Peer Victimization and Internalizing Symptoms From Adolescence Into Young Adulthood: Building Strength Through Emotional Support

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Abstract

This longitudinal study investigated how changes in peer victimization were associated with changes in internalizing symptoms among 662 adolescents across a 4-year period. The moderating effects of initial levels of father, mother, and friend emotional support on this association were also examined. Gender and age group differences (early adolescent group aged 12–15 years; late adolescent group aged 16–18 years) were tested. Increases in physical and relational victimization were related to increases in internalizing symptoms. Friend emotional support was more protective in reducing internalizing symptoms for adolescent males than adolescent females in both the early and late adolescent groups. Gender differences also moderated the effects of mother and father emotional support.

Internalizing problems including depression and anxiety affect approximately 10% to 20% of youth (Brendgen, Wanner, Morin, & Vitaro, 2005; Letcher, Smart, Sanson, & Toumbourou, 2009). However, the patterns of changes in internalizing symptoms from late adolescence into early adulthood are not clear. Epidemiological research on the incidence of psychiatric disorders in the transition from adolescence to adulthood shows increases in some anxiety disorders such as panic and agoraphobia (Costello, Copeland, & Angold, 2011). Some studies also show increases in depressive symptoms and in new cases of depressive disorders from mid- to late-adolescence followed by decreases from adolescence into adulthood (Hale, Raaijmakers, Muris, van Hoof, & Meeus, 2008; Montague, Cavendish, Enders, & Dietz, 2010; Needham, 2008; Pettit, Lewinsohn, Seeley, Roberts, & Yaroslavsky, 2010). However, other research reports that rates of depressive symptoms increase from mid- to late-adolescence but remain stable from late adolescence into early adulthood (Hankin et al., 1998). Gender differences in these trajectories from adolescence to young adulthood have also been found showing increases in depressive symptoms across the transition to young adulthood for adolescent males, but not adolescent females (Leadbeater, Thompson, & Gruppuso, 2012).

Efforts to understand the contexts that create risks for or protect against increases in internalizing symptoms or accelerate declines are needed to improve our understanding of individual differences in these patterns of change. In this study, we examine the effect of

peer victimization on internalizing symptoms (including anxiety and depression) as well as the moderating effects of friend and parent emotional support among early and late adolescents across a 4-year period.

Research consistently shows that peer victimization, the experience of being a target of a peer's bullying and aggressive behavior, is associated with increases in internalizing symptoms in children and in adolescents (Reijntjes, Kamphuis, Prinzie, & Telch, 2010; Rudolph, Troop-Gordon, Hessel, & Schmidt, 2011; Stadler, Feifel, Rohrmann, Vermeiren, & Poustka, 2010; Ttofi, Farrington, Lösel, & Loeber, 2011; Van Oort, Greaves-Lord, Ormel, Verhulst, & Huizink, 2011). Reciprocal effects of depression on victimization have also been observed in young children (Leadbeater & Hoglund, 2009). Two types of peer victimization have been identified. *Physical victimization* involves harm through physical damage by peers (e.g., victims are hit). *Relational victimization* involves a peer's threat to damage a victim's relationships (e.g., victims are excluded from a group). Previous research considers physical and relational victimization as overlapping but distinct constructs (Card, Stucky, Sawalani, & Little, 2008; Cole, Maxwell, Dukewich, & Yosick, 2010). Whereas social sanctions against physical victimization may spur its decline from adolescence to young adulthood, relational victimization is likely to continue. However, the majority of past studies are short-term and have focused on the effects of physical victimization on depressive symptoms or do not distinguish between relational and physical victimization (see Card et al., 2008). Extending this research in this study, we first examine the patterns of change in internalizing symptoms from adolescence to early adulthood. We then examine the covariation of victimization types and internalizing symptoms and whether or not friend and parent support in adolescence is protective overtime.

Emotional support involving the provision of love, empathy, trust, and respect from friends and family may be particularly important for adolescents who are victimized. Previous research has also demonstrated the important role of friendships in protecting children and young adolescents from peer victimization and preventing maladaptive outcomes. Bollmer, Milich, Harris, and Maras (2005) found that young adolescents (aged 10–13 years) with an emotionally supportive best friendship were less likely to be targets of peer victimization, compared with those without a high-quality best friendship. Similarly, Sainio, Veenstra, Huitsing, and Salmivalli (2010) found that 3rd to 5th grade children who reported that they were defended by at least one classmate were also less frequently victimized than undefended victims. Schmidt and Bagwell's (2007) study with 4th and 5th grade children indicated that positive friendship quality that included help and security had buffered against victimization and depression.

Fewer studies have been conducted with older adolescents, but these findings also indicate that emotional support from friends can mitigate the association between peer victimization and internalizing symptoms in this age group. In a cross-sectional study with Grades 7–12 adolescents, Holt and Espelage (2007) found that adolescents who were not classified as bullies, victims, or bully victims reported the most friend support and the least anxiety and depression. Victims who reported moderate levels of friend support also indicated the least anxiety and depression. Emotionally supportive friendships characterized by warmth and intimate exchange may provide a context for adolescents to share and problem-solve about

peer victimization experiences (Goldbaum, Craig, Pepler, & Connolly, 2003; Prinstein, Boergers, & Vernberg, 2001). Longitudinal research is needed to understand whether or not the buffering effect of friend support on the association between peer victimization and internalizing symptoms continues to be effective across adolescence and the transition into young adulthood when the influence of long-standing friendships can be disrupted by moves or romantic relationships.

Similarly, research typically shows that high levels of parent emotional support (e.g., trust, respect, and responsiveness) are protective against internalizing symptoms in adolescence (Montague et al., 2010; Yeung & Leadbeater, 2010). Cornwell (2003) found that greater parent emotional support was associated with less depressive symptoms 1 year later in adolescents in Grades 7–12. Growth in parent emotional support over time was also associated with declines in depressive symptoms, whereas declines in parent support were related to increases in symptoms. Using self-reports from three waves of the National Longitudinal Study of Adolescent Health, Needham (2008) found that adolescents who experienced increases in levels of depressive symptoms over time also reported lower levels of parental support as young adults. In research with the current sample, Desjardins and Leadbeater (2011) found that emotional support from fathers, mothers, and peers was associated with fewer depressive symptoms, concurrently, but not over time. Finally, Stadler et al.'s (2010) cross-sectional study with adolescents (aged 11–18 years) showed that high levels of parent support buffered the association between peer victimization and mental health problems.

Some studies also suggest that it may be important to assess the differential effects of support from mothers and fathers. For example, Stoltz, Barber, and Olsen (2005) followed adolescents in 5th and 8th grade cohorts over 4 years and found that positive mothering predicted lower levels of depression in boys, whereas positive fathering predicted low levels of depression in girls. The influence of variability in parent support in adolescence on changes in depressive symptoms across the transition to young adulthood has not been assessed. We hypothesize that those who have established higher levels of support from mothers and fathers in adolescence will be less likely to show increases in internalizing symptoms that are associated with increases in peer victimization across the transition to young adulthood. Parents who are perceived as emotionally supportive may be seen as more approachable and reliable by victimized youth (Perren & Hornung, 2005). Extending past studies, we also examine the relative effects of mother and father emotional support on the association between peer victimization and internalizing symptoms for adolescent males and adolescent females across time.

The Current Study

Our study builds on previous work in several ways. First, we examine the univariate patterns of change in internalizing symptoms from adolescence to young adulthood and assess whether or not changes in physical and relational victimization are associated with concurrent changes in internalizing symptoms across a 4-year period. We then assess the moderating effects of adolescent-levels of father, mother, and friend emotional support on the association between increases in peer victimization and internalizing symptoms. Due to

the limited number of assessment points, the effect of changes in emotional support on the association between peer victimization and internalizing symptoms could not be statistically examined. Nevertheless, our study allows us to draw conclusions about the preventive effects of adolescent levels of parent and friend emotional support on peer victimization and internalizing symptoms as adolescents transition into young adulthood.

Furthermore, we extend past research by examining the relations between peer victimization, internalizing symptoms, and emotional support in two age group cohorts: an *early adolescent group* aged 12–15 years and a *late adolescent group* aged 16–18 years. Age cut-offs for these age groups are based on findings from previous research showing that rates of internalizing symptoms increase up to age 15 (e.g., Letcher et al., 2009), and either continue to increase or remain stable from adolescence into young adulthood (e.g., Hankin et al., 1998). After high school, changes in peer network members and parent influences that are the result of leaving home or starting postsecondary education or work may limit the influence of supports established in adolescence.

Finally, gender differences in these associations are investigated. Adolescent females typically report higher mean levels of internalizing symptoms than adolescent males (Hankin, 2008; Menesini, Modena, & Tani, 2009) and peer-victimized adolescent females also report higher levels of symptoms of anxiety and depression compared to adolescent males (Lopez & DuBois, 2005; Sourander et al., 2009). Findings of gender differences in the effect of friend and parent support on peer victimization and on internalizing symptoms are also beginning to emerge (Schmidt & Bagwell, 2007; Stadler et al., 2010). Adolescent females may also be more sensitive to the stresses related to peer victimization and relationship disruptions (Leadbeater, Boone, Sangster, & Mathieson, 2006; Rose & Rudolph, 2006). Hence, we expect that adolescent females will report higher levels of internalizing symptoms than adolescent males over time, and that victimization will be more likely to lead to internalizing symptoms for adolescent females than for adolescent males.

Consistent with past literature, we hypothesized that internalizing symptoms would increase for the early adolescent group over time, but remain stable for the late adolescent group (Galambos, Barker, & Krahn, 2006; Hankin et al., 1998). Furthermore, increases in physical and relational victimization were expected to be associated with increases in internalizing symptoms. We also expected that the relations between peer victimization and internalizing symptoms would be attenuated for youth who reported higher levels of mother, father, and friend emotional support in adolescence. Gender differences are also examined at each step of these analyses.

METHOD

Participants

Data were from the Victoria Healthy Youth Survey (V-HYS), a collaborative project between an interdisciplinary group of university-based researchers at the University of Victoria in British Columbia, Canada. The V-HYS was administered in the spring of 2003 (T1), of 2005 (T2), and of 2007 (T3) in a medium-sized urban community. Participants were obtained from a random sample of 9,500 telephone listings where 1,036 households with an eligible

adolescent (aged 12–18 years) were identified. Of these, 185 parents or guardians and 187 adolescents refused participation. Participants of the V-HYS were representative of the population from which the sample was drawn (Albrecht, Galambos, & Jansson, 2007).

Complete data were available from 662 adolescents (342 females) at T1, 578 adolescents (87.3% response rate; 306 females) at T2, and 539 adolescents (81.4% response rate; 294 females and one transgendered) at T3. Participants who indicated that one or more of their parents had died at either T1 ($n = 13$), T2 ($n = 7$), or T3 ($n = 5$) were excluded from analyses. Complete data were available from 513 adolescents (77% of original sample) for subsequent analyses. The evaluation of selective attrition (between participants with living parents who remained in the study for all three time points and those who did not) showed no between-group differences for the main study variables at any time point.

Adolescents ranged in age from 12 to 18 years ($M = 15.5$ years, $SD = 1.9$ years) at T1, from 14 to 20 years ($M = 17.6$ years, $SD = 1.9$ years) at T2, and from 16 to 22 years ($M = 19.5$ years, $SD = 1.9$ years) at T3. At T1, 32% of adolescents were in middle school (Grades 6–8), 65% of adolescents were in high school (Grades 9–12), and 3% of adolescents were in college or university. Approximately 64% of adolescents lived with both biological parents, 10% lived with their mother only, 9% lived with their mother and stepfather or partner, 9% lived back and forth between their mother's and father's households, and 8% had other arrangements (e.g., lived with foster family). Ninety percent of fathers and 76% of mothers were employed at a part-time or full-time job. Eighty-five percent of adolescents were Caucasian, 4% Asian, 3% Aboriginal, and 8% other (e.g., Hispanic, African, or East Indian).

Procedure

Written consent was obtained from parents (or guardians) and from adolescents. A trained interviewer administered the V-HYS in individual interviews in the adolescent's home or another private place. On average, it took 75 min to complete the survey. Adolescents received a gift certificate for a music or food store for their participation at each interview.

Measures

Internalizing symptoms were measured using the Brief Child and Family Phone Interview (BCFPI; Cunningham, Pettingill, & Boyle, 2001). The *internalizing symptoms scale* contains 18 items that tap into separation anxiety (e.g., "Do you notice that you feel sick before being separated from those you are close to?"), general anxiety (e.g., "Do you notice that you worry about doing better at things?"), and depressed mood (e.g., "Do you notice that you have trouble enjoying yourself?"). Adolescents rated how often these experiences occurred on a 3-point Likert scale (*never*, *sometimes*, or *often*). Total scores were computed by summing each adolescent's scores for the items within the internalizing symptoms scales, respectively. Internal consistencies were strong ($\alpha = .85$ at T1, $\alpha = .87$ at T2, and $\alpha = .87$ at T3).

Peer victimization was measured using the Social Experiences Questionnaire (SEQ; Crick & Grotpeter, 1996). Adolescents rated how often they experienced *physical victimization* (five items; e.g., "How often do you get pushed or shoved by your peers?"), and *relational victimization* (five items; e.g., "How often do your peers tell lies about you to make others

not like you anymore?”) on a 3-point Likert scale (*never, sometimes, or almost all the time*). Total scores were computed by summing each adolescent's scores for the physical and relational victimization scales. Cronbach's alphas for physical and relational victimization were adequate across all time points ($\alpha = .64$ and higher). Correlations between physical victimization and relational victimization across the entire study sample were small to moderate ($r_s = .19$ to $.43$) concurrently and across time.

Father and mother emotional support (ES) was assessed using Schaefer's (1965) inventory of parental behaviors. Adolescents rated how much they felt that five statements were like their father and mother separately (e.g., “My father is a person who understands my problems and worries”; “My mother is a person who is able to make me feel better when I am upset”) on a 3-point Likert scale (*not like him or her, somewhat like him or her, or like him or her*). Cronbach's alphas for father and mother emotional support were adequate across all time points ($\alpha = .73$ and higher).

Friend emotional support (ES) was assessed using nine items from the Perceived Social Support from Friends measure (PSS-Fr; Procidano & Heller, 1983). Adolescents were asked to indicate whether or not they received various forms of emotional support from their friends (e.g., “I rely on my friends or peers for emotional support”) using a scale of 0 = *no*, 1 = *yes*, or 2 = *don't know*. The “don't know” category was not scored. Kuder–Richardson 20 (KR20) coefficients were .72, .67, and .67 for friend emotional support at T1, T2, and T3, respectively.

Analyses Plan

Multilevel equations using HLM 6.06 (Raudenbush, Bryk, & Congdon, 2004) were used to examine the within-person (peer victimization) and between-person (gender, age group, and emotional support) factors that influence changes in the slope of internalizing symptoms across 4 years. Because the time between occasions of measurement varied for each participant, time in study (TIS) was used as the time metric and parameterized as years and months since baseline testing for each individual.

First, a time-based model estimated individual rates of internalizing symptoms as a function of time in study across the 4-year period. Age group (early adolescent group aged 12–15 years = 0, $n = 361$; late adolescent group aged 16–18 years = 1, $n = 278$) and gender (0 = males; 1 = females) were added in the intercept and slope parameters to examine between-person differences in initial levels of internalizing symptoms and in rates of change over time. As shown in the results section, age group was a significant predictor of changes in internalizing symptoms, and hence, all subsequent analyses were conducted separately for the early and late adolescent groups.

Next, we examined the effect of physical and relational victimization on internalizing symptoms for each age group. Consistent with our directional hypotheses, one-tailed probability tests were applied. Gender was added in the intercept and slope parameters. The moderating effects of emotional support on the association between peer victimization and internalizing symptoms were also added to the equation: Initial levels of father, mother, and friend emotional support were modeled simultaneously to consider *unique* contributions of

each predictor. Again, gender and its interaction with each source of support was added in the intercept and slope parameters. The significance of the slopes for each age group and for gender is determined by computing each equation first with the early adolescent group and adolescent males as the reference group (i.e., coded as 0) and the late adolescent group and adolescent females coded as 1. To determine the significance of the slopes for the late adolescent group and females, analyses were repeated with the late adolescent group and adolescent females recoded as the reference group (i.e., coded as 0) and the early adolescent group and adolescent males coded as 1.

RESULTS

Pearson's correlations for all variables by age group are shown in Table 1.

Time-Based Trajectories of Internalizing Symptoms for Each Age Group

As shown in Table 2, initial levels of internalizing symptoms were higher for adolescent females ($\beta = 1.89$) than adolescent males and in the late adolescent group [$\beta = (28.55 + 1.68) = 30.23$] compared to the early adolescent group ($\beta = 28.55$). Increases in internalizing symptoms for each additional year from baseline were greater in the early adolescent group ($\beta = .64, p < .001$) and were not significant for the late adolescent group ($\beta = 0.05, p = .83$). Due to these age group differences in patterns of change in internalizing symptoms, all subsequent analyses were conducted separately for the early and late adolescent groups.

Do Increases in Peer Victimization Correspond With Increases in Internalizing Symptoms?

Physical victimization and internalizing symptoms—For the early adolescent group, increases in physical victimization were associated with concurrent increases in internalizing symptoms (see Table 3). This effect was moderated by gender ($\beta = .87, p = .03$), such that the effect of increases in physical victimization on internalizing symptoms was greater for adolescent females ($\beta = 1.90, p < .001$) than for adolescent males. Similarly for the late adolescent group: the effects of increases in physical victimization on increases in internalizing symptoms were significant for adolescent females ($\beta = 1.29, p < .001$), but not for adolescent males ($\beta = 0.19, p = .26$).

Relational victimization and internalizing symptoms—As shown in Table 4, for both the early adolescent group ($\beta = 1.09, p < .001$) and late adolescent group ($\beta = 1.05, p < .001$), increases in relational victimization were associated with concurrent increases in internalizing symptoms. Gender did not moderate these associations for either age group.

Do Emotional Supports From Friends and Parents Moderate the Effects of Victimization on Internalizing Symptoms?

The next step in our analysis was to assess whether supports from friends and parents had an effect on (1) initial levels of internalizing symptoms, (2) changes in internalizing symptoms over time for each age group, and (3) the effect of increasing victimization on increasing internalizing symptoms. This tests whether emotional support directly effects levels or changes in internalizing symptoms and whether it also can operate through an effect on peer

victimization. Gender differences in these associations and gender by emotional support interactions were examined for each type of support. Nonsignificant interactions were trimmed from the tables. Again the equations were initially calculated with adolescent males as the reference group (coded as 0) and then rerun to test the significance of estimates for adolescent females by recoding adolescent females as the reference group.

Physical victimization—As shown in Table 5 for the early adolescent group, at baseline, the effect of friend support on levels of internalizing symptoms was moderated by gender ($\beta = -3.56, p = .01$): initial levels of friend support was associated with higher initial levels of internalizing symptoms for adolescent males ($\beta = 2.01, p = .04$), but not for adolescent females ($\beta = -1.55, p = .07$). None of the support variables predicted changes in internalizing symptoms directly.

The effect of emotional support on increases in physical victimization was conditioned by gender differences: Being adolescent females dramatically increased the effect of physical victimization on internalizing symptoms [$\beta = (-3.47 + 9.04) = 5.57, p = .01$] compared to adolescent males ($\beta = -3.47, p = .14$). Moreover, for adolescent females, reporting higher initial levels of friend support *increased* the effect of physical victimization on internalizing symptoms [$\beta = (-0.33 + 0.57) = 0.24, p = .05$], whereas for adolescent males, friend support *attenuated* the effects of physical victimization on internalizing symptoms ($\beta = -0.33, p = .04$). However, higher initial levels of mother support attenuated the effects of physical victimization on internalizing symptoms for adolescent females [$\beta = (0.19 + -0.52) = -0.33, p = .03$] but not for adolescent males ($\beta = 0.19, p = .19$). The effect of father support on the effect of victimization was not significant for adolescent females [$\beta = (0.30 + -0.38) = -0.08, p = .26$] or for adolescent males ($\beta = 0.30, p = .06$).

For the late adolescent group, with victimization and the moderators in the model, initial levels of friend support were positively associated with initial levels of internalizing symptoms for adolescent males ($\beta = 2.19, p = .006$) but not for adolescent females [$\beta = (2.19 + -2.02) = 0.17, p = .47$]. Internalizing symptoms increased for adolescent males ($\beta = 2.46, p = .03$) but declined for adolescent females ($\beta = -4.30, p = .01$). However, initial levels of friend support attenuated increases in internalizing symptoms for adolescent males ($\beta = -0.32, p < .001$) but not adolescent females ($\beta = 0.00, p = .49$). Emotional support also moderated the effect of victimization on internalizing symptoms in this age group. Specifically, higher initial levels of friend support attenuated the effect of physical victimization on internalizing symptoms for adolescent males ($\beta = -0.32, p = .009$) but not for adolescent females [$\beta = -0.32 + 0.30 = -0.02, p = .48$]. Also, higher initial levels of father support attenuated the effect of physical victimization on internalizing symptoms for adolescent males ($\beta = -0.28, p = .02$) but not for adolescent females [$\beta = -0.28 + 0.24 = -0.04, p = .43$].

Relational victimization—The effects of support on the relation between relational victimization and internalizing symptoms are shown in Table 6. For the early adolescent group, higher initial levels of friend support were associated with more internalizing symptoms at baseline ($\beta = 1.96, p = .003$). Higher initial levels of father support were associated with less internalizing symptoms at baseline for adolescent males ($\beta = -1.45, p$

= .04), but not for adolescent females [$\beta = (-1.45 + 1.83) = 0.38, p = .28$]. Friend support also attenuated increases in internalizing symptoms over time for adolescent males ($\beta = -0.17, p = .02$) but not for adolescent females [$\beta = (-0.17 + 0.08) = -0.09, p = .20$].

As was the case for physical victimization, examining the effect of emotional supports on increases in relational victimization also showed that friend support was more protective for adolescent males: For adolescent males higher levels of friend support attenuated the effect of relational victimization on internalizing symptoms ($\beta = -0.29, p = .006$), but not for adolescent females [$\beta = (-0.29 + 0.29) = 0.00, p = .49$]. However, higher initial levels of father support increased the effects of relational victimization on internalizing symptoms for adolescent males ($\beta = 0.22, p = .05$), but not for adolescent females [$\beta = (0.22 + -0.38) = -0.16, p = .06$]. Mother support did not influence the effect of relational victimization on concurrent changes in internalizing symptoms for adolescent males ($\beta = 0.18, p = .23$), or for adolescent females [$\beta = (0.18 + -0.28) = -0.10, p = .22$].

For the late adolescent group, initial levels of friend support attenuated increases in internalizing symptoms for adolescent males ($\beta = -0.34, p < .001$) but not for adolescent females [$\beta = (-0.34 + 0.37) = 0.03, p = .40$]. Initial levels of father, mother, and friend support did not moderate the association between relational victimization and internalizing symptoms.

DISCUSSION

Consistent with past literature (Galambos et al., 2006; Hankin et al., 1998), our findings showed that, on average, internalizing symptoms increased for the early adolescent group over time but remained stable for the late adolescent group. However, our examination of the effects of risks for physical and relational victimization and the effects of emotional supports from friends and parents add to our understanding of individual differences in these trajectories. Gender differences in these effects were also found.

Peer Victimization and Internalizing Symptoms

Also consistent with past studies (Phelps, 2001; Prinstein et al., 2001), increases in physical and relational victimization were associated with increases in internalizing symptoms. The effect of increases in physical (but not relational) victimization on increases in internalizing symptoms was, as expected, greater for adolescent girls. Stereotypically, adolescent girls' experiences of physical victimization are atypical and may be an indication of other risks associated with internalizing symptoms. Internalizing symptoms are frequently comorbid with externalizing. Externalizing problems like aggression and delinquency may increase stresses in relationships with parents and authorities and increase affiliation with aggressive and deviant peer groups, making victimization more likely (e.g., Fergusson, Wanner, Vitaro, Horwood, & Swain-Campbell, 2003). Past research with younger children suggests that girls may be more likely than boys to respond with internalizing symptoms as a result of peer victimization (Leadbeater et al., 2006; Rose & Rudolph, 2006). Additional research is needed to examine if these co-occurring problems explain the gender differences in the association between physical victimization and internalizing symptoms. Our findings also suggest that the effects of social supports are different for adolescent males and females.

The Moderating Effects of Friend and Parent Support on the Relation between Increases in Victimization and Increases in Internalizing Symptoms

The effects of friend emotional support—Whereas the effects of emotional support from friends were expected to reduce the likelihood of concurrent internalizing symptoms and increases in these symptoms over time, findings of this study differed importantly by age group and by gender. For the early adolescent group, who were aged 12–15 at baseline, higher initial levels of friend emotional support were associated with *more* internalizing symptoms for adolescent males but not for adolescent females. However, these baseline levels of emotional support also reduced the likelihood of increases in internalizing symptoms across the 4 years of the study in the context of relational victimization for the early adolescent group.

In early adolescence, it is possible that adolescent males (but not adolescent females) with more internalizing symptoms elicit more emotional support from friend networks. As expected, over time the capacity to engage emotional support (that was evident at baseline) had a buffering effect for both adolescent males and adolescent females on increases in internalizing symptoms across the teenage years for the early adolescent group. This effect was also sustained in the transition of the late adolescent group to young adulthood.

However, the effects of friend support on increases in physical and relational victimization were more protective against increases in victimization on internalizing symptoms for adolescent males than for adolescent females. Indeed, friend support attenuated the effect of increases in victimization on internalizing symptoms for adolescent males, but increased the effects of increasing physical (but not relational) victimization on internalizing symptoms for adolescent females. In the late adolescent group, initial levels of friend support directly attenuated increases in internalizing symptoms for adolescent males but not for adolescent females.

A better understanding of the nature and function of emotional support in the friendship networks of males and females is needed. Adolescent females are more likely than adolescent males to seek support from peers, and their social conversations include higher levels of self-disclosure (Rose & Rudolph, 2006). In high school age adolescents, this may fuel subsequent victimization when important dyadic relationships shift (Leadbeater et al., 2006). Past research also suggests that co-ruminating on stressors may contribute to increases in internalizing symptoms, and this may reduce the effectiveness of emotional support particularly among girls. Co-rumination (characterized by talking about problems frequently with friends, revisiting the same problems repeatedly, and focusing on negative feelings), is more common among adolescent females than adolescent males, and both are associated with increases in symptoms of depression and anxiety over time (Hankin, 2008; Rose, Carlson, & Walker, 2007; Rose & Rudolph, 2006).

The effects of parent emotional support—Mother emotional support attenuated the effects of physical victimization on internalizing symptoms for early adolescent females, but had no other effect in the models. Mothers who are emotionally supportive may be perceived by adolescent females as understanding and ready to help, and accordingly may be more likely to be approached for assistance when they encounter peer conflicts (Perren &

Hornung, 2005; Yeung & Leadbeater, 2010). In the early adolescent age group, father support did not influence the effects of physical victimization on internalizing symptoms for adolescent males or adolescent females. Father support was associated with increases in the effects of relational victimization on internalizing symptoms for young adolescent males. However, by late adolescence, father support did buffer the effect of physical victimization on internalizing symptoms mainly for males.

These results suggest that a greater understanding of the quality and changing functions of father emotional support across adolescence and the transition to young adulthood is needed. Relationally victimized adolescent males who are excluded or humiliated by their peers may elicit emotional support from their fathers, but this appears unlikely to overcome the power effects of these victimization experiences with peers. However, some studies indicate that excessive father support is also associated with paternal psychological control (i.e., manipulation of an adolescent's thoughts and feelings and restriction of their autonomy through love withdrawal, shaming, or guilt induction) during adolescence (e.g., Bean, Barber, & Crane, 2006). Embarrassment, concerns about disappointing emotionally supportive (but controlling) fathers, or beliefs that fathers will not take relational victimization seriously may increase the self-doubt that engenders internalizing symptoms in the context of peer victimization.

In contrast, for late adolescent males, reports of high levels of father support in early adolescence were protective against physical victimization and internalizing symptoms. It is possible that the capacity for supportive relationships with fathers that is evident at baseline aids in the transition into young adulthood as peer networks change. Previous research has also shown that relationships with mothers may be more important in adolescence, whereas the influence of fathers becomes particularly salient in the transition to adulthood (e.g., Desjardins & Leadbeater, 2011; Seiffge-Krenke, Overbeek, & Vermulst, 2010). Young adults may become more dependent on high-quality relationships with fathers as their instrumental needs for housing and economics increase, and expectations for contributions from both the youth and parents are renegotiated.

Limitations and Future Directions

Findings revealed differential effects in the source of emotional support from mothers, fathers, and friends across a 4-year period in younger and older adolescents. The measures of support in this study focused on the receipt of emotional support from friends and parents; however, differences in the effects of support may be due to other unmeasured aspects of the quality of the relationship with support providers. In these age groups, parents' capacity to offer emotional support, monitor their youth's peer relationships, or to influence peer conflicts may be increasingly limited. Likewise, this study only assessed emotional support. The moderating effects of other types of support, such as instrumental, appraisal, and informational supports (Malecki & Demaray, 2003) on peer victimization and internalizing symptoms need to be examined. Future studies that use qualitative interviews and more detailed assessments of the types of support and the quality of the relationship with support providers are needed to illuminate how adolescents use the emotional support that they are receiving, how this differs for various sources of support, and how supports change across

the transition to young adulthood. The context of support may also be important, such that parent support in the context of victimizing peer relationships may have different effects than when youth are engaged in more positive activities with peers.

Despite the availability of longitudinal data, the effect of changes in emotional support on the association between peer victimization and internalizing symptoms could not be statistically examined due to the limited number of assessment points. Declines in emotional support from mothers, fathers, and friends may also be associated with changes in peer victimization and internalizing symptoms and this warrants further study.

Also limiting our findings, the data for this study are all self-reports. Adolescents reported on how often they experienced victimization by their peers and they may underrate their experiences to avoid the stigma associated with being identified as a victim. Likewise, adolescents' perceptions of emotional support may vary depending on concurrent levels of symptoms and the quality of their relationships with mothers, fathers, and friends at the initial assessment. Although examining these effects across time reduces conflation attributable to self-report data, future studies that draw from multi-informant sources of victimization and emotional support can be used to validate individual responses (Ladd & Kochenderfer-Ladd, 2002).

IMPLICATIONS FOR PREVENTION PROGRAMS

Our findings demonstrate the importance of the quality of supports from family and friends that are already established in adolescence. Findings also demonstrate the need for dissemination of evidence-based prevention programs that can prevent and diminish the association between peer victimization and internalizing symptoms. School-based prevention programs can help adolescents to use respectful and supportive responses within their relationships and to manage conflict and victimization (Crooks, Wolfe, Hughes, Jaffe, & Chiodo, 2008). Overall, creating responsive environments for adolescents and young adults to seek help when they face peer victimization may be essential in promoting their emotional well-being across these developmental transitions.

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References

- Albrecht AK, Galambos NL, Jansson SM. Adolescents' internalizing and aggressive behaviors and perceptions of parents' psychological control: A panel study examining direction of effects. *Journal of Youth and Adolescence*. 2007; 36:673–684. DOI: 10.1007/s10964-007-9191-5
- Bean RA, Barber BK, Crane DR. Parental support, behavioural control, and psychological control among African American youth: The relationships to academic grades, delinquency, and depression. *Journal of Family Issues*. 2006; 27:1335–1355. DOI: 10.1177/0192513X06289649
- Bollmer JM, Milich R, Harris MJ, Maras MA. A friend in need: The role of friendship quality as a protective factor in peer victimization and bullying. *Journal of Interpersonal Violence*. 2005; 20:701–712. DOI: 10.1177/0886260504272897 [PubMed: 15851537]

- Brendgen M, Wanner B, Morin AJS, Vitaro F. Relations with parents and with peers, temperament, and trajectories of depressed mood during early adolescence. *Journal of Abnormal Child Psychology*. 2005; 33:579–594. DOI: 10.1007/s10802-005-6739-2 [PubMed: 16195952]
- Card NA, Stucky BD, Sawalani GM, Little TD. Direct and indirect aggression during childhood and adolescence: A meta-analytic review of gender differences, intercorrelations, and relations to maladjustment. *Child Development*. 2008; 79:1185–1229. DOI: 10.1111/j.1467-8624.2008.01184.x [PubMed: 18826521]
- Cole DA, Maxwell MA, Dukewich TL, Yosick R. Targeted peer victimization and the construction of positive and negative self-cognitions: Connections to depressive symptoms in children. *Journal of Clinical Child & Adolescent Psychology*. 2010; 39:421–435. DOI: 10.1080/15374411003691776 [PubMed: 20419582]
- Cornwell B. The dynamic properties of social support: Decay, growth, and staticity, and their effects on adolescent depression. *Social Forces*. 2003; 81:953–978. DOI: 10.1353/sof.2003.0029
- Costello EJ, Copeland W, Angold A. Trends in psychopathology across the adolescent years: What changes when children become adolescents, and when adolescents become adults? *Journal of Child Psychology and Psychiatry*. 2011; 52:1015–1025. DOI: 10.1111/j.1469-7610.2011.02446.x [PubMed: 21815892]
- Crick NR, Grotpeter JK. Children's treatment by peers: Victims of relational and overt aggression. *Development and Psychopathology*. 1996; 8:367–380. DOI: 10.1017/S0954579400007148
- Crooks CV, Wolfe DA, Hughes R, Jaffe PG, Chiodo D. Development, evaluation and national implementation of a school-based program to reduce violence and related risk behaviours: Lessons from the Fourth R. *Institute for the Prevention of Crime Review*. 2008; 2:109–135.
- Cunningham, CE., Pettingill, P., Boyle, M. The brief child and family phone interview (BCFPI). Hamilton, Canada: Canadian Centre for the Study of Children at Risk, Hamilton Health Sciences Corporation, McMaster University; 2001.
- Desjardins TL, Leadbeater BJ. Relational victimization and depressive symptoms in adolescence: Moderating effects of mother, father, and peer emotional support. *Journal of Youth and Adolescence*. 2011; 40:531–544. DOI: 10.1007/s10964-010-9562-1 [PubMed: 20577897]
- Fergusson DM, Wanner B, Vitaro F, Horwood LJ, Swain-Campbell N. Deviant peer affiliations and depression: Confounding of causation? *Journal of Abnormal Child Psychology*. 2003; 31:605–618. DOI: 10.1023/A:1026258106540 [PubMed: 14658741]
- Galambos NL, Barker ET, Krahn HJ. Depression, self-esteem, and anger in emerging adulthood: Seven-year trajectories. *Developmental Psychology*. 2006; 42:350–365. DOI: 10.1037/0012-1649.42.2.350 [PubMed: 16569173]
- Goldbaum S, Craig WM, Pepler D, Connolly J. Developmental trajectories of victimization: Identifying risk and protective factors. *Journal of Applied School Psychology*. 2003; 19:139–156. DOI: 10.1300/J008v19n02_09
- Hale W, Raaijmakers Q, Muris P, van Hoof A, Meeus W. Developmental trajectories of adolescent anxiety disorder symptoms: A 5-year prospective community study. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2008; 47:556–564. DOI: 10.1097/CHI.0b013e3181676583 [PubMed: 18356762]
- Hankin BL. Rumination and depression in adolescence: Investigating symptom specificity in a multi-wave prospective study. *Journal of Clinical Child & Adolescent Psychology*. 2008; 35:701–713. DOI: 10.1080/15374410802359627
- Hankin BL, Abramson LY, Moffitt TE, Silva PA, McGee R, Angell KE. Development of depression from preadolescence to young adulthood: Emerging gender differences in a 10 year longitudinal study. *Journal of Abnormal Psychology*. 1998; 107:128–140. [PubMed: 9505045]
- Holt MK, Espelage DL. Perceived social support among bullies, victims, and bully-victims. *Journal of Youth and Adolescence*. 2007; 36:984–994. DOI: 10.1007/s10964-006-9153-3
- Ladd GW, Kochenderfer-Ladd B. Identifying victims of peer aggression from early to middle childhood: Analysis of cross-informant data for concordance, estimation of relational adjustment, prevalence of victimization, and characteristics of identified victims. *Psychological Assessment*. 2002; 14:74–96. DOI: 10.1037/1040-3590.14.1.74 [PubMed: 11911051]

- Leadbeater BJ, Boone EM, Sangster NA, Mathieson LC. Sex differences in the personal costs and benefits of relational and physical aggression in high school. *Aggressive Behavior*. 2006; 32:409–419. DOI: 10.1002/ab.2L0139
- Leadbeater BJ, Hoglund WLG. The effects of peer victimization and physical aggression on changes in internalizing from first to third grade. *Child Development*. 2009; 80:843–859. DOI: 10.1111/j.1467-8624.2009.01301.x [PubMed: 19489907]
- Leadbeater BJ, Thompson K, Gruppuso V. Co-occurring trajectories of symptoms of anxiety, depression, and oppositional defiance from adolescence to young adulthood. *Journal of Clinical Child and Adolescent Psychology*. 2012; Advance online publication. doi: 10.1080/15374416.2012.694608
- Letcher P, Smart D, Sanson A, Toumbourou JW. Psychosocial precursors and correlates of differing internalizing trajectories from 3 to 15 years. *Social Development*. 2009; 18:618–646. DOI: 10.1111/j.1467-9507.2008.00500.x
- Lopez C, DuBois DL. Peer victimization and rejection: Investigation of integrative model of effects on emotional, behavioural, and academic adjustment in early adolescence. *Journal of Clinical Child and Adolescent Psychology*. 2005; 34:25–36. DOI: 10.1207/s15374424jccp3401_3 [PubMed: 15677278]
- Malecki CK, Demaray MK. What type of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *Social Psychology Quarterly*. 2003; 18:231–252.
- Menesini E, Modena M, Tani F. Bullying and victimization in adolescence: Concurrent and stable roles and psychological health symptoms. *The Journal of Genetic Psychology*. 2009; 170:115–133. DOI: 10.3200/GNTP.170.2.115-134 [PubMed: 19492729]
- Montague M, Cavendish W, Enders C, Dietz S. Interpersonal relationships and the development of behavior problems in adolescents in urban schools: A longitudinal study. *Journal of Youth and Adolescence*. 2010; 39:646–657. DOI: 10.1007/s10964-009-9440-x [PubMed: 19657727]
- Needham BL. Reciprocal relationships between symptoms of depression and parental support during the transition from adolescence to young adulthood. *Journal of Youth and Adolescence*. 2008; 37:893–905. DOI: 10.1007/s10964-007-9181-7
- Perren S, Hornung R. Bullying and delinquency in adolescence: Victims' and perpetrators' family and peer relations. *Swiss Journal of Psychology*. 2005; 64:51–64.
- Pettit JW, Lewinsohn PM, Seeley JR, Roberts RE, Yaroslavsky I. Developmental relations between depressive symptoms, minor hassles, and major events from adolescence through age 30 years. *Journal of Abnormal Psychology*. 2010; 119:811–824. DOI: 10.1037/a0020980 [PubMed: 21090879]
- Phelps CE. Children's responses to overt and relational aggression. *Journal of Clinical Child & Adolescent Psychology*. 2001; 30:240–252.
- Prinstein MJ, Boergers J, Vernberg EM. Overt and relational aggression in adolescents: Social-psychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology*. 2001; 30:479–491. DOI: 10.1207/S15374424JCCP3004_05 [PubMed: 11708236]
- Procidano ME, Heller K. Measures of perceived social support from friends and family: Three validation studies. *American Journal of Community Psychology*. 1983; 11:1–24. [PubMed: 6837532]
- Raudenbush, SW., Bryk, AS., Congdon, R. HLM 6.06 for windows [Computer software]. Lincolnwood, IL: Scientific Software International, Inc; 2004.
- Reijntjes A, Kamphuis JH, Prinzie P, Telch MJ. Peer victimization and internalizing problems in children: A meta-analysis of longitudinal studies. *Child Abuse & Neglect*. 2010; 34:244–252. DOI: 10.1016/j.chi-abu.2009.07.009 [PubMed: 20304490]
- Rose AJ, Carlson W, Walker EM. Prospective associations of co-rumination with friendship and emotional adjustment: Considering the socioemotional trade-offs of co-rumination. *Developmental Psychology*. 2007; 43:1019–1031. DOI: 10.1037/0012-1649.43.4.1019 [PubMed: 17605532]
- Rose AJ, Rudolph KD. A review of sex differences in peer relationship processes: Potential tradeoffs for the emotional and behavioral development of girls and boys. *Psychological Bulletin*. 2006; 132:98–131. DOI: 10.1037/0033-2909.132.1.98 [PubMed: 16435959]

- Rudolph KR, Troop-Gordon W, Hessel E, Schmidt J. A latent growth curve analysis of early and emerging peer victimization as predictors of mental health across elementary school. *Journal of Clinical Child and Adolescent Psychology*. 2011; 40:111–122. DOI: 10.1080/15374416.2011.533413 [PubMed: 21229448]
- Sainio M, Veenstra R, Huitsing G, Salmivalli C. Victims and their defenders: A dyadic approach. *International Journal of Behavioral Development*. 2010; 35:144–151. DOI: 10.1177/0165025410378068
- Schaefer E. Children's reports of parental behavior: An inventory. *Child Development*. 1965; 36:413–424. [PubMed: 14300862]
- Schmidt ME, Bagwell CL. The protective role of friendships in overtly and relationally victimized males and girls. *Merrill-Palmer Quarterly*. 2007; 53:439–460.
- Seiffge-Krenke I, Overbeek G, Vermulst A. Parent–child relationship trajectories during adolescence: Longitudinal associations with romantic outcomes in emerging adulthood. *Journal of Adolescence*. 2010; 33:159–171. DOI: 10.1016/j.adolescence.2009.04.001 [PubMed: 19476993]
- Sourander A, Ronning J, Brunstein-Klomek A, Gyllenberg D, Kumpulainen K, Niemelä S, ... Almqvist F. Childhood bullying behavior and later psychiatric hospital and psychopharmacologic treatment. *Archives of General Psychiatry*. 2009; 66:1005–1012. DOI: 10.1001/archgenpsychiatry.2009.122 [PubMed: 19736357]
- Stadler C, Feifel J, Rohrmann S, Vermeiren R, Poustka F. Peer-victimization and mental health problems in adolescents: Are parental and school support protective? *Child Psychiatry and Human Development*. 2010; 41:371–386. DOI: 10.1007/s10578-010-0174-5 [PubMed: 20221691]
- Stoltz HE, Barber BK, Olsen JA. Toward disentangling father and mothering: An assessment of relative importance. *Journal of Marriage and Family*. 2005; 67:1076–1092. DOI: 10.1111/j.1741-3737.2005.00195.x
- Ttofi MM, Farrington DP, Lösel F, Loeber R. Do the victims of school bullies tend to become depressed later in life? A systemic review and meta-analysis of longitudinal studies. *Journal of Aggression, Conflict and Peace Research*. 2011; 3:63–73. DOI: 10.1108/17596591111132873
- Van Oort FA, Greaves-Lord KK, Ormel JJ, Verhulst FC, Huizink AC. Risk indicators of anxiety throughout adolescence: The TRAILS study. *Depression and Anxiety*. 2011; 28:485–494. DOI: 10.1002/da.20818 [PubMed: 21509913]
- Yeung RS, Leadbeater BJ. Adults make a difference: The protective effects of parent and teacher emotional support on emotional and behavioral problems among peer victimized adolescents. *Journal of Community Psychology*. 2010; 38:80–98. DOI: 10.1002/jcop.20353

TABLE 1

Intercorrelations of Variables at T1, T2, and T3 (by Age Group)

Variable	Physical V			Relational V			Father ES			Mother ES			Friend ES			Internalizing S			Gender
	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	
(1) Physical V																			
T1	—	.25	.34	.27	.15	.08	-.10	-.00	-.01	-.17	-.04	-.01	-.14	-.00	-.09	.01	.16	.14	-.28
T2	.45	—	.30	.06	.04	.02	-.11	-.15	-.10	-.00	.06	-.02	-.19	-.15	-.19	-.01	.15	.08	-.25
T3	.31	.42	—	.21	.14	.30	.00	-.02	-.10	-.07	-.06	-.05	-.06	-.06	-.02	.14	.25	.30	-.17
(2) Relational V																			
T1	.49	.30	.27	—	.44	.36	-.18	-.12	-.10	-.05	-.02	-.06	-.11	.05	.04	.28	.31	.29	.14
T2	.29	.45	.26	.37	—	.37	-.07	-.12	-.03	-.12	-.11	-.05	.01	-.02	.03	.17	.30	.23	.04
T3	.22	.26	.36	.26	.42	—	-.01	-.05	-.05	-.04	-.04	-.07	-.03	.02	-.02	.17	.30	.34	.13
(3) Father ES																			
T1	-.13	-.15	-.17	-.01	-.08	-.18	—	.60	.53	.14	-.00	.01	.16	.12	.14	-.11	-.06	-.03	-.03
T2	-.09	-.16	-.15	-.02	-.12	-.19	.56	—	.60	.00	.04	-.05	.04	.07	.13	-.10	-.07	-.03	-.04
T3	-.02	-.05	-.09	-.00	-.09	-.15	.37	.60	—	-.00	.00	.06	-.02	.08	.14	-.03	-.02	-.03	.00
(4) Mother ES																			
T1	-.12	-.05	-.11	-.08	-.17	-.16	.30	.16	.17	—	.53	.55	.25	.21	.17	-.07	-.04	-.06	.10
T2	-.22	-.17	-.22	-.11	-.26	-.23	.18	.27	.24	.43	—	.54	.15	.29	.16	-.08	-.17	-.09	.18
T3	-.12	-.18	-.21	-.11	-.12	-.25	.17	.24	.30	.21	.47	—	.14	.19	.17	-.03	-.08	-.13	.17
(5) Friend ES																			
T1	-.23	-.13	-.16	-.25	-.08	-.00	.15	.10	.03	.11	.08	.10	—	.41	.37	.11	-.07	-.10	.28
T2	-.17	-.19	-.15	-.15	-.21	-.01	.04	.08	.05	.01	.15	.12	.50	—	.53	.03	-.15	-.08	.34
T3	-.19	-.14	-.09	-.19	-.17	-.13	.05	.01	.11	.08	.10	.14	.39	.46	—	.13	.02	-.04	.25
(6) Internalizing S																			
T1	.31	.28	.17	.39	.28	.19	-.16	-.07	-.09	-.15	-.15	-.03	-.03	-.11	-.20	—	.58	.54	.24
T2	.12	.25	.24	.22	.36	.28	-.27	-.21	-.19	-.20	-.26	-.13	-.02	-.13	-.09	.58	—	.64	.04
T3	.15	.22	.34	.23	.22	.39	-.30	-.31	-.20	-.18	-.15	-.21	-.02	-.09	-.09	.44	.61	—	.04
(7) Gender	-.17	-.09	-.16	.04	.09	.08	-.10	-.08	-.08	-.10	.07	.05	.34	.34	.28	.09	.18	.18	—

Note. Significant correlations ($p < .05$, two-tailed) are in bold. V = Victimization; ES = Emotional support; S = Symptoms; Gender (0 = male, 1 = female). Correlations for the *early adolescent group* (12–15 years, $n = 361$) are depicted in the lower left quadrant. Correlations for the *late adolescent group* (16–18 years, $n = 278$) are presented in the upper right quadrant.

TABLE 2
Time-Based Model: Fixed and Random Effects of Age Group and Gender on Internalizing Symptoms

Internalizing Symptoms					
Parameter	Estimate	SE	T ratio	df	p
Fixed Effects					
Intercept	28.55	0.47	60.37	436	<.001
Age group	1.68	0.55	3.08	436	<.01
Gender	1.89	0.55	3.46	436	<.01
Time slope	0.64	0.13	4.71	436	<.001
Age group	30.59	0.15	34.01	436	<.001
Gender	30.12	0.15	30.77	436	.44
Variance Component		χ^2	df	p	
Random Effects					
Individual-level intercept	22.31	1310.19	436	<.001	
Individual-level slope	0.88	671.09	436	<.001	
Within-person residual	13.15				

Note. Age Group (0 = early adolescent group 12–15 years, $n = 361$; 1 = late adolescent group 16–18 years, $n = 278$). Gender (0 = male, 1 = female).

TABLE 3

The Association Between Physical Victimization and Internalizing Symptoms

Parameter	Early Adolescent Group				Late Adolescent Group			
	Estimate	SE	T ratio	df	Estimate	SE	T ratio	df
Fixed Effects								
Intercept (γ_{00})	22.66***	1.61	14.04	311	28.94***	1.73	16.70	255
Gender (γ_{01})	-3.13	2.29	-1.37	311	-3.26	3.17	-1.03	255
Time slope (γ_{10})	0.37**	0.14	2.66	311	0.40**	0.14	2.90	255
Gender (γ_{11})	0.30	0.19	1.58	311	-0.69**	0.19	-3.60	255
Physical victimization slope (γ_{20})	1.03**	0.27	3.81	846	0.19	0.29	0.63	677
Gender (γ_{21})	0.87*	0.40	2.23	846	1.10*	0.58	1.90	677
	Variance Component	χ^2	df	Variance Component	χ^2	df		
Random Effects								
Individual-level intercept (τ_0)	19.43***	725.22	278	20.53***	609.14	223		
Individual-level slope (τ_1)	0.85***	408.45	278	0.39*	274.14	223		
Within-person residual (ϵ)	13.72			13.28				

Note. Gender (0 = male, 1 = female). Tests of fixed effects are one-tailed.

* $p < .05$;

** $p < .01$;

*** $p < .001$.

TABLE 4

The Association Between Relational Victimization and Internalizing Symptoms

Parameter	Early Adolescent Group				Late Adolescent Group			
	Estimate	SE	T ratio	df	Estimate	SE	T ratio	df
Fixed Effects								
Intercept (γ_{00})	22.21***	1.66	13.39	311	24.14***	1.64	14.75	255
Gender (γ_{01})	-0.22	2.11	-0.10	311	2.09	2.21	0.94	255
Time slope (γ_{10})	0.42**	0.15	2.87	311	0.40**	0.14	2.86	255
Gender (γ_{11})	0.28	0.20	1.46	311	-0.63**	0.19	-3.31	255
Relational victimization slope (γ_{20})	1.09***	0.27	3.99	846	1.05***	0.26	3.97	677
Gender (γ_{21})	0.25	0.34	0.74	846	0.01	0.36	0.03	677
Random Effects								
Individual-level intercept (τ_0)	20.12***	753.91	278	18.56***	573.91	223		
Individual-level slope (τ_1)	0.98***	433.88	278	0.34*	268.74	223		
Within-person residual (ϵ)	13.10			13.21				
Variance Component								
	χ^2		df		χ^2		df	

Note. Gender (0 = male, 1 = female). Tests of fixed effects are one-tailed.

* $p < .05$;

** $p < .01$;

*** $p < .001$.

TABLE 5
Gender and Emotional Support on the Association Between Physical Victimization and Internalizing Symptoms

Parameter	Early Adolescent Group				Late Adolescent Group			
	Estimate	SE	T ratio	df	Estimate	SE	T ratio	df
Fixed Effects								
Intercept (γ_{00})	52.37 *	23.82	2.20	305	17.13	12.08	1.42	249
Gender (γ_{01})	-41.29	27.49	-1.50	305	31.29	38.49	0.81	249
Father ES (γ_{02})	-1.83	1.21	-1.50	305	1.13	0.92	1.24	249
Mother ES (γ_{03})	-1.31	1.65	-0.79	305	-1.37	0.86	-1.59	249
Friend ES (γ_{04})	2.01 *	1.11	1.81	305	2.19 **	0.85	2.59	249
Gender $\times$ Friend ES (γ_{07})	-3.56 *	1.53	-2.33	305	-2.02	2.65	-0.76	249
Time slope (γ_{10})	3.27	2.53	1.29	305	2.46 *	1.34	1.84	249
Gender (γ_{11})	-1.76	2.95	-0.60	305	-6.76 *	2.24	-3.02	249
Father ES (γ_{12})	-0.10	0.08	-1.17	305	0.04	0.08	0.53	249
Mother ES (γ_{13})	-0.04	0.16	-0.25	305	-0.02	0.10	-0.16	249
Friend ES (γ_{14})	-0.13	0.09	-1.54	305	-0.32 ***	0.09	-3.52	249
Gender $\times$ Friend ES (γ_{17})	0.18	0.13	1.42	305	0.32 *	0.16	2.01	249
Physical victimization slope (γ_{20})	-3.47	3.22	-1.08	828	2.76	1.82	1.52	659
Gender (γ_{21})	9.04 **	3.79	2.38	828	-4.46	6.61	0.67	659
Father ES (γ_{22})	0.30	0.19	1.60	828	-0.28 *	0.13	-2.12	659
Mother ES (γ_{23})	0.19	0.21	0.90	828	0.240	0.15	1.64	659
Friend ES (γ_{24})	-0.33 *	0.19	-1.74	828	-0.32 **	0.13	-2.40	659
Gender $\times$ Father ES (γ_{25})	-0.38 *	0.22	-1.74	828	0.24	0.27	0.89	659
Gender $\times$ Mother ES (γ_{26})	-0.52 *	0.28	-1.89	828	0.02	0.24	0.06	659
Gender $\times$ Friend ES (γ_{27})	0.57 **	0.24	2.41	828	0.30	0.47	0.64	659
Variance Component				χ^2	df	Variance Component		
Random Effects								
Individual-level intercept (τ_0)	18.91 ***	701.20	272	20.67 ***	596.41	217		

Parameter	Early Adolescent Group			Late Adolescent Group		
	Estimate	SE	T ratio	df	Estimate	SE
Individual-level slope (γ_1)	0.85***	399.54	272	0.25	245.46	217
Within-person residual (ϵ)	13.50			13.10		

Note: Gender (0 = male, 1 = female). Tests of fixed effects are one-tailed. Nonsignificant interactions between gender and emotional support were not included in the table.

* $p < .05$;
** $p < .01$;
*** $p < .001$.

TABLE 6
Gender and Emotional Support on the Association Between Relational Victimization and Internalizing Symptoms

Parameter	Early Adolescent Group				Late Adolescent Group			
	Estimate	SE	T ratio	df	Estimate	SE	T ratio	df
Fixed Effects								
Intercept (γ_{00})	46.82 *	25.51	1.84	305	25.87	16.70	1.55	249
Gender (γ_{01})	-33.22	29.32	-1.13	305	16.65	23.68	0.70	249
Father ES (γ_{02})	-1.45 *	0.84	-1.73	305	-0.74	0.62	-1.18	249
Mother ES (γ_{03})	-1.25	1.56	-0.80	305	1.04	0.81	1.28	249
Friend ES (γ_{04})	1.96 **	0.70	2.80	305	-0.72	1.06	-0.69	249
Gender $\times$ Father ES (γ_{05})	1.83 *	1.07	1.71	305	-0.70	0.98	-0.72	249
Time slope (γ_{10})	3.02	2.37	1.28	305	2.44 *	1.38	1.77	249
Gender (γ_{11})	-1.82	2.89	-0.63	305	-6.54 **	2.06	-3.18	249
Father ES (γ_{12})	-0.09	0.08	-1.10	305	0.04	0.08	0.49	249
Mother ES (γ_{13})	-0.01	0.15	-0.05	305	0.00	0.10	0.02	249
Friend ES (γ_{14})	-0.17 *	0.08	-2.10	305	-0.34 ***	0.09	-3.74	249
Gender $\times$ Friend ES (γ_{17})	0.08	0.14	0.58	305	0.37 *	0.16	2.36	249
Relational victimization slope (γ_{20})	-2.51	3.77	-0.67	828	1.22	2.64	0.46	659
Gender (γ_{21})	7.34 *	4.21	1.74	828	-1.49	3.70	-0.40	659
Father ES (γ_{22})	0.22 *	0.14	1.62	828	0.05	0.08	0.57	659
Mother ES (γ_{23})	0.18	0.24	0.74	828	-0.17	0.14	-1.22	659
Friend ES (γ_{24})	-0.29 **	0.11	-2.55	828	0.18	0.16	1.14	659
Gender $\times$ Father ES (γ_{25})	-0.38 *	0.17	-2.25	828	0.20	0.15	1.40	659
Gender $\times$ Friend ES (γ_{27})	0.29 *	0.17	1.69	828	0.12	0.24	0.48	659
Variance Component								
		χ^2	df	Variance Component		χ^2	df	
Random Effects								
Individual-level intercept (τ_0)	18.96 ***	709.04	272	18.82 ***	580.48	217		
Individual-level slope (τ_1)	0.94 ***	414.78	272	0.29 *	253.94	217		

Parameter	Early Adolescent Group				Late Adolescent Group			
	Estimate	SE	T ratio	df	Estimate	SE	T ratio	df
Within-person residual (ϵ)	13.02			12.64				

Note: Gender (0 = male, 1 = female). Tests of fixed effects are one-tailed. Nonsignificant interactions between gender and emotional support were not included in the table.

* $p < .05$;
** $p < .01$;
*** $p < .001$.