Journal of Adolescence 39 (2015) 15–26

Contents lists available at ScienceDirect

Journal of Adolescence

journal homepage: www.elsevier.com/locate/jado

# Is co-ruminating with friends related to health problems in victimized adolescents?

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ARTICLE INFO

*Article history:*
Available online 24 December 2014

*Keywords:*
Co-rumination
Peer victimization
Bullying

ABSTRACT

Co-rumination, or the tendency to revisit and endlessly discuss problems and negative events, has been linked to depression and other emotional difficulties (Rose, Carson, & Waller, 2007). The current study examined the moderating effect of co-rumination on the relationship between peer victimization and depression, anxiety, PTSD symptoms, and health problems in 108 adolescents aged 10–15 years. Adolescents and a parent completed measures of adolescents' peer victimization, co-rumination, depression, and health problems. Results indicate that adolescents who are both peer victimized and engaged in high levels of co-rumination were at highest risk for psychological problems. Co-rumination also moderated the relationship between peer victimization and physical health problems via general depressive symptoms (i.e., moderated mediation).


The relationship between health and social support has been well documented in the literature; individuals who perceive the presence of physical or emotional comfort from others tend to live longer (Cacioppo & Cacioppo, 2014; Holt-Lunstad, Smith, & Layton, 2010), have fewer illnesses (Cohen, Doyle, Skoner, Rabin, & Gwaltney, 1997; Compare et al., 2013), and report lower rates of depression (Brown, Brown, House, & Smith, 2008) than those who do not perceive others' support. The presence or perception of social support has also been found to protect the individual against the poor outcomes associated with certain stressors by providing a buffering effect (Taylor, 2007). For example, victimized adolescents who have higher levels of social support tend to have better mental health outcomes than do victimized adolescents who have less support (Davidson & Demaray, 2007; Tanigawa, Furlong, Felix, & Sharkey, 2011).

However, not all forms of social support are beneficial. Despite its buffering capabilities against emotional difficulties, a curious paradox has been found in the literature: although some adolescent girls report having high-quality friendships, they also tend to report more anxiety and depression (Rose, 2002). The presence of higher levels of internalizing problems seems incongruent with research on the protective nature of high-quality friendships. The answer to this seemingly contradicting finding may lie in *how* the social support is provided. Co-rumination, a construct identified by Rose (2002), is marked by both self-disclosure and rumination; it is defined as excessively talking about and focusing on problems and negative events within a dyadic relationship. Self-disclosure is associated with positive friendship qualities such as companionship (Parker & Asher, 1993) and emotional closeness (Camarena, Sarigiani, & Petersen, 1990); however, as Rose (2002) notes, such findings are not qualified by *what* is being self-disclosed (i.e., positive or negative information). Rumination entails focusing upon one's own

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http://dx.doi.org/10.1016/j.adolescence.2014.11.004
0140-1971/

depressive state and is not considered to be adaptive; indeed, it has been associated with both adolescent depression (Hart & Thompson, 1997) and anxiety (Schwartz & Koenig, 1996). Given that individuals who engage in co-rumination tend to report the quality of their friendships to be high while also reporting higher rates of depression than those who do not co-ruminate, Rose (2002) suggests that this dynamic has adjustment trade-offs; that is, the self-disclosure aspect of co-rumination increases friendship quality, whereas the rumination aspect increases depressive symptomology.

Co-rumination is often seen more in female than in male friendship dyads; this sex difference may explain why female adolescents exhibit higher rates of depression than their male counterparts (Rose, 2002). That is, because of the emotionally intimate nature of female friendships, they are more likely to co-ruminate and thus report depressive symptoms. These gender differences have been found in adolescent (Rose, 2002; Tompkins, Hockett, Abraibesh, & Witt, 2011) and young adult samples (Calmes & Roberts, 2008) as well as in the workplace (Haggard, Robert, & Rose, 2011). Furthermore, co-rumination mediates the relationship between gender and internalizing problems (i.e., depression and anxiety) (Rose, 2002; Tompkins et al., 2011). Co-rumination also tends to occur in older (i.e., adolescent and adult) dyads, perhaps due to an increase in emotional intimacy and stressors during this time (Tompkins et al., 2011). Although children (i.e., 3rd and 5th graders) have been found to co-ruminate, they do so at lower rates than adolescents (7th and 9th graders); this age difference has been suggested as being indicative of the less-stressful nature of childhood as well as a cognitive maturity typically not seen until the adolescent years. In addition to predicting increases in females' depression and anxiety, co-ruminating also predicts increases in friendship quality (Rose, Carlson, &Waller, 2007). That is, there seems to be a cyclical relationship at play in which co-ruminating predicted increases in depression, anxiety, and friendship quality, which in turn predicted *more* co-rumination. Co-rumination has also been found to increase the risk for depression onset, even when other risk factors (baseline depressive symptoms, rumination) are controlled; more importantly, co-rumination predicted the *first* onset of depression, strengthening support for its role as a stand-alone risk factor (Stone, Hankin, Gibb, & Abela, 2011). Furthermore, high levels of co-rumination predict both length and severity of depressive episodes.

Although the bulk of the literature links co-rumination with increased depression and internalizing difficulties, these outcomes may be dependent upon *what* the dyads are ruminating about. Byrd-Craven, Geary, Rose, and Ponzi (2008) found that cortisol increased in participants who were assigned to co-ruminate about a personal problem but not in control participants who discussed a neutral topic. Co-rumination has been found to predict depression only in those adolescents with large amounts of romantic relationship experience, suggesting that a stressful situation may be necessary in order for internalizing problems to develop (Starr & Davila, 2009). Another emotionally taxing situation may be peer victimization, which has been identified as a psychosocial stressor (Knack, Jensen-Campbell, &, Baum, 2011). Peer victimization has been estimated to affect between 10 to 30% of adolescents (Nansel et al., 2001). Defined as aggressive behavior that occurs repeatedly over time (Olweus & Limber, 2010), peer victimization is marked by malicious intent and a power imbalance and is therefore not the same as arguing or good-natured teasing amongst friends. Being the target of peer victimization is associated with a number of psychological health problems including depression (Iyer, Scielzo, & Jensen-Campbell, under review; Wang, Nansel, & Iannotti, 2011), loneliness and social anxiety (Storch, Brassard, & Masia-Warner, 2003), and suicidal ideation and attempts (Klomek, Marracco, Kleinman, Schonfield, & Gould, 2007). Peer victimization is also associated with poorer physical health outcomes such as headaches and sleep difficulties (Biebl, DiLalla, Davis, Lynch, & Shinn, 2011) and increased abdominal pain (Knack et al., 2011).

As stated previously, increased perceptions of social support tend to buffer victimized children from the emotional and somatic outcomes associated with the victimization (Cohen & Wills, 1985; Holt & Espelage, 2007) as well as the development of long-term high stress levels (Newman, Holden, & Delville, 2005). However, Holt and Espelage (2007) found that victimized children with high levels of social support reported more anxiety and depression than those victimized children with low levels; as social support generally acts as a buffer against the negative effects of victimization, it is possible that these findings are due to co-rumination within the friendships. Similar results were found by Knack (2009), who noted that victimized adolescents who engaged in higher rates of disclosure experienced more health problems.

Although it has traditionally been associated with combat veterans, researchers have argued that chronic severe stressors can also lead to symptoms of PTSD over time, especially if the stressors are beyond the individual's control (Baum, Cohen, & Hall, 1993). Indeed, several studies have found that targets of peer aggression also exhibit symptoms of post-traumatic stress disorder, which include re-experiencing events, avoiding things/places that remind one of the event, and hyper-arousal (Houbre, Tarquinio, Thuillier, & Hergott, 2006; Idsoe, Dyregrov, & Idsoe, 2012).

To date there are no studies that have examined whether co-rumination specifically exacerbates the negative health consequences associated with being victimized; as such, the current study seeks to determine the moderating effects of co-rumination on the relationship between peer victimization and psychological and physical health problems. We hypothesized that co-rumination and peer victimization would be related to poor psychological health outcomes including general reports of depression and symptoms of PTSD as well as symptoms of anxious and withdrawn depression.

We chose to examine withdrawn behaviors and anxiety individually because although there is often co-morbidity between anxiety and withdrawal (Cummings, Caporino, & Kendall, 2014; Seligman & Ollendick, 1998), they are classified as separate syndromes (e.g., DSM-IV). That is, both anxious-depression and withdrawn-depression share overlapping symptomology and a common pathophysiology, but individuals can exhibit either anxious or withdrawn depressed symptoms both individually and in tandem with one another (58% comorbidity) (Ressler & Nemeroff, 2000). As peer victimization has been related to both anxious-depression and withdrawn-depression (Iyer et al., under review), both measures were included not only to permit testing of differentiated linkages but also to permit a comprehensive test of the hypothesis that co-