# The Role of Perceived Hostile and Non-Hostile Criticism in Friendships

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General criticism is associated with poorer relationship functioning; however, few studies of specifically non-hostile and hostile criticism in relationships have yet been conducted. The present study examined the associations of hostile and non-hostile criticism with perceived support, perceived conflict, and support seeking intentions in platonic (non-romantic, non-familial) relationships. Perceptions of hostile criticism were related to greater conflict, lower support, and lower support seeking. Perceptions of non-hostile criticism were associated with greater support and support seeking; however, perceptions of non-hostile criticism were more strongly linked with greater support seeking in men than in women.

Keywords: interpersonal perceptions, friendship, cognition, perceived criticism

A long history of research has revealed associations between criticism and relationship functioning (e.g., Koren, Carlton, & Shaw, 1980; Rogge, Bradbury, Hahlweg, Engl, & Thurmaier, 2006). Specifically, individuals who perceive greater criticism from another individual tend to rate their relationship quality with that person as poorer than individuals who perceive lower criticism, across romantic partners, family members, and friends (e.g., Fals-Steward, O'Farell, & Hooley, 2001; Renshaw, Blais, & Caska, 2012). This research includes both observational measures of criticism (e.g., Benazon, Foster, & Coyne, 2006) and people's own perceptions of criticism (PC) from others (see review by Renshaw, 2008).

Though these results appear quite conclusive, nearly all of these studies have treated criticism as a one-dimensional construct that is negative in nature. In contrast, there is a precedent to distinguish between overt hostility and more circumscribed forms of criticism (e.g., non-hostile or helpful criticism) in research on the family context of psychopathology (e.g., Vaughn & Leff, 1976). Not surprisingly, hostile criticism is generally predictive of poorer treastment response and higher relapse rates for all disorders studied (Butzlaff & Hooley, 1998). On the other hand, although non-hostile criticism is associated with greater relapse and less time before relapse in disorders like schizophrenia and depression (see meta-analysis by Butzlaff & Hooley,

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Correspondence should be directed to Rebecca K. Blais, 1660 South Columbian Way, Seattle, WA 98108. rebecca.blais@va.gov. 1998), it is associated with better treatment response (e.g., symptom reduction, increases in post-treatment functioning) in several anxiety disorders, including obsessive compulsive disorder, panic disorder, and generalized anxiety disorder (Chambless & Steketee, 1999; Peter & Hand, 1988; Zinbarg, Lee, & Yoon, 2007).

This pattern of findings raises questions about whether perceptions of hostile and non-hostile criticism from others might also be important in nonclinical populations. Although treatment outcome and progression of symptoms are not relevant outcomes in non-clinical populations, there is reason to believe that hostile and non-hostile criticism may be differentially associated with interpersonal processes, such as perceived conflict, perceived support, and willingness to seek support from another person. Recently, Renshaw, Blais, and Caska (2010) examined the associations between general relationship satisfaction with a close other (e.g., parent, friend, romantic partner) and perceptions of hostile and non-hostile criticism in two large undergraduate samples. They found that selfreported perceptions of hostile criticism were negatively correlated with relationship satisfaction, whereas perceptions of non-hostile criticism were positively associated with relationship satisfaction, both with medium effect sizes. This latter association suggested that satisfying relationships might not be devoid of criticism from a close other, but rather characterized by higher levels of non-hostile criticism from that close other.

These findings were not predicted by a priori hypotheses. In addition, the study focused solely on overall ratings of satisfaction in relationships. Moving beyond global measures of relationship satisfaction to examine more specific aspects of relationship functioning (e.g., levels of support, conflict) can provide researchers with a greater understanding of what factors are associated with satisfying relationships (e.g., Brock, 2009; Rook, 1984). For example, although support and conflict share strong but contrasting associations with relationship satisfaction, the effects are independent of each other, suggesting that support and conflict are not simply opposite ends of a single continuum (Rook, 1984). Thus, further research is needed to determine how perceived hostile and non-hostile criticism would relate to more specific interpersonal processes that are related, but not identical, to relationship satisfaction.

Moreover, in advancing our understanding of these constructs, it is important to consider factors that might moderate the associations of perceived hostile and nonhostile criticism with interpersonal processes. One such factor is gender. Indeed, prior research suggests that men and women differ in interpersonal processes. For example, the positive association between satisfaction and social support is greater in women than in men (Julien & Markman, 1991). Also, research has shown that men differentiate between emotional and instrumental support (e.g., tangible aid, problem solving), whereas women do not (Matud, Ibañez, Bethencourt, Marrero, & Carballeira, 2003), and that women tend to favor emotional expression over problem solving when dealing with relationship distress, and vice versa for men (Belansky & Boggiano, 1994; Ptacek, Smith, & Zanas, 1992). In some ways, non-hostile criticism can be viewed as somewhat analogous to instrumental support and problem-solving strategies, in that such criticism often involves admonitions to engage (or not engage) in certain activities (see Renshaw, 2008). Therefore, it is possible that men may value nonhostile criticism more than women. Consequently, the association between non-hostile criticism and perceived support and willingness to seek social support may be more strongly positive for men than women.

The purpose of the present study was to replicate and extend the findings of Renshaw, Blais, and Caska (2010) in the following ways: (1) examine the associations of perceived hostile and non-hostile criticism with more

fine-grained measures of relationship functioning, specifically including perceived conflict, perceived support, and willingness to seek social support, in a non-clinical sample; (2) examine potential gender differences in the associations between perceptions of hostile and non-hostile criticism with perceived conflict, perceived support, and willingness to seek social support. Primary hypotheses were the following: (1) perceptions of hostile criticism from a platonic friend would be related to greater conflict in friendships, lower support in friendships, and less willingness to seek social support from that friend, (2) perceptions of nonhostile criticism from a platonic friend would be related to lower levels of conflict, greater levels of support, and greater willingness to seek social support from that friend; and (3) non-hostile criticism would have a stronger positive association with perceived support and social support seeking in men than in women.

### Method

## **Participants**

Participants were 261 undergraduate men (n = 122) and women (n = 139) enrolled in psychology courses at a large American university. Their mean age was 21.25 years (SD = 4.83). The majority (80.5%) of the sample identified themselves as White, with 9.6% identifying as Asian or Asian American, 5.7% identifying as biracial, and 4.2% either reporting another race or failing to answer this question.

### **Measures**

**Perceived Criticism Measure-Type** (PCM-T; Renshaw et al., 2010). The PCM-T is a two-item scale that assesses perceptions of non-hostile criticism ("How much do you think this person criticizes you in a helpful, constructive way?") and perceptions of hostile criticism ("How much do you think this person criticizes you in a harsh, hurtful way?"). Answers to both questions are again given on a scale from 1 (*not at all constructively critical / not at all harshly critical*) to 10 (*very constructively critical / very harshly critical*). As 1-item measures, the test-retest reliabilities of these items over 2 to 3 weeks in a subsample of 50 individuals was acceptable (r = .68 for non-hostile criticism; r = .53 for hostile criticism; Renshaw et al., 2010). Preliminary evidence suggests that the PCM-T

also has good construct validity. Specifically, hostile criticism was positively related (r = .36, p < .001) to an established measure of general perceived criticism in two samples, with a medium effect size (Renshaw et al., 2010). In the same samples, non-hostile criticism was unrelated to the measure of general perceived criticism at high levels of depression, but positively associated with general criticism at lower levels of depression, which the authors interpreted as reflective of the difficulty people experiencing depression have in seeing any criticism as non-hostile in nature (Renshaw et al., 2010).

Quality of Relationships Index (QRI; Pierce, Sarason, Sarason, Solky-Butzel, & Nagel, 1997). The QRI is a 39-item self-report measure that assesses relationship satisfaction via three subscales: Support (e.g., ability to rely on a specific other to meet personal needs), Conflict (e.g., degree of interpersonal turmoil experienced in the relationship), and Depth (e.g., subjective rating of relationship importance). Participants rate how well each item applies to their relationship using a Likert scale, ranging from 1 (not at all) to 4 (a lot). Due to the high overlap of support and depth in our sample (r = .67, p < .001), the Depth scale was excluded from this study to reduce potential redundancy in the analyses. Scores on the Support subscale range from 7 to 28, and scores on the Conflict subscale range from 12 to 48, with higher scores indicating higher levels on each subscale (as such, high scores on the conflict scale indicate lower quality of relationship). The QRI has good internal consistency and test-retest reliability (Pierce et al., 1997), and in the

current sample, Cronbach's  $\alpha$  was .83 for the support scale and .85 for the conflict scale.

Willingness to Seek Social Support Scale (WS4; Blais & Renshaw, 2012). The WS4 is a 13-item scale that asks participants to rate how likely they are to engage in 13 acts of social support seeking in regard to a specific person, using a Likert scale ranging from 1 (not at all likely) to 5 (extremely likely). Scores range from 13 to 65, with higher scores indicating a greater willingness to seek social support. The scale has good internal consistency, test-retest reliability, and factorial validity (Blais & Renshaw, 2010), and there is preliminary evidence supporting its convergent validity as well (Blais & Renshaw, 2008). In the present sample, the measure again showed adequate internal consistency, Cronbach's  $\alpha = .93$ .

#### **Procedure**

The university Institutional Review Board (IRB) approved all procedures. Participants were recruited via an undergraduate participant pool in the psychology department and provided consent and completed all measures online. Participants were instructed to complete all interpersonal measures in regard to their closest non-romantic, non-familial friend. All participants received credit in partial fulfillment of a research requirement for a psychology class as compensation.

### **Data Analysis**

Initial tests of hypotheses were conducted using bivariate correlations to assess the magnitude and direction of associations among the perceptions of

Table 1
Means, Standard Deviations, and Intercorrelations for Perceptions of Hostile and Non-Hostile Criticism and Perceptions of Support and Conflict, and Willingness to Seek Social Support Scale (WS4)

	M	SD	Correlations				
			1	2	3	4	5
1. PC-H	2.16	1.35					
2. PC-NH	6.55	2.24	13				
3. WS4	46.41	11.15	21**	.35**			
4. Perceptions of Support	3.39	.54	40**	46**	.70**		
5. Perceptions of Conflict	1.65	.49	.45**	12	08	22**	

*Note.* PC - H = perceived hostile criticism; PC-NH = perceived non-hostile criticism; WS4 = Willingness to Seek Social Support Scale.

<sup>\*\*</sup> p < .001. \* p < .083 (Bonferonni-corrected alpha of .05/6).

Table 2
Standardized β from Regressions of Relationship Variables onto Perceived Criticism Variables, Gender, and Their Interaction

	Willingness to Seek Social Support <sup>a</sup>	Perceptions of Support <sup>b</sup>	Perceptions of Conflict <sup>c</sup>			
	Regression with non-hostile criticism					
Non-hostile criticism	.21***	.34***	14			
Gender	68**	45*	.07			
Interaction	.43*	.30	.04			
	F	sm				
Hostile criticism	22*	33***	.49***			
Gender	37***	11	04			
Interaction	.11	10	06			

<sup>&</sup>lt;sup>a</sup> Non-hostile criticism:  $R^2 = .22$ ; F(3, 244) = 22.36, p < .001; Hostile criticism:  $R^2 = .13$ ; F(3, 246) = 11.93, p < .001.

non-hostile and hostile criticism and the relationship quality variables (i.e., perceived support, perceived conflict, and willingness to seek social support from the friend). To control for the use of three separate indices of relationship quality, a Bonferroni correction was applied within the sets of correlations for each index of perceived criticism (alpha = .05/6). The adjusted alpha of .0083 yielded a power of .80 to detect small to medium effects (r = .21) with these analyses.

To test for gender differences in these associations, participant gender was explored as a possible moderator in all relationships. Perceptions of hostile and nonhostile criticism variables were each centered and then multiplied by a dummy coded sex variable (0 =females; 1 = males) to create interaction terms. Each relationship variable (support, conflict, and WS4) was then regressed on the centered criticism variable, the dummy coded gender variable, and the relevant interaction term. Any significant interactions were probed as recommended by Aiken and West (1991). In all regressions, randomness of residuals, multicollinearity, and possible outliers (via inspection of standardized DFBETAs) were examined. No such problems were detected, indicating that there were no violations of the assumptions of linear regressions (Cohen & Cohen, 1983). Although the number of analyses increased our chance of Type I error, we maintained an alpha of .05

in these analyses because of the inherently low power to detect significant interactions in regressions (e.g., Stone-Romero & Anderson, 1994). This provided a power of .80 to detect small effects for individual independent variables in these 3-predictor models.

### Results

Means, standard deviations, and intercorrelations for all measures are presented in Table 1. Most participants responded to questions in regard to a same sex friend (male: 77.1%; female: 78.6%). There were no significant gender differences in the mean scores of perceptions of non-hostile criticism, F(1, 251) = 3.02, p = .08, and perceived conflict, F(1, 230) = .08, p = .08.78. However, men reported greater levels of hostile criticism (M = 2.38, SD = 1.46) from their friends compared to women (M = 1.98, SD = 1.21; F[1, 253])= 5.70, p < .05). Also, women rated their relationships (M = 3.52, SD = .48) as more supportive than men (M= 3.27, SD = .58; F[1, 237] = 12.90, p < .001). Finally, women were more likely overall to seek social support from their friends (M = 49.68, SD = 10.48) than were men (M = 42.73, SD = 10.77; F[1, 249] = 26.76, p <.001).

As hypothesized, perceptions of hostile criticism

<sup>&</sup>lt;sup>b</sup> Non-hostile criticism:  $R^2 = .24$ ; F(3, 233) = 25.06, p < 001; Hostile criticism:  $R^2 = .20$ ; F(3, 234) = 18.94, p < .001.

<sup>°</sup> Non-hostile criticism:  $R^2 = .02$ ; F(3, 225) = 1.26, p > .05; Hostile criticism:  $R^2 = 21$ ; F(3, 227) = 20.05, p < .001.

<sup>\*</sup> p < .05. \*\* p < .01. \*\*\* p < .001.

were positively correlated with conflict (with a medium effect size) and negatively correlated with perceived support (medium effect size) and willingness to seek support from the friend (small effect size). Also as hypothesized, perceptions of non-hostile criticism were positively related with perceived support and willingness to seek social support (see Table 1). However, perceptions of non-hostile criticism were unrelated to conflict.

### **Gender Differences in Associations**

Regression results are shown in Table 2. Consistent with hypotheses, there were no significant interactions between gender and perceived hostile criticism in regressions of any of the three relationship variables (see Table 2). Also consistent with hypotheses, there was a significant interaction in the regression of willingness to seek social support from friends on perceived non-hostile criticism. Using regression, a probe of this interaction indicated that the association between willingness to seek social support and perceptions of non-hostile criticism was more strongly positive for men ( $\beta = .48$ , p < .001) than for women ( $\beta = .21$ , p < .001). Contrary to hypotheses, however, there were no significant interactions of gender and perceived non-hostile criticism in the prediction of perceived support.

## Discussion

Criticism has been strongly linked to poorer relationship quality (e.g., Koren et al., 1980; Rogge et al., 2006), but studies examining this association have largely treated criticism as a one-dimensional, uniformly negative construct. Prior research with relatives of individuals with mental disorders suggests that a differentiation between hostile and non-hostile forms of criticism may be important (see review by Renshaw, Steketee, Rodrigues, & Caska, 2010); moreover, a recent study suggests that hostile and non-hostile criticism are differentially related to relationship satisfaction in non-clinical populations as well (Renshaw et al, 2010). The purpose of the present investigation was to examine associations of specific indices of relationship quality (i.e., perceived support, perceived conflict, and willingness to seek social support) in friendships with perceptions of hostile and non-hostile criticism. Furthermore, we examined potential gender differences as research indicates that men and women experience

social support differently. Specifically, research shows that the association between relationship satisfaction and social support is higher in women compared to men; men differentiate between various sources of support; and women show a preference for emotional expression versus problem solving when trying to repair relationship distress (Acitelli, 1992; Julien & Markman, 1991; Matud et al., 2003).

Consistent with hypotheses, when people perceived greater hostile criticism from their friends, they rated their friendships as higher in conflict and lower in support, and they were less likely to seek support from their friends. Conversely, when people perceived greater non-hostile criticism from a friend, their relationship was viewed as more supportive, and they were more likely to seek social support from that person. These results are consistent with recent findings of a significant positive association between relationship satisfaction and perceptions of non-hostile criticism in another undergraduate sample (Renshaw et al., 2010). This replicated pattern suggests that perceptions of criticism can be healthy in relationships, as long as the criticism is not viewed as hostile. Moreover, our findings suggest that when measuring criticism, it is important to attend to the different indices of criticism, such as hostile and non-hostile, as these forms of criticism have differential associations with perceived support, perceived conflict, and willingness to seek social support.

As predicted, perceptions of non-hostile criticism were more strongly related to greater help-seeking intentions in men than in women, even though women were, overall, more likely to seek social support than men. This pattern suggests that men might appreciate and be more receptive to constructive criticism when seeking support than are women, although it should be noted that a similar pattern was not detected for overall levels of reported support. The pattern with regard to willingness to seek support is consistent with prior research that demonstrates that, in times of distress, men are more likely to use problem-focused coping whereas women use emotion-focused coping (e.g., Ptacek et al., 1992). In other words, men may be more likely to seek out advice in the form of nonhostile constructive criticism than women, who may be more likely to seek out emotional support that is less characterized by criticism. These findings could have implications for addressing relationship distress in

the context of therapy. Specifically, in times of higher conflict and lower support, it may be important to help individuals in distressed relationships understand how hostile and non-hostile criticism is associated with relationship functioning. However, further research is needed to explore this possible link, as there are several possible interpretations of our pattern of results, due to the cross-sectional, self-report nature of our data. Moreover, further studies examining these associations in different relationships (e.g., familial, romantic) is also needed.

The present study has limitations that must be considered. First, the participants were mostly White college undergraduates reporting on primarily samesex friendships; thus, the results may not generalize to other populations and other types of relationships. Second, perceptions of hostile and non-hostile criticism were each assessed via a single item, and although this has been the standard in prior research on perceived criticism, such an assessment is susceptible to lower reliability. Third, the perceived hostile and nonhostile criticism items were not counter-balanced in presentation, which could have contributed to artifactual effects, including, but not limited to, priming. Fourth, participants rated their relationships as generally low in conflict; thus, the associations between perceptions of criticism and conflict may have been attenuated due to floor effects.

Notwithstanding these limitations, the present study demonstrates that it is important to move beyond a general measure of criticism to gain a more comprehensive understanding of how criticism functions in relationships. Additionally, these results suggest that it is important to examine gender differences in relationship processes and perceptions of criticism. Finally, these results corroborate recent findings that perceptions of non-hostile criticism are related to greater relationship satisfaction (Renshaw et al., 2010). Future research on interpersonal relationships should attend to the distinction between hostile and non-hostile forms of criticism, as it may prove illustrative, explore these differences across various relationships (e.g., family, romantic partners, friends), and examine these effects in a community sample to better understand the generalizability of these results.

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