Don't Get Your Hopes Up: Avoidantly Attached Individuals Perceive Lower Social Reward When There Is Potential for Intimacy

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Abstract

We examine whether lower expectations for social reward selectively applied to high intimacy contexts may help avoidantly attached individuals minimize distress from reward loss. Studies 1, 2, and 4 demonstrated that avoidant attachment was negatively associated with perceived intimacy potential in relationships involving approach of closeness (current/future partners), but not for relationships less associated with approach of closeness (ex-partners). Studies 3 and 5 manipulated the potential for intimacy among dating prospects. Avoidant attachment was negatively associated with romantic interest in high intimacy targets but not low intimacy targets. This effect was mediated by perceived responsiveness. Studies 4 and 5 rule out perceived dissimilarity to responsive targets as a mechanism. Study 6 demonstrated that avoidants' lower expectations for connection are associated with less anticipated distress from reward loss. These results suggest that avoidant individuals may circumvent attachment system activation by perceiving lower opportunity for connection when there is potential for intimacy.

Keywords

attachment style, attachment system deactivation, intimacy, rejection, romantic relationships

> The sudden disappointment of a hope leaves a scar which the ultimate fulfillment of that hope never entirely removes.
>
> —Thomas Hardy (1877; as cited in Irwin, 2007)

Activation of the attachment system occurs in times of distress, prompting individuals to seek out support from safe and reliable others (Ainsworth & Bell, 1970; Bowlby, 1969). Avoidant attachment is typically characterized by a preference for independence and a lack of desire to connect intimately with others that appears to be founded in a concern that others will not be available when needed (Mikulincer & Shaver, 2007). Avoidantly attached individuals therefore engage in strategies to maintain attachment system deactivation because an activated attachment system puts them in the uncomfortable position of needing to seek out and depend on others to ease their distress. Research on deactivating strategies has focused on avoidant individuals' attempts to reduce exposure to emotional distress by focusing attention away from threatening information (Edelstein & Gillath, 2008) and suppressing accessibility of attachment worries, such as separation and rejection (Fraley & Shaver, 1997; Mikulincer, Birnbaum, Woddis, & Nachmias, 2000; Mikulincer, Dolev, & Shaver, 2004).

However, aside from minimizing exposure to social threats such as rejection and negative evaluation, another potential mechanism for maintaining attachment system deactivation may involve lowering hopes for obtaining social rewards such as intimacy and close connection. Strong expectations for intimacy and closeness have the potential to lead to feelings of loss, disappointment, and frustration if those expectations are not met. Such unrealized expectations of reward are experienced as aversive and punishing (Gray & McNaughton, 2000). Losing the approval of others produces hurt feelings (Buckley, Winkel, & Leary, 2004), and failure to obtain/retain intimacy in contexts like unrequited love (Baumeister, Wotman, & Stillwell, 1993) and grief (Bonanno & Kaltman, 2001) is often described as painful. In fact, human and animal research suggests that lost or frustrated reward may activate aspects of physical pain systems (MacDonald & Leary, 2005; Papini, Wood, Daniel, & Norris, 2006).

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Thus, although the distress of social threat is one potential source of attachment system activation, a less commonly considered source is the pain of unattained but desired social reward (MacDonald, Borsook, & Spielmann, 2011). As protection against the latter route to attachment system activation, avoidant individuals may perceive lower potential for intimacy and connection with others. That is, by keeping expectations for social reward low, the pain of failing to obtain that reward should also be low. For example, avoidant attachment is associated with low perceptions of intimacy in close relationships (e.g., Tidwell, Reis, & Shaver, 1996) and expectations of romantic relationship failure (Birnie, McClure, Lydon, & Holmberg, 2009). Furthermore, avoidant individuals expect lower intimacy and closeness (but not higher concerns over negative evaluation) before social interactions (MacDonald, Tackett, & Bakker, 2012). Indeed, past research has framed attachment avoidance as consistently related to lower perceptions of and desires for intimacy in relationships, largely regardless of context. However, if avoidant individuals' lower expectations of intimacy are a mechanism for maintaining attachment system deactivation, then lower perceptions of intimacy potential should only manifest in situations where there is sufficient potential for unfulfilled intimacy. That is, attachment avoidance should only predict lower intimacy potential in contexts where the potential for closeness is strong enough that reward loss is a legitimate risk.

In the present research, we explored the effects of avoidant attachment on perceived opportunities for intimacy in contexts varying in the potential for closeness. First, we examined the contexts of current, future, and past romantic relationships. We hypothesized that avoidant attachment would be negatively associated with perceived opportunities for intimacy in relationships likely to involve the approach of closeness: current romantic partners (Studies 1 and 4) and future romantic partners (Study 2). However, because people are relatively unlikely to pursue closeness with ex-partners (an assumption we test in our data), we predicted that avoidant attachment would not be associated with expected intimacy potential from past relationships.

In Study 3, we provide experimental evidence for our hypothesis, and extend the research to the mate selection stage of relationships. Unattached participants were led to expect a possible meeting with an individual who was presented as either high or low in closeness potential. We predicted that avoidant attachment would be negatively associated with perceived opportunities for intimacy only with a prospective dating partner who has the potential to promote high levels of closeness. Moreover, we aimed to demonstrate that such low expectations for intimacy potential would have consequences for romantic approach motivations. We hypothesized that avoidants' selective perceptions of lower reward when considering responsive partners would serve to reduce their desires to romantically approach those targets.

In Studies 4 and 5, we addressed an alternative hypothesis that avoidant individuals report lower intimacy potential in high intimacy contexts because they feel dissimilar to partners who promote closeness. In a correlational design examining intimacy potential with current and ex-partners (Study 4) and an experimental design manipulating intimacy potential of prospective dating targets (Study 5), we hypothesized that avoidant attachment would predict perceiving lower intimacy potential with desirable dating targets above and beyond perceived dissimilarity to the targets. Finally, in Study 6, we conducted an experiment to test the hypothesis that lowered expectations for connection would buffer avoidantly attached individuals against anticipated pain from reward loss, and thus potential attachment system activation.

Overall, consistent with past literature, we expected to find that avoidant attachment would be negatively associated with expectations for intimacy with romantic partners. However, more novel to the literature, we expected to find a boundary condition to this association such that avoidance would only be associated with perceptions of intimacy potential when there was realistic opportunity for closeness. Furthermore, we explored whether keeping hopes for closeness low would be associated with diminished expectations of pain from the loss of social reward.

Study 1

Participants in relationships evaluated perceived threat of negative evaluation and opportunities for intimacy with relationship partners likely to involve the approach of closeness (i.e., their current romantic partners) and partners unlikely to involve the approach of closeness (i.e., their most recent ex-partners). We expected that avoidant attachment would be negatively related with perceived opportunity for intimacy with current romantic partners, but would be unrelated to hypothetical intimacy potential with ex-partners.

Unlike the deactivated attachment system of avoidantly attached individuals, anxiously attached individuals experience chronic hyperactivation of the attachment system, such that they experience relatively chronic feelings of upset and seek proximity and security from close others even when circumstances objectively do not seem particularly distressing (Mikulincer, Gillath, & Shaver, 2002). Anxious individuals' chronically hyperactivated attachment system heightens vigilance for signs of attachment figure unavailability (Mikulincer & Shaver, 2007), leading to a relatively constant sense of social threat potential (MacDonald et al., 2012). For this reason, we hypothesized that anxious attachment would positively predict perceived risk of rejection threat in all relationship contexts.

Method

Participants. Participants were involved in relationships and had experienced a breakup. Participants were recruited in

Table 1. Means, Standard Deviations, and Reliabilities Across Studies 1 and 2

	Study 1			Study 2		
	M	*SD*	α	*M*	*SD*	α
Anxious attachment	3.14	0.87	.88	3.38	0.84	.86
Avoidant attachment	3.20	0.69	.84	3.41	0.65	.82
Intimacy potential ex	2.22	1.10	.94	2.83	1.15	.89
Negative evaluation threat ex	2.44	1.01	.82	2.62	0.98	.81
Intimacy potential current	4.34	0.73	.91	–	–	–
Negative evaluation threat current	2.65	0.83	.79	–	–	–
Intimacy potential future	–	–	–	4.03	0.74	.73
Negative evaluation threat future	–	–	–	2.95	0.85	.79
Intentions to pursue ex	1.69	1.01	.94	2.09	1.08	.88
Intentions to find new partner	–	–	–	3.79	1.20	–

two ways: Undergraduate students participated in small groups for course credit and community members participated online through links on Craigslist.org for entry into a draw.[1] A total of 213 participants began the study, with 184 meeting all inclusion criteria.[2] Participants ranged in age from 18 to 61 years old (M = 27.8, SD = 10.4). There were 150 females, 33 males, and 1 unidentified. Current relationships ranged from less than 1 month to 251 months in length (M = 28.5, SD = 38.6). Participants' most recent breakups had occurred between 1 and 252 months prior to the study (M = 37.4, SD = 44.0), and the relationship had lasted from 2 weeks to 120 months (M = 24.2, SD = 26.5).

Procedure. All participants completed the measures below in the order presented, except for the final measure of behavioral intentions to pursue the ex-partner, which was completed only by online participants.

Measures

Attachment style. Adult attachment was assessed using the Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994). Participants indicated on a scale from 1 (*totally disagree*) to 6 (*totally agree*) the degree to which they agreed with statements tapping into subscales of anxious attachment (e.g., "I worry that others won't care about me as much as I care about them") and avoidant attachment (e.g., "I prefer to depend on myself rather than other people"). See Table 1 for all scale reliabilities and descriptive statistics in Studies 1 and 2.

Perceived threat of negative evaluation and opportunity for intimacy. The Romantic Social Threat and Reward Scales (STARS–Romantic; Spielmann, MacDonald, & Tackett, 2012) were used to assess participants' perceived threat of negative evaluation and opportunities for intimacy with their current romantic partners and with their most recent ex-partner in a hypothetical renewal of their relationship. Perceived threat of negative evaluation was assessed with items such as "I'm often concerned about my partner judging me negatively" (current partner) and "I would be concerned about my partner judging me negatively if we renewed our relationship" (ex-partner). Perceived opportunity for intimacy was assessed with items such as "My partner and I have a meaningful connection" (current partner) and "I think we could develop a meaningful connection if we renewed our relationship" (ex-partner). Participants responded on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*), and responded to items about current partners and ex-partners in counterbalanced order.

Intentions to pursue ex-partner. To confirm that ex-partners represent a relationship context that does not involve strong likelihood of approach of closeness, the subsample of online community members (n = 113) completed a measure of behavioral intentions to pursue the ex-partner (Spielmann et al., in press). Participants responded to items such as, "I intend to get back together with my ex-partner," on a scale from 1 (*not at all*) to 5 (*definitely*).

Results

As can be seen in Table 1, actual intentions to renew relationships with ex-partners were quite low. Correlations between variables in Studies 1 and 2 are presented in Table 2.

Attachment Style Predicting Perceived Negative Evaluation Threat and Intimacy Potential. To examine the effects of attachment style on perceived risks of negative evaluation and opportunities for intimacy, we regressed perceived rejection threat and intimacy potential with each relationship target (current partners and ex-partners) onto anxious and avoidant attachment simultaneously. All standardized regression coefficients are presented in Table 3. As predicted, avoidant attachment negatively predicted perceived opportunity for intimacy with current partners but was not related to perceived opportunity for intimacy with ex-partners. Anxious attachment, on the other hand, predicted greater perceived threat of negative evaluation from current and ex-partners.

In testing for the hypothesized avoidance by target interaction, we accounted for within-participant dependence due to the repeated measures design by utilizing hierarchical linear modeling. Specifically, we examined whether avoidant attachment (grand mean centered) interacted with relationship target (0 = ex-partner, 1 = current partner) to predict perceived intimacy potential. We also included length of the current relationship, months passed since the breakup, and anxious attachment as covariates (all grand mean centered). Because anxious attachment was correlated with avoidant attachment (see Table 2), the interaction between anxious attachment and target was also included to account for bias in the estimate of the avoidance by target interaction (Yzerbyt, Muller, & Judd, 2004). A main effect of months since the breakup revealed that participants saw marginally more intimacy potential overall the more recently they had been with an ex-partner, b = −.004, SE = .002, p = .08.

Table 2. Intercorrelations Between Variables in Studies 1 and 2

	Study 1					Study 2				
	1	2	3	4	5	1	2	3	4	5
1. Anxious attachment	–					–				
2. Avoidant attachment	.51****	–				.38****	–			
3. Intimacy potential ex	.12	.08	–			.15**	.03	–		
4. Negative evaluation threat ex	.33****	.15**	.27****	–		.41****	.16**	.27****	–	
5. Intimacy potential current/future	−.07	−.27***	−.37****	−.08	–	−.23****	−.34****	−.11*	−.11*	–
6. Negative evaluation threat current/future	.37****	.18**	.03	.24***	−.05	.66****	.19***	.04	.53****	−.11*

*$p < .10$. **$p < .05$. ***$p < .01$. ****$p < .001$.

Table 3. Standardized Regression Coefficients (β) From Simultaneous Regression of Anxious and Avoidant Attachment in Studies 1 and 2

	Study 1		Study 2	
	Anxious attachment	Avoidant attachment	Anxious attachment	Avoidant attachment
Negative evaluation threat current	.40****	−.03	–	–
Negative evaluation threat future	–	–	.69****	−.06
Negative evaluation threat ex	.34****	−.02	.41****	.01
Intimacy potential current	.09	−.34****	–	–
Intimacy potential future	–	–	−.18***	−.22****
Intimacy potential ex	.10	.03	.16**	−.03
Intentions to pursue ex-partner	.16	.08	.26***	−.24***
Intentions to find new partner	–	–	−.12	−.06

**$p < .05$. ***$p < .01$. ****$p < .001$.

Participants also rated their current partners as higher in intimacy potential than their ex-partners, $b = 2.15$, $SE = .11$, $p < .001$. This main effect was qualified by a marginally significant relationship target by attachment avoidance interaction, $b = -.35$, $SE = .19$, $p = .07$ (Figure 1). As expected, simple effects tests revealed that when considering current relationship partners, avoidance negatively predicted perceived intimacy potential, $b = -.30$, $SE = .09$, $p = .002$. However, when considering ex-partners, avoidance was not a significant predictor of perceived intimacy potential, $b = .05$, $SE = .14$, *ns*. The interaction between anxious attachment and target was not significant, $b = -.04$, $SE = .16$, *ns*.

Discussion

Avoidant attachment was negatively associated with perceived opportunities for intimacy with one's current romantic partner but was unrelated to intimacy potential with an ex-partner. If nothing else, the data show that avoidant individuals do not simply see relatively lower levels of reward in all social targets. Thus, some account must be made of when avoidance can be expected to negatively predict perceived opportunity for intimacy and when it cannot. One possible explanation—a statistical floor effect—seems unlikely. Participants represented the entire range of possible scores for intimacy potential with an ex-partner and the scale was not skewed (skewness statistic = .62). Moreover, as can be seen in Table 1, the mean was located not far from the midpoint of the scale. Therefore, although there was sufficient statistical range for a negative relation between avoidant attachment and the reward value of ex-partners, it did not emerge.

The data from Study 1 are consistent with the notion that when avoidant individuals consider social targets they do not expect to approach (i.e., ex-partners), the tendency to perceive lower intimacy potential is diminished. These findings suggest that perceiving lower opportunity for intimacy potential may, in part, protect against the vulnerability of lost or frustrated reward. On the other hand, the results showing that anxious attachment is associated with perceptions of greater risk of rejection are consistent with a large body of literature on attachment anxiety generally (e.g., Mikulincer & Shaver, 2007).

Although we attribute the effects of attachment avoidance to the likelihood of approaching certain relationships, an important limitation of Study 1 is that current and ex-partners differ in the extent to which they evoke actual versus hypothetical relationships. A more stringent test of our hypothesis would involve a comparison between two equivalently intangible romantic unions—one with a likelihood of real-life approach and the other without. To this end, recruitment in

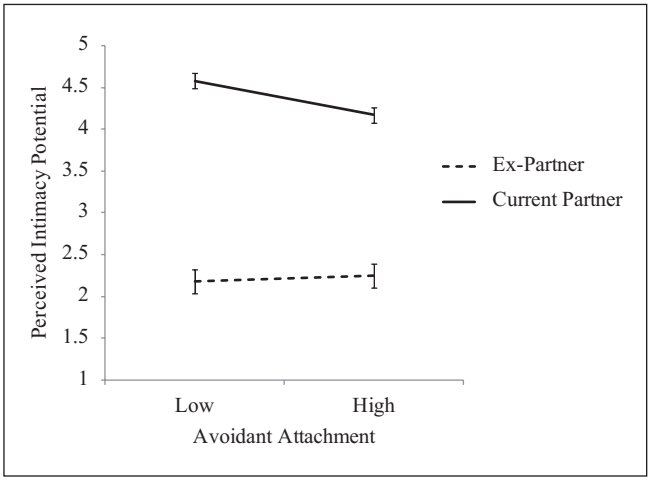

Figure 1. Perceived intimacy potential as a function of avoidant attachment and target in Study 1, controlling for anxious attachment, length of current relationship, and months since breakup with the ex-partner

Study 2 was restricted to participants who were currently single, who considered two hypothetical romantic unions—their imagined future romantic relationships and a hypothetical reunion with their ex-partner.

Study 2

Method

Participants. Participants in Study 2 were single undergraduates and online participants who had experienced a breakup. A total of 260 individuals were recruited, with 248 meeting all inclusion criteria. There were 190 females, 57 males, and 1 unidentified, ranging in age from 17 to 57 years old (M = 25.8, SD = 9.1). Participants reported that their most recent relationship had ended between less than 1 month and 334 months prior to participation in the study (M = 17.5, SD = 34.1), and that their past relationship had lasted between 1 month and 370 months (M = 20.4, SD = 35.0).

Procedure and Measures. The procedure and measures were the same as in Study 1, with the addition of the following measures.

Perceived threat of negative evaluation and opportunity for intimacy. As in Study 1, Spielmann et al.'s (in press) STARS–Romantic scales were used to assess perceived threat of negative evaluation and opportunity for intimacy with ex-partners. Participants in Study 2 completed a scale relevant to their anticipated future romantic partners. Perceived threat of negative evaluation from future partners was assessed with items such as "I'm concerned about being judged negatively in future relationships," and perceived opportunity for intimacy was assessed with items such as "I think I could develop a meaningful connection with another partner."

Intentions to find a new partner. To gauge intentions to approach new relationships, the subsample of online participants (n = 163) responded on a scale from 1 (*not at all*) to 5 (*definitely*) to the question "I intend to find a new partner in the near future."

Results

Approaching Closeness With Ex-Partners Versus New Partners. We first examined whether future partners were more likely to garner approach compared with ex-partners. A paired-samples t test among the subsample of online participants revealed that ex-partners were significantly less likely to be intended targets of pursuit than future partners, $t(163) = -11.99$, $p < .001$. Moreover, as can be seen in Table 3, simultaneous regression of anxious and avoidant attachment revealed that avoidance was negatively associated with intentions to pursue the ex, whereas anxiety was associated with significantly greater intentions to pursue the ex. However, neither attachment dimension predicted intentions to pursue new relationships.

Attachment Style Predicting Perceived Negative Evaluation Threat and Intimacy Potential. As also seen in Table 3, anxious attachment was positively associated with perceived threat of negative evaluation from future and past partners. Avoidant attachment was negatively associated with perceived opportunity for intimacy with future partners but not with ex-partners. To confirm that ex- versus future partners were differentially associated with avoidant individuals' perceptions of intimacy potential, we tested an avoidant attachment (grand mean centered) by relationship target (0 = ex-partner, 1 = future partner) interaction using hierarchical linear modeling, including anxious attachment and months passed since the breakup as covariates (both grand mean centered). We again included the interaction between anxious attachment and target to account for bias in the interaction between avoidance and target (Yzerbyt et al., 2004). Once again, the more recently participants had been with ex-partners, the more intimacy potential they perceived overall, $b = -.003$, $SE = .001$, $p = .03$. Participants also rated their future partners as higher in intimacy potential than their ex-partners, $b = 1.21$, $SE = .09$, $p < .001$. As predicted, this main effect was qualified by a significant relationship target by attachment avoidance interaction, $b = -.33$, $SE = .15$, $p = .03$ (see Figure 2). When considering future relationship partners, avoidance negatively predicted perceived opportunity for intimacy, $b = -.31$, $SE = .09$, $p = .001$. However, when considering ex-partners, avoidance was not a significant predictor of perceived opportunity for intimacy, $b = .02$, $SE = .13$, *ns*.

Unlike Study 1, there was also a significant relationship target by attachment anxiety interaction, $b = -.27$, $SE = .12$, $p = .03$. The pattern of results is similar to that depicted in Figure 2, such that anxious attachment negatively predicted

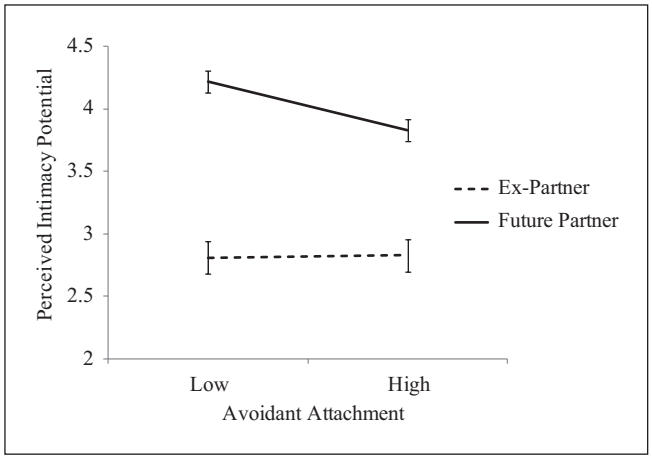

Figure 2. Perceived intimacy potential as a function of avoidant attachment and target in Study 2, controlling for anxious attachment and months since breakup with the ex-partner

perceived intimacy potential when considering future partners, $b = -.13$, $SE = .06$, $p = .04$, but not when considering ex-partners, $b = .14$, $SE = .10$, *ns*.

Discussion

The results of Study 2 replicated those of Study 1 based on a contrast of two hypothetical relationships: an imagined future relationship and a fantasized reunion with an ex-partner. As predicted, when considering partners likely to be approached (e.g., future partners), avoidant attachment was negatively associated with perceived opportunity for intimacy. When considering partners unlikely to be approached (i.e., ex-partners), avoidant attachment was not associated with perceived intimacy potential. A statistical floor effect again seems an unlikely explanation of our effects. The mean of intimacy potential with an ex-partner was located around the midpoint of the scale and the distribution of scores was not skewed (skewness statistic = .11).

In addition, anxious attachment was a consistent predictor of perceived threat of negative evaluation across relationship contexts. Surprisingly, anxious attachment also predicted perceiving lower intimacy potential with future partners. Lower intimacy potential with future partners may reflect anxious individuals' general concerns and pessimism about future relationships (Carnelley & Janoff-Bulman, 1992), which is particularly common among single anxiously attached individuals (Spielmann, MacDonald, & Wilson, 2009).

Study 3

The results of Studies 1 and 2 suggest that avoidant attachment is not universally associated with lower social reward perceptions, but instead avoidant individuals selectively perceive lower reward from romantic partners who pose the risk of disappointment. However, the correlational nature of these studies leaves open alternative causal explanations. Furthermore, although one feature of ex-partners is that they are less likely to be approached, they also differ in a number of other ways from our comparison groups. Study 3 was designed to account for these issues by using an experimental manipulation of likelihood of approach that offers a conceptual replication of our first studies while operationalizing potential for closeness in a different way. Specifically, participants were led to expect an interaction with a prospective dating partner who was presented as either high or low in partner responsiveness. Partner responsiveness refers to the extent to which an individual is validating and caring toward their partner (Reis, Clark, & Holmes, 2004). Responsiveness is a key component of interpersonal intimacy and closeness (Laurenceau, Feldman Barrett, & Pietromonaco, 1998) and tends to be a valued and sought out trait in a relationship partner (e.g., Regan, 1998). We hypothesized that avoidant attachment would be negatively associated with perceived opportunity for intimacy with high responsiveness targets, but unassociated with opportunity for intimacy with low responsiveness targets. Furthermore, to more directly test whether lower expectations for intimacy may reduce desires to approach romantic partners, we assessed romantic interest in the targets (e.g., willingness to go on a date). We hypothesized that a negative relation between avoidant attachment and romantic interest in highly responsive targets would be mediated by lower perceptions of intimacy potential.

Method

Participants. Participants were 129 single, heterosexual female undergraduate students at the University of Toronto.[3]

Procedure. Participants were told that the study was investigating online dating and impression formation, involving an online dating task with two ostensible male participants. The women in our study first created a dating profile that they believed would be evaluated by the two male participants.[4] Participants then read the two male profiles (prepared ahead of time by the experimenter) containing personal details, hobbies, and qualities as a relationship partner. The two profiles varied systematically in the extent to which the male appeared to be responsive to a relationship partner's needs (see below). Participants then evaluated the intimacy potential of each target and their interest in romantically approaching each target.

Measures

Attachment style. Participants first completed the ASQ to assess anxious attachment ($M = 3.24$, $SD = .75$; $\alpha = .84$) and avoidant attachment ($M = 3.22$, $SD = .59$; $\alpha = .79$).

Dating profiles. The two dating profiles varied in the degree to which the target mentioned traits representative of someone high in responsiveness. Levels of responsiveness for each target were confirmed through pilot testing, $t(13) = 13.02$, $p < .001$. The high responsiveness target made statements

such as, "I am quick to respond to my girlfriend's needs and do my best to help her fulfill those needs," and "I make sure my partner knows that I appreciate her," whereas the low responsiveness target made statements such as, "As a boyfriend I figure girls should be able to take care of themselves," and "I tell it like it is and people know where I stand." The order in which participants viewed the two profiles was counterbalanced.

Perceived intimacy potential. After viewing the dating profiles, participants rated the extent to which they perceived the male targets provided opportunity for intimacy. The scale consisted of 9 items (e.g., "This person seemed comfortable developing emotional bonds with others" and "This person seemed caring and affectionate") on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*); (M = 4.36, SD = 1.87; α = .98).

Romantic interest. Participants indicated their desire to romantically approach the male targets. This measure of romantic interest was assessed using a 5-item scale with items such as, "I would be interested in going on a first date with this person." Participants responded on scale from 1 (*strongly disagree*) to 7 (*strongly agree*); (M = 4.03, SD = 1.53; α = .92).

Results

Perceived Intimacy Potential. To explore whether avoidant attachment differentially predicted perceptions of intimacy potential across targets, we tested for an avoidant attachment (grand mean centered) by target (0 = low responsiveness, 1 = high responsiveness) interaction using hierarchical linear modeling. We also included anxious attachment (grand mean centered), presentation order (0 = low intimacy potential target first, 1 = high intimacy potential target first), and their interactions with target in the model. Participants perceived greater opportunity for intimacy with the high responsiveness target than with the low responsiveness target, b = 3.42, SE = .16, p < .001. There was a marginal interaction between presentation order and target, b = −.42, SE = .22, p = .06, such that the low responsiveness target was evaluated as lower in intimacy potential if the high responsiveness target was presented first compared with when the low responsiveness target was presented first, b = .42, SE = .20, p = .03. Evaluations of the high responsiveness target were not affected by presentation order, b = −.001, SE = .10, *ns*.

Above and beyond order effects, there was a significant interaction between avoidant attachment and target predicting perceived intimacy potential, b = −.45, SE = .22, p = .04 (Figure 3). Avoidant attachment was not significantly associated with perceived intimacy potential when evaluating the low responsiveness target, b = .24, SE = .21, *ns*. However, avoidant attachment was significantly, negatively related to perceived intimacy potential for the high responsiveness target, b = −.22, SE = .10, p = .03. There was no interaction between anxious attachment and target on perceived intimacy potential, b = .13, SE = .18, *ns*.

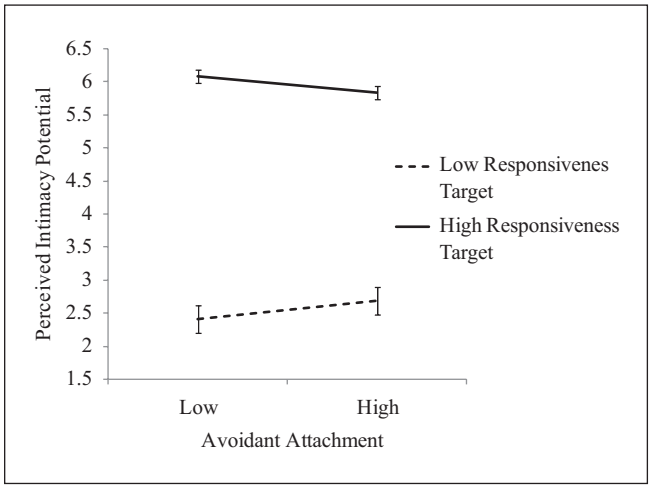

Figure 3. Perceived intimacy potential as a function of avoidant attachment and target in Study 3, controlling for presentation order and anxious attachment

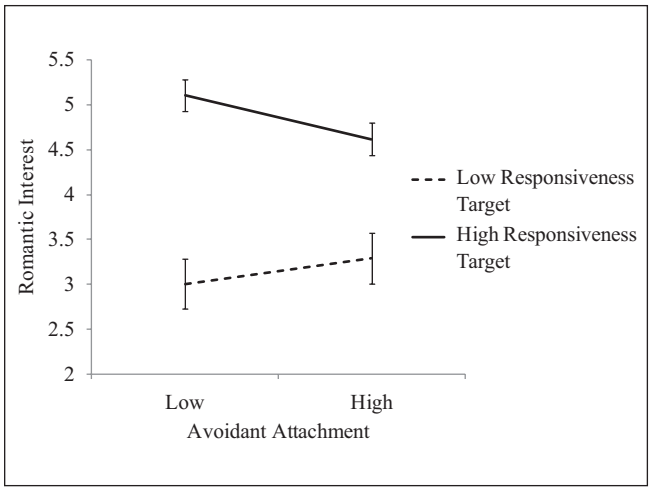

Figure 4. Romantic interest as a function of avoidant attachment and target in Study 3, controlling for presentation order and anxious attachment

Romantic Interest. The same analysis as above was conducted with romantic interest as the dependent variable. Participants were more romantically interested in the high responsiveness target than the low responsiveness target, b = 1.72, SE = .25, p < .001. There was not a significant interaction between presentation order and target predicting romantic interest, b = −.35, SE = .34, *ns*. However, there was a marginally significant interaction between avoidant attachment and target, b = −.66, SE = .34, p = .06, as well as a significant interaction between anxious attachment and target, b = .57, SE = .28, p = .04. The interaction with avoidant attachment is depicted in Figure 4. Avoidance was not significantly associated with romantic interest when evaluating the low responsiveness target, b = .24, SE = .28, *ns*. However, avoidant attachment was significantly, negatively associated with romantic interest

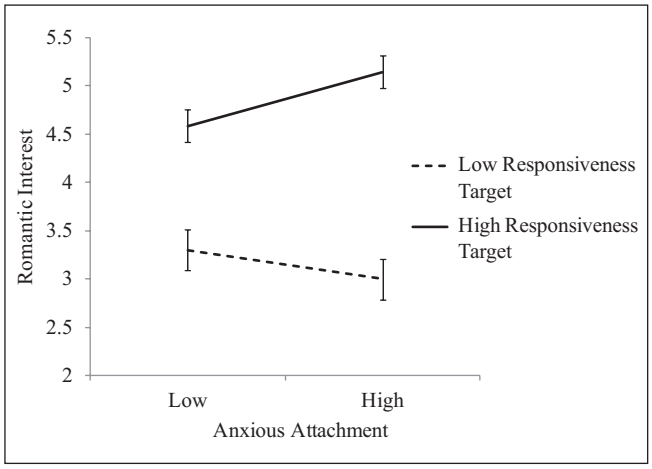

Figure 5. Romantic interest as a function of anxious attachment and target in Study 3, controlling for presentation order and avoidant attachment

when evaluating the high responsiveness target, $b = -.42$, $SE = .18$, $p = .03$. Figure 5 depicts the interaction between anxious attachment and target reward. Anxious attachment did not predict romantic interest when evaluating the low responsiveness target, $b = -.20$, $SE = .21$, *ns*. However, anxious attachment positively predicted romantic interest when evaluating the high responsiveness target, $b = .37$, $SE = .17$, $p = .03$.

Perceived Intimacy Potential Mediates Romantic Interest. To explore our hypothesis that avoidant individuals derogate opportunities for intimacy as a strategy for reducing desires to approach those who present the risk of frustrated reward, we tested whether the avoidance by target moderation of romantic interest was mediated by perceived intimacy potential. Following the recommendations of Muller, Judd, and Yzerbyt (2005) and Zhang, Zyphur, and Preacher (2009), we conducted a multilevel mediated moderation. To account for the mediated effect between participants (avoidant attachment is a between-participants variable) and within participants (perceived intimacy potential is a within-participant variable), Zhang et al. (2009) recommend including the mediator at the within- and between-participant levels. We therefore included perceived intimacy potential (group-mean centered) as a within-participant mediator, and included each participant's mean perceived intimacy potential score as a between-participant mediator.

Satisfying the conditions for mediated moderation (Muller et al., 2005), the avoidant attachment by target interaction was reduced to nonsignificance, $b = -.34$, $SE = .32$, $p = .28$. The within-participant component of perceived intimacy potential was a significant predictor of romantic interest, $b = .68$, $SE = .10$, $p < .001$, and a significant Sobel test confirmed mediation, Sobel = 1.98, $p = .05$. The between-participant component of perceived intimacy potential was a significant predictor of romantic interest, $b = .81$, $SE = .09$, $p < .001$, and a significant Sobel test confirmed mediation, Sobel = 2.02, $p = .04$. In other words, the finding that avoidant attachment predicts weaker romantic interest in high responsiveness can be explained by avoidants' relatively low perceptions of the target's intimacy potential.

We also wanted to explore whether the reverse mediation was significant. Do avoidant individuals perceive lower intimacy potential because they are less romantically interested in responsive targets? The avoidant attachment by target interaction predicting perceived intimacy potential was reduced to nonsignificance with the inclusion of romantic interest, $b = -.24$, $SE = .21$, $p = .25$. The within-participant component of romantic interest was a significant predictor of perceived intimacy potential, $b = .33$, $SE = .04$, $p < .001$, and mediation was suggested by a marginally significant Sobel test, Sobel = 1.83, $p = .07$. The between-participant component of romantic interest was also a significant predictor of perceived intimacy potential, $b = .41$, $SE = .06$, $p < .001$, and mediation was again suggested by a marginally significant Sobel test, Sobel = 1.85, $p = .06$. In other words, the data were also consistent with the interpretation that avoidants' lower perceived intimacy potential with responsive targets was due to weaker romantic interest.

Discussion

The results of Study 3 are consistent with the hypothesis that avoidantly attached individuals have selectively lower perceptions of reward potential for dating targets who may tempt them to approach closeness. Only when considering objectively warm and rewarding romantic targets was avoidant attachment negatively associated with the extent to which the targets were seen as partners capable of providing intimacy. As in Studies 1 and 2, avoidant attachment was not universally related to the intimacy potential of prospective romantic partners. Specifically, avoidant attachment was not significantly related to perceptions of opportunity for intimacy with less responsive individuals. Importantly, evaluations of intimacy potential had significant consequences for romantic decision making. Perceiving lower opportunities for close connection kept romantic interest at bay, inhibiting avoidants' desires to approach the rewarding (and thus potentially disappointing) partners. However, the data were also consistent with the interpretation that weaker romantic interest led, to a certain extent (suggested by marginally significant mediation models), to perceiving lower opportunity for connection. For anxiously attached individuals, on the other hand, being presented with a rewarding romantic target garnered especially high romantic interest.

Importantly, it is unlikely that the effects of Study 3 are due to a statistical floor effect in desires to connect romantically with the less responsive targets. On 1 to 7 scales, the

low responsiveness targets garnered mean scores of 2.75 and 3.24 for intimacy potential and romantic interest, respectively. Moreover, neither measure was skewed (skewness for intimacy potential = .60, and romantic interest = .18), suggesting that although there was sufficient statistical range for avoidant individuals to perceive lower intimacy potential and romantic interest with low responsiveness targets, they did not do so. Rather, they did so only when targets were high in responsiveness.

We suggest that Studies 1 to 3 indicate that avoidant individuals selectively perceive the intimacy potential of partners who might otherwise motivate approach. However, an alternative explanation is that avoidant individuals perceive themselves as dissimilar from highly responsive individuals, and thus do not feel that they could connect with responsive partners. Perceived similarity is important for interpersonal attraction (Montoya, Horton, & Kirshner, 2008). This alternative hypothesis suggests that avoidant individuals may perceive little potential for intimacy with—and consequently express lower romantic interest in—targets who offer closeness due to their perceived dissimilarity.

The goal of Studies 4 and 5 was to explore the role of perceived dissimilarity on our effects. In Study 4, individuals in relationships evaluated their current and ex-partners on intimacy potential as well as similarity in values and relationship goals. To rule out the alternative hypothesis that our effects are due to perceived dissimilarity, we would need to demonstrate that avoidant individuals' perceptions of weaker intimacy potential hold above and beyond perceptions of dissimilarity.

Study 4

Study 4 was designed as an extension to Study 1. Individuals in relationships were asked to report their perceived intimacy potential with, and perceived similarity to, current and ex-partners. We hypothesized that avoidant attachment would negatively predict perceived intimacy potential with current romantic partners above and beyond perceived similarity to those partners.

Method

Participants. Participants involved in relationships were recruited online via Amazon.com's Mechanical Turk (www.mturk.com). A total of 180 individuals completed the study, with 166 meeting all criteria for inclusion. There were 105 females and 61 males, ranging in age from 18 to 59 years old (M = 30.4, SD = 9.4). Participants reported that their current relationship ranged between 1 month and 300 months (M = 61.07, SD = 69.1). Participants' most recently ended relationships had broken off between 2 and 350 months prior to the study (M = 79.40, SD = 75.21) and had lasted between less than 1 month and 360 months (M = 26.42, SD = 38.79).

Procedure and Measures

Attachment style. The ASQ was again used to assess anxious attachment (M = 3.18, SD = .87; α = .89) and avoidant attachment (M = 3.42, SD = .74; α = .86).

Perceived opportunity for intimacy. Participants completed the STARS reward subscale for current partners (M = 4.22, SD = .83; α = .93) and ex-partners (M = 2.17, SD = 1.14; α = .95) presented in Study 1.

Perceived partner similarity. To assess perceived partner similarity, participants completed a 9-item measure created by the authors. On a scale from 1 (*not at all similar*) to 7 (*extremely similar*), participants responded to items such as, "How similar are you and your current partner in terms of how emotionally close you want to be with each other?" and "How similar are you and your current partner in terms of the main values you hold important?" (M = 5.41, SD = 1.33; α = .96). Participants responded to the same items reworded to refer to past similarity with ex-partners (e.g., "How similar were you and your ex-partner in terms of how emotionally close you wanted to be with each other?" M = 3.32, SD = 1.38; α = .93).

Results

We first aimed to replicate the finding from Study 1. Using hierarchical linear modeling, we tested an avoidant attachment (grand mean centered) by relationship target (0 = ex-partner, 1 = current partner) interaction with perceived intimacy potential as the dependent variable. We included length of the current relationship and anxious attachment as covariates, including the interaction between anxious attachment and target to account for bias in the avoidance by target interaction. Participants perceived greater intimacy potential with current partners than with ex-partners, b = 2.05, SE = .12, $p < .001$. However, this main effect was qualified by a marginally significant interaction with avoidant attachment, $b = -.39$, SE = .23, p = .09. Simple effects tests revealed that avoidant attachment was a significant, negative predictor of perceived intimacy potential with one's current partner, $b = -.32$, SE = .11, p = .006, but not with one's ex-partner, b = .07, SE = .16, *ns*. There was also a marginally significant interaction with anxious attachment, $b = -.33$, SE = .17, p = .06. Simple effects revealed that anxious attachment was a marginally significant, positive predictor of perceived intimacy potential with ex-partners, b = .22, SE = .12, p = .06, but not with current partners, $b = -.11$, SE = .09, *ns*.

Next, we conducted the same analysis with perceived partner similarity as the dependent variable. Once again, there was a significant main effect of target, b = 2.09, SE = .15, $p < .001$. However, the interaction between target and avoidant attachment was not significant, $b = -.41$, SE = .26, p = .12. Simple effects revealed that avoidant attachment was a marginally significant, negative predictor of perceived partner similarity with current partners, $b = -.32$, SE = .17, p = .06, but not with ex-partners, b = .09, SE = .18, *ns*. There was a marginally significant interaction with anxious

attachment, $b = -.37$, $SE = .21$, $p = .09$. However, simple effects revealed no significant prediction by anxious attachment in either the ex-partner, $b = .12$, $SE = .16$, *ns*, nor current partner, $b = -.24$, $SE = .16$, *ns*, contexts.

Finally, we explored whether the effects of avoidant attachment on lower perceived intimacy potential could be explained by perceived dissimilarity. We included perceived similarity as a grand mean centered Level 1 predictor in the previous model predicting perceived intimacy potential. We also included the interactions with similarity and anxious and avoidant attachment to account for bias in the avoidant by target interaction. Although perceived partner similarity was a significant predictor of perceived intimacy potential, $b = .46$, $SE = .04$, $p < .001$, the interaction between target and avoidant attachment on perceived intimacy potential was significant above and beyond the effects of similarity, $b = -.57$, $SE = .23$, $p = .01$.[5] Importantly, above and beyond the effects of perceived similarity, simple effects reveal that avoidant attachment remains a significant, negative predictor of perceived intimacy potential when considering current partners, $b = -.34$, $SE = .09$, $p = .001$, but not when considering ex-partners, $b = .24$, $SE = .16$, *ns*.

Discussion

The results of Study 4 replicated those of Study 1, such that avoidantly attached individuals perceived lower opportunity for intimacy and close connection with their current partners but not ex-partners. However, Study 4 demonstrates that the relation between avoidant attachment and perceived opportunity for intimacy cannot be explained by perceived dissimilarity. Study 5 attempted to address the issue of similarity within the context of an experimental design.

Study 5

Study 5 used a comparable dating profile methodology as Study 3, assessing perceived intimacy potential and romantic interest in responsive versus unresponsive targets, while also assessing perceived similarity to each target. To promote greater generalizability of our effects, we used a new manipulation of target responsiveness and different assessments of perceived intimacy potential and romantic interest. In addition, Study 5 included males and females, whereas Study 3 was limited to female participants. Although we expected no differences between sexes in terms of how avoidance would predict intimacy potential and romantic interest, a replication study with males and females seemed a cautious approach as males are sometimes found to be higher in avoidance than females (e.g., Del Giudice, 2011). We hypothesized that, replicating Study 3, avoidant attachment would predict lower perceived intimacy potential with, and less romantic interest in, more responsive dating targets. We further hypothesized that these effects would hold above and beyond perceived dissimilarity to highly responsive targets.

Method

Participants. Single, heterosexual participants were recruited from the undergraduate participant pool and online via Mechanical Turk. A total of 351 participants completed the study, with 338 meeting all inclusion criteria. Participants included in the final analyses were 227 females and 111 males, ranging in age from 17 to 68 ($M = 26.3$, $SD = 10.1$).

Procedure. After completing measures of attachment, participants viewed an ostensibly real dating profile of a target of the opposite sex. The profile included a photo, as well as a written statement that depicted the target as either high or low in partner responsiveness (manipulated between-participants). In line with other hypotheses being tested, the photo of the target varied in attractiveness. However, as photo attractiveness did not moderate any of the effects discussed in this study, we include it only as a covariate and not as a moderator. Following the profile, participants evaluated the target's intimacy potential, perceived similarity, and romantic appeal.

Measures

Attachment style. Participants completed the ASQ to assess anxious attachment ($M = 3.23$, $SD = .89$; $\alpha = .93$) and avoidant attachment ($M = 3.42$, $SD = .67$; $\alpha = .83$).

Dating profiles. Participants viewed one dating profile of the opposite sex that was randomly assigned to depict a target who appeared high or low in partner responsiveness. The profiles were different from those used in Study 3. Levels of responsiveness for each target were again confirmed through pilot testing, $t(21) = 17.42$, $p < .001$. The high responsiveness target made statements such as, "When I'm dating someone, I really care about putting in the effort and making it work. For me, that means paying attention to my girlfriend and getting to know who she really is as a person." The low responsiveness target made statements such as,

> I like to keep conversations light and not too serious when they're not work-related, and I most prefer situations that are easy and problem-free. I deal with enough of that stressful stuff at work. Who needs that drama in their relationship?

Participants were also randomly assigned to view one of two attractive photos or one of two unattractive photos.

Perceived intimacy potential. Participants rated on a scale from 1 (*not at all*) to 5 (*extremely*) the extent to which they perceived the targets provided opportunity for intimacy. Participants rated the extent to which they thought the target was caring, considerate, and the extent to the two of them would "click" ($M = 2.66$, $SD = 1.07$; $\alpha = .84$).

Perceived similarity. To assess whether perceived intimacy potential was a reflection of perceived similarity to the target, participants completed two items assessing their similarity to

the target in terms of values and sincerity on a scale from 1 (*not at all*) to 5 (*extremely*); ($M = 2.70$, $SD = 1.16$; $\alpha = .79$).

Romantic interest. To indicate their romantic interest in the target, participants reported the extent to which they thought the target was desirable as a romantic partner, the extent to which they wished to learn more about the target, and their desire to date the target. Participants responded on a scale from 1 (*not at all*) to 5 (*extremely*); ($M = 2.28$, $SD = 1.10$; $\alpha = .90$).

Results

All of the effects presented below held controlling for participant sex and were not moderated by sex. Therefore, all analyses below are reported collapsing across sex.

Perceived Intimacy Potential. To explore whether avoidantly attached individuals perceived lower potential for intimacy with more responsive targets, we conducted a regression analysis with perceived intimacy potential as the dependent variable. In Step 1, we entered anxious and avoidant attachment (standardized), target responsiveness (0 = low responsiveness target, 1 = high responsiveness target), and target attractiveness (0 = less attractive, 1 = more attractive). In Step 2, we entered the interaction between avoidant attachment and target responsiveness as well as anxious attachment and target responsiveness. As a check of the validity of our manipulation, participants perceived greater intimacy potential with the high responsiveness target than the low responsiveness target, $\beta = .72$, $p < .001$. More attractive targets were viewed as higher in intimacy potential than less attractive targets, $\beta = .13$, $p = .002$. There were no main effects of avoidant attachment, $\beta = -.02$, *ns*, nor anxious attachment, $\beta = .01$, *ns*. There was a significant interaction between avoidant attachment and target responsiveness, $\beta = -.17$, $p = .01$ (Figure 6). Simple effects revealed that avoidant attachment negatively predicted perceived intimacy potential with the high responsiveness target, $\beta = -.12$, $p = .04$, but not with the low responsiveness target, $\beta = .11$, $p = .11$. The interaction between anxious attachment and target responsiveness was not significant, $\beta = -.06$, *ns*.

Perceived Similarity. The same analysis as above was conducted for perceived similarity. Participants perceived themselves to be more similar to high responsiveness than low responsiveness targets, $\beta = .57$, $p < .001$. Participants also perceived themselves to be more similar to attractive than unattractive targets, $\beta = .21$, $p < .001$. There were no significant main effects of avoidant attachment, $\beta = -.004$, *ns*, nor anxious attachment, $\beta = -.03$, *ns*. There was a significant interaction between avoidance and target responsiveness, $\beta = -.20$, $p = .008$. The pattern of results was similar to that depicted in Figure 6. Simple effects tests revealed that avoidant attachment marginally negatively predicted perceived similarity with the high responsiveness target, $\beta = -.13$, $p = .06$, whereas it marginally positively predicted perceived similarity with the low responsiveness target, $\beta = .15$, $p = .06$. The interaction between anxious attachment and responsiveness condition was not significant, $\beta = -.03$, *ns*.

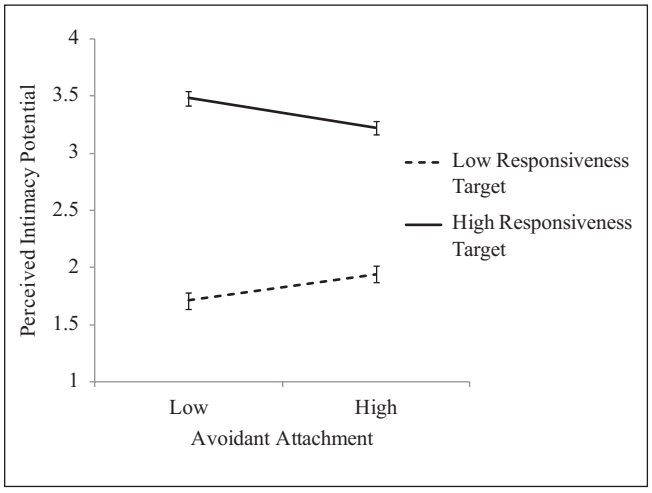

Figure 6. Perceive intimacy potential as a function of avoidant attachment and target responsiveness in Study 5, controlling for anxious attachment and target attractiveness

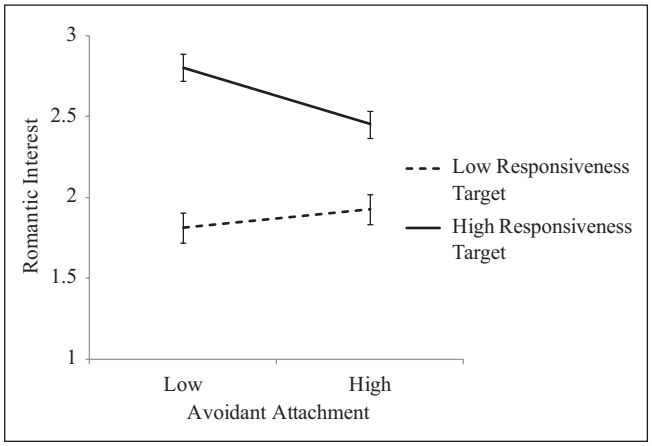

Figure 7. Romantic interest as a function of avoidant attachment and target responsiveness in Study 5, controlling for anxious attachment and target attractiveness

Romantic Interest. The same analysis applied to romantic interest revealed that participants were more romantically interested in the responsive targets, $\beta = .35$, $p < .001$, and attractive targets, $\beta = .32$, $p < .001$. There was again no main effect of avoidant attachment, $\beta = -.06$, *ns*, nor anxious attachment, $\beta = .07$, *ns*. There was, however, a marginally significant interaction between avoidant attachment and target responsiveness, $\beta = -.16$, $p = .07$. The interaction is depicted in Figure 7. Avoidant attachment was a negative predictor of romantic interest in the high responsiveness target, $\beta = -.16$, $p = .04$. However, avoidant attachment was not

a significant predictor of romantic interest in the low responsiveness target, β = .05, *ns*. The interaction between anxious attachment and responsiveness condition was not significant, β = −.04, *ns*.

Perceived Intimacy Potential Mediates Romantic Interest. We next tested whether avoidants' ratings of romantic interest were mediated by perceived intimacy potential. In the model for romantic interest presented above, we included perceived intimacy potential as a mediator in Step 1, and included the interaction between perceived intimacy potential and target responsiveness in Step 2 to account for bias in the avoidance by target responsiveness interaction. The inclusion of perceived intimacy potential as a mediator reduced the avoidance by target responsiveness interaction to nonsignificance, β = −.003, p = .96, and a significant Sobel test confirmed mediation, Sobel = −2.55, p = .01. A subsequent analysis of the reverse mediation model revealed that romantic interest did not mediate avoidants' perceptions of intimacy potential with responsive targets. The avoidance by target responsiveness interaction remained significant with the inclusion of romantic interest as a mediator, β = −.10, p = .04.

Accounting for Perceived Similarity. Finally, we examined whether avoidants' ratings of romantic interest continued to be mediated by perceived intimacy potential after accounting for similarity. We conducted a bootstrap analysis for testing multiple mediation models (Preacher & Hayes, 2008), with 5,000 samples. To account for the interaction, the main effects of avoidant attachment and responsiveness condition were included as covariates in addition to anxious attachment and attractiveness condition. This analysis revealed that the direct effect of the interaction on romantic interest was reduced to nonsignificance when accounting for both mediators, b = .01, SE = .08, p = .82. Furthermore, perceived intimacy potential, b = .67, SE = .07, p < .001, and perceived similarity, b = .28, SE = .06, p < .001, had significant direct effects on romantic interest. Indirect effects were tested to explore the mediating roles of perceived intimacy potential and similarity. These analyses revealed significant mediation effects for perceived intimacy potential (indirect effect estimate = −.21, SE = .05, 95% CI = [−.32, −.11]) and perceived similarity (indirect effect estimate = −.10, SE = .04, 95% CI = [−.20, −.04]). These results suggest unique contributions of each mediator to participants' evaluations of romantic interest.

Discussion

The results of Study 5 confirm the results of Study 3 that avoidant attachment is negatively associated with perceived intimacy potential only when romantic partners seem likely to promote closeness, resulting in less romantic interest in these partners. Although avoidant individuals perceived themselves to be less similar to responsive targets, the relation between avoidant attachment and intimacy potential held accounting for similarity. These results demonstrate that avoidant individuals do not view all relationship partners as relatively less rewarding, but rather only perceive lower potential to connect with responsive individuals as a means of reducing desires for romantic approach. Moreover, it was not the case in this study that avoidant participants perceived lower opportunity for connection because they were less romantically interested in responsive targets.

We have proposed that perceptions of intimacy potential and desires for romantic approach may be selectively applied to partners who provide the potential for intimacy, possibly as a means of reducing the pain and distress caused by lost or frustrated reward. Study 6 was designed to explicitly test this hypothesis, by examining whether avoidantly attached individuals' lowered perceptions of potential for closeness in their relationships buffers them from anticipated distress due specifically to reward loss.

Study 6

Romantically involved participants in Study 6 evaluated the social reward in their current relationship and then considered a series of hypothetical relationship scenarios. Participants reported the distress they anticipated experiencing in scenarios depicting the loss of social reward in a relationship, the experience of social threat in a relationship, as well as the combination of threat and reward loss. We hypothesized that avoidant attachment would be negatively associated with anticipated distress specifically in scenarios involving reward loss, and that this effect would be mediated by relatively low expectations for social reward.

Method

Participants. Participants involved in relationships were recruited from Mechanical Turk. A total of 213 participants began the survey, with 200 meeting all criteria for inclusion. Participants were 130 females, 66 males and 3 unidentified, ranging in age from 18 to 59 years (M = 29.0, SD = 8.8). Participants' current relationship length ranged between 1 and 360 months (M = 49.0, SD = 62.8).

Procedure and Measures

Perceived opportunity for intimacy. Participants completed the STARS Reward subscale, presented in Study 1, evaluating the opportunity for intimacy with their current romantic partner (M = 4.32, SD = .70; α = .92).

Distress from reward loss. Participants were asked to imagine themselves in a series of six scenarios occurring with a romantic partner. The scenarios differed in whether they depicted an event of lost reward in the relationship (without accompanying negative evaluation), threat in the relationship (without accompanying loss of the relationship), or a

combination of threat and reward loss. Participants saw two of each type of scenario presented in randomized order. In the reward loss scenarios, participants imagined their relationship ending by mutual agreement, but without negative evaluation by their partner. For instance, participants imagined a scenario in which their relationship ends because they cannot live on the same continent as their partner, leaving them "no choice but to break-up." In the relationship threat scenarios, participants imagined being negatively evaluated by their romantic partners but with the relationship continuing. For instance, participants imagined they had been dieting to look attractive in a bathing suit, yet their partner criticizes their figure remarking, "Wow, I hadn't realized how many pounds you have put on lately; you really need to start hitting the gym." The combined reward loss and threat scenarios included elements of negative evaluation and reward loss. For instance, participants imagined they had just spent a weekend away with their partner and felt "closer to them than ever before." However, they are then abruptly dumped by their partner, experiencing explicit rejection from their partner and the loss of the relationship.

Following each scenario, participants indicated how difficult it would be to get over the event on a scale from 1 (*a little difficult*) to 7 (*could never get over this*); (M = 4.22, SD = .89), as well as the degree of pain they would feel, on a scale from 1 (*a little pain*) to 7 (*excruciating pain*); (M = 4.78, SD = 1.00). For each scenario, the pain and difficulty responses were highly correlated (rs between .66 and .79) and thus were aggregated to form a single indicator of distress.

Attachment style. Attachment style was assessed using the Experiences in Close Relationships–Revised scale (ECR-R; Fraley, Waller, & Brennan, 2000). Participants responded to 18 items assessing their level of anxious attachment (e.g., "I worry that romantic partners won't care about me as much as I care about them," M = 3.25, SD = 1.31; α = .94) and 18 items assessing avoidant attachment (e.g., "I prefer not to be too close to romantic partners," M = 2.66, SD = 1.13; α = .94), on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

Results

Distress From Reward Loss. We first examined the association between avoidant attachment and distress in response to the relationship scenarios. Because each participant rated multiple scenarios, we used hierarchical linear modeling to account for the within-participant dependence.[6] We modeled distress response as a function of scenario type (reward loss, threat, and threat and reward loss), anxious and avoidant attachment, and the interactions between attachment and scenario type. We also accounted for the main effects of current relationship length and participant sex (0 = female, 1 = male). Relationship length did not significantly influence distress ratings, b = −.0009, SE = .001, *ns*. Overall, males reported less distress compared with females, b = −.58, SE = .12, p < .001.

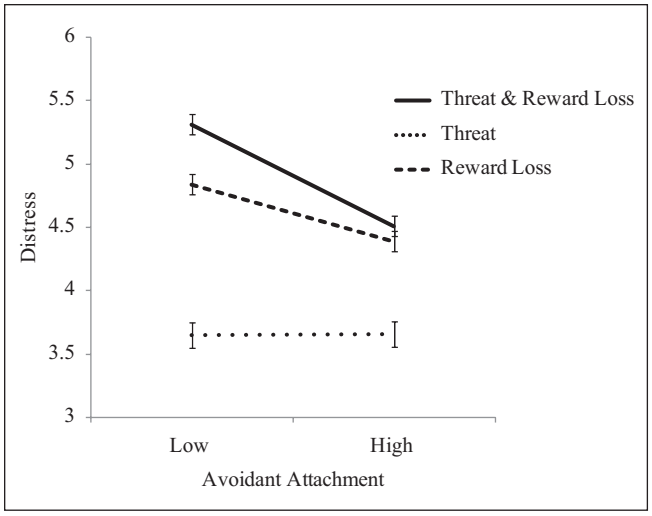

Figure 8. Distress as a function of avoidant attachment and scenario type in Study 6, controlling for anxious attachment, relationship length, and sex

Because scenario type had three levels, it was included in the model as two effect-coded terms. We tested the significance of scenario type by performing a likelihood ratio test between the model with the two scenario type terms included, and the model with the two scenario type terms excluded. The likelihood ratio test indicated a main effect of scenario type, such that the model with the scenario type terms fit the data significantly better than the model without the terms, $\chi^2(2) = 220.35$, $p < .001$. Post hoc tests revealed that the scenarios including threat and reward loss were viewed as more distressing than the threat scenarios, b = 1.26, SE = .10 p < .001, and the reward loss scenarios, b = .30, SE = .08, p = .001. Furthermore, the reward loss scenarios were viewed as more distressing than the threat scenarios, b = .96, SE = .10, p < .001.

There was a main effect of avoidant attachment, b = −.18, SE = .06, p = .005, which was qualified by a significant interaction with scenario type, $\chi^2(2) = 18.78$, $p < .001$ (see Figure 8). Simple effects tests indicated that avoidant attachment negatively predicted distress in response to reward loss scenarios, b = −.20, SE = .08, p = .02, as well as in response to combined threat and reward loss scenarios, b = −.35, SE = .08, p < .001. However, avoidant attachment was not a significant predictor of distress in the threat scenarios, b = .005, SE = .10, *ns*.

There was also a significant main effect of anxious attachment, b = .22, SE = .05, p < .001, which was qualified by a significant interaction with scenario type, $\chi^2(2) = 13.93$, p = .001. Anxious attachment positively predicted distress in the threat scenarios, b = .27, SE = .08, p = .001, and the threat and reward loss scenarios, b = .26, SE = .06, p < .001, but did not predict distress in the reward loss scenarios, b = .12, SE = .07, p = .11.

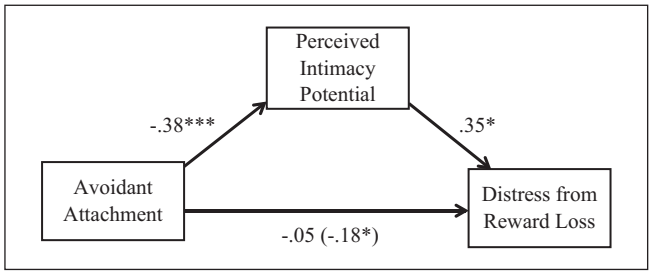

Figure 9. Perceived intimacy potential as a mediator of distress from reward loss in Study 6
Note: All values are unstandardized regression coefficients.
*$p < .05$. ***$p < .001$.

Perceived Intimacy Potential Mediates Distress From Reward Loss. We next tested our hypothesis that avoidants' lower ratings of distress in response to the reward loss scenarios were mediated by their lower expectations for intimacy in their relationships. We conducted a bootstrap analysis with 5,000 resamples, entering relationship length, attachment anxiety, and gender as covariates in the mediation. The results of this analysis indicated that the association between avoidant attachment and distress from reward loss was fully mediated by perceptions of intimacy in one's relationship (indirect effect estimate = −.13, *SE* = .05, 95% CI = [−.25, −.03]). See model in Figure 9. As noted above, the total effect of avoidant attachment on distress ratings was significant, $b = -.18$, $SE = .08$, $p = .02$. However, this association was reduced to nonsignificance when perceived intimacy potential was taken into account, $b = -.05$, $SE = .09$, $p = .57$. A subsequent analysis of the reverse mediation model revealed that avoidance remained a significant predictor of perceived intimacy potential when distress from reward loss was included, $b = -.36$, $SE = -.04$, $p < .001$. These results suggest that avoidant individuals' lower expectations for intimacy potential may help them to limit anticipated distress from lost romantic reward.

Because avoidant attachment was also related to lower distress in response to the combined threat and reward loss scenarios, we performed the same mediation analysis as above, with distress from threat and reward loss scenarios as the dependent variable. Once again, perceived intimacy potential significantly mediated the association between avoidant attachment and distress (indirect effect = −.16, *SE* = .06, 95% CI = [−.28, −.05]), although the direct effect of avoidant attachment on distress remained significant, $b = -.19$, $SE = .09$, $p = .03$.

Discussion

The results of Study 6 are consistent with the hypothesis that avoidantly attached individuals' lower perceptions of closeness in their relationships can help reduce anticipated distress of lost reward. Avoidant attachment was associated with lower distress specifically in response to reward loss scenarios (and scenarios that combined threat and reward loss) but was not associated with distress in response to scenarios depicting the threat of negative evaluation. Importantly, the results of the mediation analysis suggest that lower expectations for close connection in their relationships had a buffering effect on avoidant individuals' distress from lost reward. In essence, by construing themselves as having less to lose in relationships, avoidantly attached individuals were able to believe that loss of a relationship would hurt less. In light of the results of Studies 1 to 5, Study 6 suggests a motivation for why avoidant individuals would downplay the rewarding aspects of relationships.

General Discussion

The present research is consistent with the notion that low perceptions of social reward keep interest in romantic approach at bay, and as such may be useful in averting the pain of loss, disappointment, and frustration for avoidantly attached individuals. The results of three correlational studies (Studies 1, 2, and 4) consistently demonstrated that avoidantly attached individuals reported lower perceived opportunity for intimacy in relationships in which they could reasonably expect to approach closeness—current and future partners. Importantly, however, when considering a hypothetical renewal of their relationship with their ex-partner—whom they indicated little intention to pursue—avoidant attachment was not associated with lessened expectations for closeness. Therefore, when the hurt and disappointment of unfulfilled intimacy was a realistic risk, avoidantly attached individuals perceived lower opportunity for intimacy than their secure counterparts. By keeping hopes low, avoidant individuals may be able to defend against attachment system activation in the event that romantic partners fall short in providing needs for connection. On the other hand, when unfulfilled intimacy was not a realistic risk, avoidant individuals did not view intimacy potential significantly differently from their more secure counterparts. Our supporting evidence was not just correlational but also experimental: The results of Studies 3 and 5 showed that when evaluating warm and validating dating partners, avoidant attachment was associated with lower levels of perceived intimacy potential. Consistent with our central hypothesis, these relatively low evaluations of intimacy potential translated into less romantic approach motivation (i.e., lower interest in dating). This association was not found when evaluating a target low in partner responsiveness. Finally, the results of Study 6 demonstrated that avoidant individuals' lower expectations of intimacy potential buffer them against the anticipated pain of lost reward. Those with avoidant attachment anticipated less pain specifically in response to scenarios depicting loss of reward in their relationships, a response that was mediated by their lower expectations for close connection. Overall, then, it appears

that avoidant individuals appear to feel they have less to lose in highly intimate relationships, and as a result expect less pain should those relationships end.

Importantly, Studies 4 and 5 provided evidence that perceived dissimilarity to intimacy-promoting targets cannot account for our effects. Avoidant individuals in Study 4 did not perceive themselves to be less similar to their current partners compared with ex-partners. In addition, avoidant individuals in Study 5 evaluated responsive dating targets as lower in intimacy potential than did their secure counterparts, and consequently expressed weaker romantic interest in responsive targets, over and above their perceived dissimilarity to responsive others. Thus, it is not the case that avoidants' feelings of dissimilarity to closeness-promoting partners can fully account for their lower expectations of intimacy and weaker interest in romantic pursuit. Taken together, these findings are consistent with our hypothesis that avoidant individuals may selectively perceive lower reward in partners who pose the risk of disappointment.

The present research highlights a novel, previously undocumented phenomenon such that avoidantly attached individuals selectively perceive less potential for intimacy *only* with targets who provide the opportunity for closeness. Past research has demonstrated time and again that avoidance is associated with lower perceptions of intimacy. Our work suggests, however, an important and meaningful boundary condition to that finding. Avoidantly attached individuals do not universally perceive low intimacy potential. Rather, targets who do not pose the risk of disappointment are not subject to lowered expectations of intimacy potential. Furthermore, it is important to note that evaluations of intimacy potential and romantic interest were guided more strongly by aspects of the target than by individual differences in attachment. In other words, even avoidantly attached individuals perceived greater opportunity for connection with current/future partners than ex-partners and with responsive targets compared with unresponsive targets. The present research therefore sheds light on the contextually situated complexity of avoidant individuals' insecurities.

This newly identified boundary condition may have important implications for avoidants' mate selection decisions, particularly with regard to partner responsiveness. Arguably, the fundamental dilemma at the heart of attachment avoidance is an inability to feel comfortable depending on someone to respond sensitively and consistently to emotional distress (Mikulincer & Shaver, 2007). Indeed, research suggests that partner responsiveness is a key component to stable and satisfying romantic relationships (e.g., Reis et al., 2004). Yet, our studies consistently demonstrate that avoidant individuals show relatively less enthusiasm for beginning relationships with the sort of highly responsive partners that seem most likely to disconfirm their fears of insensitive treatment. To the extent that such relative disinterest increases the likelihood of engaging in relationships with less responsive partners by reducing the contrast with more responsive partners, avoidants' relationship experiences may ultimately validate their beliefs that others are unreliable and not to be depended on, contributing to a self-perpetuating cycle of relationship distrust.

At first glance, the results of the present research may appear contradictory to research demonstrating that avoidant individuals can be acutely responsive to opportunities for connection. For instance, Carvallo and Gabriel (2006) demonstrated that dismissive individuals reported higher mood and self-esteem than secure participants in response to being accepted by others. Similarly, other research has shown that avoidant individuals felt greater connection to a warm and validating confederate than did secure individuals, a feeling that was shared by the confederate herself (MacDonald & Borsook, 2010). Therefore, avoidant individuals can be keenly sensitive to close connection once it is realized. Both of these contexts, however, provided avoidant individuals with undeniable cues of acceptance and connection. On the other hand, participants in the present research may have felt less certain about the actual likelihood of achieving intimacy with targets under consideration. Indeed, the highly positive reactions of avoidant individuals upon receiving warmth may be in part due to a contrast with the low expectations with which they arm themselves when approaching intimacy.

Although avoidant attachment was associated with perceived opportunity for intimacy as predicted, no consistent relations between avoidance and expected risk of negative evaluation were found. This is consistent with the notion that avoidant individuals attempt to navigate social situations without the conscious acknowledgment of distress that would spur attachment system activation (e.g., Fraley & Shaver, 1997). The fact that avoidantly attached individuals do not readily acknowledge distress highlights the strength of the subtle manipulations used in the present research. Rather than acknowledging fears of threatening negative evaluation from romantic partners, avoidantly attached individuals may circumvent desires for approach and the inherent risk of attachment system activation by constructing a narrative wherein others will not provide reward. This research highlights the value of considering the role of social reward in the regulation of social behavior above and beyond the motivating power of social threat (Spielmann et al., in press).

The effects for anxiously attached individuals' expectations of rejection risk were consistent across relationship contexts. Anxious attachment was a consistent predictor of worries regarding negative evaluation with current, future, and ex-partners. It is nevertheless interesting that even fantasized reunions with ex-partners prompted expectations of rejection for anxious individuals, unlike perceived intimacy potential among avoidant individuals. These findings suggest that anxiously attached individuals' cross-situational

vigilance for threat may not reflect a specific defensive strategy, but rather general feelings of low relational value. On the other hand, the associations between anxiety and perceived opportunity for intimacy with relationship partners were mixed. Study 1 revealed no associations between anxious attachment and perceived intimacy potential, whereas Study 2 revealed lower expected intimacy with future partners and greater expected intimacy with ex-partners. In addition, Study 3 (though not Study 5) revealed that anxious individuals were especially drawn toward high responsiveness targets. These mixed findings may be due, in part, to the fact that anxiously attached individuals are ambivalent about their desires for closeness, at times needing it desperately and at times withdrawing from it in fear of rejection (Joel, MacDonald, & Shimotomai, 2011; Mikulincer, Shaver, Bar-On, & Ein-Dor, 2010).

In conclusion, the present research demonstrates that avoidantly attached individuals selectively perceive lower opportunity for intimacy with romantic partners who could bring about frustration, disappointment, or loss. Avoidant attachment was consistently related to lower expectations of intimacy only with romantic partners who could realistically offer closeness. Moreover, these relatively low perceptions of intimacy potential assisted avoidant individuals in lowering their motivation to approach responsive targets and anticipating less pain from relationship dissolution. These findings suggest that when a relationship partner has the potential to bring about the pain of unfulfilled reward, avoidantly attached individuals maintain attachment system deactivation by painting themselves a picture wherein people are not worth approaching.

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Notes

1. The sample of participants in Studies 1 and 2 were also used in Spielmann, MacDonald, and Tackett (2012) and Spielmann, MacDonald, and Wilson (2009). However, the specific associations discussed in the present research have not been presented elsewhere.
2. In all studies, participants were excluded from analyses for the following reasons: response sets, inappropriate relationship status, lack of breakup experience (Studies 1, 2, and 4), or non-heterosexual orientation (Studies 3 and 5).
3. Unfortunately, we did not collect participant age in this study. However, it is reasonable to assume this sample is similar in age to the typical undergraduate student sample.
4. As part of the study design investigating a separate research question, participants received feedback indicating whether the male targets were interested in meeting them. However, this manipulation did not affect the results of this study, nor did it interact with attachment style to predict the dependent variables. For this reason, we will not refer to the manipulation going forward.
5. Although perceived partner similarity and perceived intimacy potential were highly correlated, $r(165) = .83$, a factor analysis yielded two distinct constructs.
6. As per the recent recommendations of Judd, Westfall, and Kenny (2012), we also performed the analyses estimating a random intercept for the stimulus (each scenario); the pattern of results did not change.

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