Low Self-Esteem Predicts Indirect Support Seeking and Its Relationship Consequences in Intimate Relationships

Personality and Social Psychology Bulletin 2019, Vol. 45(7) 1028–1041 © 2018 by the Society for Personality and Social Psychology, Inc Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0146167218802837 journals.sagepub.com/home/pspb



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Abstract

Indirect support seeking involves sulking, whining, and/or displaying sadness to elicit social support. Ironically, this strategy tends to backfire by prompting rejection from close others. The current research examines how low self-esteem contributes to the use and relational consequences of indirect support seeking during couples' interactions. Results across two dyadic, observational studies (Study I = 76 couples, Study 2 = 100 couples) demonstrated that support seekers with lower self-esteem engaged in greater indirect support seeking, and seekers' greater indirect support seeking was associated with greater negative support from partners. Furthermore, partners' negative support was associated with lower seeker perceptions of partner responsiveness, but only when support seekers were low in self-esteem. These results demonstrate how low self-esteem individuals' attempts to protect themselves from social rejection by utilizing indirect support seeking may ironically elicit negative partner support, and undermine the feelings of acceptance that low self-esteem individuals crave.

Keywords

support seeking, self-esteem, perceived partner responsiveness, negative support

Received February 16, 2018; revision accepted August 22, 2018

Healthy social support among intimate relationship partners is crucial for coping with stress, facilitating personal growth and promoting relationship well-being (Feeney, 2004; Overall, Fletcher, & Simpson, 2010; Sullivan, Pasch, Johnson, & Bradbury, 2010; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). The majority of prior research examining support interactions has investigated ways in which people provide support to individuals who require help or comfort, with less attention focused on how individuals seek support from close others (Feeney & Collins, 2015). More specifically, researchers have frequently described, but scarcely empirically examined, indirect support seeking, which involves sulking, whining, fidgeting, and/or displaying sadness without disclosing the source of the problem. Theoretical perspectives suggest that indirect support seeking is utilized with the intention of garnering support from close others (Barbee & Cunningham, 1995; Barbee, Rowatt, & Cunningham, 1998); yet, empirical research suggests that indirect support seeking ironically elicits blame, rejection, and withdrawal from the partner-the opposite of what the support seeker desires (Collins & Feeney, 2000; Don, Mickelson, & Barbee, 2013). This negative response to indirect support seeking tends to further exacerbate the support seeker's distress, and undermine relationship wellbeing (Collins & Feeney, 2000; Don et al., 2013).

Given that prior research demonstrates indirect support seeking tends to backfire and elicit worse support from close others, an important question remains unexamined: Why do people use this support seeking strategy? In the current study, we argue one reason that support seekers use indirect support seeking is because they fear the possible rejection associated with full and open self-disclosure to their partner (Barbee & Cunningham, 1995; Barbee et al., 1998). Accordingly, we focused on self-esteem-an individual difference that encapsulates fears over social rejection, and concerns with making oneself emotionally vulnerable in social relationships (Leary & Baumeister, 2000; Leary, Tambor, Terdal, & Downs, 1995; Murray, Holmes, & Collins, 2006)-as a useful predictor of (a) whether individuals would utilize indirect support seeking and (b) the relational outcomes of the use of indirect support seeking. To do so, we drew upon data from two observational studies of intimate couples' support-relevant interactions.

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Relational Costs of Indirect Support Seeking

The manner in which people seek support from their intimate relationship partner is important, because it can determine the success of support interactions (Barbee & Cunningham, 1995; Cutrona, 1996; Feeney & Collins, 2015). For instance, when individuals seek support openly and directly by asking partners for help, requesting advice, and/or clearly disclosing the nature of the problem, partners tend to respond by providing greater and better quality support (Collins & Feeney, 2000; Don & Hammond, 2017; Overall et al., 2010; Simpson, Rholes, Oriña, & Grich, 2002). High-quality support by the provider means that support-relevant interactions tend to be more successful at comforting the distressed seeker, and/or facilitating the seeker's personal goals, which, in turn, have positive consequences for relational well-being (Collins & Feeney, 2000; Overall et al., 2010).

When individuals seek support indirectly, it tends to have a detrimental influence on the overall support interaction and broader relationship outcomes. Indirect support seeking involves whining, fidgeting, and/or displaying sadness without disclosing the source of the problem (Barbee & Cunningham, 1995; Barbee et al., 1998). From a theoretical perspective, these indirect strategies do not give the support provider enough information to adequately respond to the seeker's concerns, which leads to provider frustration, withdrawal, and rejection (Barbee & Cunningham, 1995). Indeed, research demonstrates greater use of indirect support seeking predicts a particularly detrimental partner response: negative support provision (Collins & Feeney, 2000; Don et al., 2013). Negative support provision refers to when partners respond to requests for support with criticism, invalidation, blaming, and withdrawal. Negative support provision represents the opposite of the caring and comfort that support seekers desire when requesting support, and a number of studies demonstrate that it is associated with host of negative consequences for seeker and relationship well-being (e.g., Collins & Feeney, 2000; Don et al., 2013; Overall et al., 2010).

Indirect support seeking is conceptually unique compared with other support-seeking strategies because it tends to elicit an ironic outcome. Theoretically, individuals use indirect support seeking to gain attention, care, and comfort from their partner without having to risk the potential vulnerability of full and open self-disclosure (Barbee & Cunningham, 1995; Barbee et al., 1998). Yet, the use of indirect support seeking tends to be associated with a negative response from the partner, thus evoking an ironic response (Collins & Feeney, 2000; Don et al., 2013). By contrast, other forms of support seeking are associated with the appropriate and/or expected reactions. For instance, positive direct support seeking, which involves clearly explaining the source of the problem, searching for solutions, and clarifying the situation, elicits positive support responses from the partner (Collins & Feeney, 2000; Overall et al., 2010). Similarly, negative direct

support seeking involves more overt attempts to undermine the support partner, such as criticizing, blaming, or derogating the support provider. As would be expected, negative direct support seeking evokes lower levels of emotional support and responsiveness, and greater negative support from providers (Collins & Feeney, 2000; Overall et al., 2010).

The Use and Consequences of Indirect Support Seeking

It is important to understand why people utilize indirect support seeking because of its unique and detrimental influence on social support interactions. Theorists argue that the use of indirect support seeking stems from support seekers' fear of fully disclosing oneself to close others due to the vulnerability of possible rejection (Barbee & Cunningham, 1995). Indeed, research demonstrates that when a partner is not responsive to the needs of a support seeker, it has severe and detrimental consequences to the well-being of the seeker (Collins & Feeney, 2000; Girme, Overall, & Simpson, 2013; Neff & Karney, 2005). Thus, seeking support in a subtle and indirect way seemingly allows the seeker to bypass full and open disclosure, and avoid any potential rejection from the partner (Barbee & Cunningham, 1995; Barbee et al., 1998; Cutrona, 1996). As such, factors that make people especially wary of social rejection are likely to increase the use of indirect support seeking.

Low Self-Esteem and Indirect Support Seeking

According the risk regulation model, one individual difference that highlights peoples' struggle with balancing the need to develop social connectedness with concerns over social rejection is self-esteem (Murray et al., 2006). Individuals with low self-esteem tend to emphasize self-protection in their relationships (at the expense of developing connectedness) because their negative self-views mean they doubt their partner's regard, are wary of vulnerability, and fear rejection (Cameron, Stinson, Gaetz, & Balchen, 2010; Murray et al., 2006; Murray, Holmes, & Griffin, 2000; Murray, Rose, Bellavia, Holmes, & Kusche, 2002). For instance, individuals with low self-esteem tend to report that their intimate partner views them more negatively than their partner actually does, and assume quotidian disturbances in their relationships (such as minor conflicts or their partner's negative mood) are signs of rejection (Murray et al., 2000; Murray et al., 2002). Because these individuals are hypervigilant for signs of rejection, they also tend to create situations in which rejection actually occurs, which has negative consequences for the overall quality of the relationship (Luerssen, Jhita, & Ayduk, 2017; Murray et al., 2000).

It is precisely because people with low self-esteem fear rejection in their relationships that we hypothesize they are particularly likely to engage in indirect support seeking (Figure 1, Path A). During potentially vulnerable situations (such as conflicts or support interactions), individuals low in

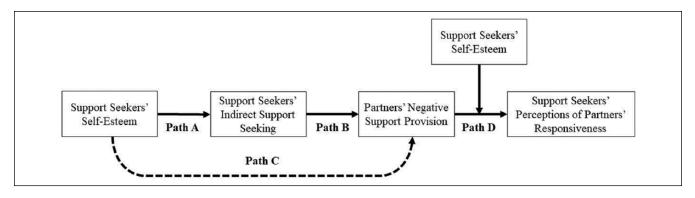


Figure 1. Conceptual model illustrating the flow on relational consequences of support seekers' self-esteem and indirect support seeking. *Note.* This figure is intended to provide a visual depiction of our hypotheses only, and is not intended to provide an overview of our analytic strategy. The dashed line for Path C indicates this hypothesized path is an indirect effect from self-esteem to partners' negative support provision through support seekers' indirect support seeking.

self-esteem are likely to adopt a "prevention-oriented system," whereby their behavior in relationships is largely aimed at protection from rejection, at the expense of openness, selfdisclosure, and intimacy with their partner (Murray et al., 2006). Importantly, people low in self-esteem *are* highly motivated to establish connections with others; however, they tend to do so in ways that feel self-protective (Cameron et al., 2010; Forest & Wood, 2011; Marigold, Holmes, & Ross, 2007). People with low self-esteem should, therefore, view indirect support seeking as an appealing strategy, which seemingly enables them to garner support and enhance social connectedness without the vulnerability of directly and openly stating how they feel (Barbee & Cunningham, 1995).

Low Self-Esteem, Indirect Support Seeking, and Partners' Negative Support

Unfortunately, as discussed above, indirect support seeking strategies tend to elicit greater negative support from support providers (Collins & Feeney, 2000; Don et al., 2013). As such, we attempted to replicate the prior research demonstrating that indirect support seeking is associated with negative support responses from the partner (Figure 1, Path B).

In light of our predictions that (a) low self-esteem would be associated with greater indirect support seeking and (b) greater indirect support seeking would be associated with greater partner negative support, we also wanted to test the possibility that individuals with low self-esteem tend to engage in behavior that ironically creates the very rejection they fear. That is, we predicted an indirect effect from low seeker self-esteem to greater provider negative support through greater indirect support seeking (Figure 1, Path C).

Low Self-Esteem and the Relational Costs of Partners' Negative Support

Negative support from the partner has been linked to a host of detrimental relational outcomes, including perceiving the support provider as less caring and responsive immediately following support-relevant discussions (Collins & Feeney, 2000; Overall et al., 2010). Perceived partner responsiveness involves believing the partner recognizes, acknowledges, and values core components of the self, as well as needs and concerns, and research demonstrates it is crucial for fostering relationship well-being (Holmes, Clark, & Reis, 2004). Indeed, one reason that negative support has such widespread effects is because it undermines the extent to which the seeker perceives that the partner is being responsive to his or her needs and concerns (Collins & Feeney, 2000; Overall et al., 2010). Thus, negative support from partners should be associated with support seekers perceiving the partner to be less responsive during such interactions, which involves individuals' belief that their partner recognizes, acknowledges, and values core components of the self and their needs (Holmes et al., 2004).

Although negative support is likely to have an overall negative influence on perceptions of partners' responsiveness, we expect this association will be moderated by support seekers' self-esteem. Low self-esteem represents sensitivity to rejection in relationships, even when the rejection may be small, or the result of a misperception (Murray et al., 2000; Murray et al., 2002). Because of this sensitivity to rejection, negative support from the provider—which involves direct and overt displays of criticism, blame, or withdrawal—is likely to be particularly threatening for support seekers who are low in self-esteem. Importantly, this pattern may be different for people who are high in selfesteem. According to the risk regulation model, people with high self-esteem tend to respond to rejection in a fundamentally different manner than people with low self-esteem (Murray et al., 2006; Murray et al., 2002). Because people high in self-esteem feel generally secure in their partner's positive regard, they tend to resolve signs of rejection by promoting the relationship and enhancing closeness (Murray et al., 2006). Indeed, empirical research suggests that individuals with high self-esteem tend to respond to signs of rejection by reaffirming the value of their relationship and the sense that their partner is responsive (Ford & Collins, 2010; Murray et al., 2002). In light of the above research and theory, we predict that support seekers will respond to their partners' provision of negative support in different ways, depending on their self-esteem: Seekers with low self-esteem will experience decrements in perceptions of their partner's responsiveness, whereas seekers with high self-esteem will experience no change (or even an increase) in perceptions of their partner's responsiveness as they reaffirm the value of their relationship in the face of rejection (Figure 1, Path D).

The Current Study

The way individuals seek support from their intimate partners is a surprisingly understudied aspect of social support, but one that is crucial to the overall success of support interactions (Feeney & Collins, 2015). The current study expands on prior research by examining the role of self-esteem in the use and consequences of indirect support seeking. Figure 1 presents a conceptual model, which organizes our four hypotheses based on the risk regulation model (Murray et al., 2006).¹ We predicted the following:

Hypothesis 1: Individuals with low self-esteem—who seek social acceptance, but are simultaneously wary of making themselves vulnerable to close others—are especially likely to utilize indirect support seeking (Path A).

Hypothesis 2: We predicted that indirect support-seeking behaviors would be associated with greater negative support from partners (Path B).

Hypothesis 3: There would be a significant indirect effect of self-esteem on negative support, through indirect support seeking (Path C).

Hypothesis 4: Finally, we predicted that negative support would be associated with lower perceptions of partners' responsiveness, but that this association would be particularly strong for support seekers with low self-esteem, and attenuated or even positive for those with high self-esteem (Path D).

We tested these hypotheses across two dyadic observational studies that involved couples engaging in video-recorded discussions with their partner about an important personal goal. Prior to the discussions, individuals completed questionnaires assessing their self-esteem and baseline perceptions of relatedness (Study 1) or partner responsiveness (Study 2). Following the support-relevant discussions, support seekers reported on their perceptions of their partner's responsiveness. Across both studies, coders observed the video-recorded discussions, and provided ratings for support seekers' indirect support-seeking strategies (e.g., sulking, whining, fidgeting, and/or displaying sadness without disclosing the source of the problem), and support providers' negative support behavior (e.g., greater criticism, invalidation, and derogation). Finally, in ancillary

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analyses, we tested for gender differences between men and women, and controlled for support seekers' attachment anxiety and avoidance, given that prior research has linked attachment insecurity to related support-seeking behaviors (Collins & Feeney, 2000; Girme, Molloy, & Overall, 2016; Girme, Overall, Simpson, & Fletcher, 2015; Mikulincer & Shaver, 2009; Simpson, Rholes, & Nelligan, 1992).

Study I

Method

Participants. Participants were drawn from the research participation pool of a large university in the Midwest of the United States. To be eligible for the study, the couples were required to be least 18 years of age, English speaking, and in a committed, monogamous relationship for at least 3 months prior. At least one member of each couple was enrolled in a psychology course, and both members were eligible to receive course credit in exchange for their participation. Although 80 couples were initially included in the study, data from four couples were unusable for various reasons (three due to technical problems in the laboratory and one couple did not speak English during the observational session). Thus, the final sample consisted of 76 couples. Participants were a mean age of 20.12 years (SD = 3.93 years), and had an average relationship length of 1.53 years (SD = 1.80years). The majority of the sample identified as White (82.8%, African American = 10.5%, Latino/Hispanic = 1.3%, Asian = 2.6\%, Other ethnicity = 2.6\%).

Procedure and materials. On arrival to the lab, participants were separated to complete a series of initial questionnaires.

Self-esteem. Participants completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Participants completed 10 items (e.g., "I feel like a person who has a number of good qualities"; 1 = strongly disagree, 4 = strongly agree; $\alpha = .88$).

Attachment insecurity. Support seekers' attachment anxiety and avoidance were used in ancillary covariate analyses, and were assessed using the Revised Adult Attachment Scale (Collins, 1996). This scale has been frequently utilized in prior research examining social support in intimate relationships, and demonstrated excellent reliability and validity in these studies (e.g., Collins & Feeney, 2000, 2004; Davila & Kashy, 2009). Twelve items assessed attachment avoidance (e.g., "I find it difficult to allow myself to depend on others"; $\alpha = .80$) and six items assessed attachment anxiety (e.g., "I often worry that romantic partners don't really love me"; 1 = not at all characteristic of me, 5 = very characteristic of me; $\alpha = .82$).

Prediscussion relatedness. Support seekers' prediscussion feelings of relatedness to their intimate partner were assessed

	Study I	Study 2							
	M (SD)	M (SD)	Ι	2	3	4	5	6	7
I. Self-esteem	3.19 (0.55)	4.91 (1.09)		39**	26*	.16	.25*	31**	04
2. Attachment anxiety	2.59 (0.88)	3.07 (1.05)	36**		.35**	21	17	.22	.24*
3. Attachment avoidance	2.69 (0.63)	2.86 (1.02)	2 9 **	.13		38**	39**	.26*	.13
4. Prediscussion relatedness or PPR ^a	6.41 (0.81)	5.54 (1.09)	.12	−.16*	−.21**	_	.62**	.13	11
5. Postdiscussion PPR	7.65 (1.26)	5.61 (1.15)	.21*	13	−.19 **	.62**	_	23	15
6. Indirect support seeking	2.24 (0.98)	2.63 (1.33)	38**	.16*	.05	.01	15*	_	.25*
7. Partners' negative support provision	1.83 (0.82)	2.06 (1.43)	11	.11	.02	22**	32**	.12	—

Table I. Descriptive Statistics (Means and Standard Deviations) and Correlations Across All Measures (Studies I and 2).

Note. PPR = perceptions of partners' responsiveness; OSM = online supplementary material.

^aPrediscussion measures were assessed using a relatedness scale in Study I, and a PPR scale in Study 2. Correlations for Study I (N = 76) variables appear above the diagonal line. Correlations for Study 2 (N = 100 dyads, 200 individuals) appear below the diagonal line. We provide an additional correlation matrix for Study 2 with correlations for male and female dyad members separately in the OSM. *p < .05. **p < .01.

using the Relatedness Need Satisfaction subscale (La Guardia, Ryan, Couchman, & Deci, 2000). Three items assessed the extent to which individuals felt a sense of closeness and connection in their intimate relationship (e.g., "When I am with my romantic partner, I feel a lot of closeness and intimacy"; 1 = not at all true, 7 = very true; $\alpha = .78$).

Following this, participants were asked to list one thing about themselves that they would like to change. Participants were then reunited to complete a video-recorded supportrelevant discussion. One member of the couple was randomly assigned to share his or her self-improvement goal with his or her partner (the support seeker refers to the individual discussing his or her self-improvement goal, and his or her partner could choose to provide support). The couple was then directed to discuss this goal for the next 7 minutes.

Postdiscussion perceived partner responsiveness. After participants completed the support-relevant discussion task, they complete the Perceived Partner Responsiveness Scale (Reis & Carmichael, 2006). Support seekers completed 18 items assessing the extent to which they felt their partner was understanding, valuing, and caring (e.g., "My partner is aware of what I am thinking and feeling"; 1 = not at all true, 9 = completely true; $\alpha = .95$).

Observational coding procedure

Indirect support seeking. The videotaped support interactions were first coded for indirect support seeking using a scheme developed by Overall et al. (2010). In this coding scheme, *indirect support seeking* includes behaviors such as acting weak, expressing negative affect to make the partner feel guilty, whining, and debasing the self to elicit sympathy. Coders were asked to rate the extent to which they observed the use of these behaviors across the 7-min interaction on a scale of 1 = low to 7 = high. The ratings by the four observational coders were adequately consistent and so were averaged to index indirect support seeking (intraclass correlation coefficients [ICCs] consistency = .79).

Negative support. In a second wave of coding, coders again drew on the coding schedule developed by Overall and colleagues (2010) to code support providers' negative support. Coders rated behaviors such as criticizing, blaming, and expressing disapproval for the support seeker, and coders were again asked to rate the extent to which they observed these behaviors across the entire interaction on a scale of 1 = low to 7 = high. The ratings by the four observational coders were adequately consistent and so were averaged to index overall negative support (ICC = .78).

Results

Descriptive statistics and bivariate correlations across all measures are presented in Table 1. We tested Paths A and B using multiple linear regression. To test Path C, we conducted bootstrapped mediation analyses using the PROCESS macro (Hayes, 2017), according to the recommendations of Preacher and Hayes (2008). In this analysis, partner negative support provision was specified as the outcome, self-esteem was specified as the independent variable, and indirect support seeking was specified as the mediator. To test Path D, we conducted a moderation analysis using multiple linear regression. In all models, we coded the gender of the support seeker (coded -1 =female, 1 =male).

Power analyses. We examined power for each of these analyses based on the effect sizes reported in Table 2. First, we examined power for the regressions examining Paths A, B, and D using Monte Carlo simulations in MPlus (Muthén & Muthén, 2012). With a sample of 76 people, and based on 10,000 simulations per model, we estimated observed power for Path A = .74, Path B = .76, and Path D = .62. Second, we examined power for the bootstrapped mediation model according to the recommendations of Schoemann, Boulton, and Short (2017), who suggest using Monte Carlo simulations to accurately assess power when utilizing bootstrapping to examine indirect effects. With a sample size of 76

	Study I					Study 2						
				95% CI						95% CI		
	В	SE	t	Low	High	r	В	SE	t	Low	High	r
Path A: Self-esteem \rightarrow Indirect s	upport se	eking										
Self-esteem	-0.61	0.23	-2.68**	-1.07	-0.16	0.30	-0.42	0.08	-5.32**	-0.57	-0.26	0.36
Gender	-0.27	0.12	-2.20*	-0.52	-0.03	0.25	-0.17	0.08	-2.18*	-0.32	-0.02	0.21
Path B: Indirect support seeking	\rightarrow Partne	rs' negat	ive support	:								
Indirect support seeking	0.28	0.10	2.82**	0.08	0.48	0.31	0.06	0.08	0.76	-0.10	0.22	0.05
Self-esteem	0.07	0.20	0.34	-0.34	0.48	0.04	-0.12	0.09	-1.24	-0.30	0.07	0.09
Gender	0.15	0.11	1.34	-0.07	0.37	0.15	0.25	0.08	2.99**	0.08	0.41	0.29
Path D: Partners' negative support	rt $ imes$ Self-	esteem -	\rightarrow Perceive	d partnei	r respons	iveness						
Prediscussion relatedness	0.90	0.14	6.33**	0.61	1.18	0.61	0.59	0.06	10.33**	0.48	0.71	0.60
Self-esteem	-0.54	0.47	-1.13	-1.48	0.41	0.14	0.10	0.06	1.81	-0.01	0.22	0.13
Partners' negative support	-1.66	0.74	-2.30**	-3.14	-0.18	0.27	-0.14	0.04	-3.09**	-0.23	-0.05	0.23
Partners' negative support $ imes$ Self-esteem	0.51	0.23	2.18*	0.04	0.97	0.26	0.11	0.03	3.08**	0.04	0.17	0.23
Gender	-0.13	0.11	-1.15	-0.36	0.10	0.14	0.06	0.06	0.98	-0.06	0.19	0.10

 Table 2.
 The Associations Between Seekers' Self-Esteem, Seekers' Indirect Support Seeking, Partners' Negative Support Provision, and Perceptions of Partners' Responsiveness (Studies 1 and 2).

Note. Effect sizes (r) were computed using Rosenthal and Rosnow's (2007) formula: $r = \sqrt{(t^2 / t^2 + df)}$. CI = confidence interval. *p < .05. **p < .01.

people, and based on 20,000 Monte Carlo draws per replication, power for Path C was calculated to be .54. Thus, power was adequate in our test of Paths A and B, but was low in our test of Paths C and D.

Path A. We regressed support seekers' indirect support seeking on support seekers' self-esteem. Supporting our hypothesis, the results presented in Table 2 (top section) indicate that individuals with lower self-esteem tended to engage in greater indirect support seeking during the support interactions.

Path B. Next, we regressed partners' negative support provision on support seekers' indirect support seeking, controlling for the downstream effects of support seekers' self-esteem. Consistent with prior research, the results in Table 2 (middle section) indicate that greater indirect support seeking was associated with greater negative support from the partner.

Path C. To assess the significance of Path C, we examined the results of the bootstrapped test of the indirect effect of self-esteem on negative support provision through indirect support seeking. The results, based on 10,000 bootstrapped subsamples, indicated a significant indirect effect of self-esteem on negative support through indirect support seeking, estimate = -0.17, 95% confidence interval (CI) = [-0.36, -0.05], SE = 0.08, p < .01, such that individuals with lower self-esteem tended to utilize greater indirect support seeking, which was then associated with greater negative support from the partner.

Path D. Finally, we examined whether negative support from the provider predicted lower perceived partner responsiveness for the seeker, and whether this association was moderated by the support seeker's self-esteem. We regressed *seekers' perceived partner responsiveness* on (a) seekers' prediscussion levels of relatedness in the relationship (to ensure that any significant associations from this analysis were not confounded by preexisting associations between individuals' low self-esteem and a lack of relatedness in their relationships), (b) seekers' self-esteem, (c) providers' negative support, and (d) the interaction between seekers' selfesteem and partners' negative support.

The results presented in Table 2 (bottom section) demonstrate that there was a significant interaction between seeker self-esteem and partners' negative support. Probing the simple slopes of the interaction (see Figure 2, Panel A) demonstrated that when support seekers had high self-esteem (1 SD above the mean), partners' negative support provision was not associated with changes in seeker-perceived partner responsiveness (slope = 0.23, SE = 0.18, t = 1.28, p = .20, r = .15). However, when support seekers had low selfesteem (1 SD below the mean), greater levels of partners' negative support provision during support-relevant discussions were marginally associated with declines in perceptions of partners' responsiveness (slope = -0.32, SE = 0.17, t = -1.92, p = .06, r = .23). Examining perceived partner responsiveness at different levels of negative support demonstrated that when partners' negative support provision was low, there were no differences between high and low selfesteem support seekers' perceptions of partners' responsiveness (B = -0.01, SE = 0.27, t = -0.04, p = .96, r = .01).

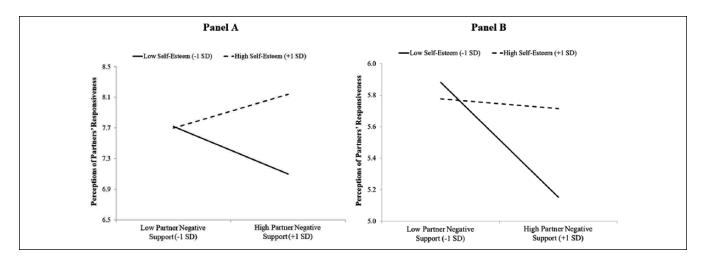


Figure 2. The association between partners' negative support provision and seekers' perceptions of partners' responsiveness during support-relevant discussions, moderated by seekers' self-esteem in Study I (Panel A) and Study 2 (Panel B). *Note.* Perceived partner responsiveness was assessed on a scale from I to 9 in Study I, and on a scale from I to 7 in Study 2. Analyses controlled for prediscussion feelings of relatedness in Study I and perceived partner responsiveness in Study 2.

When partners' negative support provision was high, support seekers with low self-esteem had significantly lower perceived partner responsiveness than seekers with high self-esteem (B = 0.95, SE = 0.33, t = 2.86, p = .006, r = .33).

Ancillary analyses. We conducted two sets of ancillary analyses. First, given some of the significant main effects of gender (see Table 2), we wanted to explore whether our focal results may have revealed differences between men and women. Thus, we reran our analyses in Table 2 and included the main and interaction effects of gender to test for differences between men and women. Results demonstrated that gender did not moderate any of the focal associations displayed in Table 2 (ts = 0.12-0.61, ps = .90-.53).

Second, given the known associations between attachment insecurity and indirect support-seeking strategies (Collins & Feeney, 2000; Girme et al., 2016; Girme et al., 2015; Mikulincer & Shaver, 2009; Simpson et al., 1992), we also wanted to ensure that the role of self-esteem in the use and consequences of indirect support was independent to attachment insecurity. Thus, we reran all the previous analyses controlling for support seekers' attachment anxiety and avoidance. In all analyses tested, the results in Table 2 remained nearly identical to those tested in our primary analyses. Thus, our findings appear to be unique to the influence of predictor variables we tested. For specific information, please refer to the online supplementary material (OSM).

Discussion

Study 1 largely supported our hypotheses and conceptual model displayed in Figure 1. Support seekers who were low in self-esteem were more likely to use indirect support seeking during support-relevant discussions with their intimate partners (Path A). Indirect support seeking was associated with greater negative support from the support provider (Path B), and mediation analyses were consistent with the expectation that people who are low in self-esteem tend to create the very rejection they fear, through the use of greater indirect support seeking (Path C). Moreover, a significant interaction between negative support provision and seeker self-esteem revealed that when partners provided greater negative support provision, seekers with low self-esteem reported considerably lower perceived partner responsiveness than seekers with high self-esteem (Path D). These results provide evidence for our hypotheses that low selfesteem not only contributes to the use of indirect support seeking but also makes people especially vulnerable to its detrimental relational outcomes.

Study 2

In Study 2, we aimed to replicate the findings of Study 1. Although our test of Paths A and B were adequately powered in Study 1, our tests of Paths C and D were underpowered. We extended Study 1 by testing our effects in a larger sample of intimate couples, allowing *both* couple members to engage in support-relevant discussions to increase the number of observations (i.e., 100 dyads, 200 support-relevant discussions).

Method

Participants. A sample size of 100 couples was determined a priori to ensure ample power to detect the typical size of dyadic support effects shown in prior research (Kenny, Kashy, & Cook, 2006). Data collection stopped once we reached 100 heterosexual couples. Participants were recruited via electronic and hard-copy advertisements distributed across a city university campus.

To be eligible for the study, the couples had to be involved in a committed, monogamous relationship for at least a year prior. Participants were a mean age of 22.64 years (SD = 6.51 years), involved in serious (13% married, 36% cohabiting, 47% serious, 4% steady dating), long-term (M = 3.28 years, SD = 4.16 years) relationships, and were paid NZ\$80 for the in-lab session. The majority of the sample identified as New Zealand European (58%, Asian = 10%, non-New Zealand European = 10%, Other = 8%, Māori = 5.5%, Indian = 4.5%, Pacific Island = 2%, did not disclose = 2%).

Procedure and materials. During a laboratory session, participants first completed baseline questionnaires.

Self-esteem. As in Study 1, participants completed the Rosenberg (1965) Self-Esteem Scale (e.g., "On the whole, I am satisfied with myself"; $1 = strongly \ disagree$, $7 = strongly \ agree$; $\alpha = .87$).

Attachment insecurity. Participants completed the Adult Attachment Questionnaire (Simpson, Rholes, & Phillips, 1996), which has also been frequently used in prior observational social support research, and demonstrated excellent reliability and validity (Girme et al., 2016; Girme et al., 2015; Jayamaha, Girme, & Overall, 2017; Rholes, Simpson, & Oriña, 1999; Simpson et al., 2002). Eight items assessed attachment avoidance (e.g., "I'm not very comfortable having to depend on romantic partners"; $\alpha = .76$) and nine items assessed anxiety (e.g., "I often worry that my romantic partners don't really love me"; 1 = strongly disagree, 7 = strongly agree; $\alpha = .78$).

Participants then identified and ranked in order of importance three current personal goals they had been trying to achieve, which they were told they might discuss with their romantic partners. The top-ranked personal goal was selected for discussion. Then, thinking about their chosen goal, individuals reported the extent to which their partner's thoughts, feelings, and behavior was responsive with regard to the individuals' goal. After a short warm-up discussion, each couple was video recorded engaging in two 7-min discussions about each person's personal goal (the support seeker refers to the individual discussing his or her personal goal, and the partner could choose to provide support). Half of the couples discussed the woman's goal first, and half discussed the man's goal first. Immediately after the discussion about their personal goals, support seekers again reported on their perceptions of their partner's responsiveness with regard to the discussion they just had with their partner.

Pre- and postdiscussion perceptions of partners' responsiveness. Both prior to and after the support-relevant discussions, participants were asked about how their partner's feelings, thoughts, and behaviors with regard to their personal goal made them feel. Perceptions of partner's responsiveness were assessed with three items: "I feel close/intimate," "I feel understood/validated," and "I feel accepted/valued" (1 = not at all, 7 = very). Items were averaged to index pre- (α = .78) and postdiscussion (α = .81) perceptions of partner's responsiveness with regard to their personal goal.

Observational coding procedure. The same coding scheme outlined in Study 1 was used. Coders were blind to the study aims and all participant data. Four coders independently rated the degree to which support seekers discussing their personal goal exhibited indirect support seeking, including two coders who rated all videos and two senior coders who rated 8% and 16% of the videos to ensure better reliability and accuracy of ratings, given the complexity of rating indirect support-seeking behaviors (average ICC across all four coders = .94). In a separate wave of coding, the two coders who rated indirect support-seeking behavior for all videos also rated the degree to which support providers exhibited negative support provision (ICC = .97).

Results

Table 1 displays descriptive statistics and bivariate correlations across all measures. To account for the inherent dependence of dyadic data, we followed the guidelines by Kenny et al. (2006) to run a dyadic analysis using the MIXED procedure in SPSS 24, cross classifying partners with dyad.² As in Study 1, we also controlled for the main effect of gender (coded -1 = woman, 1 = man) in all analyses.

Power analyses. In addition to determining a priori that 100 couples would provide adequate power, we also conducted post hoc power analyses using Monte Carlo simulations according to recommendations for conducting power analyses for dyadic data (Bolger & Laurenceau, 2013; Lane & Hennes, 2018). With a sample size of 100 dyads with equality constraints for the paths modeling effects of each dyad member, and based on 20,000 Monte Carlo draws per replication, Monte Carlo simulations based on our hypothesized models (see Figure 1) revealed that power for main effects with an effect size of .36 was calculated to be .99 (Path A), and power for moderation effects with an effect size of .23 was calculated to be .92 (Path D), suggesting ample power to detect effects.

Path A. We regressed support seekers' indirect support seeking on support seekers' self-esteem. The results presented in Table 2 (top section, right-hand side of the table) demonstrated that individuals lower in self-esteem were more likely to utilize indirect support seeking.

Path B. Next, we ran an analogous model and regressed partners' negative support provision on support seekers' indirect support seeking. We also included support seekers' self-esteem to control for downstream effects. The results are presented in Table 2 (middle section, right-hand side of the

table). Although trending in the right direction, indirect support seeking was not significantly associated with partners' negative support provision.

Path C. To test whether low self-esteem indirectly predicted greater negative support from the partner through greater indirect support seeking, we calculated the indirect effect and associated CI by using the procedure recommended by Tofighi and MacKinnon (2011) using the *RMediation* Package (also see MacKinnon, Fritz, Williams, & Lockwood, 2007). The CI overlapped zero (indirect effect = -.025, 95% CI = [-0.098, 0.042]), thus demonstrating the indirect effect of self-esteem on negative partner support through indirect support seeking was not significant.

Path D. Finally, we ran an analogous model and regressed *seekers' postdiscussion perceptions of partners' responsiveness* on (a) seekers' prediscussion perceptions of partners' responsiveness to capture residual changes in the outcome, (b) seekers' self-esteem, (c) partners' negative support provision, and (d) the interaction between partners' negative support provision and support seekers' self-esteem.

The results presented in Table 2 (bottom section, right-hand side of the table) show that a significant interaction between support seekers' self-esteem and partners' negative support provision emerged. This interaction (see Figure 2, Panel B) indicated that when support seekers had high self-esteem, partners' negative support provision was not associated with changes in perceptions of partners' responsiveness (slope = -0.02, SE = 0.06, t = -0.35, p = .73, r = .03). However, when support seekers had low self-esteem, greater levels of partners' negative support provision was associated with moderate declines in perceptions of partners' responsiveness (slope = -0.26, SE = 0.06, t = -4.67, p < .001, r = .33). Furthermore, when partners' negative support provision was low, there were no significant differences between high and low self-esteem support seekers' perceptions of partners' responsiveness (B =-0.05, SE = 0.08, t = -0.59, p = .55, r = .04). However, when partners' negative support provision was high, low selfesteem support seekers had significantly lower perceived partner responsiveness compared with seekers high in self-esteem (B = 0.26, SE = 0.07, t = 3.63, p < .001, r = .26).

Ancillary analyses. As in Study 1, we conducted two sets of ancillary analyses. First, we reran our focal analyses and included the main and all interaction effects of gender to test for differences between men and women. Gender did not significantly moderate any of the focal effects (ts = 0.41-1.80, ps = .69-.073). Second, as in Study 1, we reran all the previous analyses controlling for support seekers' attachment anxiety and avoidance. In all analyses tested, the results in Table 2 remained nearly identical to those tested in our primary analyses. Thus, our findings appear to be unique to the influence of predictor variables we tested. For specific information, please refer to the OSM.

Discussion

Study 2 partially replicated the effects in Study 1, although there were also some inconsistencies. As in Study 1, support seekers with low self-esteem tended to use greater indirect support seeking during support-relevant discussions with their partners (Path A). Although greater indirect support seeking did not significantly predict partners' provision of negative support directly (Path B), which rendered the indirect effect of self-esteem on partner negative support nonsignificant (Path C), partners' greater negative support provision was associated with decreases in seekers' perceptions of partner responsiveness when seekers had low (but not high) self-esteem (Path D). Taken together, these results suggest that individuals with low self-esteem are more likely to use indirect support seeking, but are also more heavily influenced by partners' negative support.

Meta-Analysis of Effects Across Studies 1 and 2

Although Studies 1 and 2 provided some support for our conceptual model (Figure 1), there were a few inconsistencies across studies. In particular, Path B did not replicate in Study 2 (although the effect was trending in the right direction). Moreover, although Path D was significant in both studies, our test of this association suffered from low power in Study 1. Thus, to test the reliability of the predicted effects across studies, we conducted a meta-analysis of effects (Goh, Hall, & Rosenthal, 2016). We followed meta-analytic procedures for estimated weighted r values assuming random component models as outlined by Lipsey and Wilson (2001). The results of these meta-analyses are reported in Table 3. The meta-analysis pooling across both studies revealed that Path A was statistically significant: Individuals with lower selfesteem were more likely to engage in indirect support seeking. Path B was also significant: Greater indirect support seeking predicted greater negative support from the provider. Finally, Path D was significant when pooling across studies, and a meta-analysis of the simple effects for seekers, low versus high in self-esteem, revealed that support providers' negative support predicted lower perceived partner responsiveness when support seekers had low self-esteem, but not when seekers had high self-esteem.³

General Discussion

Indirect support seeking has negative consequences for relationship outcomes; yet, prior research had not examined why people use indirect support seeking, or the relational consequences associated with its use. Focusing on the significant results from a meta-analysis across two observational dyadic studies of intimate couples' support-relevant interactions, we demonstrated that people with low self-esteem were more likely to utilize indirect support seeking, that indirect support

	Average offect size	95%	CI			
	Average effect size <i>R</i>	Low	Low High		Þ	
Path A: Self-esteem \rightarrow Indirect support see	king					
Self-esteem	34	20	46	-4.54	<.00 I	
Gender	.23	.08	.36	3.02	.003	
Path B: Indirect support seeking \rightarrow Partners	s' negative support					
Indirect support seeking	.17	.01	.31	2.13	.03	
Self-esteem	.07	08	.22	0.90	.37	
Gender	.23	.08	.37	3.07	.002	
Path D: Partners' negative support $ imes$ Self-e	steem $ ightarrow$ Perceptions of parts	ners' responsive	ness			
Meta-analyses of effects						
Prediscussion relatedness or PPR	.60	.50	.69	9.13	<.001	
Self-esteem	13	02	.28	1.76	.08	
Partners' negative support	25	10	38	-3.29	<.001	
Partners' negative support $ imes$ Self-esteem	.24	.10	.38	3.23	<.001	
Gender	12	03	.26	1.54	.26	
Meta-analyses of simple effects						
High self-esteem	.08	07	.23	1.07	.29	
Low self-esteem	29	15	42	-3.86	<.00 I	

Table 3. Meta-Analyses of the Effects and Simple Effects Across Studies 1 and 2.

Note. Effect sizes (r) were computed using Rosenthal and Rosnow's (2007) formula: $r = \sqrt{t^2 + df}$. Significant hypothesized effects are highlighted in bold. CI = confidence interval; PPR = perceptions of partners' responsiveness.

seeking was associated with greater negative support from the partner, and that when partners responded in this negative manner, people with low self-esteem (and not people with high self-esteem) reported lower perceived partner responsiveness after support-relevant discussions. Our findings suggest that although people with low self-esteem likely engage in indirect support seeking to protect themselves from potential rejection, they are also particularly sensitive to the rejection associated with the use of indirect support seeking, which undermines their feelings of being accepted by their partner. The following sections discuss the theoretical and practical implications of these results.

Self-Esteem Contributes to Indirect Support Seeking and Relational Outcomes in Support Interactions

The risk regulation model purports that when people are uncertain of their partner's positive regard (i.e., when people are low in self-esteem), they will tend toward self-protection in their close relationships at the expense of openness, selfdisclosure, and vulnerability (Murray et al., 2006). Although other studies have demonstrated the pitfalls of this self-protective motive in other relationship contexts (Luerssen et al., 2017; Murray et al., 2000; Murray et al., 2002), no prior studies had examined risk regulation in the context of support seeking. Given that support seeking requires self-disclosure and dependence on one's intimate partner, we argued individuals with low self-esteem would be especially likely to behave in self-protective ways by utilizing indirect support seeking. Consistent with this theorizing, results across both studies demonstrate that individuals with lower selfesteem are more likely to use indirect support seeking during support interactions, likely because it allows the individual to garner social support without openly making oneself vulnerable (Barbee & Cunningham, 1995). These findings represent a novel and important contribution to the literature because no studies have examined the predictors of indirect support seeking, and few studies have examined the predictors of individual differences in the use of various supportseeking strategies more generally (Feeney & Collins, 2015). Given that support seeking plays a crucial role in the overall success of social support interactions, our research suggests that self-esteem plays an important role in how people attempt to garner the support they need in their intimate relationships.

Ironically, although people with low self-esteem engage in indirect support seeking out of self-protection, our results suggest the use of indirect support seeking is associated with the type of rejection they fear. Consistent with prior research (Collins & Feeney, 2000; Don et al., 2013), our meta-analytic results demonstrate that indirect support seeking is associated with greater levels of partners' negative support. Furthermore, our results demonstrate that partner negative support is uniquely damaging to the people who most want to avoid it—people low in self-esteem. Individuals with low self-esteem tend to have heightened sensitively to social rejection, which raises the stakes of their social support

tivity, find it more threating. It is also particularly noteworthy that-in accordance with our hypotheses—people with high self-esteem did not experience decrements in perceived partner responsiveness when (according to objective coders) their partners responded to their requests for support with behaviors such as criticizing, blaming, and expressing disapproval. The social support literature tends to portray negative support as universally detrimental, given that it represents the opposite of what a support seeker desires, and more broadly communicates a lack of willingness to meet the needs of the individual requesting support (Collins & Feeney, 2000; Overall et al., 2010). Despite this, the risk regulation model suggests that people with high self-esteem may respond to signs of partner rejection by reaffirming the relationship, and our results demonstrate this even applies to when support seekers with high self-esteem receive negative support from their partner. Although individuals with high self-esteem did not demonstrate increases in perceived partner responsiveness in the face of rejection (as prior research has tended to show; Ford & Collins, 2010; Murray et al., 2002), they did retain their relatively positive perceptions of partner responsiveness even in the face of partner rejection. As such, our study uniquely demonstrates that self-esteem is an important individual difference influencing how people respond to (the lack of) social support from intimate partners.

Although our findings were largely consistent across studies, there were two associations that did not replicate across studies. The indirect effect of low self-esteem increasing partners' negative support via indirect support seeking was significant in Study 1, but not in Study 2, likely because indirect support seeking was robustly associated with negative partner behavior in Study 1, but not in Study 2. Why was indirect support seeking inconsistently associated with partners' negative behavior, despite previous research demonstrating evidence for this association (Collins & Feeney, 2000; Don et al., 2013?)? One possibility, highlighted by recent theoretical perspectives, is that the impact of relationship behaviors depends on important contextual factors (see McNulty, 2016; McNulty & Fincham, 2012; Overall & McNulty, 2017). For example, during couples' conflict interactions, the success of seemingly negative communication strategies depends on a host of other factors, including the seriousness of the relationship problem, whether the problems are minor, or whether partners are insecure (see Overall & McNulty, 2017). Similarly, the impact of maladaptive support-seeking behaviors (such as indirect support seeking) can also depend on important contextual factors (Cavallo & Hirniak, 2017; Girme et al., 2013). Exploring how these contextual factors influence precisely when indirect support seeking tends to elicit negative support is an important avenue for future research.

Strengths, Caveats, and Future Directions

The current research has several strengths. We assessed the impact of observer-rated indirect support seeking across two dyadic studies of support-relevant interactions. By bridging theories on self-esteem (Murray et al., 2000; Murray et al., 2002) and social support (Barbee & Cunningham, 1995; Barbee et al., 1998), we were able to highlight important characteristics of support seekers that undermine effective support-seeking and relational outcomes. Nonetheless, the current study is not without limitations. Our data are correlational, so it is possible that partners' negative behaviors may elicit the use of indirect support seeking. However, the timing of assessment for other elements of our model is unlikely to represent a different direction of processes. For example, our results demonstrate that self-esteem assessed prior to the discussion leads to indirect support seeking during discussions. Similarly, partners' negative support *during* the discussion was associated with perceptions of partners' responsiveness assessed after the discussion. Regardless, it is important to supplement these results with longitudinal evidence, or with experimental manipulations of the processes we examined.

Although we utilized a well-validated, observational social support interaction task, the interactional outcomes of indirect support seeking are likely to differ across contexts. For instance, research suggests that social support processes in the context of daily life—where dealing with daily hassles and stressors may elicit more responsive help in the moment (Iida, Seidman, Shrout, Fujita, & Bolger, 2008; Wang & Repetti, 2014, 2016)—may not have as strong an impact on perceptions of partners' responsiveness. As such, future research should explore how the antecedents and consequences of indirect support seeking change when people are attending to immediate stressors (e.g., managing child care).

Our results provided consistent support for a risk regulation theoretical interpretation for the use and consequences of indirect support seeking. However, other motivations to use indirect support seeking may also exist, such as a lack of social competence, perceptions of the providers' competence to provide adequate support (Cavallo & Hirniak, 2017), or a desire not to burden one's partner with requests for social support (Taylor et al., 2004). Indeed, although we statistically explained a portion of the variance in the use of indirect support seeking, future research should continue to explore other factors that contribute to the use and consequences of this support-seeking strategy.

Finally, we were unable to test all our hypotheses simultaneously, such as in a structural path model. Ideally, we would have tested all our hypotheses simultaneously, however, this was not possible given power considerations. As such, we settled on an analytic strategy that provided a reasonable test of each of our crucial hypotheses, while balancing analytic complexity and power considerations. Even so, two of our paths tested in Study 1 (Figure 1, Paths C and D) suffered from low power, which is another important limitation of these analyses, and future research should continue to explore these processes with larger samples.

Conclusion

Indirect support seeking is a unique support-seeking strategy, because it is utilized with the intention of garnering support from the partner, yet is also associated with a negative response from close others. By drawing on the risk regulation model, the current research demonstrates that people with low self-esteem-who try to protect themselves from rejection-are more likely to utilize indirect support seeking. Ironically, this form of support seeking is associated with the type of rejection that people who are low in self-esteem tend to fear-negative support from their partner. Moreover, only individuals with low self-esteem tend to experience the negative consequences of indirect support seeking: Partners' negative support behaviors undermined perceptions of partners' responsiveness when seekers were low (but not high) in self-esteem. Taken together, these results bridge theories in the social support and self-esteem literatures to demonstrate that indirect support seeking appeals to individuals concerned with social rejection, but that its use can ironically undermine the very acceptance and validation that people with low self-esteem crave.

Acknowledgments

Brian P. Don and Yuthika U. Girme have shared first-authorship on this research. They each contributed to the paper equally. We thank John Updegraff and Manfred van Dulmen for use of their laboratory space and their help with data collection. We thank Adrian Castellon, Jesse Coon, Laura Eisenbrei, Felicity Frost, Jessica Gordon, Elena Hood, Madison Jaramillo, Courtney McLaughlin, and Brad Stewart for their assistance with data collection and observational coding. Finally, we thank Nickola Overall for her assistance with the observational coding scheme.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was supported by a grant from the International Association of Relationships research to Brian P. Don, as part of the 2014 Steve Duck New Scholar Award.

Notes

1. This figure is intended to provide a visual depiction our hypotheses only, and is not intended to provide an overview of our analytic strategy.

- 2. It is possible that support recipients' and providers' reactions might depend on behavior in the prior discussion. Thus, we wanted to ensure that our hypothesized effects were not influenced by the order of the couples' discussions. First, controlling for discussion order did not alter the effect of self-esteem on indirect support seeking (t = -5.28, p < .001) or the interaction between partners' negative support and recipients' self-esteem on perceptions of partners' responsiveness (t = 3.10, p = .002). Second, we re-ran all our analyses and included the main and interaction effects of discussion order. Discussion order did not moderate any of our predicted effects (ts < 0.72, ps > .48).
- 3. As far as we are aware, it is not possible to meta-analyze indirect effects across two different tests of mediation. We note this as a limitation of our analyses.

Supplemental Material

Supplemental material is available online with this article.

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