. Ç. (2021). Social support, resilience and subjective well-being in college students. *Journal of Positive School Psychology*. 5(2), 127-137.

Yıldırım, M., Çiçek, İ., & Şanlı, M. E. (2021). Coronavirus stress and COVID-19 burnout among healthcare staffs: The mediating role of optimism and social connectedness. *Current Psychology*, 1-9.

You, S., Furlong, M. J., Felix, E., Sharkey, J. D., Tanigawa, D., & Green, J. G. (2008). Relations among school connectedness, hope, life satisfaction, and bully victimization. *Psychology in the Schools*, *45*(5), 446-460.

You, S., Furlong, M. J., Felix, E., Sharkey, J. D., Tanigawa, D., & Green, J. G. (2008). Relations among school connectedness, hope, life satisfaction, and bully victimization. *Psychology in the Schools*, *45*(5), 446-460.

Yuan, G., Goh, P. H., Xu, W., & An, Y. (2018). Perceived social support mediates the relations between parental attachment and posttraumatic growth and resilience in adolescents following the Yancheng tornado. *Journal of Aggression, Maltreatment & Trauma*, *27*(6), 631-644.

Zhang, C., Ye, M., Fu, Y., Yang, M., Luo, F., Yuan, J., & Tao, Q. (2020). The psychological impact of the COVID-19 pandemic on teenagers in China. *Journal of Adolescent Health*, *67*(6), 747-755.

Zhang, Y., Dong, K., & Zhao, G. (2021). The mediating role of social connectedness in the effect of positive personality, alexithymia and emotional

granularity on life   satisfaction: analysis based on a   structural   equation   model. *Personality   and Individual Differences*, *171*, 110473.

Zhou, X., & Wu, X. (2016). Understanding the roles of gratitude   and   social   support   in   posttraumatic growth among adolescents after   Ya'an earthquake: A longitudinal study. *Personality and Individual Differences*, *101*, 4-8.

Zhou, X., Wu, X., & Zhen, R. (2018). Self-esteem and hope mediate the relations between social support and post-traumatic stress disorder and growth in adolescents following   the   Ya'an earthquake. *Anxiety, Stress, & Coping*, *31*(1), 32-45.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale   of perceived social support. *Journal of personality assessment*, *52*(1), 30-41.