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The Relationships between Co-Rumination, Social Support, Stress, and Burnout among Working Adults

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Abstract

Workers regularly report high levels of stress and burnout because of their daily interactions at work. Workers also tend to seek social support as a mechanism to reduce stress and burnout. Social support buffers the negative effects of stress on health-related outcomes and is inversely associated with both burnout and perceived stress. However, recent research has revealed that not all social support is beneficial. Co-rumination, or excessive negative problem talk about an issue, has been linked to increasing levels of stress and burnout. Working adults ($N = 447$) completed a survey exploring the relationships between social support, co-rumination, stress, and burnout. Two mediation models predicted that co-rumination would suppress the relationships between social support and both burnout and perceived stress. Data supported both partial mediation hypotheses. This study concludes that some social support can be less-than-beneficial, if the content of the supportive transaction focuses on excessive and negative problem talk.

Keywords: social support, social networks, coworker relationships, venting, stress, burnout, co-rumination

The Relationships between Co-Rumination, Social Support, Stress, and Burnout among

Working Adults

Organizational life is marred with stress. In fact, 69% of workers report that work is a

major source of stress in their lives (American Psychological Association, 2009) and stress-

related disorders account for a nearly $300 Billion loss each year to American companies

(Rosch, 2001). With these figures in mind, many researchers have explored ways to buffer the

deleterious effects of stress in the workplace. Of nearly all stress-buffering activities studied in

an organizational context, social support is regularly seen as one of the most beneficial (Cohen &

Wills, 1985; Ganster, Fusilier, & Mayes, 1986; Larocco, House, & French, 1980). For many

organizational members, those individuals closest to them provide a stress relief in terms of

social support. In fact, positive and socially-supportive relationships with coworkers have been

implicated in a variety of health-related outcomes. Ratings of social support have been associated

with immune system function (Segerstrom & Miller, 2004), cardiovascular health (Brough &

Pears, 2004), stress response (Eller, Netterstrøm, & Hansen, 2006), and mortality after 20-years

(Shirom, Toker, Alkaly, Jacobson, & Balicer, 2011). From an organizational perspective, social

support has regularly been one of the primary remedies to buffer the relationship between

perceived stress and health.

However, new research exploring specific types of social support has found mixed results

for social support on health, depending on what is discussed in a socially-supportive context

(Boren, 2013; Byrd-Craven, Geary, Rose, & Ponzi, 2008; Crompton, Lewis, & Lyonette, 2007;

Haggard, Robert, & Rose, 2010; Rose, 2002). The communication of social support is truly an

important element in building healthy relationships at work and does reduce the experience of

stress. However, the content of social support is also important, especially when considering its

positive benefits. Co-rumination, or excessive and negative problem-talk about an issue during a socially-supportive interaction (Haggard et al., 2010; Rose, 2002), has been associated with increased physical and psychological stress (Byrd-Craven et al., 2008; Byrd-Craven, Granger, & Auer, 2011), depression (Rose, 2002), emotional adjustment (Rose, Carlson, & Waller, 2007), and work adjustment (Haggard et al., 2010).

The purpose of this study is to explore co-rumination as a variable that potentially interferes with the beneficial effects of social support on two important criteria – burnout and global stress. The goal of this investigation is to determine if co-rumination could suppress the buffering effects of social support. In doing so, this investigation also calls into question the value of evaluating socially-supportive interactions absent the content of those supportive messages.

Social Support and Co-Rumination at Work

When individuals communicate with the goal of supporting each other, they are said to be engaging in a socially-supportive transaction. Regardless of the context of that transaction, socially-supportive messages are designed to help a person in a negative situation (Zimmermann & Applegate, 1994). Social support is a widely-studied organizational variable that moderates the relationship between psychological stress and physiological health (Schaufeli & Bakker, 2004). Social support is commonly defined with three primary components: support schemata (or mental maps of supportive social network individuals), supportive relationships (or those actual individuals who provide support), and supportive communicative encounters (Pierce, Sarason, & Sarason, 1996). These three key components of the support process are critical to understanding how individuals give and receive support from others. Social support is a highly communicative transaction between individuals who want support and those who give support (Burleson,

Albrecth, Goldsmith, & Sarason, 1994; Zimmermann & Applegate, 1994). In organizations, individuals give and receive informational support (messages to improve knowledge of an issue), instrumental support (co-workers providing each other with physical assistance) and emotional support (interactions to boost morale) to their coworkers (Zimmermann & Applegate, 1994).

Social support is regularly associated with positive health benefits (Boren & Veksler, 2011; Tracy, 2009; Uchino, 2004). This is especially true for those workers who are reporting high levels of workplace stress (Heaphy & Dutton, 2008). In fact, in a highly publicized 20-year longitudinal study, increased peer and supervisor support mitigated risk of worker mortality (Shirom et al., 2011). Additionally, researchers have determined that lack of positive workplace social interactions is a risk factor for ischemic heart disease (Eller et al., 2009). Social support also moderated the effect between stress and self-confidence, insofar that self-confidence increased because of social support, even for individuals who self-reported a great deal of stress (Rees & Freeman, 2007).

Social support helps individuals to cope with their stressful experiences and lack of social support can be potentially dangerous. However, the positive benefits of social support may not be realized when individuals engage in an interaction characterized by excessive emotional expression, especially at work (Uchida & Yamasaki, 2008). In fact, the expression of disagreement or contradictory opinions to others in an organizational context may make an individual feel as if they are no longer integrated within the organization (Kassing, 1997). Messages of employee dissent might be expressed explicitly during a perceived socially-supportive transaction or might be more implicit (Kassing & Avtgis, 1999). For instance, employees who feel that they have a low-quality relationship with their supervisors might be more inclined to use latent dissent messages while those who perceived high-quality supervisor

relationships expressed more explicit dissent messages (Kassing, 2000). Furthermore, Kassing and Armstrong (2002) tested a measurement model of employee dissent expression and found that employees vary their dissent expression, depending on the audience. In fact, the dissent message itself is not a unidirectional action. Instead, dissent messages are the embodiment of various organizational forces, co-constructed by the players, and are highly interactive (Garner, 2013). Similarly, co-workers often communicate with each other with the inherent goal of social support, but instead co-construct negative messages about the organization and its members, or focus on other issues of particular salience.

On an interpersonal level, Rose (2002) has described this process as co-rumination, or "excessively discussing personal problems within a dyadic relationship" (p. 1830). Co-rumination is related to the psychological concept known as rumination, a negative and constant problem-focus on an issue, thereby increasing the perceived severity of the issue. The distinguishing characteristics of co-rumination from rumination are that it is dyadic and communicative. Therefore, co-rumination is characterized by "frequently discussing problems, discussing the same problem repeatedly, mutual encouragement of discussing problems, speculating about problems, and focusing on negative feelings" (Rose, 2002, p. 1830).

As co-rumination involves two people interacting with an inherent goal of mutual support, it is an element of the social support process. While a socially-supportive message may help to solve a problem, a co-ruminative message tends to be more problem-centric with little direction toward a solution. In this sense, a co-ruminative interaction may escalate a small problem into something perceived as being much larger. All organizations are characterized by emotional expression (Sandelands & Boudens, 2000) and in some organizations individuals

communicate frequently with each other about their personal and professional problems and may engage in "venting," which is usually seen as an element of emotional catharsis.

Co-rumination has both positive and negative benefits. On the dyadic level, it can increase relational closeness but also increases depressive symptomology and anxiety (Rose et al., 2007). Co-rumination has also been found to interact with support type (good or poor social support given to a participant by a trained friend during an experiment) on relationship satisfaction, brooding, and anxiety (Afifi, Afifi, Merrill, Denes, & Davis, 2013). Physiologically, co-rumination increases stress hormone production (Byrd-Craven et al., 2008) and activation of both the hypothalamic–pituitary–adrenal axis and the sympathetic nervous system, two of the primary systems in the human stress response (Byrd-Craven et al., 2011). In an organizational setting, co-rumination was positively associated with work-to-family conflict and relationship satisfaction (Haggard et al., 2010). Furthermore, Haggard et al. (2010) found a three-way interaction effect of gender, abusive supervision, and co-rumination on job satisfaction in that "among men who experienced higher levels of abusive supervision, co-ruminating was related to greater job satisfaction" (p. 34), but a similar effect was not detected for women at either high or low abusive supervision. Finally, in a survey of graduate students, co-rumination was seen to suppress the relationship between social support and emotional exhaustion (Boren, 2013). Taken together, these findings suggest that social support does have many positive outcomes, but co-rumination can have potentially damaging consequences to individuals, thereby indicating that the content of a socially-supportive transaction might be more important than the frequency of supportive encounters.

Job Burnout and Stress

Burnout is a conceptual term for a series of factors that limit employee success at work and can be defined as wearing out at work (Maslach, Schaufeli, & Leiter, 2001). More specifically, Maslach et al. (2001) define burnout as "a psychological syndrome in response to chronic interpersonal stressors on the job" (p. 399) and include three dimensions of emotional exhaustion, cynicism (also called depersonalization), and lack of professional efficacy (Maslach et al., 2001). Employees who experience burnout often report that they have difficulty accomplishing work tasks and obligations, thereby linking their burnout experiences with their reports of stress at work. Employee reports of emotional exhaustion (the first of the tripartite indicators of burnout) will further result in decreased interpersonal connection with co-workers (cynicism) and eventually lead to a lack of ability to accomplish tasks at work. Therefore, the most burnt-out workers will report high levels of all three dimensions of burnout (Maslach, Jackson, & Leiter, 1996). Across all organizations, burnout is common in service-related jobs, higher in workers under the age of 30, and is most often reported among employees who have direct contact with customers, patients, or students (Schaufeli & Bakker, 2004; Smith, 1999).

While burnout is a perception often based on work, stress is a global perception that some element in a person's environment is interfering with that person's ability to accomplish particular goals (Selye, 1955). Importantly, stress involves the perception that a threat (stressor) will potentially cause harm to the individual. Importantly, that threat only needs to be perceived as such and not necessarily as a genuine threat (Cohen, Kamarck, & Mermelstein, 1983; Cohen & Williamson, 1988). This is why many stress-related disorders in the workplace are attributed to social conditions and not always environmental working conditions (which could be seen as a more "genuine" threat to a worker's wellbeing). For example, workers attribute global stress to

perceived lack of organizational support and job pressure (Vagg & Spielberger, 1998), organizational climate (Wright, 2005), perceived job demands and job strain (Steptoe, Cropley, Griffith, & Kirschbaum, 2000), workplace bullying (Hansen, Hogh, Persson, Karlson, Garde, & Ørbæk, 2006; Lutgen-Sandvik, Tracy, & Alberts, 2007), and perceived lack of control at work (Shirom et al., 2011). Interestingly, organizational burnout and global stress share similarly-reported causes among employees, indicating that the effects of work burnout spill-over to other domains of life, causing a perception of increasing global life stress (Zapf, Dormann, & Frese, 1996).

The causal relationship between stress and burnout, if any, has not been clearly determined through prior research, thereby complicating the measuring of both variables as discreet, especially in a working context. Therefore, stress is best measured as a global perception, while burnout is best measured as a specific variable related to working life with both phenomena having profound impacts on individual employees (Pruessner, Hellhamer, & Kirschbaum, 1999). That being said, the concept of employee engagement has been evaluated as the polar opposite of burnout, thereby potentially decreasing the experience of global stress (Schaufeli & Bakker, 2004). In fact, engaged employees will report lower amounts burnout and fewer health related problems, even with high job demands. Engagement manifests itself in positive interactions between employees, thereby making the concept inherently communicative. Importantly, increasing perceptions of employee engagement are linked to positive reports of social support – an engaged employee often reports that he or she feels supported by coworkers and by the organization (Schaufeli & Bakker, 2004; Tracy, 2009).

In most cases, social support should be inversely associated with both stress and burnout, therefore leading to the idea that socially supportive transactions are beneficial to individuals.

However, given the fact that prior research has linked co-rumination to increases in stress (Byrd-Craven et al., 2011) and burnout (Haggard et al., 2010), co-rumination should then act on the statistical relationships among social support, stress, and burnout. In fact, Boren (2013) discovered that co-rumination suppressed the inverse relationship between social support and emotional exhaustion in a non-working sample. Existing conceptualizations of co-rumination have viewed it as a particular type of social support. For instance, individuals who engage in co-rumination typically report high amounts of friendship adjustment (Rose et al., 2007). Therefore, co-ruminative messages are perceived as a type of social support to the parties engaged in the interaction, leading co-rumination to act on the statistical relationships among social support, burnout, and stress. Said differently, these statistical relationships can only be evaluated though the concept of co-rumination – that the content of social support is an important variable. Given this argument, the following hypotheses are proposed to test the relationships between variables:

> H_1: Co-rumination partially mediates the relationship between social support and burnout.

> H_2: Co-rumination partially mediates the relationship between social support and perceived stress.

Method

To evaluate the hypotheses, a survey methodology was employed using an online questionnaire. After obtaining approval from the human subjects committee, students enrolled in basic communication courses at two universities (public northeastern and private western) were offered nominal course credit to locate two potential research subjects. This project was one of multiple opportunities for students to earn the same course credit. Once the student agreed to act as a recruiter for the study, they were to e-mail two qualified potential participants. To qualify,

the participant must have been at least 18 years old, currently working in the same job for the

past six months, and must not currently be affiliated with the university (alumni status was

acceptable). The student e-mailed the potential participants with approved text provided by the

researcher and a unique four digit code. The potential research participant entered that code into

a different online questionnaire. The research participant did not need to complete the

questionnaire for the student to earn their credit. To validate responses, research participants

were asked for their name and telephone number. Any individual who did not include

information in this response was automatically removed from the study ($n = 23$). Additional

steps at data validation included removing any participant who reported working fewer than 10

hours per week ($n = 7$) or fewer than six months ($n = 1$). This yielded a total final sample size of

447.

Participants

Participants for this study were 235 (52.57%) women and 195 (43.62%) men ($n = 17$

decline to state) with 289 (64.65%) reporting that they were married or partnered, 139 (31.10%)

single, 17 (3.80%) co-habitating, and two declining to state relationship status. Respondent ages

ranged from 18-78 ($M = 42.43$, $SD = 12.68$ years). Nearly a quarter ($n = 110$, 24.61%) of the

sample reported total household income less than $40,000 per year, 142 respondents (31.77%)

reported between $40,000 - $79,999, and 180 (40.27%) reported $80,000 or more in household

income ($n = 15$, decline to state). Ethnic composition of the sample was as follows:

White/Caucasian/Euro-American, $n = 325$, 72.71%; Asian/Asian-American, $n = 23$, 5.15%;

Black/African/African-American, $n = 19$, 4.25%; Latino(a)/Hispanic/Mexican-American, $n = 14$,

3.13%; Middle-Eastern/Indian, $n = 10$, 2.24%; Native/Pacific-Islander, $n = 3$, 0.67%; and other,

$n = 2$. Multiple respondents declined to state their ethnicity or skipped this question ($n = 51$, 11.41%).

The respondents in this study had worked for a minimum of six months and a maximum of 36 years ($M = 9.67$, $SD = 9.10$ years). On average, the respondents worked for 42.45 hours per week ($SD = 12.50$ hours). Respondents reported their position with their current company with 61.97 ($n = 277$) indicating that they were an "employee," followed by "management" ($n = 104$, 23.27%), "owner" ($n = 33$, 7.38%), "consultant" ($n = 19$, 4.25%), and "Other" ($n = 12$, 2.68%). Organizations represented were private/for-profit ($n = 272$, 61.11%), government ($n = 88$, 19.69%), self-employed in own organization ($n = 48$, 10.74%), and private/not-for-profit ($n = 35$, 7.8%). A wide variety of industries were represented (see Table 1 for details).

Measures

Co-rumination. To evaluate co-rumination, the nine-item measure of co-rumination at work was utilized (Haggard et al., 2010). This measure is based on the work of Rose (2002), who evaluated co-rumination from the perspective of friendships. The questions in this measure are specifically contextualized to co-worker relationships. Each of the nine items was presented to respondents on five-point Likert-type scales with the anchors being "not at all true (1)" to "very true (5)." Some example items included "when I have a problem at work, we talk to each other about it for a long time" and "when we talk about a problem that I have at work, we spend a long time talking about how sad or mad I feel." The objective of the measure is to evaluate the content of social support as being a co-ruminative interaction. The measure was designed, tested, and validated as a unidimensional measure of coworker co-rumination (Haggard et al., 2010). Thus, a composite co-rumination score was created for each respondent by averaging the nine items of the measure (overall $M = 2.68$, $SD = .86$). Kurtosis and skewness statistics were unremarkable.

Table 1

Industry Descriptions and Frequencies

Industry Description	*n*	%
Finance or insurance	68	15.2
Educational services	68	15.2
Professional, scientific or technical services	57	12.8
Health care or social assistance	45	10.1
Other services (except public administration)	42	9.4
Retail trade	29	6.5
Construction	15	3.4
Manufacturing	15	3.4
Unclassified establishments	14	3.1
Real estate or rental and leasing	13	2.9
Accommodation or food services	13	2.9
Utilities	12	2.7
Management of companies or enterprises	12	2.7
Arts, entertainment or recreation	11	2.5
Wholesale trade	10	2.2
Information	10	2.2
Transportation or warehousing	4	.9
Admin, support, waste management or remediation services	4	.9
Forestry, fishing, hunting or agriculture support	1	.2
Mining	1	.2

Finally, reliability metrics were determined using Cronbach's alpha coefficient and were deemed

acceptable ($\alpha = .89$).

Social Support. To explore perceptions of social support, a measure first conceptualized

by Caplan, Cobb, French, Harrison, and Pinneau (1975) and then revised by Ganster and

colleagues (1986) was utilized. The measure explored three different social support contexts for

workers (supervisors/managers, co-workers, and friends, family, and relatives) by asking

respondents to report on four different items for each relational context. The items explored

different elements of a socially-supportive relationship with questions asking how each group of

people supports the respondent. Questions included "each of the following people go out of their

way to do things to make my life easier," "it is easy to talk with each of the following people,"

"each of these people can be relied on when things get tough at work," and "each of the

following people are willing to listen to my personal problems." The respondent was then given

a list of the three relational contexts, including supervisors, co-workers, and family and friends,

and asked how much they agree or disagree with the statement (1 = strongly disagree, 5 =

strongly agree). This measure of social support is specific to organizations (House, 1981), is

widely used (Cohen, Underwood, Gottlieb, & Fetzer Institute, 2000), and is rather parsimonious

(Ganster et al., 1986).

Given that the focus of the present investigation was on co-worker relationships, only the

co-worker subscale of the social support scale was utilized, which is an acceptable use of the

measure (see Cohen et al., 2000). To compute a composite score, a mean of the four items for co-

worker social support was used (overall $M = 3.61$, $SD = .72$), kurtosis and skewness statistics

were unremarkable. Cronbach's alpha coefficient was computed to evaluate reliability and

deemed acceptable ($\alpha = .81$).

Burnout. To explore burnout, which is characterized by high levels of emotional

exhaustion and cynicism with low levels of professional efficacy, the Maslach Burnout Inventory

General Scale (MBI-GS) (Maslach & Jackson, 1981; Maslach, Jackson, & Leiter, 1996;

Maslach, Schaufeli, & Leiter, 2001) was utilized. The MBI-GS is the widely-used research

standard metric of organizational burnout, has been validated in a variety of contexts, translated

into many languages, and possesses high levels of stability (Maslach et al., 2001). Respondents

were presented with 16 items, five of which evaluated levels of emotional exhaustion, five on

cynicism, and six on professional efficacy. Each item was presented to respondents on seven-

point Likert-type scales by asking how often they feel or think each item (1 = never to 7 =

always). Some example items are "I feel emotionally drained from work" (emotional

exhaustion), "I doubt the significance of my work" (Cynicism), and "In my opinion, I am good at

my job" (professional efficacy). Cronbach's alpha coefficients were acceptable for each of the

three dimensions: emotional exhaustion, $\alpha = .92$; cynicism, $\alpha = .82$; and professional efficacy, α

$= .87$. In order to evaluate burnout as a concept in the hypothesized models, a composite score

was computed by first reverse-coding the professional efficacy items and then computing an

average for all 16 items (overall $M = 3.01$, $SD = .95$) with skewness and kurtosis statistics being

unremarkable.

 Perceived Global Stress. To measure participants' reported level of perceived global

stress, Cohen, Kamarck, and Mermelstein's (Cohen et al., 1983) 10-item Perceived Stress Scale

(PSS-10) was used. The PSS-10 has been validated and is used widely in psychological stress

research in a variety of contexts and applications. Given the 10-item nature of this scale, the

measure is particularly parsimonious over other longer measures for studies utilizing multiple

dependent measures, such as the present investigation. The measure asks participants to rate how

often they feel negatively impacted by stressors in their lives on Likert-type scales with anchors

ranging from 1 (never) to 5 (very often), with "3" being the hypothetical midpoint of each scale

item.

 Since the scale deals with global psychological stress, items were not modified to refer to

any specific situational context (i.e., an organization). Certain items in the original measure were

reverse coded in the scale and those items were recoded prior to data analysis. Since the measure

has been used successfully and widely in a variety of research contexts, it possesses excellent

validity. The measure possessed acceptable levels of internal consistency with Cronbach's alpha

of .86. Mean (overall $M = 2.69$, $SD = .68$) PSS scores were used in all subsequent analyses, and

skewness and kurtosis were unremarkable.

Results

To evaluate each of the hypotheses presented in this study, two separate mediation

analyses were conducted. The procedure replicates that of Boren (2013), insofar that co-

rumination should act as a suppressor variable acting on the relationship between social support

and either burnout or stress. Importantly, co-rumination makes sense theoretically as a mediator,

as the relationship between social support and either burnout or stress is explained by co-

rumination. Table 2 reports correlations between study variables.

Table 2

Descriptive Statistics and Correlations for Study Variables.

Measures	Mean	SD	Pearson Correlations			
			1	2	3	4
1. Co-rumination	2.68	.86	--	.15*	.17*	.18*
2. Social Support	3.61	.72		--	-.31*	-.24*
3. Burnout	3.01	.95			--	.62*
4. Perceived Stress	2.69	.68				--

Notes: *Two-tailed. * = correlation significant at the p < .01 level.*

To test these mediation models, the Preacher and Hayes (2008) method was utilized. This method for mediation analysis is currently favored over Baron and Kenny's (1986) multi-step regression protocol, as the multi-step regression protocol is low-power and introduces unnecessary Type-I error. In the Preacher and Hayes method, bootstrap bias corrected and accelerated confidence intervals are used to evaluate the indirect effect (see Hayes, 2009). The SPSS Macro titled "PROCESS" was utilized to conduct the analysis of indirect effects and to compute the model coefficients (Hayes, 2013).

Hypothesis 1

The first Hypothesis predicted that co-rumination would partially mediate (suppress) the relationship between social support and burnout. The first mediation model (see Figure 1) included scores for co-worker social support as the independent variable, average composite burnout score as the dependent variable, and co-rumination as the mediator. The direct effect (c′ path) of social support on burnout had a standardized coefficient of -.46 ($SE = .06$, $p < .001$), with the coefficient for the total effect of social support on burnout mediated by co-rumination being -.41 ($SE = .06$, $p < .001$). All other path coefficients are reported in Figure 1. Utilizing a 95% confidence level, bootstrapping with 5000 iterations produced a bias corrected and accelerated confidence interval of .017 to .085. As zero is not included in the confidence interval, it is concluded that the indirect effect (mediation effect) is significantly different from zero. The computed effect size (R^2) for the overall model was 14.44% (Fairchild, MacKinnon, Taborga, & Taylor, 2009). Given this information, co-rumination does suppress the relationship between co-worker social support and burnout. Therefore, Hypothesis 1 is supported.
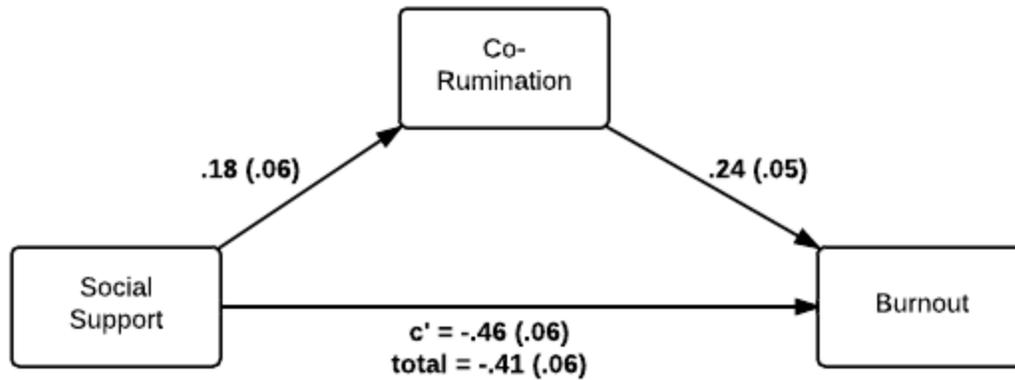
Figure 1. Partial mediation model illustrating co-rumination suppressing the relationship between social support and burnout. All coefficients are standardized and were significant at the $p < .01$ level. Number in parenthesis indicates coefficient standard error. The c′ path is the direct effect of the predictor on the dependent variable. The total effect includes the mediator. Model, $F (2, 442) = 37.31$, $p < .001$, $R^2 = .144$, Adjusted $R^2 = .141$.

Hypothesis 2

The second Hypothesis predicted that co-rumination would partially mediate (suppress) the relationship between social support and perceived stress. This second model (see Figure 2) included scores for co-worker social support as the independent variable, perceived stress score as the dependent variable, and co-rumination as the mediator. The direct effect (c′ path) of social support on perceived stress had a standardized coefficient of -.27 ($SE = .04$, $p < .001$), with the coefficient for the total effect of social support on perceived stress mediated by co-rumination being -.23 ($SE = .04$, $p < .001$). All other path coefficients are reported in Figure 2. Utilizing a 95% confidence level, bootstrapping with 5000 iterations produced a bias corrected and accelerated confidence interval of .012 to .061. As zero is not included in the confidence interval, it is concluded that the indirect effect (mediation effect) is significantly different from zero. The computed effect size (R^2) for the overall model was 11.02% (Fairchild et al., 2009). Given this information, co-rumination does suppress the relationship between co-worker social support and perceived stress. Therefore, Hypothesis 2 is supported.
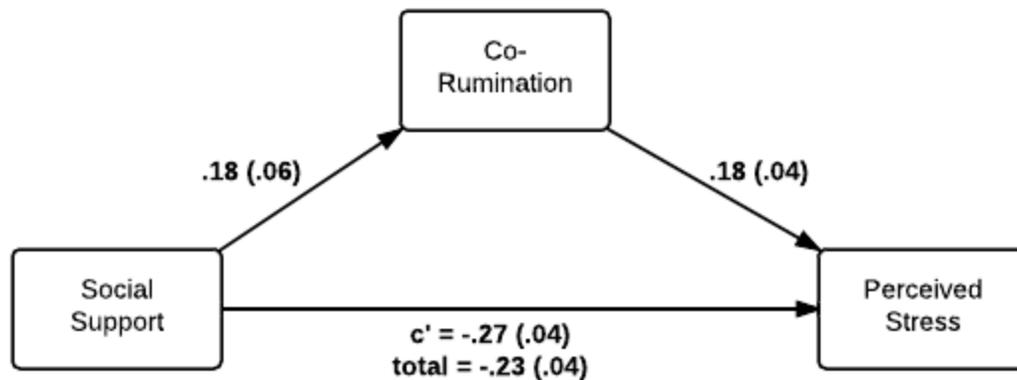
Figure 2. Partial mediation model illustrating co-rumination suppressing the relationship between social support and perceived stress. All coefficients are standardized and were significant at the $p < .01$ level. Number in parenthesis indicates coefficient standard error. The c′ path is the direct effect of the predictor on the dependent variable. The total effect includes the mediator. Model, $F (2, 442) = 27.37$, $p < .001$, $R^2 = .111$, Adjusted $R^2 = .106$.

Taken together, these two mediation models inform the notion that the content of social support is important. Co-rumination is a part of social support but it increases perceptions of stress and burnout. In these models, the effect of co-rumination serves to reduce the beneficial effects of social support on both burnout and stress (by suppressing the inverse effect). In this sense, workplace co-rumination explains the relationship between co-worker social support and both job burnout and stress.

Discussion

The primary purpose of this study was to explore the way that co-rumination helps to explain the relationships between social support, burnout, and stress. Many prior research studies have found strong inverse associations between social support and both stress and burnout. Importantly, nearly all theoretic models of social support indicate either a buffering effect of social support on stress and health or a main effect on stress, whereby social support reduces both burnout and stress. This finding is incredibly relevant in an organizational setting, as many workers turn to their proximal relations for support – namely, their coworkers. However, much of this prior research has evaluated social support without exploring the content of the supportive

transaction. Therefore, the predictions of this study were that co-rumination would act to suppress the relationship between social support and burnout along with the relationship between social support and stress – that co-rumination would decrease the beneficial effects of social support on both of these outcomes. To evaluate those predictions, a survey was conducted with 447 respondents.

Both hypotheses proposed mediation models with the study variables. The first model accurately described a partial mediation effect of co-rumination on the relationship between social support and burnout, in line with Hypothesis 1. The second model also demonstrated a similar mediation effect with stress as the outcome thereby supporting Hypothesis 2. Taken together, both models provide sufficient evidence that co-rumination suppresses these relationships, given the reduction in coefficients from the direct to total paths. In fact, the first model accounted for over 14% of the variance, with the second model accounting for 11% of the variance. Co-rumination was positively associated with social support and with both burnout and stress (see Table 2). Likewise, social support was inversely associated with both stress and burnout (see Table 2). Therefore, the complexity of the social support-to-burnout and stress relationships are better explained with co-rumination as a mediator variable. Unfortunately, and in a practical sense, this does mean that co-ruminative interactions had a deleterious effect on these statistical relationships and interferes with the beneficial effects of social support.

When co-workers engage in a co-ruminative interaction at work, they are doing so to help ease the experience of stress and burnout. This is true of nearly all models of social support, which predict either a main effect of social support on burnout and stress or a buffering effect of social support on burnout and stress (House, 1981; Larocco et al., 1980). However, as seen in this sample of workers, co-rumination increased burnout and stress in spite of any reduction in

burnout and stress from the direct statistical relationship. The ability to share a stressful experience with a co-worker may be beneficial to the worker, only when the content of social support remains focused around solving problems and not dwelling on problems. While these findings are only in the context of psychological stress and burnout, the expectation that this suppression effect would translate to physical stress is not far-fetched.

Many social support interactions could easily turn into a moment of co-rumination. In this sense, co-rumination may be more insidious than originally conceptualized by prior researchers (Haggard et al., 2010; Rose et al., 2007; Rose, 2002). Conversely, engaging in frequent co-ruminative interactions may instill a more fleeting sense of burnout and stress than severe, causing the individual to feel burnout about that interaction, but not enough to have that level of burnout spill over to other aspects of his or her life. However, regardless of the individual's role in engaging in co-rumination, the mere fact he or she did so was enough to reduce some of the positive effects of social support on burnout and stress for this sample, which is quite telling.

Ascertaining a more complete understanding of socially-supportive transactions is very important, especially if organizations are aware that social support can reduce emotional exhaustion (Heaphy & Dutton, 2008). This is even more important when engagement at work has been the typical prescription given to a burnt-out workforce (Maslach et al., 2001; Schaufeli & Bakker, 2004). Burnout researchers have been articulating complex arguments and presenting detailed theoretic models calling for increases in social support in the workforce; however, those employees who are already reporting stress may be co-ruminating with their colleagues, thereby exacerbating the effects of burnout and stress. These results call into question the conventional wisdom that social support is entirely beneficial to both the workplace and the individual.

Conversely, the content of those supportive messages may be just as important, if not more important, as engaging in a supportive transaction.

Theoretic and Practical Applications

  This research project calls into question much of the prior research that argues that when individuals simply "talk it out" with others, they feel better. Indeed, social support is a useful tool in reducing feelings of stress and burnout and in some relationships can act as a buffer to stress. However, the way that workers engage in social support has an effect on its beneficial properties. Therefore, models of social support need to include commentary on types of social support messages. For instance, many researchers have said that those with larger social support networks tend to be healthier (Cohen & Wills, 1985; Haber, Cohen, Lucas, & Baltes, 2007). However, if those same participants report that they are engaging in excessive negative talk about their particular issues with many people in their social support network, they may be suppressing (or perhaps eliminating) the beneficial effects of social support.

  From an organizational perspective, the presence of co-rumination in an organization may be representative of cultural elements of the organization or, perhaps, a way that organizational members deal with emotion with work or emotion at work (Miller, Considine, & Garner, 2007). The findings in the present investigation closely relate to those in the organizational dissent literature, especially with respect to way that dissent messages are expressed and to whom (Kassing & Armstrong, 2002; Kassing, 1997). Just as some organizations and organizational relationships are more prone to explicit dissent messages (Kassing, 2000), some organizations may be prone to greater instances of co-rumination disguised as social support (Jenaro, Flores, & Arias, 2007). Furthermore, there is a strong likelihood that co-rumination is associated with emotional labor, perhaps providing another

useful variable in the study of the effects of emotional labor and stress (Fiebig & Kramer, 1998;

Shuler & Sypher, 2000).

The benefits of allowing employees specific time to provide each other with social

support has been addressed in research (Anthony & O'Brien, 2002; Cohen et al., 2000; Randall,

Nielsen, & Tvedt, 2009), but those studies have looked at the perceptions of social support

without much attention to the content of social support. In fact, many organizational and

individual-level social support interventions fail, as they focus too heavily on describing social

support but lack of focus on the particular messages exchanged during a supportive transaction

(Cohen et al., 2000; Seidman, Shrout, & Bolger, 2006). On a practical level, guidance should be

given to individuals as to the type of social support message that is most beneficial – one that

focuses on the problem by seeking a resolution and does not necessarily dwell on the negative

elements of the problem (thereby exacerbating the problem). In this sense, communication

practitioners can play a key role at training organizational members on the differences between

social support and co-rumination. Additionally, co-rumination should be talked about in basic

management, human resources, and interpersonal communication college courses as a way to

help future organizational members guard against the dangers of co-rumination and bolster the

quality of their social support networks.

Limitations and Directions for Future Research

Given the fact that the questionnaire was distributed in select parts of the United States,

the overall sample was rather homogenous with a vast majority being white and employed in

traditional office jobs. Of course, the nature of the effects of social support changes depending

on the organization and coworker relationships. Therefore, future studies would be well served

by oversampling understudied populations. Especially valuable would be to ascertain the

deleterious effects of co-rumination among front line employees along with more diverse

elements of the labor force. In fact, this sample seemed to have a high skew toward those in the

upper middle-class, which might have influenced the findings. Perhaps the effects seen here

would be stronger among those individuals who have additional stressors (perhaps including

work/family conflict or financial strife) as workers with more resources may report less stress

and burnout, which means that including those variables would be useful in building more

complete models of stress and social support. Another sample that would be important to

explore, as discussed earlier, would be those workers in heavy emotion-labor jobs with high

potential for shared interaction time and burnout (e.g., flight attendants, 911 call takers, human

service workers, those in the medical field). While social support might not be fundamentally

different in these or other types of organizations and relational contexts, there may be some

differences in the way that workers interact with their colleagues, thereby changing the nature of

co-rumination. Connecting co-rumination to other similar elements of organizational peer

relationships, such as the existence of resentment messages (Boren & Johnson, 2013) might also

yield useful comprehensive results.

From a measurement perspective, measures of social support might need to account for

co-rumination as an exogenous variable, especially considering that there exists a debate in the

literature as to whether received or perceived social support is more valuable (Haber et al.,

2007). As a first step to reconciling these measurement issues, observational research, coding,

content analysis, and dyadic analysis would be helpful in understanding the types of messages

that may be considered co-rumination. Also, experimental research would assist in determining

specific elements of causation (co-rumination as a product of stress or stress as a product of co-

rumination). Perhaps researchers could also explore the way that co-rumination at work affects

physiology by including biological markers of stress. Finally, given the fact that co-rumination is most likely not a fleeting behavior, longitudinal research could prove valuable at better understanding these complex associations, which would be especially beneficial in attempting to determine any potential threshold effect. This would be useful in differentiating the effects of a small venting session from co-rumination.

Conclusions

The results of this investigation inform us of a few important things. First, co-rumination does occur among co-workers. Second, co-rumination suppresses the beneficial relationship between social support and both burnout and perceived global stress. Third, exploring the content of socially-supportive communication is equally as important as simply evaluating perceived social support, especially when trying to reduce stress and burnout in organizations. Finally, the buffering effects of social support may only be useful when the content of the supportive transaction is focused on problem-solving and not on excessive problem-talk. This research program is a valuable addition to the work on social support, especially from a communicative framework by exploring the content dimension of socially-supportive transactions. Participants engaged in a socially-supportive conversation may not realize that they are reducing the beneficial psychological and health effects of social support by engaging in co-rumination. Exploring this concept further by evaluating potential ways to resolve this problem is useful to the study of social support at work.

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