



Relational Violence, Social Support, Self-Esteem, Depression and Anxiety: A Moderated Mediation Model

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Abstract

Objectives The current study aimed to explore whether relational violence victimization predicts depression and anxiety through self-esteem and whether this indirect effect is moderated by social support.

Methods A sample of 1993 high school students completed self-report measures of relational violence victimization, self-esteem, social support, symptoms of depression and anxiety. We conducted a moderated mediation model analysis in order to detect whether there is an indirect effect from relation violence victimization on depression and anxiety through self-esteem, and this indirect effect is dependent on the moderation of social support.

Results Results indicated that relational violence and social support have a direct and interactive effect on self-esteem. Self-esteem mediates the relationships between relational violence, depression, and anxiety. Furthermore, the findings suggest that the indirect effect of relational violence on depression and anxiety through self-esteem may vary depending on the level of social support.

Conclusions The current findings highlighted the protective role of social support for adolescents' well-being.

Keywords Relational violence victimization · Self-esteem · Social support · Adolescents · Depression · Anxiety

Violence at schools is as a serious problem that causes negative effects on the subjective well-being of students. As a natural consequence of this problem, the literature has aimed to develop intervention programs to clearly identify the violent behaviors and terminate them (Abada et al. 2008; Baldry and Winkel 2003; Graham and Bellmore 2007; Hawker and Boulton 2000; Klomek et al. 2008). Notably, identifying the violent experiences between individuals in a concrete and clear way is sometimes difficult. For example, because some violent behaviors that aim to hurt the well-being of another might not include physical violence, this situation might be more complex than simply disrupting a physical violence behavior pattern (Crick et al. 2001; Crick et al. 2002). Relational violence does not include any form of physical violence but aims to directly to harm another individual's relationships, feelings of acceptance, friendship, and belongingness. This type of violence

is frequently observed, especially between adolescents (Crick et al. 1999).

Relational violence is an extremely offending type of violence that occurs by means of behaviors observed in interpersonal relations, such as social isolation, exclusion, and rejection. This type of violence, which aims to directly diminish the satisfaction from interpersonal relations, includes excluding the targeted individual from the group, not talking to them, leaving them alone, or insulting them through malediction (Crick et al. 1999; Crick and Grotpeter 1995). Crick et al. (1999) and Crick and Grotpeter (1995) have indicated that relational violence is firstly observed between young children in play groups; however, within the developmental process, interpersonal violence behaviors transform from the physical type and become more complex, which may be why relational violence is more common in adolescence (Crick et al. 1996).

The increasing frequency of relational violence in adolescence might be due to the important role of adolescents' needs and their cognitive and social capacity, which has been developing since childhood (Crick et al. 2001). Additionally, a crucial developmental period in adolescence is when they gain autonomy and create positive relations that provide acceptance from peer groups. Moreover, in

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adolescence, it is important to build relationships with peers of both sexes (Crick et al. 2002). With adolescents, it is more understandable that the harmful behaviors in adolescence aim to damage the friendships of an individual or their social status in the group. Previous studies have suggested that relational violence have negative effects similar to physical violence (Cole et al. 2014; Sullivan et al. 2006). For instance, Sullivan et al. (2006) examined the association between relational violence victimization and externalizing behaviors among adolescents and found that exposing to relational violence predicts all types of drug use even after physical violence is controlled.

Previous research has suggest a relationship exists between perceived relational violence and depression and anxiety. Zimmer-Gembeck and Pronk (2012) found that adolescents who reported relational violence exposure from their peers stated a higher level of depression and anxiety symptoms. Similarly, Prinstein et al. (2001) found a significant relationship between exposure to relational violence and an increase in the symptoms of depression and anxiety. Exposure to relational violence not only increases depression and anxiety levels of adolescents but also negatively affects those levels in later developmental periods. Dempsey and Storch (2008) examined the effect of perceived relational violence in adolescence on emotional adaptation in early adulthood and found that a significant association between perceived relational violence in the past and ongoing depression and anxiety symptoms. All those studies have stressed that relational violence is a risk factor for the depression and anxiety levels of adolescents; however, *when* and *how* relational violence affects the level of depression and anxiety in adolescents remains unclear. Therefore, understanding the underlying mechanisms of these relations may be a basis for the intervention programs that aim to minimize the negative effects of relational violence on the mental health of adolescents.

Self-esteem may be one of the mechanisms involved in the relationship between relation violence and depression and anxiety levels in adolescents. Rosenberg (1965) defined self-esteem “as favorable or unfavorable attitude towards self” (p.15). McDevitt and Ormrod (2007) asserted peer relations have a critical role in the development of the sense of self and self-esteem. Related literature has suggested the self-esteem of adolescents exposed to relational violence is negatively affected (Merrell et al. 2006; Prinstein et al. 2001). For instance, Kochenderfer-Ladd and Wardrop (2001) reported that relational violence sends a message to victims that they cannot adapt and are not a loved and valuable member of the social group, directly and negatively affecting their self-esteem. Cole et al. (2014) stated that children and adolescents exposed to relational violence perceive themselves as ugly, amphipathic, and ordinary. According to Leary et al. (1995), the content of social

interactions and the quality of interpersonal relations are important for the development of self-esteem. In other words, when an individual has problems in interpersonal relations or is threatened, their self-esteem is also negatively affected. If the individual cannot develop and use effective coping skills for this type of threat, they may experience many emotional and behavioral problems. Regarding this concept, Troop-Gordon and Ladd (2005) suggested that individuals insulted by their peers are more inclined to depression and anxiety by internalizing negative messages about themselves. The literature has also reported that the depression and anxiety level of an individual are closely associated with negative self-evaluations (Leary 2005; Pyszczynski et al. 2004). A body of research has indicated that low level of self-esteem is related to anxiety (Lee and Hankin 2009; Guo et al. 2018; Sowislo and Orth 2013) and depression (Lin et al. 2008; Orth et al. 2008). Thus, relational violence victimization decreases the self-esteem level of adolescents, which increases their levels of anxiety and depression. For instance, in a sample of children and adolescents, Cole et al. (2010) found that a negative sense of self has a mediator role in the relationship between exposure to relational violence and depression and anxiety. Similarly, Bosacki et al. (2007) indicated that self-esteem mediates the relationship between peer relations (e.g., social isolation, bonds of friendship-alienation, and bonds of friendship-trust) and internalizing problems (e.g., depression and social anxiety). In this sense, a similar role of self-esteem might be important for the relationship among relational violence and depression and anxiety. Put differently, the findings of the relationship among relational violence and low self-esteem, and low self-esteem and high depression and anxiety show that self-esteem might mediate the relationship between relational violence, depression, and anxiety.

In parallel with the possible relations among relational violence, depression, anxiety, and self-esteem, there might be mechanisms or various variables that moderate these relations. One of those variables is perceived social support. As a multidimensional concept, social support can be defined as the emotional, social, informational, and instrumental help an individual can receive from their environment when needed (Duru 2008). Social support is a protective factor for the destructive effects of negative experiences on a person’s mental health (Cohen and Wills 1985). The literature has asserted that the social support level perceived by adolescents has a protective effect against the negative outcomes of relational violence and a moderator role in the relationship among relational violence and depression and anxiety (Desjardins and Leadbeater 2011; Holt and Espelage 2007; Prinstein et al. 2001; Sapouna and Wolke 2013).

A common finding in the existing literature has been that when adolescents exposed to relational violence receive

sufficient social support, their level of anxiety and depression decreases. Social support is expected to have the same role in the relationship between relational violence and self-esteem. For instance, Veselska et al. (2009) stated that individuals such as parents, peers, and teachers are important in the development of self-esteem for adolescents. Similarly, Collins and Steinberg (2007) suggested family is one important factor affecting the self-esteem of adolescents.

As frequently stressed in literature, parents can positively contribute to their children's self-esteem by providing them with sufficient support in adolescence (Boudreault-Bouchard et al. 2013; Gaylord-Harden et al. 2007). Hoffman et al. (1988) also reported that social support perceived from the mother is the strongest predictor of self-esteem, in the case when the mother provides insufficient support, peer support becomes prominent, and when both support sources are controlled, social support from the father has little effect. Furthermore, Bean et al. (2003) stated the parent support significantly predicts the self-esteem of adolescents. Similarly, McDevitt and Ormrod (2007) indicated peer support as critical in the development of self-esteem and sense of self. The literature shows that parent and peer support significantly predict the self-esteem of adolescents (Franco and Levitt 1998; Roberts et al. 1999). Crocker et al. (2003) noted that some people's self-esteem is rooted in being loved, liked, and approved. Robinson (1995) found that approval from the others is strongly related to self-esteem.

People are social creatures, and the self is supposed to be positively affected when an individual's psycho-social needs are met. In this process, various support sources might have a significant role in meeting those needs (Duru 2008). When an individual feels significant, valuable, and efficient, their self is affected positively, and they have a high level of self-esteem. In this sense, the individual's qualitative social network can be evaluated as a meaningful psychological structure that feeds their self.

Considering the existing literature and theoretical explanations as a whole, it is observed that as the level of perceived social support increases, the level of self-esteem increases. Therefore, perceived social support might have a moderator role in the relation of relational violence and self-esteem. Furthermore, if self-esteem mediates the relationship among relational violence and depression and anxiety, and social support moderates the relationship between relational violence and self-esteem, then the indirect effect of relational violence on depression and anxiety through self-esteem is supposed to differ according to the level of perceived social support. Therefore, the current study aimed to explore whether relational violence victimization predicts depression and anxiety through self-esteem and whether this indirect effect is moderated by social support (Fig. 1). Based on previous findings and theoretical explanations, we formulated three hypotheses. First, we hypothesized that relational violence

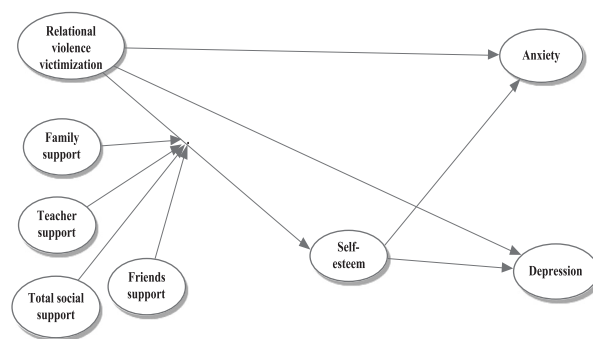


Fig. 1 Conceptual model of impact of exposure to relational violence on depression and anxiety

victimization and social support (family, friends, and teachers) would interact to predict self-esteem. The unfavorable relationship between relational violence victimization and self-esteem would be more powerful when the level of perceived social support is low (vs high; hypothesis 1). Second, we hypothesized that self-esteem would mediate the association between relational violence victimization and depression, but this mediating (indirect) effect would be dependent on social support (family, friends, and teachers) and would be more powerful when the level of perceived social support is low (hypothesis 2). Finally, we hypothesized that self-esteem would mediate the association between relational violence victimization and anxiety, but this indirect effect would be dependent on the level of social support and would be more powerful when the level of perceived social support is low (hypothesis 3).

Methods

Participants

The participants were 2018 high school students (1097 females and 911 males: age $M = 16.13$, $SD = 0.93$; 14 students did not report their age) were recruited in four public high schools located in an urban city in Turkey. In the study, the data of “The Project of Violence in Schools” which was supported by the Province Education Directorate of Denizli was used. The study includes secondary analysis of the data obtained from high school students. In the selection of schools to be included in the research sample, we used the typical case sampling method, one of the purposeful sampling methods. Among the public schools in the city center, we identified schools with average characteristics in terms of variables such as socio-economic level and academic achievement, and we collected data from four schools with the highest number of students. 39.6, 27.9, 32.5% of the students were in the 9th, 10th, and 11th grades, respectively, and 22.2, 33.4, and 44.4% went to a

distinguished high school (refers to Anatolian high schools that have a curriculum that mainly includes foreign language teaching), a vocational high school (refers to high school that have a vocational knowledge-based curriculum, and students of these schools have the right to enter higher education institutions), and a basic high school (refers to high school that apply a general academic curriculum to prepare students for higher education), respectively. All the students reported having the same ethnic background. Regarding socio-economic status (SES), 38.6, 29.1, and 28.3% of the students had a low, average, or high SES and 4% did not report their SES.

Procedure

After obtaining permission from the Province Education Directorate of Denizli, school counselors informed students about the study. Next, we declared that they were not obligated to participate in the study and could leave the study at any time. Following the participants' informed consent, we administered all measures in the classroom setting. Next, the final report containing the main findings of the study and suggestions for school practices was shared with the relevant schools.

Measures

Relational Violence Victimization (RVV)

Students' levels of relational victimization were determined by the Relational Violence Victimization Scale (RVVS) developed for this study and originated from a conceptual grouping of aggression types by Archer and Coyne (2005). The RVVS includes seven items (e.g., *How often have you been exposed to discrimination by other students at school*) with five response options: from 0 (Never) to 4 (Always). We performed an exploratory factor analyses (EFA, $N = 300$) using principal component factoring in order to test the structure of the RVVS. The findings showed that the scale has a one-factor structure that explains 63.84% of total variance and an eigenvalue of 4.47. The factor loadings of the scale items are between 0.76 and 0.84. Inter reliability coefficient was = 0.90. Next, we conduct confirmatory factor analysis (CFA, $N = 120$) on a 7-item scale. The findings confirmed one factor structure of RVVS: ($X^2/df = 1.739$), $RMSEA = 0.079$ (0.00–0.13), $SRMR = 0.048$, $CFI = 0.98$, $TLI = 0.96$. For this study, the internal coefficients were found = 0.85.

Social Support

We used the Adolescent Social Support Inventory (ASSI) (Balkis et al. 2011) to determine students' social support

sources. The ASSI has 12 items that measure perceived social support from three sources, namely, parents (*I can talk to my parents about my problems*), friends (*My friends really try to help me when I need it*), and teachers (*I do not hesitate to ask my teachers for help when I have a problem*), with seven response options: from 1 (Absolutely no) to 7 (Absolutely yes). The Cronbach's alpha coefficients were 0.88 for parents, 0.90 for friends, and 0.88 for teachers subscale of ASSI (Balkis et al. 2011). For this study, Cronbach alphas were 0.80 for parents', 0.81 for friends, and 0.88 for teachers subscale of ASSI.

Self-Esteem

We used Rosenberg Self-Esteem Scale (RES) (Rosenberg 1965; Çuhadaroğlu 1986) to determine students' level of self-esteem. The RES consists of 10 items (e.g., *"I feel that I have a number of good qualities"*) with four response options: from 1 (Strongly agree) to 4 (Strongly disagree). The Cronbach's alpha coefficient for RES was 0.71, and the test-retest reliability was $r = 0.75$. For the current study, the Cronbach's alpha coefficient was = 0.73.

Depression

Depression was assessed with depression subscale of the Turkish version of the Brief Symptom Inventory (TVBSI) (Şahin and Durak 1994). This depression subscale includes 12 items (e.g., *"Feeling no interest in things"*) with four response options: from 0 (Never) to 4 (Excessively). Şahin and Durak (1994) reported that the internal coefficients were 0.85 for depression. For this sample, the Cronbach's alpha coefficient was = 0.90.

Anxiety

Anxiety was determined with anxiety subscale of the Turkish version of Brief Symptom Inventory (TVBSI) (Şahin and Durak 1994). This subscale consists of 13 items (e.g., *"Suddenly scared for no reason"*) with four response options: from 0 (Never) to 4 (Excessively). Şahin and Durak (1994) reported that the internal coefficients were 0.81 for anxiety. For this sample, the Cronbach's alpha coefficient was = 0.88.

Data Analysis

We performed the data analysis in four steps by using the SPSS 22 package program. In the first step, we examined the properties of the variables. In the second step, the relations among relational violence, self-esteem, social support, depression, and anxiety were examined by using correlation analysis. Next, we calculated Cohen's d to

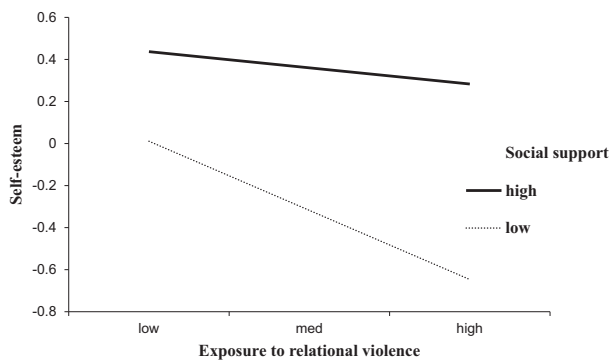


Fig. 2 Interaction effect of relational violence victimization and social support on self-esteem

examine the strength of the relations among those variables. In the third stage, we used SPSS macro PROCESS (Hayes 2013) in order to test the moderation role of social support on the relation between relational violence and self-esteem (Fig. 2). Finally, the mediator role of self-esteem and the moderator role of social support on the relation among relational violence, depression, and anxiety were tested in two models.

Hayes (2013) identified the moderated mediation effect as the process of mediation being dependent on a value of a moderator variable. As suggested Hayes (2009), we used a bootstrapped confidence interval (CI) to test whether the indirect effect of relational violence on depression and anxiety was significant at specific values of social support. As suggested by Fairchild et al. (2009), R^2_{med} (R-squared mediation effect size) was calculated to evaluate the strength of mediation effect.

Results

Preliminary Analyses

For the normally distributed data, the findings from the preliminary analyses indicated the skewness scores ranged between -0.991 and 0.973 , and the kurtosis scores ranged between -0.503 and 0.429 . We tested the univariate and multivariate outliers by utilizing $z \pm 3$ (Tabachnick and Fidell 2006) and Mahalanobis and Cook's distance. We found that the data obtained from 15 participants were to be extreme outliers, and excluded them from the analyses. We performed all analyses with the data from a total of 1993 participants.

Results from the correlation analysis indicate that RVV was negatively associated with self-esteem and social support sources (family, friends, and teachers) and positively correlated with depression and anxiety, with effect sizes ranging from small to moderate. Self-esteem was negatively related to depression and anxiety and positively associated

with social support sources, with effect sizes ranging from small to large. Social support sources were negatively correlated with depression and anxiety, with effect sizes ranging from small to moderate. Table 1 presents the results of descriptive statistics and correlational analysis.

Moderation Role of Social Support

We utilized SPSS macro PROCESS (Hayes 2013) to test all the hypotheses by using two single instances of moderated mediation (Model 7). Moderated mediation analysis detects whether there is an indirect effect from relational violence victimization (RVV) on depression and anxiety through self-esteem, and this indirect effect is dependent on the moderation of social support. The results of the moderated mediation analyses are presented in Table 2 and Fig. 2.

For the relationship between RVV and self-esteem, findings from the moderation analysis indicated that both RVV ($B = -0.141$, $p < 0.001$) and total social support ($B = 0.121$, $p < 0.001$) directly predict self-esteem, and the interaction effect of RVV and social support on self-esteem was also statistically significant ($\Delta R^2 = 0.023$, $p < 0.001$). The analyses were repeated for each source of social support to test which source had a greater moderator effect. The results indicated that the interaction effect of RVV and family support ($\Delta R^2 = 0.012$, $p < 0.001$), interaction effect of RVV and friends' support ($\Delta R^2 = 0.007$, $p < 0.001$), and interaction effect of RVV and teachers' support ($\Delta R^2 = 0.013$, $p < 0.001$) on self-esteem were significant as well. Although relational violence and social support explained 15.6% of total variance, the integrated effect of relational violence and social support explained 2.3% of total variance.

When the effect size of the interaction terms was considered, although Cohen (1988) asserted that the effect size of this combined effect is small, Evans (1985) argues that determining the moderator effects is difficult; thus, a 1% of contribution to total variance should be considered as significant. In addition, Champoux and Peters (1987) noted that the magnitude of the increment in R^2 was not a sufficient explanation of the effect size of the interaction effects. They offered to calculate the slope coefficients to interpret the interaction effect. Thus, we conducted a simple slope analysis to interpret the interaction effects. The findings from the simple slope analysis indicated that slope with a low level of social support was significantly different from zero ($b = -0.280$, $p < 0.001$), but the slope with a high level of social support was not significantly different from zero ($b = -0.003$, $p > 0.05$). These results showed that only a high level of social support may buffer self-esteem against the impact of exposure to relational violence (Fig. 2). In this way, Hypothesis 1 was corroborated: RVV and social support interact to predict self-esteem. The unfavorable

Table 1 Correlations and descriptive statistics

	1	2	3	4	5	6	7	8
1-Relational violence victimization	–	–0.21**	–0.11**	–0.08**	–0.10**	–0.14**	0.28**	0.26**
2-Self-esteem		–	0.28**	0.21**	0.21**	0.33**	–0.36**	–0.33**
3- Family support			–	0.25**	0.30**	0.71**	–0.29**	–0.26**
4-Friends support				–	0.16**	0.58**	–0.09**	–0.10**
5-Teachers support					–	0.79**	–0.18**	–0.15**
6-Total social support						–	–0.27**	–0.24**
7-Depression							–	0.83**
8-Anxiety								–
<i>M</i>	11.67	30.44	23.14	24.30	18.28	65.73	13.77	11.34
<i>SD</i>	4.50	4.23	4.48	3.73	6.14	10.22	10.88	9.64
<i>Skewness</i>	0.752	–0.420	–0.991	–0.979	–0.469	–0.418	0.793	0.973
<i>Kurtosis</i>	–0.012	–0.151	0.429	0.266	–0.503	–0.256	–0.123	0.334

** $p < 0.001$

relationship between RVV and self-esteem is weaker when the level of social support is also high.

Mediation Role of Self-Esteem in the Relation between Relational Violence Victimization and Depression

Mediation analysis indicated that RVV negatively predicted self-esteem ($B = -0.194$, $p < 0.001$), self-esteem negatively predicted depression ($B = -0.81$, $p < 0.001$), and RVV positively predicted depression ($B = 0.51$, $p < 0.001$). The indirect effect of RVV on depression ($ab = 0.157$, $SE = 0.020$, 95% confidence interval [CI] = 0.12, 0.20) through self-esteem was significant as well. The point estimate of R^2_{med} was 0.034 (95% of CI = 0.024, 0.045). According to Cohen's guidelines, the point estimate of R^2_{med} was small. Put it differently, the mediating effect of RVV on depression through self-esteem was small.

Next, we tested the significance of the predictive effect of RVV on depression through the self-esteem contingent on social support by using bootstrapping ($N = 10,000$). The findings showed that the predictive effect of RVV on depression through self-esteem is more powerful when the level of social support is low ($ab = 0.23$, $SE = 0.026$, 95% CI = 0.18, 0.28) rather than when it is medium ($ab = 0.11$, $SE = 0.017$, 95% CI = 0.08, 0.15) and high ($ab = 0.002$, $SE = 0.022$, 95% CI = –0.04, 0.04). Therefore, Hypothesis 2 was confirmed: RVV indirectly predicts depression through self-esteem. Notably, this indirect predictive effect of RVV on depression is dependent on the social support and is stronger when the level of social support is low.

Finally, the results indicated that RVV negatively predicted self-esteem ($B = -0.194$, $p < 0.001$) self-esteem negatively predicted anxiety ($B = -0.663$, $p < 0.001$), and RVV positively predicted anxiety ($B = 0.435$, $p <$

0.001). The indirect effect of RVV on anxiety ($ab = 0.129$, $SE = 0.017$, 95% CI = 0.10, 0.16) through self-esteem was significant as well. The point estimate of R^2_{med} was 0.030 (95% of CI = 0.021, 0.040). According to Cohen's guidelines, the point estimate of R^2_{med} was small. In other words, the mediating effect of RVV on anxiety through self-esteem was small.

Next, whether there was a significant mediating (indirect) effect of RVV on anxiety via self-esteem contingent upon the social support was tested by using bootstrapping ($N = 10,000$). The findings showed that the mediating effect of RVV on anxiety through self-esteem is more powerful when the level of social support is low ($ab = 0.19$, $SE = 0.022$, 95% of CI = 0.15, 0.23) rather than when it is medium ($ab = 0.09$, $SE = 0.014$, 95% of CI = 0.07, 0.12) and high ($ab = 0.002$, $SE = 0.017$, 95% of CI = –0.03, 0.03). Finally, these analyses were repeated for each source of social support. Thus, Hypothesis 3 was confirmed: RVV indirectly predicts anxiety through self-esteem. Notably, however, the indirect predictive effect of RVV on anxiety is dependent on the social support and is weaker when the level of social support is high.

Discussion

This study was designed to analyze the mechanisms underlying the relationship among RVV, depression, and anxiety. The results demonstrated the mediating effect of self-esteem in the relations among RVV, depression, and anxiety, and the moderating effect of social support in the relation between RVV and self-esteem. Furthermore, the moderated mediation model indicated that the mediating effect of self-esteem differed with the different levels of social support.

Table 2 Moderated mediation statistics ($N = 1993$)

	Outcome: Self-esteem			Model R^2
	<i>B</i>	SE	<i>t</i>	
<i>Predictor variables</i>				
Relational violence victimization	−0.14	0.02	−7.59***	0.16***
Total social support	0.12	0.01	14.29***	
Relational violence victimization × Total social support	0.01	0.00	7.95***	
Relational violence victimization	−0.16	0.02	−8.19***	0.12***
Family support	0.24	0.02	12.15***	
Relational violence victimization × Family support	0.02	0.00	5.33***	
Relational violence victimization	−0.17	0.02	−8.63***	0.09***
Friends support	0.22	0.03	8.73***	
Relational violence victimization × Friends support	0.02	0.01	3.80***	
Relational violence victimization	−0.17	0.02	−8.72***	0.09***
Teachers support	0.12	0.02	8.47***	
Relational violence victimization × Teacher support	0.02	0.00	6.04***	
<i>Mediation analyses</i>				
Relation violence victimization	−0.19	0.02	−9.49***	0.04***
<hr/>				
Outcome: Depression				
<i>Predictor variables</i>				
Self-esteem	−0.81	0.05	−15.50***	0.17***
Relational violence victimization	0.51	0.05	9.58***	
<hr/>				
Outcome: Anxiety				
Self-esteem	−0.66	0.05	−13.35***	0.15***
Relational violence victimization	0.44	0.05	9.35***	
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Outcome: Depression				
	<i>ab</i>	Boot SE	Boot LLCI	Boot ULCI
<i>Conditional indirect effect analysis</i>				
Total social support				
Low	0.23	0.03	0.18	0.28
Med	0.11	0.02	0.09	0.15
High	0.002	0.02	−0.04	0.04
Family support				
Low	0.21	0.03	0.17	0.27
Med	0.13	0.02	0.01	0.17
High	0.05	0.02	0.01	0.01
Friends support				
Low	0.20	0.03	0.15	0.25
Med	0.14	0.02	0.10	0.18
High	0.08	0.02	0.04	0.13
Teachers support				
Low	0.22	0.03	0.18	0.28
Med	0.14	0.02	0.10	0.18
High	0.05	0.02	0.01	0.09
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Outcome: Anxiety				
<i>Conditional indirect effect analysis</i>				
Total social support				
Low	0.19	0.02	0.15	0.23
Med	0.09	0.01	0.07	0.12
High	0.01	0.012	−0.03	0.03
Family support				
Low	0.17	0.02	0.13	0.22

Table 2 (continued)

	Outcome: Anxiety			
Med	0.11	0.02	0.08	0.14
High	0.04	0.02	0.01	0.08
Friends support				
Low	0.16	0.02	0.12	0.21
Med	0.11	0.02	0.09	0.15
High	0.07	0.02	0.03	0.11
Teachers support				
Low	0.18	0.02	0.14	0.23
Med	0.11	0.02	0.08	0.14
High	0.04	0.02	0.01	0.08

Unstandardized regression coefficients were reported. Bootstrap sample size = 10,000

LL low limit, *CI* confidence interval, *UL* upper limit

** $p < 0.01$

*** $p < 0.001$

Consistent with the hypotheses, the findings suggested that self-esteem is an important factor that mediates the relationship among RVV, depression, and anxiety. The current findings are in line with the literature that has indicated the effect of RVV on self-esteem (Cole et al. 2014; Merrell et al. 2006; Prinstein et al. 2001), depression, and anxiety (Dempsey and Storch 2008; Prinstein et al. 2001; Zimmer-Gembeck and Pronk 2012), and the effect of self-esteem on depression (Lin et al. 2008; Orth et al. 2008) and anxiety (Lee and Hankin 2009; Guo et al. 2018; Sowislo and Orth 2013). This study's findings suggested that RVV has an adverse impact on self-esteem, which might lead to depression and anxiety. Moreover, apart from having a direct effect, RVV has an indirect effect on depression and anxiety through self-esteem. In other words, when an adolescent exposed to relational violence feels invaluable, inefficient, isolated, and unimportant, their self-esteem is negatively affected. Thereby, decreasing level of self-esteem might ease the effect of relational violence on depression and anxiety.

Another finding of this study is that the effect of RVV on self-esteem was moderated by social support. This phenomenon suggests that the negative association between RVV and self-esteem is weaker when the level of perceived social support (family, friends, and teachers) is high. Moreover, the analysis showed the moderator effect of the level of perceived social support from family on this relationship is higher than the level of perceived social support from friends and teachers. This finding is consistent with the research that has indicated social support is a protective factor against the negative outcomes of relational violence (Desjardins and Leadbeater 2011; Holt and Espelage 2007; Prinstein et al. 2001; Sapouna and Wolke 2013).

Furthermore, it can be concluded that when adolescents who are insulted, offended, isolated, or rumored by their peers receive sufficient support from their environment,

they might not internalize those negative experiences and messages and protect their self. In the case of RVV, adolescents might consider it as a situational factor instead of attributing it to themselves if their social support level from family, teachers, or friends is high. This finding is also in line with the earlier literature that has underlined that social support from family and friends are important predictors of adolescents' self-esteem (Bean et al. 2003; Franco and Levitt 1998; Hoffman et al. 1988; Roberts et al. 1999).

Moreover, this study indicated that the mediating effect of self-esteem in the relationship between RVV, depression, and anxiety were moderated by social support. This finding suggested that the negative effect of RVV on depression and anxiety is more potent for adolescents who have a low level of social support from their family, friends, and teachers. The findings demonstrated that sufficient social support, especially from family, is a protective shield against the negative outcomes of relational violence on self-esteem; thus, it minimizes the effect of relational violence on depression and anxiety by the mediation of self-esteem. Nonetheless, the related literature has indicated the significant role of social support from family for protecting the self-esteem of adolescents (Boudreault-Bouchard et al. 2013; Collins and Steinberg 2007; Gaylord-Harden et al. 2007). Therefore, when adolescents exposed to relational violence receive sufficient support from their family as well as their friends and teachers, their self-esteem is less affected by these negative experiences; thus, their levels of depression and anxiety decrease.

Limitations

The findings from this study should be interpreted within its limitations. The most important limitation is that this is a cross-sectional study that examines the relations among RVV, self-esteem, depression, and anxiety; thus, the

findings should not be evaluated in terms of a cause–effect relationship. Future controlled, experimental, and longitudinal studies should make the relations between these variables and their underlying mechanisms clearer. Another limitation of this study is that it is a quantitative study. A qualitative examination of the relations between those variables might provide a more holistic and significant picture. Finally, the current study is based on self-reported data that may increase the concern of the common method bias problem. Future research should endeavor to get data from multiple sources to deal with this problem

Although the limitations reported above, this study offers significant contributions and implications despite its limitations. The most important contribution is that this study shows *when* and *how* relational violence affects the depression and anxiety levels of adolescents. That is, the negative effect of relational violence by the mediation of self-esteem on depression and anxiety is stronger when the level of social support—especially social support from family—is low. Although adolescence is conceptualized as a period of deep conflict between parents and adolescents in the literature, this study underlines the important role of parents' support in protecting adolescents' self-esteem against negative experiences.

This finding also indicates that parents' support is more important in collectivist cultures like Turkey than in more individualistic cultures like the United States. Culture is critical because it influences behavior in a variety of ways (Eskin 2003). Family integrity and close interpersonal relationships are crucial in traditional or collectivist cultures such as in Turkey (Karakitapoglu-Aygun and Imamoglu 2002). Identified as a culture of relatedness, Turkish culture allocates a crucial value to close relationships, family ties, and interdependence (Duru 2008; Eskin 2003; Kağıtçıbaşı 1996). For instance, Kuzucu and Özdemir (2013) concluded that perceived parental support is an important predictor of mental health for Turkish adolescents. Similarly, Özdemir (2016) indicated that adolescents who feel close with their family have higher levels of life satisfaction than those who feel autonomous. This study emphasizes the vital importance of a supportive family environment for adolescents' psychological adjustment in Turkey. In sum, this study confirmed the conception that social support has a significant protective role for adolescents' well-being in Turkish culture.

Adolescents can protect their self-esteem and psychological adaptation against relational violence by developing relationships with family, friends, and teachers. In the context of ecological theory, intervention programs for adolescents' microsystem that include their teachers, friends, and family members, seem to be more meaningful. Therefore, future studies that replicates the current findings

and or identifies additional mediators or moderates in the relationship between relational violence and adolescents' well-being will provide a stronger basis for understanding when and how relational violence affects adolescents' well-being.

Author Contributions E.D.: designed and executed the study, and wrote the paper. M.B.: collaborated with the design, collecting data and analyzed data, and writing of the study. T.T.: collected data and wrote part of introduction.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflicts of interest with respect to the research, authorship, and/or publication of this article.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of Social and Human Sciences Research and Publication Ethics Committee of Pamukkale University and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

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