Contents lists available at ScienceDirect

### Journal of Adolescence

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

# Brief report: Preliminary evidence that co-rumination fosters adolescents' depression risk by increasing rumination

Lindsey B. Stone <sup>a, \*</sup>, Brandon E. Gibb <sup>b</sup>

<sup>a</sup> Department of Psychiatry, University of Pittsburgh School of Medicine, Pittsburgh, PA, USA
<sup>b</sup> Department of Psychology, Binghamton University (SUNY), Binghamton, NY 13902-6000, USA

#### A R T I C L E I N F O

Article history: Available online 9 November 2014

Keywords: Co-rumination Depression Rumination Peer relationships Adolescence

#### ABSTRACT

Mounting research shows that the tendency to co-ruminate with peers regarding ongoing problems increases adolescents' depression risk; however, the means by which this interpersonal process fosters risk has not been identified. This said, theorists have proposed that co-rumination increases depression risk, in part, by increasing one's tendency to ruminate when alone. We tested this hypothesis in a study of 201 high-school freshmen who completed two assessments, six months apart. Supporting the proposed model, co-rumination predicted prospective increases in rumination and rumination predicted increases in depressive symptoms. The direct effect of co-rumination on depressive symptom change was not significant. Results indicate that co-rumination with friends may serve to increase rumination, which in turn increases depression risk.

© 2014 The Foundation for Professionals in Services for Adolescents. Published by Elsevier Ltd. All rights reserved.

Co-rumination involves the tendency to engage with peers in extensive negatively focused discussion, by rehashing one's reactions to ongoing problems (Rose, 2002). Despite the social benefits of increasing friendship quality (Rose, 2002; Rose, Carlson, & Waller, 2007), there is growing evidence that co-rumination increases adolescents' risk for future depressive symptoms and diagnoses (Hankin, Stone, & Wright, 2010; Stone, Hankin, Gibb, & Abela, 2011). Although the precise mechanisms by which co-rumination increases depression risk are not known, Rose (2002) hypothesized that co-rumination fosters youths' risk for emotional distress by reinforcing the tendency to ruminate on their own. There is preliminary cross-sectional support for this hypothesis (Rose, 2002) but it has not yet been tested prospectively.

The goal of this study was to provide a prospective test of Rose's (2002) mediation hypothesis. Focusing on a sample of high school freshmen assessed twice, 6 months apart, we predicted that initial levels of co-rumination would predict prospective changes in rumination over the follow-up and that initial levels of rumination would predict prospective changes in adolescents' depressive symptoms. Given some evidence that rumination may predict prospective increases in co-rumination (Jose, Wilkins, & Spendelow, 2012), we also tested for potential bi-directional influences between co-rumination and rumination.

Finally, co-rumination has been emphasized in adolescent girls' depression risk since it is more common of female friendships (e.g., Hankin et al., 2010; Rose, 2002). However, the majority of results show that, despite being more common in girls, both girls and boys who co-ruminate with peers are at heightened depression risk (Hankin et al., 2010; Stone, Uhrlass, &

http://dx.doi.org/10.1016/j.adolescence.2014.10.008

0140-1971/© 2014 The Foundation for Professionals in Services for Adolescents. Published by Elsevier Ltd. All rights reserved.





CrossMark

<sup>\*</sup> Corresponding author. University of Pittsburgh Medical School, Western Psychiatric Institute and Clinic, 3811 O'Hara Street, Pittsburgh, PA 15213, USA. Tel.: +1 412 648 9438; fax: +1 412 383 5426.

E-mail addresses: Stonelb@upmc.edu (L.B. Stone), Bgibb@binghamton.edu (B.E. Gibb).

Gibb, 2010; Stone et al., 2011; but see also Rose et al., 2007). Therefore, we tested for gender moderation, but did not anticipate significant gender differences in the magnitudes of the associations between the model variables.

#### Method

#### Participants and procedure

Freshmen were recruited from a local high school. Of 336 incoming students, 245 parental consent forms were completed, with 218 granting permission. Several students declined to participate or were absent, resulting in 201 participants: 51% female, 84% Caucasia and the average age was 14.16 (SD = .44). The follow-up assessment was completed by 192 (95%) students. Assessments were administered six months apart in group setting. Afterwards participants were entered into a lottery for a chance to win \$50-100 gift cards.

#### Measures

The Children's Depression Inventory (CDI; Kovacs, 1981) was used to assess depressive symptom levels. Consistent with school-based research, the suicide item was omitted ( $\alpha$ s: T1 = .88 and T2 = .89).

The Co-Rumination Questionnaire (CRQ: Rose, 2002) assessed the extent to which participants co-ruminate with their closest friend. Participants responded to 27 items using a 5-point Likert scale ranging from "Not at all true" (1) to "Really true" (5). For example, "If one of us has a problem, we will spend our time together talking about it, no matter what else we could do instead." Co-rumination was calculated by averaging participants' ratings across the 27 items, ( $\alpha$ s: T1 = .97 and T2 = .98).

The five-item brooding subscale of the Ruminative Responses Scale (RRS; Nolen-Hoeksema & Morrow, 1991; Treynor, Gonzalez, & Nolen-Hoeksema, 2003) was used to assess levels of brooding rumination, ( $\alpha$ s: T1 = .86 and T2 = .80). For example, "When I am sad I think *Why do I always react this way*?"

#### Results

Given the presence of missing data at each assessment (6–7%), we examined if data were missing at random to justify data imputation methods for estimating missing values (Schafer & Graham, 2002). Little's missing completely at random (MCAR) test was non-significant,  $\chi^2(892) = 906.57$ , p = .36, supporting the imputation of missing values (Little & Rubin, 1987). Thus, maximum likelihood estimates of missing data were created and used in all analyses (Schafer & Graham, 2002). Descriptive statistics and correlations are presented in Table 1. Associations between co-rumination, rumination, and depressive symptoms were significant concurrently and across assessments. Girls exhibited higher levels of co-rumination than boys, but there was no gender difference in rumination or depressive symptoms at either assessment.

We used path analysis to test our model, following the steps outlined by Cole and Maxwell (2003) in AMOS (Arbuckle, 2010). For an indirect pathway between co-rumination and depressive symptoms via rumination to be supported, (i) the proposed model had to provide a good fit to the data compared to a fully saturated model, and (ii) the indirect pathway (product of the  $\alpha\beta$  coefficients) must be significant (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). In this two wave study the indirect path was as follows: co-rumination must predict a significant increase in rumination ( $\alpha = T1CoRum \rightarrow T2Rum$ ) covarying for baseline rumination (T1Rum  $\rightarrow T2Rum$ ), and rumination must predict a significant increase in depressive symptoms: ( $\beta = T1Rum \rightarrow T2CDI$ ) covarying for baseline depression (T1CDI  $\rightarrow T2CDI$ ; cf. Cole & Maxwell, 2003). Given the significant concurrent correlations, all baseline predictors were allowed to correlate, as were the error terms of the endogenous variables.

The fully saturated model is presented in Fig. 1. All T1 variables were significantly related to their T2 counterparts. In addition, consistent with our indirect model, T1 co-rumination predicted residual change in rumination and T1 rumination predicted residual change in depressive symptoms. None of the reciprocal effects were significant. Fig. 2 presents our predicted indirect pathway model, which provided an excellent fit to the data: CFI = 1.00, SRMR = .03, RMSEA = .04 (Hu & Bentler, 1999), and did not fit significantly worse than the fully-saturated model,  $\chi^2(3) = 4.27$ , p = .23. Each path in Fig. 2

Table 1	
Bivariate associations and descriptive statistics.	

		1	2	3	4	5	6	Mean	SD
1	T1 CDI	_						7.60	6.96
2	T1 CoRum	.26***	_					2.38	0.90
3	T1 Rum	.48***	.28***	-				10.70	4.10
4	T2 CDI	.78***	.25***	.46***	-			7.71	6.95
5	T2 CoRum	.25***	.70***	.26***	.23***	-		2.45	0.97
6	T2 Rum	.37***	.29***	.59***	.48***	.37***	_	10.75	3.76
7	Gender	01	.35***	.06	05	.25***	.11	-	-

*Note*: T1, T2 = Time 1 and Time 2 respectively.  $CDI = Children's Depression Inventory. CoRum = Co-Rumination Questionnaire. Rum = Ruminative Response Styles, Brooding Subscale. Gender: Boys = 0, Girls = 1. *** <math>p \le .001$ .

Download English Version:

## https://daneshyari.com/en/article/880680

Download Persian Version:

https://daneshyari.com/article/880680

Daneshyari.com