

THE EFFECTS OF EMOTION-FOCUSED VERSUS INSTRUMENTAL RUMINATION ON  
THE PROVISION OF SOCIAL SUPPORT

by

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Victims of negative events often report that they do not receive the expected and desired social support (e.g., Dunkel-Schetter, 1984). The current study investigated the impact of two types of victim rumination and gender role expectations on support provision and receipt. Using a 2 (Instrumental vs. Emotion-Focused Rumination) x 2 (Victim Gender) x 2 (Participant Gender) between-subjects factorial design, 136 undergraduate students interacted with one of four “burglary victims” for eight minutes, providing both behavioral and questionnaire data. Results suggest that instrumental ruminators receive more support than emotion-focused ruminators. Women provided more support to victims than did men. Additionally, male victims’ coping was evaluated more positively than female victims’ coping, regardless of rumination type.

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## The Effects of Emotion-Focused versus Instrumental Rumination on the Provision of Social Support

Individuals who have experienced a traumatic event often feel the need to share their experiences and feelings with others (Horowitz, et al., 2001; Pennebaker, 1993; Rimè, Finkenbauer, Luminet, Zech & Phillipot, 1998). Such sharing of traumatic events may provide psychological benefits for the victim (Silver & Wortman, 1980). For example, disclosure of a previously undisclosed trauma is linked to a decrease repetitive thoughts, which prolong and increase the magnitude of depressive episodes (e.g., Butler & Nolen-Hoeksema, 1994; Nolen-Hoeksema, 1987, 1998; Nolen-Hoeksema, McBride & Larson, 1997).

Discussion of traumatic events may aid in recovery in many ways. For example, discussion allows one to find meaning in the trauma (Lepore, Silver, Wortman & Wayment, 1996; Mikulincer & Florian, 1996; Pennebaker, 1995; Pennebaker & O'Heeron, 1984). Talking about a trauma may also help the victim to habituate to thoughts about the event (Lepore, et al., 1996; Mendolia & Kleck, 1993). By discussing the trauma, the victim becomes accustomed to telling the story and no longer finds thoughts about the trauma as emotionally arousing. Further, as Festinger (1954) asserted, individuals seek comparisons with others to determine the appropriateness of their attitudes, especially in the absence of objective information. A similar process may occur when victims face a trauma. Discussion with others can provide victims with comparison information to help them to determine if their reactions are appropriate (Pennebaker & O'Heeron, 1984; Pennebaker & Beall, 1986; Janis, 1975; Wortman & Dunkel-Schetter, 1987). A final, and important, reason for disclosing traumatic events is to elicit social support (Janis, 1975; Wortman & Dunkel-Schetter, 1987; Pennebaker & Beall, 1986; Pennebaker & O'Heeron,



1984). Victims of traumatic events may share their experience in order to obtain needed help. This help may take the form of problem-solving advice, emotional support, or reassurance. However, the disclosure of thoughts about a traumatic incident by a victim may have negative consequences for the listener. Listeners may feel uncomfortable during the disclosure, making them reluctant to interact with the victim and leading them to abbreviate the support process.

### *Victim Rumination as a Determinant of Social Support*

Although one reason that people feel the need to discuss their traumatic experiences is to elicit social support, victims frequently report not receiving the social support they expect or desire (Coyne, Ellard, & Smith, 1990; Dakof & Taylor, 1990; Davis & Brickman, 1996; Dunkel-Schetter, 1984; Dunkel-Schetter, Blasband, Feinstein, & Herbert, 1992).

Victims may be particularly at risk of not receiving support if they repeatedly focus on their trauma. In a longitudinal study of people who had recently lost a loved one, for example, ruminators felt unsupported and dissatisfied with the social support they received, although they reported seeking more social support than non-ruminators (Nolen-Hoeksema & Davis, 1999).

Researchers have suggested several reasons why sharing these repetitive thoughts may be related to others behaving in unsupportive ways. First, repetitive thoughts may prolong the emotional states accompanying the victimization (e.g., Butler & Nolen-Hoeksema, 1994; Nolen-Hoeksema, 1998; Nolen-Hoeksema, McBride & Larson, 1997), thereby breaking social norms governing the acceptable duration of grief. Second, potential supporters may experience an aversive emotional arousal in response to hearing disclosures of traumatic events (Rimè et al., 1998). Consequently, others may actively discourage the victim from speaking about the trauma or they may withdraw from the victim in order to alleviate their own feelings of discomfort (Pennebaker, 1993; Silver & Wortman, 1980). Finally, both Perrine (1993) and Yee (1997)

found that if potential supporters do not see improvement in the victim, they might abandon attempts to help. Potential supporters may interpret prolonged periods of distress as a lack of improvement, leading supporters to abbreviate attempts to help.

### *Types of Rumination*

Researchers have distinguished between at least two modes of rumination. Martin and Tesser (1996) suggest that rumination is a method of problem solving, that arises from blocked goals. However, rumination is viewed quite differently by Nolen-Hoeksema (1987), who stresses the role of emotion. She defines it as the repetitive focusing on the causes and consequences of one's emotional state. Fritz (1999) obtained support for the distinction between the instrumental and emotion-focused functions. She performed a factor analysis of coping responses displayed by coronary event patients and found that instrumental rumination and emotion-focused rumination emerged as distinct factors in her analysis. Instrumental rumination, as defined by Fritz (1999), is related to Martin and Tesser's definition, in which the ruminator seeks solutions to event-related problems. This type of rumination was not related to distress in her longitudinal study of coronary event patients (Fritz, 1999). Fritz's definition of emotion-focused rumination is consistent with Nolen-Hoeksema's construct of rumination, with excessive focus on the emotional state caused by a negative event. In contrast to instrumental rumination, this form of rumination was related to elevated distress and poor coping among coronary event patients (Fritz, 1999).

### *Gender Differences*

Studies conducted on gender differences in rumination demonstrate that a stereotype exists, which endorses emotion-focused rumination by women, while discouraging such rumination by men (Strauss, Muday, McNall, & Wong, 1997). This is consistent with a general

stereotype that men are able to cope in a more active and instrumental fashion with traumatic experiences than women (Barbee, et al., 1993). Both of these research findings are consistent with gender stereotypes, wherein men are viewed as more instrumental and women as more emotional (Prentice & Carranza, 2002).

However, gender stereotypes may not be the only forces acting upon victims. There are societal values to consider, as well. In an independent culture such as that found in the United States, instrumentality is valued (Fiske, Kitayama, Markus & Nisbett, 1998). The implications of this are that victims are operating under two sets of norms; gender norms and societal values.

When women display emotionality, such as when they engage in emotion-focused rumination, they are adhering to their gender role expectations (Barbee, et al., 1993; Prentice & Carranza, 2002). When women display instrumentality, such as when they engage in instrumental rumination, they are adhering to societal values (Fiske, et al., 1998). This may allow women to display either type of rumination without sanctions. Men, on the other hand, do not have such flexibility. Men are expected, both by gender roles and by societal values, to be instrumental and to cope independently (Barbee, et al., 1993; Prentice & Carranza, 2002). An emotional display by a man, such as when he engages in emotion-focused rumination, may be met with a decided lack of support, as he is breaking both his gender role and societal expectations.

Likewise, gender role expectations may act upon support providers. Women are gender-typed as being more nurturing and helpful than men (Barbee, et al., 1993). As such, they are expected to handle emotional situations, such as a victim's emotional ruminations, well. Men, on the other hand, are expected to be cool and not as helpful (Barbee, et al., 1993). Although men are more helpful in emergency situations than are women, women may be more helpful in

everyday situations, such as comforting a victim after the victimizing event has passed (Eagly & Crowley, 1986).

### *The Current Study*

It has been well documented that victims of traumatic events obtain benefits through discussion of the experience. However, previous work has tended to focus on victims' perspectives, evaluations and feelings while ignoring supporters' perspectives. Supporters' perceptions of the victim's behavior may impact their decisions to help. The current study was designed to examine the interactions between the type of rumination engaged in by the victim, the victim's gender and the supporter's gender and how these factors impact on a variety of supportive behaviors. More specifically, three hypotheses were generated:

*Hypothesis 1.* Our society values instrumentality, leading to the prediction that victims who engage in instrumental rumination should be given more support than those engaged in emotion-focused rumination. In other words, a main effect of rumination was expected such that participants would offer more support in a variety of ways to instrumental ruminators versus emotion-focused ruminators.

*Hypothesis 2.* Gender role expectations should lead women to be more supportive than men. This should hold especially true when faced with emotion-focused ruminators, as this is consistent with the stereotype that women are more adept at handling emotional situations. This should result in an interaction of participant gender and rumination type, such that women should provide more support than men overall, but this difference was expected to be greater when participants interacted with an emotion-focused ruminator.

*Hypothesis 3.* An interaction between rumination type and victim gender was expected on the basis of gender stereotype expectancies. Women who focus on their emotional state may

be perceived as adhering to gender stereotypes that imply that women focus on their emotions more than men. Women who engage in instrumental rumination, however, should be seen as adhering to societal values. Men do not have such flexibility, though. Men who behave in an emotion-focused manner would be seen as breaking both their gender roles and societal expectations. As such, emotion-focused male ruminators were expected to receive less support than either emotion-focused female ruminators or instrumental male ruminators.

### Method

The current study used an experimental paradigm in which potential supporters interacted with a confederate who was trained to act as a burglary victim. Participants watched a victim describing the crime and his or her reactions to it before actually interacting with the victim. These interactions allowed for the collection of a variety of verbal, non-verbal and questionnaire measures of support. In contrast to most research on social support, which has tended to rely on retrospective self-reports measures of behavioral intentions (e.g., Yee, Greenberg & Beach, 1998), the present study employed actual behavioral support measures. As Fishbein and Azjen (1975) noted, such behavioral intentions do not always predict actual behavior.

#### *Participants and Design*

Participants were randomly assigned to one of eight conditions in a 2 (Emotion-Focused or Instrumental Rumination) x 2 (Victim Gender) x 2 (Participant Gender) between subjects design. One hundred forty-three undergraduate students received partial course credit for their participation. Of these, seven participants expressed suspicion of the experimental manipulations, resulting in their data being removed from the analyses. All analyses were thus based on data collected from 136 participants (75 women and 61 men; mean age = 19.38).

### *Procedure and Materials*

Four confederates (two males and two females, between the ages of 19 and 21), blind to the hypotheses of the study, trained for approximately 70 hours to act as burglary victims. These training sessions provided the confederates with scripted responses to questions participants were likely to ask about the crime, as well as training in the emotional valence to be displayed. After this training period, two scripted “interviews” were videotaped for each confederate. These scripts varied whether the “victim” engaged in instrumental or emotion-focused rumination in reaction to the burglary. In the instrumental rumination condition, confederates remarked on their inability to stop thinking of ways to prevent another crime. In the emotion-focused rumination condition, confederates remarked on their inability to stop thinking about the emotional impact of the burglary. In all conditions, confederates acted mildly depressed over their lost possessions and the violation of their privacy. This helped to control the emotional valence of the interaction.

The interview tapes were pre-tested by 28 undergraduate psychology students. These students rated each of the eight tapes on three dimensions: victim sadness, emotion-focus, and problem focus. Subsequent analyses revealed no differences between confederates in how sad or how problem focused they were. A significant difference was found between two of the confederates in how emotion-focused they seemed,  $F(1, 220) = 3.12, p = .03$ . Thus, the variable of confederate was statistically controlled in all analyses.

Participants were run individually, each with an accompanying confederate who posed as a participant. They were told that the current study examined impression formation, and that either they or their partner would be randomly selected to describe a recent unhappy event. Through a rigged drawing of names, the confederate was always “chosen” to perform this task. The experimenter explained that the participant would observe the confederate discuss this event via a closed circuit feed on a television, as prior research had supposedly shown that people find

it easier to discuss negative events in a one-on-one situation rather than in a group of three or more people. This provided a rationale for the experimenter and confederate to leave the room for the “interview.” The participant then viewed one of two randomly chosen pre-recorded videotapes, showing the victim ruminating in an emotional or instrumental way. Prior to the random selection of the tape, the confederate and experimenter were blind as to which rumination condition would be run. Participants were thus led to believe that the tape was a live interview with the confederate concerning the negative event.

After viewing the five-minute video, participants were escorted to the room where the confederate was seated. Participants were given a choice of sitting in one of two chairs, which varied in distance from the centrally positioned confederate. They were instructed to “discuss the event revealed during the interview.” The experimenter activated a video recorder, and left the room.

Confederates behaved in ways to emphasize their ruminative responses during the interaction with the participant. Those in the emotion-focused rumination condition repeatedly focused on their emotional response to the crime by stating, “I can’t concentrate on my schoolwork because I keep thinking about how bummed out I am about this.” In the instrumental rumination condition, confederates commented, “I can’t concentrate on my schoolwork because I keep thinking of different things I could do to keep this from happening again.”

After eight minutes, the experimenter returned and separated the confederate and participant, ostensibly in order for each to complete a series of questionnaires privately. Participants did in fact complete a series of questionnaires, but the confederate did not. A full debriefing, including an explanation of the deception used, was given at the conclusion of the experiment.

## *Measures*

*Non-verbal behavioral measures.* Independent coders, blind to the hypotheses and conditions of the study, coded supportive non-verbal behavior from the videotaped interactions. In order to prevent the audio track from biasing their perceptions of non-verbal behavior, the coders did not listen to the audio portion of the videotapes while coding non-verbal behavior. Coders spent approximately eight hours training to use the coding system. Coders recorded whether participants sat in the chair near or far in relation to the victim. They also rated the behaviors of looks of concern, scowling/angry looks, glaring, rolling of the eyes, eye contact and the level of participant engagement/distraction on seven-point rating scales. Coders worked independently on the same sample of 14 video clips obtained during pilot work in order to establish inter-rater reliability. A Cohen's Kappa was calculated to determine the level of agreement between coders for seating position (Cohen's Kappa = 1.00). Intra-class correlations were performed on the rating data to determine the level of agreement between coders. Overall, inter-rater reliability was strong (looks of concern intra-class  $r = .56, p = .001$ ; scowling/angry looks intra-class  $r = .45, p = .001$ ; glaring intra-class  $r = .54, p = .02$ ; rolling of eyes intra-class  $r = .43, p = .05$ ; eye contact intra-class  $r = .84, p = .001$ ; level of engagement/distraction intra-class correlation  $r = .84, p = .001$ ). During this training and assessment phase, disagreements were resolved by discussion between the coders. Once inter-rater reliability was established, coders worked independently by coding randomly assigned sets of video clips.

Two non-verbal scales were formed. The frequency of scowling/angry looks, glaring, and rolling of the eyes formed the "Negativity" scale (Cronbach's  $\alpha = .63$ ). The second scale was labeled "Engagement" (Cronbach's  $\alpha = .85$ ) and included amount of eye contact participants made with the victim and level of distraction/engagement demonstrated during the interaction.



Scale items were transformed to z-scores prior to averaging, in order to ensure that all items would be equally weighted.

*Verbal behavioral measures.* The audio track from each interaction video was transcribed in order to code the verbal data without bias from non-verbal behavior. Coders, blind to the hypotheses and conditions of the study, then coded these transcripts using Samter and Burleson's (1984) coding scheme. This coding scheme allows for each speaking turn to be classified as one of five types of statements. Each of these types of statements vary in how much thought must go into their creation. In order from least thoughtful to most thoughtful, these types of statements are acknowledgements, information seeking, disclosures, advice, and comfort (Samter & Burleson, 1984). This coding scheme also indicates how effortful these statements are on a three-point scale (1 = off topic; 2 = comments on the victim's behavior; 3 = comments on the victim's psychological state). A training period of approximately 35 hours preceded coders working independently. During this training period, the coders coded the same seven transcripts (283 utterances) in order to establish reliability. All disagreements were resolved by discussion between the coders. The verbal coders established a very high level of reliability (Cohen's Kappa = .91) before working on random samples of transcripts independently.

*Questionnaire measures.* Participants completed a series of 7-point bi-polar adjectives scales (ranging from 1 to 7), which measured their impressions of the confederate. These scales tap the three dimensions of meaning discussed by Osgood, Suci and Tannenbaum (1961): evaluation (e.g., nice...awful), activity (e.g., active...passive) and potency (e.g., rugged...delicate). The evaluation scale was used alone (Cronbach's  $\alpha = .71$ ), while the potency and activity scales were combined to provide a measure of empowerment (Cronbach's  $\alpha = .62$ ). Item responses were converted to z-scores prior to adding, in order to ensure that all items would

be equally weighted. Participants indicated on a similar 7-point rating scale how much they approved of the victim's coping.

Participants also completed an individual difference measure of empathy; the Interpersonal Reactivity Index (IRI), consisting of 28 items (Davis, 1983). Although the internal reliability of this scale in this sample was low (Cronbach's  $\alpha = .46$ ), this scale has previously been demonstrated to be reliable (internal reliabilities of .71 to .77 and test-retest reliabilities of .62 to .71, Davis, 1983). Thus it was retained for use in the analyses.

Finally, participants indicated their willingness to interact with the confederate at a later time, indicating if they would be willing to return at a later time to interact with the same victim in another experimental session. If they agreed that they would be willing, they then indicated how many more sessions they were willing to attend.

## Results<sup>1,2</sup>

Initial analyses showed that participants' levels of empathy, as measured by the IRI (Davis, 1983), had no effect on the dependent measures. As such, empathy is not considered in the reported analyses. Only significant effects are presented. If an effect is not mentioned, it was not significant. Post-hoc analyses using the Newman-Keuls procedure were performed to determine significant pair-wise differences.

### *Hypothesis 1*

Hypothesis 1 stated that participants would provide more support to instrumental ruminators than emotion-focused ruminators. This prediction was supported by a variety of verbal measures of support (see Table 1 for means of verbal measures).

The overall number of verbalizations made to instrumental ruminators ( $M = 40.78$ ) was greater than the number of statements made to emotion-focused ruminators ( $M = 30.00$ ),  $F(1,$

127) = 5.02,  $p = .03$ . Unexpectedly, there was also a main effect for victim gender, such that participants made more disclosures to male victims ( $M = 15.33$ ) than to female victims ( $M = 12.53$ ),  $F(1, 127) = 6.71, p = .01$ . Participants made more advice statements to instrumental ( $M = .68$ ) than emotion-focused ( $M = 1.78$ ) ruminators,  $F(1, 127) = 5.48, p = .02$ .

In addition to the number of statements made, there was a marginal main effect for rumination type for the effort level of the statements of comfort made to victims. Participants made more effortful comforting statements to instrumental ( $M = 2.00$ ) versus emotion-focused ( $M = 1.78$ ) ruminators,  $F(1, 48) = 3.35, p = .07$ .

### *Hypothesis 2*

Hypothesis 2 stated that women would be more supportive than men, especially when dealing with emotion-focused ruminators. Support was found for this hypothesis on a variety of non-verbal measures of support (see Table 2 for means of non-verbal support measures).

As expected, there was a Participant Gender x Rumination Type interaction for seating position,  $F(1, 127) = 4.39, p = .04$ , such that women sat closer to emotion-focused ruminators ( $M = .16$ ) than did men ( $M = .43$ ). Women ( $M = .27$ ) and men ( $M = .26$ ) did not differ in how close they sat to instrumental ruminators. Additional support for Hypothesis 2 was found in the results for the perceptions of victim empowerment. Women perceived emotion-focused ruminators as more empowered ( $M = -.06$ ) than did men ( $M = -.84$ ), whereas women and men did not differ in their ratings of instrumental ruminators ( $M_s = .44$  &  $.40$ , respectively),  $F(1, 126) = 4.32, p = .04$ .

Women gave victims more frequent looks of concern ( $M = 1.86$ ) than did men ( $M = 1.02$ ),  $F(1, 99) = 12.45, p = .001$ . Although there were no significant gender differences between the number of concerned looks given to instrumental versus emotion-focused ruminators,  $F(1,$

99) = 1.00,  $p = \text{n.s.}$ , this result provides support for the first part of the hypothesis. That is, women were found express concern more frequently than men.

Despite this support, there were some findings that contradicted Hypothesis 2. Specifically, the variables of non-verbal negativity, engagement, evaluation, and the number of sessions participants indicated they would be willing to attend provided results that contradicted Hypothesis 2.

There was a main effect for participant gender for non-verbal negativity,  $F(1, 99) = 4.30$ ,  $p = .04$ , such that women displayed more non-verbal negativity ( $M = .55$ ) than did men ( $M = -.67$ ). This main was qualified by a Participant Gender x Victim Gender interaction,  $F(1, 99) = 7.72$ ,  $p = .01$  (see Figure 1). Post-hoc analyses show that men were less negative when dealing with female victims ( $M = -1.30$ ) than were women ( $M = .76$ ), a difference not displayed when dealing with male victims ( $M_s = .34$  &  $.37$ , respectively). Additionally, a main effect for participant gender was found for the engagement scale,  $F(1, 97) = 4.84$ ,  $p = .03$ , such that women ( $M = .39$ ) were more engaged with victims than were men ( $M = -.50$ ). Although this finding is consistent with Hypothesis 2, it was qualified by a Participant Gender x Rumination Type interaction,  $F(1, 97) = 4.32$ ,  $p = .04$  (see Figure 2). Post-hoc analyses revealed that, contrary to expectations, women were more engaged with instrumental ( $M = 1.02$ ) than with emotion-focused ( $M = -.38$ ) ruminators. There were no such differences for engagement levels of men ( $M_s = -.54$  &  $-.47$ , respectively).

There was also a main effect for victim gender for the evaluation of the victim,  $F(1, 126) = 25.26$ ,  $p < .01$ . This main effect was qualified by a Victim Gender x Participant Gender interaction,  $F(1, 126) = 4.24$ ,  $p = .04$ , which was further qualified by a Rumination Type x Victim Gender x Participant Gender interaction,  $F(1, 126) = 3.98$ ,  $p = .05$ . Post-hoc analyses

show that, contrary to expectations, women evaluated emotion-focused male ruminators ( $M = 1.82$ ) more positively than emotion-focused female ruminators ( $M = -1.58$ ), whereas there was no such difference in men's evaluations of emotion-focused ruminators ( $M_s = -.39$  &  $-.53$ , respectively).

Finally, there was a Participant Gender x Rumination Type interaction for the number of sessions for which participants were willing to return,  $F(1, 90) = 6.74, p = .01$ . Unexpectedly, men reported being willing to return for more sessions with emotion-focused ruminators ( $M = 2.00$ ) than did women ( $M = 1.34$ ), whereas there was no significant difference in the number of sessions that men and women agreed to with instrumental ruminators ( $M_s = 1.43$  &  $1.58$ , respectively).

### *Hypothesis 3*

Hypothesis 3 stated that male victims engaged in emotion-focused rumination would receive less support than either female victims engaged in this form of rumination or male victims engaged in instrumental rumination. The expected Victim Gender x Rumination Type interaction was not found for any of the variables. In fact, evidence counter to this prediction was obtained for evaluation of the victim. As noted under Hypothesis 2, women evaluated emotion-focused male victims more positively ( $M = 1.82$ ) than emotion-focused female victims ( $M = -1.58$ ). No such differences were found for men ( $M_s = -.39$  &  $-.53$ , respectively).

Finally, unrelated to any of the hypotheses, there was an unanticipated main effect of victim gender on evaluation of victim coping,  $F(1, 127) = 5.26, p = .02$ , such that subjects evaluated male victims' coping ( $M = 6.10$ ) more positively than that of female victims ( $M = 5.80$ ). This main effect was qualified by a Participant Gender x Victim Gender interaction,  $F(1, 127) = 7.41, p = .01$ . Post-hoc tests revealed that whereas women evaluated males' coping more

positively ( $M = 6.45$ ) than females' ( $M = 5.40$ ), men did not differ in their evaluations of males' and females' coping ( $M_s = 5.48$  &  $5.68$ , respectively).

### Discussion

Overall, there was mixed support for the hypotheses of the study. The first hypothesis, that instrumental ruminators would receive more support than emotion-focused ruminators, was supported in two ways. First, participants made more statements to instrumental ruminators than they did to emotion-focused ruminators; an effect that seems to be largely driven by the greater number of advice statements given to such ruminators. Perhaps instrumental ruminators are perceived as reacting in a manner more similar to how the participants think they would react, leading to more statements. Additionally, the needs of instrumental ruminators may have been clearer. Because instrumental ruminators are already focused on active ways to alleviate the problem, they may be perceived as simply needing social support in the form of advice. However, the needs of emotion-focused ruminators may not be as clear. These ruminators may benefit from several different types of support, such as (1) receiving advice as to how to alleviate the problem, (2) having a sympathetic ear to listen to them, or (3) receiving emotional reassurance. As such, participants may not have made many of any given type of statement, due to their uncertainty concerning the needs of the victim. Additionally, participants may have found instrumental rumination more inviting to make suggestions, perhaps feeling more confident that their advice would be acted upon. Finally, participants may have found the task of suggesting preventative measures more cognitively engaging than the task of trying to change a victim's emotional state.

In addition to the number of statements made to ruminators, marginal support for the first hypothesis was found in the level of effort of comforting statements made. Participants made more effortful comforting statements to instrumental ruminators than to emotion-focused

ruminators, although this effect was marginal. Perhaps effortful comfort, which itself is the most thoughtful type of statement according to Samter and Burleson (1984), is given to instrumental ruminators because participants feel that such victims present themselves with more clear needs than emotion-focused ruminators. Thus, overall it seems that a victim's rumination type impacts the verbal support given to victims.

The second hypothesis tested in the current study was that women would provide more support than men. Indeed, women sat closer to victims, particularly those engaged in emotion-focused rumination. They were also more likely to give victims concerned looks. These findings support this hypothesis and suggest that women may be more expressive of their support non-verbally than men. Despite this, women also made more facial expressions displaying negativity than did men. This was counter to expectations. Perhaps this is because non-verbal behavior is often less restrained in women than it is in men (DePaulo & Friedman, 1998). Thus, non-verbal expressiveness may underlie the findings that women displayed both more positive and more negative non-verbal behaviors than men.

An interesting three-way interaction occurred for participants' evaluations of victims. Women evaluated emotion-focused males more positively than did men, which would be partially consistent with Hypothesis 2. However, women also evaluated female emotion-focused ruminators more negatively than did men. That this interaction involved only women supporters suggests that women's evaluations of victims may rely on a more complex set of circumstances than do men's evaluations.

Partial support for the hypothesis that women would be more supportive than men was also provided by the results for engagement. Specifically, women were more engaged with instrumental ruminators than were men. Counter to predictions, when faced with an emotion-

focused ruminator, women were not as engaged in the interaction compared to their engagement levels with instrumental ruminators. The underlying reasons for this need to be explored further.

It was also expected that women would be more willing to return to interact with an emotion-focused ruminator than men. This was not the case. Instead, men expressed willingness to return for more future sessions with an emotion-focused ruminator than did women; a finding that contradicted the hypothesis. This finding must be interpreted with caution, however, as few people agreed to return for future sessions. It is nevertheless intriguing. Perhaps male supporters feel more efficacious in their ability to help emotion-focused ruminators “snap out of” the emotional ruminative cycle. This finding is certainly deserving of future study.

The final hypothesis dealt with gender roles, societal expectations and rumination. Specifically, it was expected that women engaged in emotion-focused rumination would find more support than men engaged in this form of rumination, because of the stereotype that women engage in emotion-focused rumination more frequently than men (Strauss, et al., 1997). Additionally, it was expected that men engaged in instrumental rumination would find more support than men engaged in emotion-focused rumination. Women who are emotion-focused would be seen as adhering to gender roles, whereas men with the same focus would be seen as breaking gender roles (Prentice & Carranza, 2002). The data provided no support for this hypothesis. In fact, the three-way interaction discussed above revealed that women evaluated emotion-focused male victims more positively than emotion-focused female victims. Additionally, male victims’ coping, regardless of rumination type, was rated more positively than female victims’ coping. This finding is consistent with previous work demonstrating that men are perceived as being more efficacious at coping than are women (Barbee, et al., 1993).



It was expected that many of the current results pertaining to the gender of the participant would be mediated by empathy, as women are known to score higher on empathy scales than are men (Davis, 1983). This did not happen. However, the lack of mediation is in itself interesting. It suggests that despite a person's level of trait empathy, other factors are more important in determining how much support is provided to victims.

Taken together, these results suggest that emotion-focused ruminators may not receive needed support. In addition, victims of negative life events who are caught in this repetitive thought cycle may be more successful in eliciting social support from female helpers, as women were shown to be more supportive than men in a number of ways.

#### *Strengths, Limitations and Future Directions*

A major strength of this study is its focus on actual behavior, rather than behavioral intentions. Previous work has been based upon measures of such intentions (Yee & Greenberg, 1998; Yee, et al., 1998), but intentions are often not predictive of behavior (Fishbein & Ajzen, 1975). In addition to focusing on behaviors, the current study provides a more objective perspective on the support process than has previous work. Most research on social support has relied heavily upon victims' self-reports of the amount and kinds of support received or on victims' perceptions of available support. A potential problem with such measurement of support is that victims may be biased in their recollections of received or available support. The current study avoids these biases by having objective coders rate observed interactions for supportive behaviors.

The limitation of most concern is that interactions between participants and the victims lasted only eight minutes. This minimal contact with a ruminator may have weakened the impact of rumination on support provision. Interacting with a victim for less than ten minutes may be

qualitatively different from having to deal with a ruminator for longer periods of time. However, that significant results were obtained with such a short-term interaction testifies to the potency of rumination on potential supporter's behavior. A related limitation is that the interactions occurred between strangers rather than between those in an on-going relationship. The support process may indeed be different when enacted by those close to a victim than when enacted by casual acquaintances, bystanders and strangers. Crime victims, however, often do receive social support from such individuals. Although the results of the current study may not be applicable to on-going, close relationships, they may be applied to those situations in which victims interact with casual acquaintances and strangers.

It is also possible that deleterious effects of emotion-focused rumination on support receipt and provision could be cumulative. That is, interacting with a ruminator may wear on a supporter over time. On the other hand, those who are most likely to interact with ruminators may be those in close relationships with them. This might make supporters more tolerant of their close other's ruminations, leading to more supportive behaviors. The study of on-going relationships including ruminating victims is needed to determine if the current findings exist in a different form in on-going relationships.

The results obtained in the current study are promising, but more research in this area is needed. In addition to replication, an examination of how potential supporters react differentially to ruminators versus victims who are not ruminating would be helpful in further illuminating how rumination impacts support. Although previous work has found that emotion-focused ruminators report receiving less support than non-ruminators (Nolen-Hoeksema & Davis, 1999), such work relied on self-reports from the ruminator. It may be that these findings derived from the ruminator's biased recollections of support received. Using the current paradigm, which

provides a more objective view of support provided to ruminators, may help to clarify whether ruminators actually receive less support than non-ruminators, or if these previous findings are the results of ruminators' biased perceptions of support.

The current study only focused on the type of rumination engaged in by the victim, keeping the emotional state of the victim constant. Since previous research (Steers-Wentzell & Greenberg, 2003) suggests that angry victims are treated differently than sad victims, an examination of how the valence of the victims' emotional state may interact with their ruminative status is needed.

A final area for future study pertains to the ruminator him or herself. It may be that in addition to inadvertently discouraging support, emotion-focused ruminators may be so absorbed by their internal ruminations that they do not realize that they are impacting their social support networks. Perhaps instrumental ruminators, with their more external, problem-solving focus, are also more sensitive to external cues from others than are emotion-focused ruminators. This may cause them to moderate their ruminative verbalizations. This, in turn, may lead to a less negative response from potential supporters. Examining ruminators' awareness of the impact of their ruminative state on others is certainly needed.

In conclusion, this study provides further evidence that victims themselves may indeed unintentionally influence the support they receive through their behavior and reactions to their experience. Clearly, a better understanding of the factors that influence the support process is needed to elucidate why many victims are dissatisfied with the support they receive.

## **APPENDIX A**

### **Footnotes**

<sup>1</sup> Results are based on all available data. The degrees of freedom for various analyses differ due to data that was lost in a move prior to the analyses.

<sup>2</sup> Due to between confederate differences, all reported analyses control for confederate.

## APPENDIX B

### Tables

Table 1: *Means for Verbal Support Given by Male Participants.*

		Instrumental Male Victims	Emotion- Focused Male Victims	Instrumental Female Victims	Emotion- Focused Female Victims
Number Overall		41.25	27.55	37.79	28.26
	SD	21.95	20.94	16.44	24.12
Number Acknowledgments		14.00	9.73	7.47	8.95
	SD	12.61	10.28	5.51	8.05
Number Information- Seeking		10.50	6.91	11.95	10.47
	SD	7.32	4.95	8.67	8.21
Number Disclosure		15.25	10.45	16.00	12.11
	SD	9.92	9.43	10.69	9.37
Number Advice		.58	.27	.84	.42
	SD	.79	.65	1.26	.61
Number Comfort		.92	.18	1.53	1.74
	SD	1.62	.40	2.67	2.88
Overall Level		1.78	1.80	1.91	1.87
	SD	.34	.40	2.67	2.88
Acknowledgment Level		2.09	2.07	2.43	2.07
	SD	.26	.35	1.50	.24
Information-Seeking Level		1.66	1.69	1.76	1.70
	SD	.24	.38	.28	.27
Disclosure Level		1.72	1.66	1.89	1.78
	SD	.48	.51	.37	.48
Advice Level		2.00	2.00	2.07	2.21
	SD	0	0	.19	.39
Comfort Level		2.02	2.00	2.03	1.76
	SD	.30	0	.42	.51

Table 2: Means for Verbal Support Given by Female Participants.

		Instrumental Male Victims	Emotion- Focused Male Victims	Instrumental Female Victims	Emotion- Focused Female Victims
Number Overall		44.65	34.29	38.07	29.38
	SD	29.67	25.07	24.68	17.43
Number Acknowledgments		19.73	12.65	11.50	9.67
	SD	15.87	12.33	10.46	6.58
Number Information- Seeking		9.77	7.35	11.29	13.62
	SD	6.31	7.67	9.39	7.12
Number Disclosure		19.26	13.24	13.21	9.33
	SD	14.28	10.98	9.62	7.62
Number Advice		.43	.35	1.00	.29
	SD	.99	.61	.14	.64
Number Comfort		1.48	.71	1.14	.81
	SD	2.54	1.79	1.70	1.25
Overall Level		1.81	1.97	1.93	1.92
	SD	.25	.17	.24	.21
Acknowledgment Level		2.10	2.16	2.17	2.16
	SD	.19	.13	.30	.20
Information-Seeking Level		1.79	1.87	1.80	1.78
	SD	.21	.31	.35	.24
Disclosure Level		1.62	1.90	1.90	1.88
	SD	.43	.35	.44	.48
Advice Level		2.00	2.20	2.14	2.38
	SD	0	.45	.38	.48
Comfort Level		1.98	1.62	2.00	1.82
	SD	.06	.54	0	.44

Table 3: Means for Non-Verbal Support Given by Male Participants.

	Instrumental Male Victims	Emotion-Focused Male Victims	Instrumental Female Victims	Emotion-Focused Female Victims
Seating	.25	1.45	1.21	1.32
SD	.87	1.69	1.47	1.57
Looks of Concern	1.27	1.25	.93	.81
SD	1.10	.71	.62	.83
Negativity (z-scores)	.22	.49	-1.37	-1.24
SD	2.31	3.23	.74	1.59
Engagement (z-scores)	-.16	-.14	-.86	-.63
SD	2.26	1.62	1.72	1.79

Table 4: Means for Non-Verbal Support Given by Female Participants.

	Instrumental Male Victims	Emotion-Focused Male Victims	Instrumental Female Victims	Emotion-Focused Female Victims
Seating	.78	.71	1.00	.24
SD	1.35	1.31	1.41	.94
Looks of Concern	2.11	1.77	2.08	1.43
SD	1.20	1.48	.95	1.22
Negativity (z-scores)	.79	-.23	.84	.70
SD	2.54	1.54	2.62	2.39
Engagement (z-scores)	1.11	.75	.89	-1.35
SD	1.32	1.64	1.43	1.85

## APPENDIX C

### Figures

Figure 1: *Participants' Levels of Engagement with Victims.*

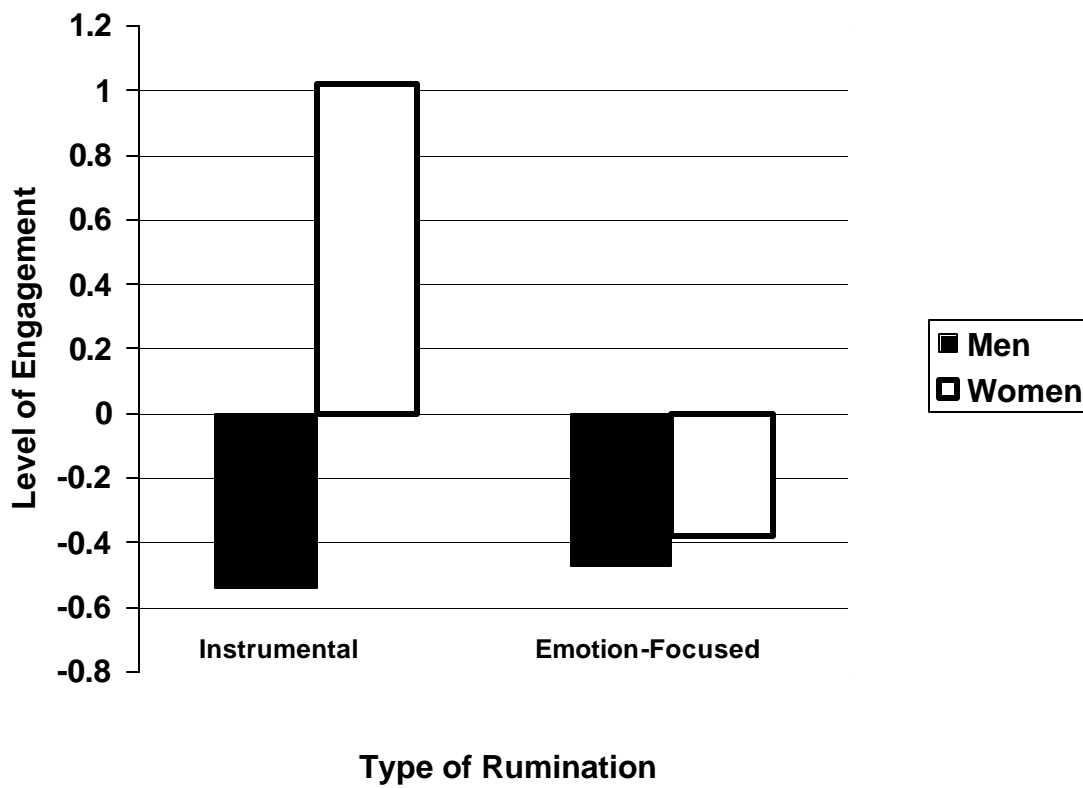
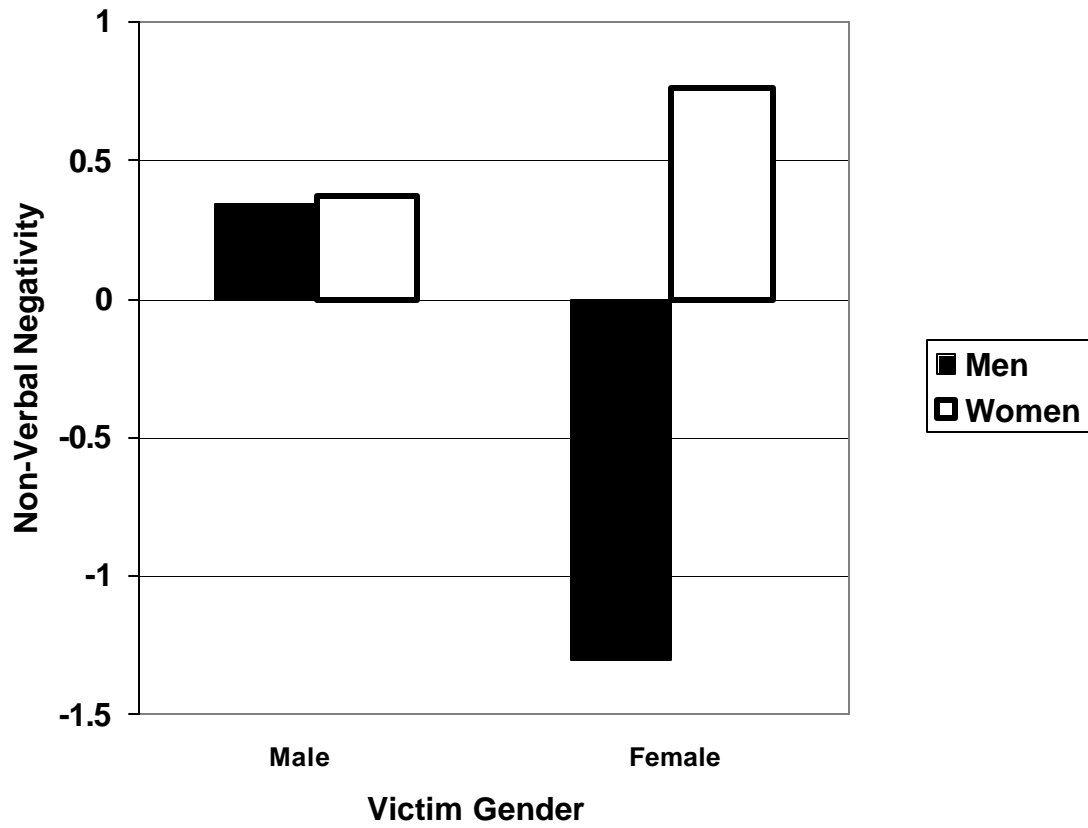




Figure 2. *Participants' Levels of Non-Verbal Negativity.*



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