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Responsive behaviors in good times and in bad

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Abstract

Although self-disclosure is a critical aspect of interactions between intimate partners, having a partner who is responsive to one's needs after the disclosure is equally important. But what does responsiveness look like? Two observational coding systems for responsive behaviors (Study 1) were created to test the links between one partner's behaviors and the other partner's outcomes, on videotaped interactions of 79 U.S. dating couples disclosing positive and negative events with each other (Study 2). These systems were useful across both types of disclosure interactions, providing evidence for the importance of responsive behaviors in different contexts. Responsive behaviors were associated with postinteraction perceptions of responsiveness, which is important for understanding how the behavioral response impacts both the discloser and the relationship.

One of the core features of a romantic relationship is that partners often confide in each other about a variety of feelings, thoughts, and events. This process of self-disclosure is critical for the development of intimacy. The way that a partner responds to this disclosure is equally important. Does the partner's response make the discloser feel understood, validated, and cared for? This interaction process may result in perceived responsiveness or "the process by which individuals come to believe that relationship partners both attend to and react supportively to central, core defining features of the self" (Reis, Clark, & Holmes, 2004, p. 203).

Perceived responsiveness has a number of consequences for individuals and their relationships. For one, perceived responsiveness leads to positive personal and relationship outcomes (e.g., Laurenceau, Barrett, & Pietromonaco, 1998; Manne et al., 2004), including fostering intimacy in relationships above and beyond the benefits of self-disclosure. Second, the concept of perceived responsiveness is central to a number of areas of close relationships research; according to several recent reviews of the literature, theoretical conceptualizations of intimacy, trust, empathy, communal relationships, and attachment all include perceived responsiveness (Lemay, Clark, & Feeney, 2007; Murray, Holmes, & Collins, 2006; Reis & Collins, 2000).

The role of responsiveness in the intimacy model

Given the importance of responsiveness in the development of intimacy in relationships, the central question of the current investigation is "How does perceived responsiveness arise?" Reis and Shaver (1988) proposed a model of

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intimate interactions between partners that begin with one partner disclosing self-relevant information, which is followed by a behavioral response from the other partner. The discloser then reacts to his or her partner's response and the process continues. The most commonly studied form of responsiveness is *perceived responsiveness*, which is how understood, validated, and cared for the discloser feels after his or her partner's reaction.

In studies on responsiveness, researchers do not often explicitly examine *responsive behaviors*, which are the behaviors the nondisclosing partner enacts in reaction to the other's disclosure. Processes internal to the discloser (e.g., self-esteem, expectations, mood) at least partially influence perceived responsiveness. But the actual enacted behavioral response of the reacting partner is presumably also a significant contributor to the disclosing partner's perceived responsiveness. What do these responsive behaviors look like? More research is needed to fully understand these responsive behaviors. Once we have a measure to assess responsive behaviors, we can more clearly understand the role of internal processes, contextual factors, and partner behaviors in contributing to a discloser's perception of responsiveness. Our first goal of the current research was to create a behavioral coding system for responsive behaviors and measure the associations among the coded behavior of one partner and the perceived responsiveness in the other partner.

We based the behavioral coding system on the theoretical definitions of understanding, validation, and caring. *Understanding* referred to the ability of the responding partner to listen, gather information, and "get the facts right" of the event. *Validation* referred to the respondent's ability to use his or her partner's disclosure as an opportunity to reinforce the partner's self-views and make the partner feel valued and respected. Finally, *caring* referred to the emotional aspect of the interaction and included communication of feelings of affection and concern for one's partner. We used these definitions and more detailed discussions of this theory (e.g., Reis & Patrick, 1996) to help derive codes that tapped into responsive behaviors.

Our additional goal was to test whether enacted responsive behaviors are central enough in relationships that we could find them across different types of partner interactions. Because researchers propose that responsiveness is at the core of satisfying relationships (e.g., Gable & Reis, 2006; Murray et al., 2006), we expected to see this responsiveness process in different contexts. We examined responsiveness across two different "contexts": when people turn to their partners for social support by disclosing personal negative events (e.g., a fight with a friend) and when people turn to their partners to share a positive event (e.g., winning an award). This latter positively oriented partner interaction is relatively new in the literature, but research is already demonstrating the importance of capitalization, which is the process of sharing one's personal positive events with others (Gable, Gonzaga, & Strachman, 2006; Gable, Reis, Impett, & Asher, 2004; Langston, 1994).

Perceived responsiveness across contexts

Negative event disclosures

The literature on social support often focuses on the disconnect between perceiving and receiving support (e.g., Shrout, Herman, & Bolger, 2006). *Perceived support* refers to the perception that support would be available if one were to need it, whereas *received support* refers to the actual support one gets from others (e.g., advice, help, comfort). The perception of having social support tends to be more beneficial than the actual enacted social support (Dunkel-Schetter & Bennett, 1990). The majority of studies measuring received support use self-report measures (e.g., Barrera, Sandler, & Ramsay, 1981), which can be problematic methodologically. For example, support recipients may not be aware of the support they are receiving, they may not remember all instances of support, or they may be biased in the way they interpret the support (Reis & Collins, 2000). These biases may blur the effect that enacted support has on the recipient and therefore examining the behavioral response is one way to understand the effects of received support.

Positive event disclosures

Responses to the disclosure of a positive event can have many implications for the partner who disclosed and for the relationship. Gable et al. (2004) demonstrated that sharing positive events with others resulted in greater positive affect and higher reports of life satisfaction over and above the positive affect attributable to the event itself. Perceiving that one's partner reacted appropriately to the disclosure (e.g., partner gave an enthusiastic response instead of pointing out the downside of the event) was associated with greater relationship satisfaction and intimacy. In a study of dating couples discussing recent positive events with each other in the lab, Gable et al. (2006) demonstrated that participants who reported that their partners were more responsive to their needs during the lab interactions also reported greater RWB at the time of the study and at a 2-month follow-up. Examining enacted responsive behaviors in positive event contexts is likely also important in understanding the outcomes of these discussions.

Observational coding of behavior

Observational coding can shed light on the contribution of enacted behaviors to people's perceptions of their partners (e.g., Notarius & Markman, 1989). Observational research has led to great strides in understanding conflict resolution in marriage, demand–withdrawal patterns in interactions, the role of positive and negative affectivity in relationships, constructive responses to positive event disclosures, and much more (Gable et al., 2006; Gottman & Notarius, 2000). Several studies have also included observational coding of social support interactions (Pasch & Bradbury, 1998). The majority of social support coding guides have focused on comparisons between different categories of supportive behaviors. One area of interest is whether positive behaviors (e.g., reassurance) or negative behaviors (e.g., criticism) are better at predicting interaction and relationship outcomes (e.g., Barbee & Cunningham, 1995; Pasch & Bradbury, 1998). Other coding systems have compared the effectiveness of providing emotional support (e.g., consoling), instrumental support (e.g., offering advice), and other types of support (e.g., Cutrona & Suhr, 1992).

These existing coding systems have been valuable in the examination of social support interactions, but they cannot readily be applied to other types of discussions (consoling behaviors would not likely be seen during positive event discussions, for example), nor are they often grounded in a broader theoretical model. If responsiveness is a core aspect of close relationships (e.g., Collins & Feeney, 2000; Murray et al., 2006), then behaviors that engender feelings of responsiveness in a partner should be readily observable in both positive and negative interactions. To date, researchers have not examined the construct of responsiveness in detail using observational methods. Although a handful of important studies have included responsiveness or similar constructs as part of their behavioral coding (e.g., Collins & Feeney, 2000; Feeney, 2004), we based the current coding system explicitly on the theoretical construct of responsiveness. In the current study, we attempt to address the question: What are responsive behaviors, and how do they influence a partner's perceived responsiveness? We developed a behavioral coding system of responsive behaviors to be used in observations of different types of interactions, including classic social support discussions of negative events and the more recently investigated positive event disclosures.

Enacted responsive behaviors are not the only determinant of a partner's perception of responsiveness. A number of factors (e.g., individual differences, mood, and personal goals), which are internal to the *discloser*, also influence perceived responsiveness. That is, the disclosing partner's perceptual filter is likely to influence the way he or she interprets the responding partner's behaviors (Reis & Shaver, 1988). Self-esteem is one individual difference that has received attention in the social support literature. Stressors and even the mere receipt of support can be threatening, especially for those with low self-esteem (e.g., Shrout et al., 2006). Thus, self-esteem may color the way that a person perceives his or her partner's supportive behaviors. Low self-esteem may be associated with less appreciation of responsive behaviors or increased sensitivity

to nonresponsive behaviors, whereas high self-esteem may be associated with perceived responsiveness even in the absence of a partner's responsive behaviors (e.g., Murray, Rose, Bellavia, Holmes, & Kusche, 2002). We examined self-esteem as a possible moderator of the association between enacted responsive behaviors and perceived responsiveness.

Current investigation

The present research aimed to assess responsive behaviors across two contexts: personal positive event disclosures (e.g., getting a promotion) and personal negative event disclosures (e.g., having a fight with a family member). Although we do not think that the context of an interaction is irrelevant, we hypothesized that there are core behaviors related to responsiveness across contexts. Specifically, we operationalized responsive behaviors as behaviors that signal understanding, validation, and caring—these behaviors should be associated with a person feeling as though they have been heard, accepted, and loved. Theoretically, these factors are distinct, but in practice, they are hard to separate. For example, a person likely needs to understand the facts of the situation before he or she can offer validation. Although we created codes for each of the three components of responsiveness, in the current study we examined them together as an aggregated construct.

We used two approaches to assess behavioral responses. The first coding system (created in Study 1 and tested in Study 2) was a detailed "microanalyic" coding guide. Microanalytic coding guides focus on "small coding units and low levels of inference" (Julien, Markman, & Lindahl, 1989, p. 81), and we coded each second of an interaction between partners for specific behaviors. The second coding system (created and tested in Study 2) was a "global" coding guide, which allows coders to give overall impressions on a number of dimensions and focuses on "larger coding units and higher levels of inference" (Julien et al., 1989, p. 81). In Study 2, we tested our formal hypotheses using both coding guides on a sample of dating couples whose interactions of discussions of a positive and negative event we videotaped in the lab.

Our specific hypotheses tested the idea that one partner's enacted responsive behaviors (our responsive behaviors coding systems assessed these behaviors) would be associated with perceived responsiveness (in the other partner) and RWB. Hypothesis 1 predicted that responsive behaviors, as assessed with both the microanalytic and the global coding guides, would be positively associated with postinteraction reports of perceived responsiveness. Hypothesis 2 predicted that a person's own current relationship satisfaction would be associated with his or her response to the partner's disclosures (in other words, one's own satisfaction should be associated with how responsive he or she is when the partner discloses).

To further understand the factors that contribute to perceived responsiveness, Hypothesis 3 examined the role of an individual difference (self-esteem) in moderating the effect of responsive behaviors on perceptions of responsiveness. Hypothesis 3 predicted that disclosers' self-esteem would moderate perceptions of responsiveness in negative event discussions but not in positive event discussions because people may experience greater vulnerability when disclosing a negative event than when disclosing a positive event (Gable et al., 2004).

Specifically, we hypothesized that high self-esteem would buffer individuals from the potential negative effects of having a partner who does not provide responsiveness in the negative event interaction. But people with low self-esteem should be especially attuned to this type of missed opportunity for responsiveness, and a partner's low responsiveness will negatively affect them. We based this hypothesis on work showing that self-esteem influences interpretations and attributions in relationships (Hobfoll, Nadler, & Leiberman, 1986). In particular, individuals with high self-esteem tend to feel chronically more accepted by others (e.g., Graham & Clark, 2006) and interpret their partners' behaviors in more favorable ways (e.g., Bellavia & Murray, 2003), whereas those with low self-esteem do not show this pattern.

Study 1

Method

In Study 1, we aimed to identify responsive behaviors and create an observational coding guide. We used both a data-driven, or "bottom-up," approach, and a theory-driven approach in the construction of the coding guide.

Participants

Participants included 44 men and 44 women whom we recruited from the subject pool of a university in the United States. Students from this 4-year, large public university in California came from many diverse backgrounds. Participants received course credit for their participation. The mean age of the participants was 20.25 years ($SD = 2.70$), 50.0% were Asian American or Pacific Islander, 28.4% were White, 12.5% were Hispanic, 1.1% were African American, and 8.0% were other, and approximately half of the participants (48.9%) were currently involved in a dating relationship. Although this was a convenience sample, its use was justified because of the adequate diversity of the sample in terms of ethnicity, socioeconomic background, and relationship characteristics.

Procedure

Participants read a series of fictitious vignettes that described two people in a romantic relationship where one member of a heterosexual dating couple experienced a positive event or a negative event and then disclosed this event to his or her partner. After reading each vignette, participants listed behaviors (up to 10 behaviors for each vignette) that they felt would be supportive in the fictitious situation. We reasoned that the average participant would be unfamiliar with the theoretical term "responsive"; therefore, we used the term "supportive."

Vignettes. We used four different scenarios in the vignettes, which we obtained by crossing event type (positive and negative) by domain type (achievement and social) in order to get a sampling of the different kinds of experiences that college students might typically share with their romantic partners. For the positive achievement event, Partner A received a high score on the graduate record examinations. For the positive social event, Partner A found out that his or her good friend would be transferring schools and would now be attending Partner A's university. In the negative achievement event, Partner A did poorly in an important class, and in the negative social event, Partner A had a fight with his or her friend. The gender of Partner A varied so that there were a total of eight vignettes used—four vignettes with a male in the support recipient role and four vignettes with a female in the support recipient role. Each participant responded to four vignettes (out of the eight total), and we randomized participants into one of eight counterbalanced order conditions.

Empirical and theoretical construction of the coding guide. Altogether, participants listed a total of 1,654 behaviors across all conditions. On average, participants listed 5.20 behaviors ($SD = 1.87$) after each vignette. For the data-sorting procedures, the first author wrote each behavior on a note card and sorted and grouped the participants' supportive behaviors into categories of closely related behaviors. Next, we organized the categories generated from the vignette study and refined them according to the theoretical construct of responsiveness. The theoretical model of responsiveness (e.g., Reis & Patrick, 1996; Reis & Shaver, 1988) guided our selection of the final codes into the coding system.

Understanding. We defined understanding here as the ability of the responding partner to listen, gather information, and get the facts right of the event or goal. Reis and Patrick (1996) viewed understanding as the first step in responsiveness and as a "prerequisite" for validation and caring to occur (p. 550). Popular and scientific conceptions of couples' communication often note the importance of listening and understanding. For example, Gottman and Silver (1999) often stressed the importance of "active listening" (p. 87). Based on the behavioral data and the theoretical conceptualization of understanding, this construct seems to consist of two main parts: attentive listening (e.g., paying attention,

showing interest in the conversation) and comprehension (e.g., understanding what the event is). In the understanding category of the coding guide, we therefore included codes such as asking questions, verbal behaviors that indicated understanding (e.g., "mm-hm"), and summarizing and paraphrasing the discloser's words.

Validation. Validation refers to the respondent's ability to use his or her partner's disclosure as an opportunity to reinforce the partner's self-views and make the partner feel valued and respected. This construct can include behavioral sequences in which one partner communicates "acceptance, respect, or support for the other's perspective" (Reis & Patrick, 1996, p. 550). In this conceptualization, validation codes reflect two main processes. First, Partner A can demonstrate that he or she understands the significance of the event and understands why the event triggered the feelings it has (e.g., understanding why Partner B is happy, upset, frustrated, excited, etc.). Second, partners may use validating behaviors in an effort to confirm the partner's self-concept and boost his or her self-esteem (e.g. "You gave it your all"; "You did an amazing job!"). The validation category included codes such as "identity validation," which we defined as affirming or enhancing the partner's desired identity (e.g., pointing out the support recipient's positive qualities), and "agreement or taking partner's side."

Caring. Finally, caring refers to the emotional aspect of the interaction and includes communication of feelings of affection for one's partner. Reis and Patrick (1996) pointed out that this caring and emotional aspect of a support response needs more research. The caring dimension is similar to other related constructs such as a therapist's unconditional positive regard (Rogers, 1961) and other theories of liking and attraction, which demonstrate the importance of knowing that a relationship partner likes you and cares about your well-being (Reis & Patrick, 1996). In the current coding system, caring codes included expressing love for the partner and demonstrating that the couple is "in it together."

Results

The final coding scheme that emerged from the sorted behaviors and the theoretical refinement formed a total of 19 codes (see the Appendix). Four codes fell under the theoretical category of understanding, 10 codes comprised the validation category, and 5 codes fell under the category of caring. Finally, two trained coders used the coding guide to categorize the supportive behaviors generated from this study. The coders used the coding guide on all 1,654 behaviors presented in a random order and the interrater reliability was adequate ($\kappa = 0.75$).

Next, we assessed whether the coding categories applied across contexts (e.g., when men and women disclose both positive and negative events in different domains). We did find evidence for the context-independent nature of the coding guide. All the codes except for one (Code 11 [exclamations], which was only used in the positive event vignettes) appeared in response to both the positive and negative event vignettes. Coders rated approximately 8.6% of the responses to positive vignettes as understanding and 10.9% of the responses to the negative vignettes as understanding. For validation codes, coders rated 20.7% of the responses to positive vignettes as validation and 27.7% of the responses to the negative vignettes as validation. Finally, coders rated 34.9% of the responses to positive vignettes as caring and 23.7% of the responses to the negative vignettes as caring.[1] As can be seen from these percentages, participants

1. According to our theoretical model, we did not include behaviors listed such as offering advice, solving problems, or offering solutions (even though participants listed these behaviors 1.4% of the time in positive event vignettes and 10.5% of the time in negative event vignettes). We predicted that participants were likely to consider emotional support behaviors responsive more consistently across contexts. Emotional support can lead to a number of positive effects on well-being and relationships (e.g., Burleson, 2003), whereas instrumental or information support (e.g., giving advice) has much more mixed results, especially if close relationship partners provide them (e.g., Dakof & Taylor, 1990). We did include one form of instrumental support—"active" behaviors such as providing tangible help or celebratory behaviors for the recipient. These behaviors may be relevant in many types of situations as a way to show responsiveness in addition to verbal and nonverbal behaviors.

listed more validation behaviors than caring behaviors for negative event vignettes, but the opposite was true for positive event vignettes; analyses (paired *t* tests) confirmed significant differences in the frequency of behaviors listed in positive versus negative event vignettes for both validation, $t(87) = 3.16$, $p < .05$, and caring codes, $t(87) = -5.71$, $p < .05$.

Behaviors that we classified as nonverbal (physical affection and nonverbal expressions) comprised a large proportion of the responses (22.8% in positive event vignettes and 15.6% in negative event vignettes). The remaining behaviors contained two or more codes (7.4% in positive event vignettes and 9.3% in negative event vignettes). We were able to code all but less than 5.0% of the behaviors into one of the categories in the coding guide (4.1% in the positive event vignettes and 2.4% in the negative event vignettes).

Discussion

The purpose of Study 1 was to develop a coding guide based on the theoretical construct of responsiveness for use in various interpersonal situations. Although existing coding guides included some of the same behaviors, the purpose of the current study was to merge these disparate literatures into a coding system based on responsiveness for use across different partner interactions.[2] Our results indicate that we were fairly successful as we used all but one of the codes in both types of interactions and found the three categories of behaviors in relatively similar frequencies in both interactions.

This flexibility is an advantage over several existing coding systems, which have tended to use codes that rely on a specific type of interaction taking place. For example, in most social support coding systems, the behaviors of interest are somewhat specific to a negative event occurring, such as solving a problem or avoiding the problem (e.g., Barbee & Cunningham, 1995). We designed the current coding guide to be general enough to be used in different types of interactions; for example, validating a person's feelings can occur whether the person discloses a problem, a positive event, an area of conflict, or another issue. The goal of Study 2 was to test our substantive hypotheses with the coding guide on interactions between romantic partners in which they discussed a personal positive and negative event with each other.

Study 2

Method

Participants

We recruited 79 heterosexual dating couples in the United States from a university sample and paid US $50 for their participation. To recruit participants, we posted flyers around the campus and medical buildings and took out advertisements in the campus newspaper. Couples included undergraduate students, graduate students, and members of the university community who were dating exclusively for at least 6 months (38.0% were full-time students; see "Participants" section of Study 1 for more details about the student body). The average age was 21.71 years ($SD = 2.78$), and 41.1% were White, 36.1% were Asian American or Pacific Islander, 6.3% were Hispanic, 5.1% were African American, and 9.5% were other. Couples had been dating for 25.07 months ($SD = 22.26$) on average. The participants were relatively young, but the current sample did not consist exclusively of undergraduates, and the average length of the relationship was 2 years. In addition, although this was a convenience sample, participants reported a relatively wide range of relationship satisfaction scores, ranging from 3.13 (low to moderate satisfaction) to 6.95 (high satisfaction).

2. For example, the Specific Affect Coding System (SPAFF; Gottman & Krokoff, 1989) includes the construct of active listening and codes for paraphrasing and summarizing a partner's feelings and related speech content; the Marital Interaction Coding System (MICS; Heyman, Weiss, & Eddy, 1995) has codes for acceptance and validation, which include "agree, approve, accept responsibility, [and] comply" (p. 740). Another example of this overlap is the similarity between the concept of validation and "esteem support" (Cutrona & Russell, 1990), which we derived from the literature on optimal matching of social support provision to recipient needs.

Procedure

Gable et al. (2006) collected these data as part of a larger study and reported a portion of these data along with a detailed description of the study methods. In short, each couple came to the lab, completed several self-report measures, and then participated in several videotaped interactions. Of interest in this particular study are two sets of interactions: the positive event discussions and the negative event discussions. Each partner took a turn discussing a recent positive event (e.g., getting a good grade) and a recent negative event (e.g., a work stressor) of their choosing that was unrelated to the couple's relationship, and we randomly assigned couples to one of four different counterbalanced order conditions. In the positive event discussions, topics included spending time with friends, academic achievements, and success at work. In the negative event discussions, topics included issues with work or school, financial problems, and problems with family or friends.

Couples participated in four discussions each. A loss of sound occurred in one female positive event discussion, and therefore, we coded a total of 311 interactions: 78 male positive event disclosures, 77 female positive event disclosures, 78 male negative event disclosures, and 78 female negative event disclosures. Couples discussed each event for up to 5 min. The mean length of discussions was 2.48 min ($SD = 1.62$). The duration of the interactions ranged from 0.12 to 9.53 minutes (some couples exceeded the 5-min limit). Approximately 12.8% of the interactions lasted for less than 1 min. There was no main effect of interaction length for the gender of the partner disclosing, and couples discussed negative events ($M = 2.90$ min, $SD = 1.82$) longer than positive events ($M = 2.05$ min, $SD = 1.27$), paired-samples t test, $t(77) = -5.98$, $p < .001$.

Measures

Relationship well-being. Prior to the videotaped interactions, participants rated their relationship well-being with a seven-item relationship satisfaction measure (Hendrick, 1988), a seven-item commitment measure (Rusbult, Martz, & Agnew, 1998), and a seven-item passionate love measure (Hatfield & Sprecher, 1986). For all questions, participants used 7-point Likert scales to respond. Because these three relationship measures were highly correlated, we calculated a composite score by averaging the three measures together. We will refer to the composite measure as relationship well-being (RWB). The mean was 5.91 ($SD = 0.87$) for women, and the alpha coefficient (α) was 0.93. The mean was 5.73 years ($SD = 0.99$) for men ($\alpha = 0.93$) t test for gender differences, $t(154) = -1.23$, *ns*.

Self-esteem. Participants completed the 10-item Rosenberg (1965) self-esteem measure before the videotaped interactions. Participants answered questions such as "I feel like a person who has a number of good qualities" on a 7-point scale from 1 = *strongly disagree* to 7 = *strongly agree*. Women ($\alpha = 0.87$) reported a mean self-esteem score of 5.59 ($SD = 1.12$), and men ($\alpha = 0.91$) reported a mean of 5.73 ($SD = 1.03$) t test for gender differences: $t(154) = 0.80$, *ns*.

Interaction questionnaires. After talking about their positive or negative event, participants filled out a brief 10-item measure of how responsive they felt their partners had been during the interaction. We took these items from Reis's (2003) 18-item General Responsiveness measure and included items such as "My partner values my ability and opinions" and "My partner 'gets the facts right' about me." Participants responded on a 5-point Likert scale ranging from 1 = *not at all* to 5 = *very much.* In the positive event discussions, the mean score was 4.20 ($SD = 0.82$) for men ($\alpha = 0.82$) and 4.37 ($SD = 0.67$) for women ($\alpha = 0.95$), t test for gender differences, $t(144) = -1.31$, *ns*. In the negative event discussions, the mean was 4.33 ($SD = 0.58$) for men ($\alpha = 0.94$) and 4.33 ($SD = 0.73$) for women ($\alpha = 0.89$), t test for gender differences, $t(154) = 0.10$, *ns*. We will refer to these scores as "postinteraction perceived responsiveness." In six positive event interactions, participants did not receive the correct form, and so there were missing data for six couples on the postinteraction perceived responsiveness questionnaires. Thus, $n = 73$ for males and $n = 72$ for females in all

analyses involving postinteraction perceived responsiveness in the positive event interactions.

Behavioral coding

Microanalytic responsive behaviors coding guide. First, the *microanalytic responsive behaviors* coding guide created in Study 1 assessed responsive behaviors in both the positive and negative event interactions. To account for the transition from coding written behaviors to coding interpersonal interactions, we made slight modifications. The version used to code the videotaped interactions (see the Appendix for the coding guide) focused on verbal behaviors and nonverbal behaviors such as eye contact and tone of voice. Given constraints on the way participants were sitting and on the quality of the recording, we did not code other nonverbal displays such as certain facial emotions (e.g., eyebrow rises) or physical affection (e.g., hugging and kissing). In the future, these other nonverbal behaviors should be included under the category of caring codes.

We trained two research assistants for several weeks using the videotapes of five couples for a total of 20 training interactions (6.4% of the total number of interactions in the study). The coders met with the first author frequently to discuss the ratings and to reach consensus on the coding. The research assistants recorded the minute and second of the interaction when the behavior started and when it ended. We calculated the duration of each code in seconds from these two values. We instructed coders to code "complete thoughts" (Barbee & Cunningham, 1995) such that the coded behavior could last an unspecified amount of time. For example, the participant might say a complex sentence such as "All that hard work paid off and I'm so happy for you." We would code the first part of this sentence as "effort validation" and the second part as "expressing emotions (e.g., happiness) for the support recipient." Table 1 presents the duration of each code averaged across all interactions.

We randomly assigned the interactions to each research assistant who coded them in random order. Both coders coded 101 of the same interactions for reliability (32.5% of the total number of interactions in the study). After we established reliability, we randomly divided the remaining 210 interactions between the two coders. To establish reliability, both research assistants coded 101 interactions, and we calculated reliability on a code-by-code basis for agreement in the duration of each code in a given interaction, and the total intraclass correlation (ICC) was 0.84. For the subscales, the ICC for the understanding codes was 0.88, for the validation codes was 0.87, and for the caring codes was 0.67. In subsequent analyses, we did not separately analyze the subcategories of understanding, validation, and caring because the interaction length of the discussions was quite short ($M = 2.5$ min), and we felt that in these brief interactions, any given participant would enact only some of the behaviors of interest.

Therefore, we calculated a composite measure for duration by summing across all codes to establish the total duration of responsive

Table 1. *Mean duration in seconds for each code of the microanalytic responsive behaviors coding system across all interactions in Study 2*

Responsive behaviors code	*M*	*SD*
1. Questions	3.53	5.93
2. Paralinguistic	1.72	2.43
3. Summarizing/paraphrasing	4.28	7.36
4. Understanding	0.12	0.66
5. Significance	0.03	0.27
6. Agreement	0.37	0.81
7. Perspective/elaboration	12.20	16.21
8. Reassurance/encourage	0.69	1.97
9. Emotional validation	0.28	1.59
10. Feelings questions	0.64	4.21
11. Self-referencing	2.32	9.77
12. Effort validation	0.38	1.51
13. Identity validation	1.09	3.41
14. Exclamations	0.36	0.80
15. Expressing love	0.01	0.08
16. Joint outcomes	0.88	4.44
17. Support/concern	0.17	1.07
18. Context-appropriate actions	0.35	1.54
19. Expressing empathy/ emotions for SR	0.64	1.77

behaviors (in seconds) within a given interaction. We averaged the two coders' scores, and to create the final microanalytic responsive behaviors measure, we divided the total duration of responsive behaviors by the total length of the individual interaction. The microanalytic responsive behaviors measure is equal to a percentage. The percentage signifies how much time, out of the total interaction, the support provider engaged in providing responsive behaviors.

Global responsive behaviors coding guide. In addition to the microanalytic coding, we created a three-item global responsive behaviors coding system to be used in both positive and negative event discussions. Although microanalytic coding guides provide very detailed information regarding the behaviors enacted in an interaction, there are several benefits of global coding (e.g., Baucom & Sayers, 1989). We included the global responsive behaviors coding in this study as a complement to the microanalytic coding. In addition, the global coding guide could take many nonverbal behaviors into account, as behaviors such as nodding and smiling affect global judgments.

We used the global coding in this study in both the positive and negative event discussions, and it consisted of brief descriptions of three variables (understanding, validation, and caring) based specifically on the microanalytic coding (see the Appendix for the items). Two coders, who were not involved in coding using the microanalytic coding guide, rated "To what extent did the support-provider use each of these strategies in the interaction" using a 7-point Likert scale ranging from 1 = *not at all* to 7 = *a great deal*. Of the total interactions, coders rated 28.6% for reliability, and the ICC for each item was as follows: understanding = 0.84, validation = 0.91, caring = 0.81. We used a composite score for global responsive behaviors (sum of understanding, validation, and caring) in subsequent analyses.

In addition, the global and microanalytic guides were highly correlated (male positive event discussion correlation between the two coding guides), $r(78) = 0.63$, $p < .001$; female positive event discussion, $r(77) = 0.42$, $p < .001$; male negative event discussion, $r(78) = 0.62$, $p < .001$; female negative event, $r(78) = 0.47$, $p < .001$.

Results

Context-independent coding

First, we examined whether we could apply the microanalytic coding across the different interaction contexts (positive and negative event discussions). We calculated means of the percentage of time, out of the total interaction, that the responder engaged in responsive behaviors.[3] The means across all four interaction types were extremely similar.[4] Using paired-samples *t* tests, the duration of responsive behaviors enacted in the male positive event ($M = 0.19$, $SD = 0.12$) was not significantly different from the duration enacted during the male negative event ($M = 0.20$, $SD = 0.12$), $t(78) = -0.59$, $p = .56$. Similarly, using paired-samples *t* tests, the duration of responsive behaviors enacted in the female positive event ($M = 0.20$, $SD = 0.12$) was not significantly different from the duration enacted during the female negative event ($M = 0.19$, $SD = 0.11$), $t(76) = 0.30$, $p = .77$. There was also no significant effect for gender, males as discloser interactions versus females as discloser interactions, $t(154) = -0.29$, $p = .77$. We obtained similar findings for the results of the global responsive behaviors coding measure (male positive event: $M = 15.44$, $SD = 3.93$; female positive event: $M = 15.53$, $SD = 3.81$; male negative event: $M = 15.14$, $SD = 3.61$; female negative event: $M = 15.58$, $SD = 3.31$).

3. When participants were not engaging in "responsive" behaviors, they were listening to the partner speak, engaging in "negative" behaviors such as criticism or anger, and providing support that we did not generally classify as responsiveness (e.g., offering unsolicited advice) because we felt that these types of behaviors are not always perceived as being helpful by partners.
4. We checked for skew and outliers in the coding measures. There was one outlier in the female positive event discussion, which was 3.23 *SD*s above the mean. We calculated the mean of the variable with this participant excluded, and we then recalculated the outlier so that it fell 3 *SD*s above the mean.

Data analysis strategy

Although couples participated in four interactions, each interaction differed either by the gender of the person disclosing or by event type (positive event or negative event). Participants played the role of discloser in a positive and negative event discussion, and they played the role of responder in a positive and negative event discussion. We used structural equation modeling (SEM) in order to take into account the potential shared variance between discussions where men were in the support recipient role and discussions where women were in the support recipient role, as well as to account for any intercorrelations among the independent variables or among the dependent variables. All variables in the models were observed variables. We considered our SEM models to be a good fit of the data if the compartive fit index (CFI) score was more than 0.95 (and an adequate fit if it was more than 0.90; e.g., Hu & Bentler, 1999), if the root mean square error of approximation (RMSEA; Browne & Cudeck, 1993) was less than 0.08, and the chi-squared test was nonsignificant.

Hypotheses 1 and 2: Associations among responsive behaviors, RWB, and postinteraction perceived responsiveness

Hypothesis 1 predicted that a partner's enacted responsive behaviors, as coded using the behavioral coding guides, would be associated with the discloser's perception of how responsive his or her partner was during the interaction. In Hypothesis 2, we hypothesized that a person's RWB would be associated with the responsive behaviors that he or she enacted in the partner's discussion. For example, the male partner's RWB should be associated with the responsive behaviors he enacted in his partner's positive event disclosure. Figure 1 shows a sample model predicting postinteraction perceived responsiveness from global responsive behaviors in positive event discussions. (We created and tested parallel models for the global coding scores in the negative event discussion and the microanalytic coding scores in both discussions—a total of four models.)

The model controls for the influence that one's own RWB has on postinteraction

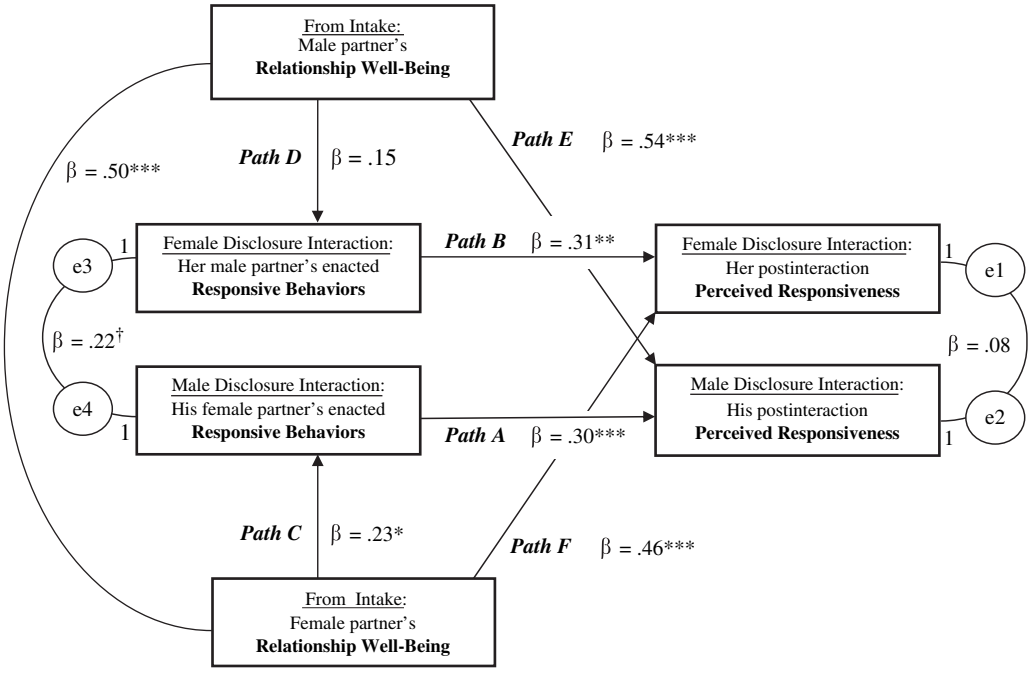


Figure 1. Model predicting postinteraction perceived responsiveness from the global coding scores in positive event discussions in Study 2.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

perceived responsiveness (i.e., controls for relationship satisfaction, Paths E and F). Hypothesis 1 examined the association between responsive behaviors and postinteraction perceived responsiveness for both male disclosure interactions (Path A) and female disclosure interactions (Path B). Hypothesis 2 examined the path between the responder's RWB and the responsive behaviors that he or she enacted during the interaction (Path C for male disclosure interactions and Path D for female disclosure interactions). We allowed the variance for men and women to correlate on the independent and on the dependent variables. Table 2 summarizes the results from tests of Hypotheses 1 and 2 in all four models, which we describe below. All models tested provided an adequate fit of the data (Table 2).

Positive event discussion: Global responsive behaviors. As predicted, Figure 1 shows that during the male positive event disclosure, the female partner's global responsive behaviors were significantly positively associated with the male partner's report of perceived responsiveness after his positive event discussion (Path A). Similarly, global responsive behaviors in the female positive event discussion were significantly positively associated with the female partner's report of postinteraction perceived responsiveness (Path B). In other words, the responder's enacted responsive behaviors were associated with the discloser's perception of responsiveness.

Hypothesis 2 predicted that RWB would be associated with the responsive behaviors enacted. In support of this hypothesis, the

Table 2. *Standardized regression coefficients from structural equation modeling analyses testing the associations between responsive behavior coding, relationship well-being (RWB), and postinteraction perceived responsiveness in Study 2*

	Positive event disclosure		Negative event disclosure	
Primary models: Testing Hypotheses 1 and 2	Male	Female	Male	Female
Global responsive behaviors coding				
Path A/B: Responsive coding → perceived responsiveness	.30***	.31**	.16†	.08
Path C/D: RWB → responsive coding	.23*	.15	.13	.19†
Path E/F: RWB → perceived responsiveness	.54***	.46***	.47***	.46***
R^2 for perceived responsiveness	.42	.33	.25	.23
Model fit: χ^2	$\chi^2(6) = 10.04, p = .12$		$\chi^2(6) = 6.37, p = .38$	
Model fit: CFI/RMSEA	0.95/0.094		1.00/0.028	
Microanalytic Responsive behaviors coding				
Path A/B: Responsive coding → perceived responsiveness	.25**	.17†	.11	.05
Path C/D: RWB → responsive coding	.15	.31**	.19†	.16
Path E/F: RWB → perceived responsiveness	.57***	.43***	.47***	.48***
R^2 for perceived responsiveness	.41	.24	.25	.23
Model fit: χ^2	$\chi^2(6) = 5.21, p = .52$		$\chi^2(6) = 3.85, p = .70$	
Model fit: CFI/RMSEA	1.00/0.000		1.00/0.000	

Note. CFI = comparative fit index; RMSEA = root mean square error of approximation.
$^{\dagger}p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

female partner's RWB was significantly associated with the behaviors she enacted in her partner's positive event discussion (Path C). Contrary to our prediction, the male partner's RWB was not significantly associated with his behaviors in his partner's discussion (Path D).

Positive event discussion: Microanalytic responsive behaviors. We tested the same model presented in Figure 1 using the microanalytic responsive behaviors measure. As predicted (Hypothesis 1), during the male positive event disclosure, the female partner's microanalytic responsive behaviors were positively associated with the male partner's postinteraction perceived responsiveness (Path A). Similarly, during the female positive event disclosure, the male partner's microanalytic responsive behaviors were marginally positively associated with the female partner's postinteraction perceived responsiveness (Path B). In short, the length of time the responder spent providing responsive behaviors was positively associated with the discloser's perceived responsiveness. Regarding Hypothesis 2, the female partner's RWB was not significantly associated with her behaviors (Path C), but the male partner's RWB was significantly associated with his behaviors (Path D).

Negative event discussion: Global responsive behaviors. We tested the same basic model presented in Figure 1 for the negative event discussions. For the male negative event disclosure, his partner's enacted global responsive behaviors were marginally associated with his postinteraction perceived responsiveness (Path A). Contrary to predictions, in the female negative event disclosure, her partner's enacted responsive behaviors were not associated with her postinteraction perceived responsiveness (Path B). For Hypothesis 2, the female partner's RWB was not significantly associated with her behaviors in her partner's negative event disclosure (Path C), but the male partner's RWB was marginally significantly associated with his behaviors in his partner's disclosure interaction (Path D).

Negative event discussion: Microanalytic responsive behaviors. Contrary to predictions (Hypothesis 1), the association between perceptions of responsiveness and microanalytic responsive behaviors was not significant for the male negative event disclosures (Path A) nor the female negative event disclosures (Path B). Regarding Hypothesis 2, the female partner's RWB was not significantly associated with her behaviors in her partner's negative event disclosures (Path C), but the male partner's RWB was marginally significantly associated with his behaviors in his partner's disclosure interaction (Path D).

In all four models, RWB was significantly associated with postinteraction perceived responsiveness for male disclosures (Path E) and female disclosures (Path F) (beta coefficients [β] ranged from 0.43 to 0.57, $p < .001$ for all estimates; see Table 2). This finding supports the idea that responsiveness and RWB are closely associated and that people who are happy in their relationships will likely perceive more responsiveness.

In summary, global and microanalytic responsive behaviors enacted during the interaction were positively associated with the discloser's perceptions of his or her partner's responsiveness in positive event discussions, for both men and women. In the negative event discussion, global responsive behaviors were associated with men's perceptions of responsiveness, but for women, neither global nor microanalytic responsive behaviors were reliably associated with responsiveness perceptions. We also predicted that the discloser's self-esteem in the negative event interactions would moderate perceptions of responsiveness, the results of which we describe below (see Hypothesis 3 results). In addition, RWB was associated with one's perceptions of the partner's responsiveness during one's own disclosures during all interactions and also tended to be associated with one's behavior during the partner's disclosures (these associations were marginal in the negative event disclosures). In addition, we created and tested models that included importance ratings of the event, stressfulness of the event (negative event interaction), and how much the event was under the discloser's control. None of these variables accounted for or moderated the results reported above.

Hypothesis 3: Moderating role of self-esteem

To investigate the potential moderating role of self-esteem, Figure 2 shows sample path diagrams used to test the interaction of the discloser's self-esteem with the responder's global or microanalytic behavior on the outcome of perceived responsiveness. In this sample model, we predicted that female self-esteem would be associated with her own perceived responsiveness in the negative event discussion (Path C′). We also added the interaction between self-esteem and the responder's behavior (Path D′). We tested a total of eight models in a similar way: female self-esteem moderating global or microanalytic responsive behaviors in both positive and negative discussions, and male self-esteem moderating global or microanalytic responsive behaviors in both positive and negative discussions.

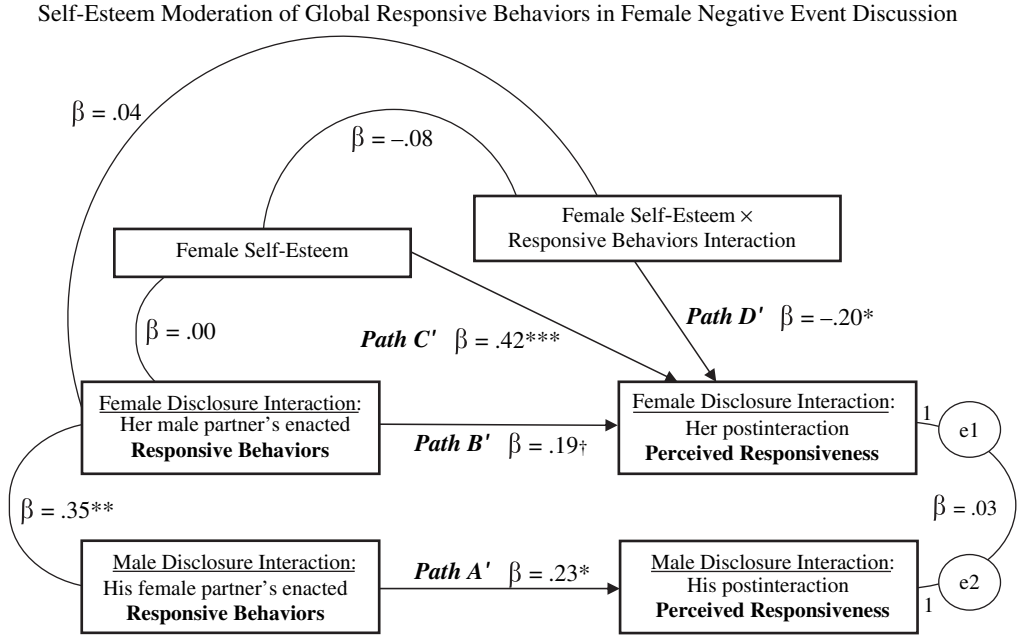
In the positive event discussions, the interactions between self-esteem and responsive behaviors were not significantly associated with perceived responsiveness, and in general, the positive event models with self-esteem had poor fit (CFIs ranging from 0.50 to 0.73). In the negative event discussions, the models that included self-esteem were a better fit (CFIs ranging from 0.88 to 1.00). The results for positive event discussions were consistent with our predictions, so we limited our discussion of the results to the models tested in the negative event discussions. First, in the male negative event discussion models, the interaction of self-esteem and responsive behaviors was not significant.

As shown in Figure 2, the interaction of the global responsive behaviors and self-esteem (Path D′) was significant in the female partner's negative event discussion ($\beta = -0.20$, $p < .05$; see top half of Figure 2). In this new model, responsive behaviors were significantly associated with postinteraction perceived responsiveness in male disclosures (Path A′) and marginally significantly associated with postinteraction perceived responsiveness in female disclosures (Path B′). This model was a good fit of the data with a CFI of 0.96, an RMSEA of 0.055, and a nonsignificant $\chi^2(6)$ of 7.38 ($p = .29$).

When we tested the microanalytic responsive behaviors, the interaction between the responsive behaviors and self-esteem was also significant in the female partner's negative event discussion (Path D′: $\beta = -0.28$, $p < .01$). This model was a relatively good fit of the data with a CFI of 0.89, an RMSEA of 0.079, and a nonsignificant $\chi^2(6)$ of 8.89 ($p = .18$) (see bottom half of Figure 2). In this model, responsive behaviors were not significantly associated with postinteraction perceived responsiveness in female disclosures (Path B′) but marginally significantly associated with perceived responsiveness in male disclosures (Path A′).

To interpret the interaction in the female negative event discussion, we centered the responsive behaviors and self-esteem variables and used the unstandardized beta weights from the SEM analyses to plot the interaction, as we would using multiple regression (Aiken & West, 1991; we replicated these results using standard multiple regression analyses as well). Figure 3 shows the predicted scores for those 1 *SD* above and below the mean on self-esteem and 1 *SD* above and below the mean on responsive behaviors. For comparison, the bottom half of Figure 3 presents the graph for the male negative event interaction. For men there was only a significant main effect of self-esteem, such that men with higher self-esteem reported higher levels of perceived responsiveness.

The top half of Figure 3 shows the results for the moderating role of self-esteem in women. This graph indicates that for women who were low in self-esteem, responsive behaviors were associated with the amount of perceived responsiveness they reported. Specifically, women who were low in self-esteem reported very low perceived responsiveness if their partners provided a low amount of responsive amounts ($M = 3.80$, on a scale of 1 to 5). If their partners provided them with a high amount of responsive behaviors, they reported much higher perceived responsiveness ($M = 4.39$). For women high in self-esteem, they reported high perceived responsiveness whether their partners enacted a low amount of responsive behaviors ($M = 4.75$) or



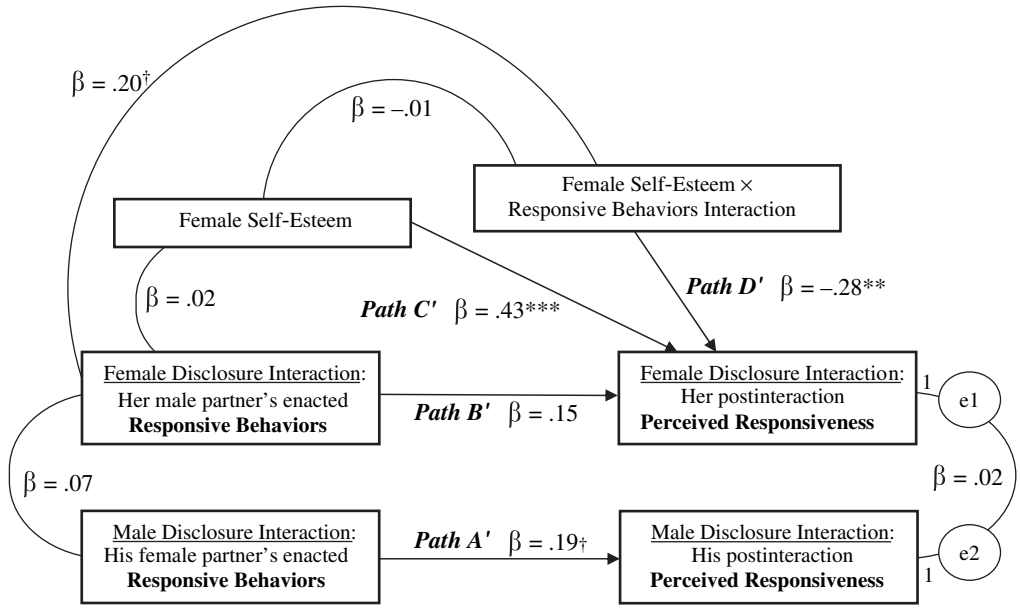


Figure 2. Two path diagrams used to test the interaction of the female discloser's self-esteem with the responder's behavior (global coding in the top figure and microanalytic coding in the bottom figure) in predicting female perceived responsiveness in the negative event discussion in Study 2.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

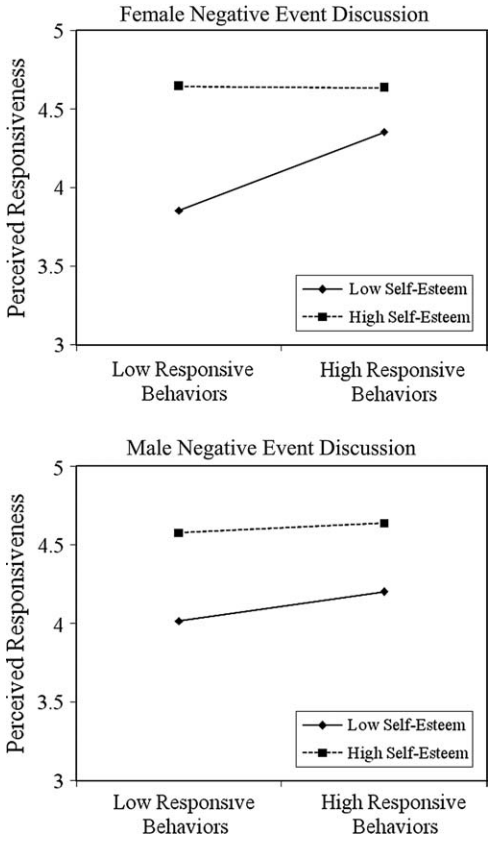


Figure 3. Predicted ratings of perceived responsiveness in negative event discussions by support provider's microanalytic responsive behaviors coding and support recipient's self-esteem in Study 2.

a high amount of responsive behaviors ($M = 4.56$).

To confirm this interpretation, we tested the significance of the simple slopes of the regression line (Aiken & West, 1991). As our interpretation suggested, the simple slope for women who were low in self-esteem was significantly different from zero, $t(74) = 3.01$, $p < .05$, whereas the simple slope for women who were high in self-esteem was not, $t(74) = -0.78$, $p > .10$. The interaction effect with global responsive behaviors was significant for women, and the plotted results replicated the findings for the microanalytic guide.

In summary, self-esteem did not seem to play a role in any of the positive event discussions. In the negative event discussions, female self-esteem moderated the association between responsive behaviors and perceived responsiveness. In particular, participants with low self-esteem were more sensitive to their partner's enacted responses, whereas participants with high self-esteem tended to rate their partners as responsive regardless of the behaviors their partners enacted.

Discussion

The results of Study 2 suggested that responsive behaviors can be usefully coded in both positive and negative interactions with the same coding guide, which helps demonstrate that responsive behaviors are at the core of many disclosure interactions. These responsive behaviors were associated, in varying degrees, to perceptions of responsiveness and to RWB. We found some limited support for our hypotheses regarding the utility of the microanalytic coding guide. When a male partner disclosed his positive event, his partner's enacted responsive behaviors were significantly associated with how responsive he felt his partner had been during the interaction. Similarly, when a female partner disclosed her event, her partner's responsive behaviors were marginally associated with how responsive she felt her partner was during the interaction. In short, the more time one's partner spent providing responsive behaviors (e.g., reassurance, perspective, identity validation), the more responsiveness he or she reported feeling during these interactions. This pattern was less strong in the negative event discussions, but self-esteem moderated this finding for females disclosing negative events. In this case, for females low in self-esteem, responsive behaviors were significantly associated with perceived responsiveness during negative event disclosures and not for those high in self-esteem.

Responsive behaviors as coded using the global measure were more consistently associated with perceived responsiveness across almost all interaction types. Responsive behaviors were significantly associated with perceived responsiveness in the male positive and negative (marginal) event discussions and in the female positive event discussion. Consistent

with the microanalytic measure, global responsive behaviors in the negative event discussion were only associated with perceived responsiveness for women with low self-esteem. In our study, the global coding may have been more effective because it included behaviors not listed in the microanalytic guide such as the emotional tone of the interactions. In general, the high correlations between the two coding systems suggest that they were tapping similar processes.

Additionally, one's own relationship satisfaction can influence the support that one provides (e.g., Collins & Feeney, 2000). The results of Hypothesis 2, which predicted that one's current RWB would influence how one reacted to a partner's disclosure, showed mixed support. Although it varied by gender, in all the models tested, there was an association between at least one person's RWB and his or her own enacted responsive behaviors. For example, the male partner's RWB was associated with his enacted global responsive behaviors in the positive interactions and his microanalytic responsive behaviors in the negative interactions. Similarly, the female partner's RWB was associated with her microanalytic responsive behaviors in the positive interactions and her global responsive behaviors in the negative interactions. The fact that RWB was associated with responsive behaviors, as coded using at least one of the coding guides, for both sexes may suggest that there were no underlying gender differences. Instead, our lack of power (due to sample size limitations) may have affected our ability to detect a significant effect of both coding guides across the interactions for men and women.

A more pronounced gender difference was that self-esteem moderated the association between enacted behaviors and perceived responsiveness only for women. In particular, having high self-esteem seemed to buffer women from a drop in perceived responsiveness when their partners provided few responsive behaviors; this was not the case for men. Although speculative, one explanation for this finding is that women's self-esteem affects their judgments of their partner and relationships more than men's self-esteem. Indeed, women's self-esteem and personal successes and failures may influence their judgments of their relationships more than men's (e.g., Murray, Griffin, Rose, & Bellavia, 2006).

Finally, responsive behaviors were particularly associated with outcomes in the positive event discussions. We found that microanalytic responsive behaviors were useful in the negative event discussions only when we took self-esteem into account. This finding is consistent with the idea that disclosing negative information may involve a greater threat to one's self (e.g., Gable et al., 2004), and consequently factors such as self-esteem, mood, and stress might have a greater impact on these interactions than on capitalization or positive event interactions.

Although responsive behaviors did not explain all the variance associated with perceived responsiveness, there is substantial evidence for the utility of the coding guides. In the male positive interaction, where received and perceived responsiveness were most closely related, responsive behaviors as coded using the microanalytic measure accounted for 9.6% of the variance in the perceived responsiveness measure. Responsive behaviors as coded using the global measure accounted for 17.2% of the variance in the perceived responsiveness measure. We were not entirely surprised that enacted behaviors did not account for more variance in the outcomes of interest. These results are in line with other studies using observational coding guides (Melby, Conger, Ge, & Warner, 1995). For one, there are many processes that the behavioral coding guides cannot capture, such as idiosyncratic interaction patterns that couples may have (e.g., Collins & Feeney, 2000). In addition to enacted behaviors, perceiver factors, such as individual differences, goals, and mood, can all affect perceived responsiveness (Reis et al., 2004). With these coding guides, future research can now take into account enacted responsive behaviors when examining perceived responsiveness across various contexts.

General Discussion

The quality of one's intimate relationship has a number of repercussions for mental and

physical health (e.g., Kiecolt-Glaser & Newton, 2001). Perceived responsiveness, in particular, fosters intimacy and trust in relationships (Reis et al., 2004), and it is thus crucial to understand the process through which perceived responsiveness develops. As Reis and Shaver (1988) suggest, perceived responsiveness develops as the result of day-to-day interactions with one's partner. Therefore, one goal of the current study was to advance our knowledge of the interaction process, which ultimately leads to the perception of responsiveness. Indeed, we found that responsive behaviors were generally associated with postinteraction perceptions of responsiveness.

A further goal of this study was to see if responsive behaviors are "central" enough that they can be coded across contexts. One of the main contributions of the present study may be the idea that by using the broad responsiveness framework, a core set of responsive behaviors can be observed (and coded) in both classic social support interactions and capitalization interactions. Additionally, the use of these coding guides for responsive behaviors across different discussion types may provide researchers with a useful way to compare and contrast these interactions.

Of course, context influences the perception of responsiveness. Reis and Shaver's (1988) intimacy model posits that context plays a role at several steps of the interaction (e.g., in interpreting a partner's disclosure, in motivating a person to disclose), and larger contextual factors (e.g., how much stress a couple is under) also influence this entire process. Before considering these contextual factors, we first wanted to determine common behavioral processes that people find to be responsive and that can be observed across situations. Interestingly, in additional tests of our models, the importance of the event, how stressful the event was, or how much the person thought he or she was able to control the event did not moderate the results of Study 2.

Limitations and future directions

One limitation of the current study is our lack of consideration of the discloser's behavior in the interaction. The way a person discloses an event in support situations (e.g., directly asking for help vs. hinting at the issue) plays an influential role in how a person provides support (Barbee & Cunningham, 1995). The same may be true for the way that people disclose positive events to each other. For example, a person is likely to react to his or her partner's positive event very differently if the partner is excited and happy when talking about the event or if the person tries to downplay the event and not outwardly show too much excitement. In the future, coding for the discloser's behavior will be an important next step for this research. Another limitation of the current study is the use of a university convenience sample. Further replications of these findings in other cultures and in other age groups are needed to determine the general applicability of the coding systems. For example, research on cross-cultural aspects of social support demonstrates that individuals in East Asian cultures are less likely to seek social support (Taylor et al., 2004), which may have implications for how the partners of individuals in these cultures respond to disclosures (e.g., is it harder to be responsive if you are not used to providing social support?).

Additionally, comparing the current coding systems to other relevant coding systems will be important. These comparisons will be especially important in studies with a larger sample size and more power than the current one. Although our sample is similar in size to other observational studies (e.g., Cutrona & Suhr, 1992), the low power may have inhibited our ability to fully examine the associations between the coding guide and the outcomes measured. Because of this low power and the short length of the interactions, we aggregated the responsiveness codes across the three categories of understanding, validation, and caring. Future studies could examine these categories separately, especially if the studies included interactions of longer length or if they randomly sampled behaviors over a longer period of time. Another limitation of the present study is its reliance on correlational data. The causal pathways between responsive behaviors, perceived responsiveness,

individual differences, and RWB cannot be clearly established using correlational methods such as the ones used here. Experimental studies that manipulate factors at different steps in the interaction process could be useful.

Finally, we conducted this research in the lab, which limits its ecological validity. We did allow couples to choose what they discussed, and we let them stop the discussion when they desired in order to increase ecological validity. Reviews of the literature indicated that these discussions in the lab are predictive of how couples act in their day-to-day lives (Heyman, 2001). In addition, although the interactions were short in length, previous researchers have been able to successfully utilize short interactions (i.e., less than 5 min) for purposes such as coding expressions of love in positive disclosure interactions (Gonzaga, Keltner, Londahl, & Smith, 2001) and examining social support interactions (Yankeelov, Barbee, Cunningham, & Druen, 1995). In particular, Carrère and Gottman (1999) were able to predict divorce 6 years later based on observational coding of the first 3 min of a marital interaction.

In the future, understanding more about responsive behaviors could be beneficial to applications such as couples' therapy or interventions aimed at increasing responsiveness. Although the current study did not sample distressed couples, increasing a person's ability to show that he or she understands, validates, and cares for a romantic partner could be an important focus for couples working to improve their relationship. In order to fully understand perceived responsiveness, future research can continue to examine the enacted behaviors that lead to perceptions of responsiveness and the important personal, contextual, and relationship factors that affect the provision and perception of responsive behaviors.

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Appendix

Microanalytic responsive behaviors coding guide

Note: SR = support recipient; SP = support provider.

Understanding

1. Questions: Asking questions about the event. Asking for more details (e.g., "What happened after that?").
2. Paralinguistic behavior*: Backchannel utterances (e.g., "mm-hm," "yes").
3. Summarizing or paraphrasing: Repeating back key phrases of the story. Summarizing the story in one's own words. Adding relevant information to the story.
4. Understanding: Voicing understanding (e.g., "I understand," "I see").

Validation

5. Significance: Expressing understanding of why the event or goal is important to SR.
6. Agreement: Agreeing with SR or taking partner's side. Telling SR that he or she was right. Agreeing with the cause of the event (e.g., "It wasn't your fault").
7. Perspective or elaboration: Putting the situation in perspective. Talking about the "big picture." Talking about what the event or outcome means. Providing insight (e.g., "Grad schools look at a lot of things besides one grade"; "This award will really have a big effect on helping you get into law school!").
8. Reassurance or encouragement: Reassuring SR that everything will work out or has worked out the way he or she wanted it to. Encouraging partner to keep trying, to continue on to the next step. Expressing faith or confidence in partner (e.g., "It all worked out the way you wanted!"; "Everything will be okay"; "I knew you could do it!"; "I have faith in you").
9. Emotional validation: Describing or acknowledging partner's feelings and emotions. Indicating that the emotions are justified (e.g., "That must make you really happy/angry").
10. Feelings questions: Asking how SR is feeling or discussing emotions.
11. Self-referencing: SP gives examples from his or her own experiences that relate to current situation or draws on relevant personal experience (e.g., "I had a teacher like that once"). (Note: If this takes the focus of the conversation off of SR and directs the attention to SP for an extended period of time, then this is not coded as self-referencing.)
12. Effort validation: Acknowledging SR's efforts and how hard SR worked. Acknowledging a job well done (e.g., "All that hard work paid off"; "There's nothing more you could have done").
13. Identity validation: Affirming or enhancing the partner's desired identity. This includes reinforcing SR's self-concept in event domain, and highlighting SR's skills in the domain (e.g., pointing out SR's positive qualities; complimenting SR's abilities, attributes and accomplishments; expressing pride in partner).
14. Exclamations or judgments: "That's great!"; "That's awful"; offering congratulations; "Wow!"

Caring

15. Expressing love: Caring for partner ("I care about you"; "I love you").
16. Joint outcomes or involvement: Emphasizing that SP shares in the outcomes of SR's event. (e.g., "We'll get through this together"; "I would love to visit law schools with you").
17. Support or Concern: offering support or concern or comfort (e.g., "I'll always be here for you"; "I don't want you to work too hard").
18. Context-appropriate actions: Actions that convey thoughtful behavior, appropriate to the situation.

- Offering help: Offering tangible help, offering to find help, offering to help facilitate goal; behaviors intended to help ("I can help you study for the next exam"; "I can show your friends around town when they come to visit").
- Lift mood or extend positive mood: A focus on producing or extending a positive mood (e.g., celebrating, cheering up partner, spreading good news to others).

19. Expressing empathy or expressing emotions for the SR: Expressing feelings for the partner regarding the event—feeling excited, happy, sad, so forth, for partner ("I'm so happy for you"; "I'm sorry that happened"; "That makes me angry too").

Note: Two codes emerged from Study 1, but they were not coded in Study 2 due to methodological constraints. Future use of this coding guide could include the following codes:

20. Being physically affectionate (hugging and touching).
21. Nonverbal expressions: nodding, smiling, and maintaining eye contact.

*We added the code of paralinguistic behavior for Study 2.

Global responsive behaviors coding guide

Note: SR = support recipient; SP = support provider. Items rated on a 7-point scale from 1 = *not at all* to 7 = *a great deal*.

1. Understanding: SP listens attentively, gathers information about the event, tries to "get the facts right," demonstrates comprehension, asks relevant questions, summarizes or paraphrases, and voices understanding.
2. Validation: SP expresses that he or she values and respects the SR; communicates acceptance, respect, support for SR's position; expresses understanding of why event is significant; takes SR's side or agrees with SR; offers reassurance; offers perspective or elaboration of consequences; offers encouragement; validates partner's emotion; validates effort of SR; validates identity of SR (e.g., "See, you're a great basketball player!").
3. Caring: SP expresses love and affection, shows concern, offers support, offers help, attempts to lift mood or extend positive mood, emphasizes joint outcomes (e.g., "We'll get through this together"), shows involvement, expresses sympathy, and expresses empathy (e.g., "I'm so happy for you"; "That makes me angry too"; "I'm sorry that happened").