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Abstract

The current studies tested how attachment orientations are related to empathic accuracy (i.e., the accuracy with which one infers a partner's private thoughts and feelings) during attachment-relevant discussions. In Study 1, married couples were videotaped discussing a severe or a less severe relationship issue that involved intimacy or jealousy. In Study 2, dating couples were videotaped trying to resolve a relationship conflict. Consistent with the revised empathic accuracy model, highly avoidant individuals were less empathically accurate in both studies. Relative to less anxious persons, highly anxious individuals were more empathically accurate when discussing intimacy issues that posed a potential threat to their relationship (in Study 1) and when they were rated as more distressed when discussing a relationship conflict (in Study 2). The findings are discussed in terms of how highly anxious and highly avoidant people differentially manage empathic accuracy to regulate negative affect and facilitate their interpersonal goals.

Keywords

attachment, empathic accuracy, social interaction, conflict, affect regulation

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To understand all is to forgive all.

French proverb

To understand all is to forgive nothing.

English epigram

As these contrasting views suggest, insight into what a partner is thinking or feeling can cut both ways. In some contexts, knowing more may strengthen the ties that bind partners together. In others, knowing more may threaten or even destroy a relationship. For example, in relationship-threatening situations that cannot be averted, some people may be motivated to ignore, disregard, or misinterpret the damaging thoughts or feelings their partners could be harboring, not wanting to become entangled in the issues implied by those negative thoughts and feelings. Other people, however, may want to “get inside the head” of their partners, even if the knowledge gained might hurt or destabilize the relationship. Who are these people, and how do they manage empathic accuracy enroute to protecting—or failing to protect—themselves or their relationships?

Though it is a topic of considerable theorizing and speculation (Ickes & Simpson, 1997, 2001), little empirical research has investigated how people manage empathic accuracy,

especially during relationship-threatening interactions. Melding principles of attachment theory (Bowlby, 1969, 1973, 1980) and the revised empathic accuracy model (Ickes & Simpson, 2001), we derived and tested a set of predictions that address how individuals who have different attachment orientations differentially manage empathic accuracy in relationship-threatening contexts.

Attachment Theory and Working Models

Individuals begin developing working models of the self and others based on interactions with significant others early in life. Across time, these models influence the way in which people think, feel, and behave in close relationships (Bowlby,

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1969, 1973, 1980). Beliefs and expectations are central components of working models, which involve “if–then” propositions about what attachment figures are likely to do in certain contexts (e.g., *if* I feel vulnerable, *then* I can count on my partner for support). Working models also contain rules distilled from experiences with past attachment figures that guide behavior with respect to current attachment figures. For example, working models affect information processing by influencing which aspects of a romantic partner’s behavior are attended to or ignored, the inferences and judgments that are made about a partner’s behavior, and which partner actions are or are not remembered (Collins, Guichard, Ford, & Feeney, 2004). Variations in working models give rise to individual differences in attachment orientations (styles).

Two dimensions underlie individual differences in adult romantic attachment orientations (Brennan, Clark, & Shaver, 1998; Simpson, Rholes, & Phillips, 1996). *Avoidance* reflects the degree to which people are uncomfortable with closeness and emotional intimacy. Highly avoidant individuals tend to be less invested in their relationships, claim to value their relationships less, and strive to maintain psychological and emotional independence from their partners (Bowlby, 1973; Hazan & Shaver, 1994).

Anxiety reflects the degree to which individuals worry and ruminate about being rejected or abandoned by their partners. Highly anxious individuals are chronically concerned that their partners might leave them, do not love them, or are unwilling to help them cope with distressing situations.

One of the central functions served by attachment orientations is the regulation of negative affect (Kobak & Sceery, 1988; Simpson, 1990). According to Kobak and Sceery (1988), secure individuals directly acknowledge distress when they experience it and turn toward attachment figures for comfort and support. Highly avoidant individuals divert attention away from the source of distress, do not acknowledge being upset, and use self-reliant tactics to control and mitigate negative affect. Highly anxious people direct their attention toward the source of distress and focus on it, particularly when they believe that attachment figures might be unresponsive to their needs. As a result, highly anxious people have difficulty reducing and containing negative affect. Given these tendencies, highly anxious and highly avoidant individuals cope with stressful events less effectively than do less avoidant and less anxious (i.e., more secure) persons (Mikulincer & Florian, 1998).

Mikulincer and Shaver (2003) developed a process model that specifies the conditions under which the attachment system should be activated in adults who have different attachment orientations. Because highly anxious individuals want to avoid losing their partners and relationships, they use tactics associated with a hyperactivating strategy (e.g., ruminating about worst-case scenarios, exaggerating potentially threatening cues, remaining vigilant to signs that their partners might leave them), especially when

a potential relationship threat is detected. One such tactic may be *motivated empathic accuracy* with respect to what the partner is thinking and feeling during relationship-threatening interactions. In other words, one manifestation of vigilance should be greater empathic accuracy in relationship-threatening situations relative to less threatening ones. Preliminary evidence for this phenomenon was first reported by Simpson, Ickes, and Grich (1999), who found that highly anxious women were more empathically accurate than less anxious women when each woman tried to infer her romantic partner’s thoughts and feelings as he rated and discussed attractive women with her. This effect, however, has never been documented in men, and it has not been investigated in discussions that center on significant relationship issues (e.g., intimacy, jealousy, conflict), many of which involve problems *internal to* (rather than external to) the relationship.

When highly avoidant individuals detect potential threats to their independence in relationships, they should try to keep their attachment systems deactivated. Unlike anxious individuals, highly avoidant individuals work to inhibit and control their emotions using deactivating tactics such as ignoring, dismissing, or withdrawing from threats, and/or suppressing threat-related thoughts. One of the most efficient ways to limit, control, and curtail information that might activate the attachment system is to simply stay out of the partner’s head (i.e., to be less empathically accurate when partners might be harboring threatening/distressing thoughts and feelings). Thus, highly avoidant individuals should use “frontline” strategies designed to ward off activation of their attachment systems from the very outset. No research has examined whether highly avoidant people are less empathically accurate during actual relationship discussions.

Empathic Accuracy and Attachment Orientations

Empathic accuracy is a double-edged sword in that it often helps but sometimes hurts relationships. Past research has indicated that although greater empathic accuracy forecasts greater relationship satisfaction and stability in situations that pose little or no threat to relationships, it forecasts less satisfaction and more instability in relationship-threatening situations (Ickes & Simpson, 1997, 2001).

According to the revised empathic accuracy model (Ickes & Simpson, 2001), nearly all relationships have “danger zone” areas, domains in which painful insights or revelations about a partner’s private thoughts or feelings might occur (e.g., a partner’s negative thoughts about oneself, his or her attraction to desirable alternative partners). The way in which these danger zone areas are navigated should depend on how individuals have been treated in past relationships (i.e., their attachment history) and what has transpired in their current relationship. According to the model, danger

zone areas are not necessarily threatening, but they can become threatening if partners delve into them too deeply.

Highly anxious and highly avoidant people should respond to danger zones using the approach (anxiety) and avoidance tendencies described above. Highly anxious people desire greater closeness and felt security with their partners; therefore, they should remain cognitively engaged when they encounter danger zone areas with their partners. Once a danger zone is perceived as potentially threatening to the relationship, highly anxious individuals should be more empathically accurate than those who are less anxious. If a situation is perceived as less or nonthreatening to the relationship, they should be relatively less empathically accurate.

Highly avoidant people, in contrast, should be less empathically accurate in situations where potential danger zone situations might be encountered, "staying out" of their partners' heads entirely (Ickes & Simpson, 2001). In these situations, highly avoidant individuals should strive to maintain psychological and emotional distance from their partners to prevent their attachment systems from becoming activated. As a result, they should not focus on their partner's thoughts or feelings from the outset, even if they do not feel threatened.

This hypothesis is consistent with recent findings. Rholes, Simpson, Tran, Martin, and Friedman (2007) gave highly avoidant people an opportunity to obtain new information about their romantic partners' private thoughts and feelings, their thoughts about the future of the relationship, or their preferences for mundane things (e.g., movies, music). Even in this nonthreatening situation, highly avoidant people did not want to learn more private information about their partners. They also admitted that they knew less about their partners relative to other people, and they placed less value on knowing more about their partners in the future. Together, these findings suggest that highly avoidant people should be less inclined to read their partners thoughts and feelings accurately, especially during relationship-threatening discussions.

To investigate how highly anxious and highly avoidant individuals manage empathic accuracy in relationship-threatening contexts, we conducted two studies. The studies differed in type of romantic relationship (married vs. dating), type of attachment-relevant discussion topic (jealousy vs. intimacy and conflict), and the methods used to create and assess distress (experimental manipulations vs. observer ratings). Study 1 examined married couples who engaged in either a severe or a less severe discussion that involved jealousy or intimacy relationship issues. Study 2 investigated dating couples who engaged in a relationship conflict-resolution discussion.

Study 1

In Study 1, married couples participated in a videotaped problem-resolution task. Each couple was asked to identify

and try to resolve either a major or a minor relationship problem that centered on an intimacy or a jealousy issue. Following each discussion, each partner completed an empathic accuracy task followed by postdiscussion measures. We predicted that highly avoidant individuals would exhibit lower levels of empathic accuracy than less avoidant people regardless of the severity (major vs. minor) of the discussed topic. In contrast, highly anxious individuals should display more vigilance (greater empathic accuracy) than less anxious individuals when discussing a major relationship issue.

The discussion topics (intimacy vs. jealousy) were chosen because they are primary sources of concern and represent potential danger zones (Ickes & Simpson, 2001), particularly for insecurely attached people. We anticipated that highly anxious individuals would display higher levels of empathic accuracy when discussing a severe (major) intimacy topic given that such issues may be more common in established marriages, whereas jealousy issues might vary in terms of their relevance to certain marriages. However, intimacy and jealousy should both have the potential to activate the attachment systems of highly avoidant people, leading them to display uniformly lower levels of empathic accuracy.

Method

Participants. Prospective couples responded to flyers and advertisements placed in a local newspaper in a southwestern U.S. city. To participate, couples must have been married for between 1 to 15 years.¹ Those who agreed to participate were scheduled for a lab visit. One couple declined to release their videotaped interaction for coding. Thus, the Study 1 sample consisted of 95 married couples. The average length of marriage was 5.79 years. The average age of husbands and wives was 32.70 and 31.50 years, respectively. Seventy percent of the participants classified themselves as Caucasian, 22% as Hispanic, and 8% as African American. Each couple was paid \$50.

Design and procedure. Each couple was randomly assigned to one of four experimental conditions in a 2 (type of problem: jealousy vs. intimacy) \times 2 (severity of problem: more vs. less) between-dyads design. After arriving at the lab, each couple was told about the study, after which each partner read and signed a consent form. Each partner was informed that he or she could discontinue participation at any time for any reason without loss of promised compensation. Spouses were then led to separate rooms to ensure that they could not communicate while completing the preinteraction questionnaires.

Embedded in the preinteraction questionnaires was the Adult Attachment Questionnaire (AAQ; Simpson et al., 1996). The AAQ is a well-validated 17-item measure that assesses thoughts and feelings about romantic partners *in general* on two dimensions: avoidance and anxiety. The 8-item Avoidance subscale contains items such as "I don't

like people getting too close to me” and “I’m nervous whenever anyone gets too close.” The 9-item Anxiety subscale includes items such as “I often want to merge completely with others, and this desire sometimes scares them away” and “I’m confident others would never hurt me by suddenly ending our relationship” (reverse scored). Items were answered on Likert-type scales anchored 1 (*strongly disagree*) to 7 (*strongly agree*). Cronbach’s α s for women and men were .76 and .76, respectively, for the Avoidance subscale, and .81 and .71, respectively, for the Anxiety subscale.

Once both partners completed the preinteraction questionnaires, they were led to a room where their problem discussion took place. Each spouse was asked to list (independently) up to four topic-relevant (jealousy or intimacy) major or minor problems, depending on the experimental condition to which each couple was assigned. After both spouses created their separate lists, each spouse examined his or her partner’s list and the couple jointly agreed on which specific issue to discuss. Each couple was left alone to discuss the issue. Each couple was videotaped by a split-screen camera system. Each couple stated the problem they had agreed to discuss at the start of the discussion so the primary issue(s) would be clear to the raters. Seven minutes into the discussion, each couple was notified by intercom that they needed to conclude it. Immediately after the discussion, each participant rated how stressful the discussion was on three 7-point Likert-type scales (stressed, anxious, and upset; each item correlated $>.50$ with the others). Each spouse was then escorted to a separate room, where he or she privately completed the thought/feeling reporting task and the empathic inference task (with neither the partner nor the experimenter present).

Thought/feeling reporting and empathic accuracy assessment. Following standard empathic accuracy assessment procedures (see Ickes, 1997, 2001), each spouse assumed two roles. When in the role of the *target partner*, each spouse provided a set of actual thought/feeling entries (i.e., the specific thoughts or feelings he or she recalled having at specific points during the videotaped interaction), which his or her partner subsequently tried to infer. When in the role of the *perceiving partner*, each spouse tried to infer the specific thoughts/feelings reported by his or her partner.

Specifically, each participant viewed a separate copy of the videotaped discussion and was instructed to report as accurately as possible each specific thought or feeling that he or she distinctly remembered having had during the discussion. When the videotape reached a point when the participant remembered having had a particular thought or feeling, he or she was told to pause the tape. Then, using a standardized answer sheet, the participant recorded: (a) the time when the thought/feeling occurred (the running time of the discussion at that moment, which was displayed on the tape), (b) whether it was a thought or a feeling, and (c) what the

specific content of the thought/feeling was (reported as precisely as possible in one to two sentences). The average number of thoughts/feelings listed by husbands and wives were similar and did not differ significantly (husbands: $M = 7.04$, $SD = 4.25$; wives: $M = 6.50$, $SD = 3.72$, ns).

After completing this first task, each participant was given a list of the specific times or “stop-points” when his or her spouse (the target partner) reported having had a specific thought/feeling. The participant (now in the role of the perceiver) watched the videotaped discussion a second time, stopping the tape each time his or her spouse reported having had a specific thought/feeling. At each stop-point, the participant made a written inference (in one to two sentences) about what his or her spouse had been thinking/feeling at that point of the discussion. Each participant then completed a postinteraction questionnaire, after which the spouses were reunited, debriefed, and compensated.

Coding of Empathic Accuracy and Behavioral Measures

Empathic accuracy coding. The empathic accuracy data were coded by five trained raters who worked independently. Raters assessed each perceiving partner’s empathic accuracy by comparing the actual thoughts/feelings reported by each participant with the corresponding inferred thoughts/feelings reported by his or her spouse. Specifically, for each thought/feeling inference made by the perceiver, raters assigned a value of 0 if the content of the inferred thought/feeling was different from the actual thought/feeling, a 1 if the inferred content was similar to (but not the same as) the actual content, and a 2 if the inferred content was essentially the same as the actual content. Raters coded the empathic accuracy of the husband and wife in each relationship in a random order. The mean reliability of this measure (the within-subject average calculated across all raters) was .72.

For each perceiver, the empathic accuracy ratings for all of the thought/feeling inferences were aggregated, and the aggregates across the five raters were then averaged to create an empathic accuracy score. This score was then adjusted for the total number of thought/feeling inferences made by each perceiver to create an empathic accuracy index that could range from 0 (*total inaccuracy*) to 100 (*perfect accuracy*). The average scores for husbands and wives were virtually identical (26.01 and 26.03, respectively, ns). This mean level of empathic accuracy is similar to previous studies of young married couples (e.g., Kilpatrick, Bissonnette, & Rusbult, 2002).

Ease of inference coding. Some individuals might be more empathically accurate because their partners are more readable (i.e., their partners may say or do things during the discussion that make the partner’s thoughts/feelings more transparent). Because we wanted to control for nonmotivational sources of variation in empathic accuracy, we gave the

Table 1. Descriptive Statistics, Study 1

	Men M (SD)	Women M (SD)	Mean difference (SD)	Matched-pairs t test
Empathic accuracy	26.01 (15.59)	26.03 (14.98)	0.02 (18.00)	$t = 0.21, ns$
Attachment avoidance	27.89 (8.82)	24.11 (8.43)	3.78 (12.18)	$t = 3.03, p < .01$
Attachment anxiety	25.14 (9.06)	25.95 (10.44)	.81 (11.33)	$t = -0.70, ns$
Ease of inference (observer rated)	3.94 (1.00)	3.57 (0.93)	0.37 (1.19)	$t = 3.02, p < .01$

Note: $N = 95$ couples.

raters lists of each participant's actual thought/feeling entries along with the corresponding stop-points during the discussion. The raters then watched each couple's interaction, stopped the videotape at each listed stop-point, and rated the extent to which the target partner's verbal or nonverbal behavior expressed what he or she was thinking/feeling at each point, given the target's written thought/feeling at each moment. The raters coded the husband and wife in each relationship in a random order on 7-point scales ranging from 1 (*not at all*) to 7 (*extremely*). These ratings were then aggregated to create an observer-rated ease-of-inference index (mean within-subject reliability across the raters was .87). This index was treated as a covariate to statistically control for partner readability in some of the analyses reported below.²

Results

Descriptive statistics. Descriptive statistics are reported in Table 1. Means for the ease-of-inference index are normed to the 7-point rating scale used to assess this dimension. The empathic accuracy index could range from 0 (*total inaccuracy in inferring the content of the partner's thoughts/feelings*) to 100 (*perfect accuracy*). According to the raters, it was easier to infer the thoughts/feelings from the behavior of men than it was from women. No other gender differences emerged. Correlations among these variables are shown in Table 2.

Manipulation check. To test the effectiveness of our primary manipulated variable (being assigned to discuss a major vs. a minor relationship problem), we examined the amount of stress reported by each participant during the discussion on the three-item stress measure. As expected, individuals assigned to discuss more severe problems reported more stress ($M = 15.43$) than did those in the less severe condition ($M = 12.34$), $t(188) = 2.81, p < .01$.

The actor-partner interdependence model (APIM) analyses. Because husbands' and wives' scores were significantly correlated (indicating some degree of statistical interdependence), we analyzed the data using the APIM (Kashy &

Table 2. Correlations Among the Variables, Study 1

	1	2	3	4	5	6	7	8
1. Male empathic accuracy	—	-.14	-.09	-.08	.21	-.08	-.10	-.11
2. Male avoidance		—	-.07	-.03	-.15	.00	.16	-.09
3. Male anxiety			—	-.01	.14	.12	.33**	.08
4. Male ease of inference (observer rated)				—	-.14	-.00	.12	.24*
5. Female empathic accuracy					—	-.12	.06	-.28**
6. Female avoidance						—	.15	.03
7. Female anxiety							—	-.03
8. Female ease of inference (observer rated)								—

Note: $N = 95$ couples. All correlations are two-tailed. Higher scores indicate higher values on each variable.

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

Kenny, 2000; Kenny, 1996). The APIM allows one to estimate the degree to which dyad members' responses or behaviors are associated with factors attributable to the actor (the individual providing the response or behavior) and to the actor's partner. The APIM, therefore, estimates both *actor effects* (the effect that an individual's predictor variable score has on his or her own outcome score) and *partner effects* (the effect that an individual's partner's predictor variable score has on the actor's outcome score). Because the APIM models the statistical interdependence that exists between partners in relationships, it provides separate, statistically independent tests of actor and partner paths. Specifically, the effects of the actor's independent variable score on the actor's dependent measure control for the partner's independent variable score, and vice versa. Using this approach, the dyad is treated as the unit of analysis, and actor and partner effects are tested with the proper degrees of freedom.

Tests of predictions. The APIM analyses were conducted using the PROC MIXED program in SAS 9.0. Actor effects are reported as regression coefficients, all of the independent variables are standardized, and the primary dependent variable (empathic accuracy) is unstandardized. All predictor variables were centered on the grand sample mean (Aiken & West, 1991). The dependent variable in each analysis was each actor's empathic accuracy score. The predictor variables were: actor and partner scores on attachment anxiety and avoidance, problem topic (jealousy vs. intimacy), and problem severity (major vs. minor). We also entered the two-way interactions between each attachment score (for both actor and partner) and problem topic and problem severity, the two-way interaction between problem topic and problem severity, and all theoretically relevant three-way interactions. Actor gender and actor ease of partner readability were entered as covariates. Gender did not significantly interact with any of

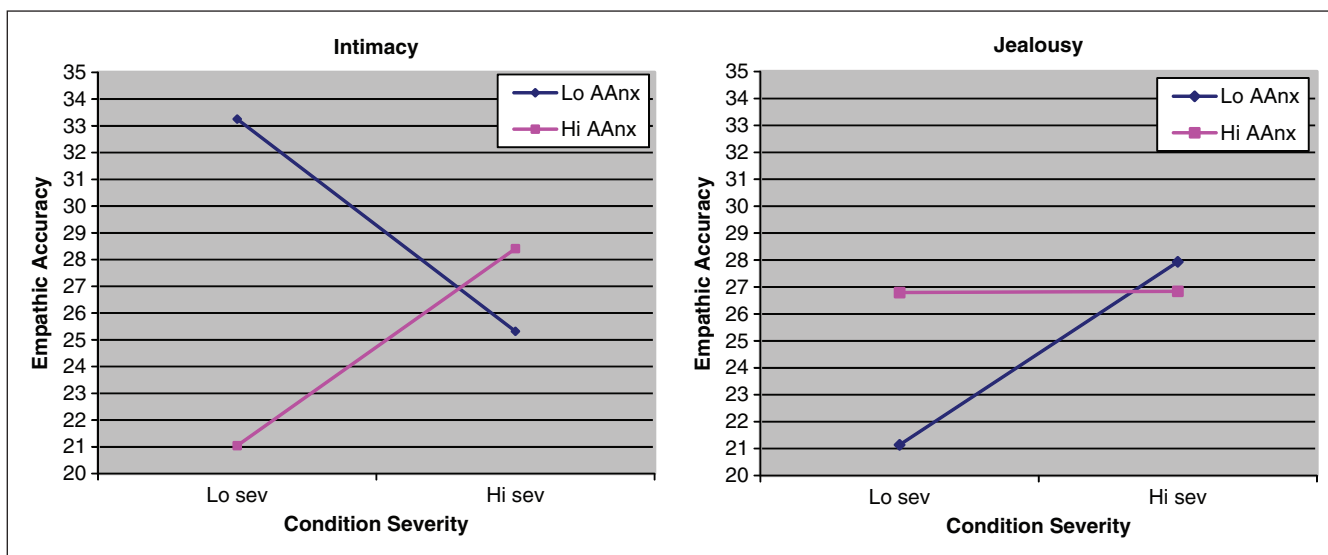


Figure 1. The interaction of actors' attachment anxiety, type of problem, and severity of problem predicting actors' empathic accuracy. Note: The left figure is for couples who discussed intimacy issues; the right figure is for those who discussed jealousy issues. Values are plotted for individuals scoring 1 SD above and 1 SD below the mean for each predictor variable. Lo AAx = low actor anxiety; Hi AAx = high actor anxiety; Lo Sev = low problem severity; Hi Sev = high problem severity.

the predictor variables, meaning that none of the effects reported below were qualified by gender differences. Moreover, there were no significant Attachment Anxiety \times Attachment Avoidance effects for actors or partners. All statistically significant findings that emerged are reported below.

First, as predicted, a significant main effect for attachment avoidance indicated that highly avoidant individuals were less empathically accurate than their less avoidant (more secure) counterparts, $b = -.33$, $t(141) = -2.26$, $p < .03$. This finding, which is consistent with Rholes et al. (2007), indicates that highly avoidant people are less likely to get into the heads of their romantic partners during relationship-threatening interactions. There was no interaction between attachment avoidance and problem severity, $b = .02$, $t(140) = 0.12$, *ns*.

Second, a three-way interaction among problem topic, actor attachment anxiety, and problem severity emerged, $b = -.31$, $t(147) = -2.35$, $p < .02$ (see Figure 1). The two-way interaction between actor anxiety and condition severity predicting actor empathic accuracy in the intimacy condition was also significant, $b = -.66$, $t(146) = 2.36$, $p < .02$.^{3,4} Among couples who discussed intimacy issues, highly anxious individuals (actors) displayed higher empathic accuracy when the problem was relatively more severe compared to less anxious individuals, who showed the opposite pattern. Simple slope analyses, however, revealed that neither the high-anxiety nor the low-anxiety regression lines differed significantly from zero (both t s < 1.50 , *ns*). Among couples who discussed jealousy topics, no interaction between anxiety and problem severity was found.

All of these effects remained statistically significant (all p s $< .05$) when the partner's readability ratings were partialled

out. This outcome is important because it indicates that these findings are not due to the degree to which participants expressed what they were thinking/feeling during their discussions.

Discussion

Study 1 revealed two predicted effects. Highly avoidant individuals were less empathically accurate in general relative to less avoidant (more secure) individuals. This finding is consistent with prior research showing that avoidant people tend to use deactivating tactics in situations when their attachment systems might become activated (e.g., Fraley & Shaver, 2000; Simpson, Rholes, & Nelligan, 1992). It is also consistent with evidence showing that highly avoidant people encode and remember fewer concrete facts and details than less avoidant persons do when listening to personal stories of painful emotions in response to interpersonal loss (Fraley, Garner, & Shaver, 2000). Our avoidance finding is novel because it is the first to document that highly avoidant people may protect themselves by not getting into the heads of their partners during attachment-relevant discussions. We also found no interactions involving avoidance, which supports the hypothesis that highly avoidant people use "front-line" deactivating strategies, regardless of problem severity.

Highly anxious individuals became relatively more empathically accurate when discussing severe intimacy problems. This finding is consistent with their general approach to dealing with relationship dangers. This tendency is likely to be problematic because it exposes highly anxious persons to the very thoughts and feelings of their partners

they fear the most, which may then trigger negative attributions and obsessive rumination about possible negative relationship outcomes (see Collins, 1996; Collins et al., 2004). It may also raise doubts about their partner's commitment to the relationship, which is perhaps their greatest fear short of actual relationship dissolution. The findings for less anxious (more secure) people were exactly the opposite. To protect themselves and/or their relationships from potentially harmful information, the empathic accuracy of less anxious people tended to *decrease* when severe intimacy-related problems were discussed. These individuals, therefore, are likely to be shielded from the negative, relationship-threatening thoughts/feelings their partners might be harboring.

No interaction was found between attachment anxiety and topic severity when discussion topics centered on jealousy issues. There are several possible explanations for this null finding. For most established marriages, jealousy may not represent as serious a danger zone issue as intimacy often does. If so, jealousy might be a less relevant source of threat for most spouses compared to intimacy. In addition, as discussed in Note 3, the discussion topics that partners chose in the jealousy condition were more heterogeneous and perhaps less relationship threatening than those chosen in the intimacy condition. Finally, the discussion of intimacy issues might raise more pressing concerns in highly anxious people that their partners are not sufficiently committed to them or the relationship.

It is important to emphasize that the Study 1 effects remained statistically significant when we controlled for how readable each partner was during the discussion. This discounts the possibility that highly avoidant individuals were less empathically accurate because they had partners who were more difficult to read. It also precludes the possibility that highly anxious persons displayed relatively greater empathic accuracy when discussing more severe intimacy issues because their partner's thoughts/feelings were easier to decipher. Moreover, the APIM analyses permit us to conclude that these empathic accuracy effects are primarily actor driven and are not a function of the partner's attachment orientation.

Considered together, these findings, along with several others in our program of research (see Ickes & Simpson, 2001; Ickes, Simpson, & Oriña, 2005), point to a motivational interpretation of the management of empathic accuracy. That is, by controlling for partner readability and partner attachment orientation, we weaken alternative explanations that the management of empathic accuracy is an artifact of factors exogenous to the perceiver.

Study 2

Study 2 was designed to replicate, clarify, and extend the findings of Study 1. If the effects found in Study 1 are robust, they should also emerge when a different type of romantic

relationship (long-term dating relationships), attachment-relevant interaction (conflict resolution), and method of measuring distress (observer ratings of how distressed each partner appeared during the discussion) are examined. In Study 1, we manipulated topic severity by asking couples to discuss an intimacy or a jealousy topic that posed a major or a minor relationship problem. However, we could not ensure that every couple maintained their assigned level of problem severity throughout the entire discussion. Accordingly, we used a more direct and sensitive measure of discussion severity in Study 2; we had trained observers code each participant's level of distress during the videotaped discussion with his or her dating partner. Moreover, to further generalize the findings beyond the methods used in Study 1, we had partners discuss an unresolved conflict in their relationship.

Specifically, we asked long-term dating couples in Study 2 to identify and try to resolve a current conflict in their relationship. Immediately following each discussion, each partner completed the empathic accuracy task privately. Similar to Study 1, we predicted that highly avoidant individuals would display lower levels of empathic accuracy in general during the conflict resolution task. We also predicted that highly anxious individuals would display comparatively greater empathic accuracy if they were rated as more distressed during their conflict discussions, but lower empathic accuracy if they appeared less distressed.

If our predicted effects are robust, they should also remain significant after statistically controlling for several alternative constructs. Thus, we also tested for the potential influences of each participant's neuroticism, relationship satisfaction, and relationship length. Highly neurotic individuals might be more empathically accurate, especially if they feel threatened (Karney & Bradbury, 1995). Because attachment anxiety correlates moderately with neuroticism (Brennan & Shaver, 1995), this possibility must be ruled out. Insecurely attached people also have relationships that tend to be short-lived (Feeney, 2008; Kirkpatrick & Davis, 1994) and less satisfying (Feeney, 2008; Simpson, 1990). It is also conceivable that people who are more satisfied with their relationships or have dated their partners for longer periods might display heightened empathic accuracy when distressed given that such people might have more to lose if their relationships ended (e.g., Rusbult, 1980). Thus, the effects of relationship satisfaction and stability must also be controlled.

Method

Participants. Ninety-six dating couples, at least one member of whom was enrolled in an introductory psychology class at a large southwestern U.S. university, participated in the study. To participate, couples must have been dating for at least 3 months to ensure they had a relatively stable and enduring relationship. Mean relationship length was 1.48 years

($SD = 1.30$ years). The mean age of the men and women was 19.53 and 18.80 years, respectively. One or both partners received credit toward an introductory psychology course.

Questionnaire and conflict resolution discussion task. The procedures for Study 2 mirrored those of Study 1. After arriving at the lab, couple members were led to different rooms to complete a large survey. Embedded in the survey were three scales: Goldberg's (1990) 20-item measure of neuroticism (Cronbach α s = .81 for men and .87 for women), the Relationship Satisfaction Scale (Hendrick, 1988; α s = .74 for men and .70 for women), and the AAQ (Simpson et al., 1996; avoidance α s = .78 for men and .76 for women; anxiety α s = .79 for men and .83 for women).

After both partners completed the survey, they were led to a room where their conflict discussion took place. To ensure that a wide range of problems were discussed, half the couples were randomly assigned to discuss a major relationship-based conflict, and half were randomly assigned to discuss a more minor (but still problematic) relationship-based conflict.⁵ Each partner then listed up to four relationship-based major or minor conflicts. Once both partners had created their lists, each partner examined his or her partner's list and both partners jointly agreed on which issue to discuss. The partners were then left alone to discuss the issue and were videotaped using a split-screen camera system. Each couple stated the problem they agreed to discuss at the start of the discussion so the specific topic would be clear to the raters. After 7 min had elapsed, each couple was notified by intercom that they needed to conclude their discussion. Immediately following the videotaping, the partners were led to separate rooms, where they independently completed the thought/feeling reporting task and the empathic inference task.

Thought/feeling reporting and empathic accuracy assessment. The procedures for the thought/feeling reporting and the empathic accuracy task were identical to Study 1. Men listed a mean of 9.47 thoughts/feelings during their discussions ($SD = 5.30$), and women listed a mean of 11.34 thoughts/feelings ($SD = 4.79$). There was no gender difference.

Coding of Empathic Accuracy and Behavioral Measures

Empathic accuracy coding. The empathic accuracy coding procedure was identical to Study 1. The mean reliability of this measure (i.e., the within-subject average calculated across all raters) was .75. Empathic accuracy ratings were aggregated in the same way as in Study 1. The average scores for men and women did not differ significantly (20.29 and 22.24, respectively, *ns*).

Ease of inference coding. Sets of two independent raters evaluated how difficult it was to infer each participant's written thoughts/feelings based on his or her videotaped interaction behavior. These procedures were also identical to

Study 1. Interrater reliabilities were reasonably high (i.e., the average intraclass correlation coefficient was .52 for ratings of male participants and .51 for ratings of female participants). The ease-of-inference ratings made by each rater were averaged for each participant. This index was then used as a covariate to control for the partner's degree of readability.

Stress/anxiety coding. Discussion behaviors were coded by five trained raters, all of whom worked independently. Raters evaluated each participant's behavior using 9-point scales (1 = *not at all*, 9 = *extremely*) on the following dimensions: stressed, anxious, upset, calm (reverse scored), and relaxed (reverse scored). Ratings were reliable across the raters (mean $\alpha = .63$), so they were averaged across raters to form a measure of each item. A principal axis factor analysis followed by varimax rotation revealed that all five measures loaded on one factor within each gender. Because the summed ratings for the five items were internally consistent (Cronbach's α s = .90 for men and .89 for women), they were aggregated to create an observer-rated index of stress/anxiety, with higher scores indicating greater stress/anxiety.

Results and Discussion

Descriptive statistics. Table 3 reports the descriptive statistics for Study 2. Women and men displayed low to moderate levels of empathic accuracy, similar to previous conflict-resolution studies of empathic accuracy (e.g., Fletcher & Thomas, 2000). Participants were rated as displaying low to moderate levels of stress/anxiety, and participants' thoughts/feelings were rated as moderately difficult to infer based on what they said and/or did during their discussions. Matched-pairs *t* tests revealed one marginally significant gender difference. Similar to Study 1, men's thoughts/feelings were rated as slightly more readable than were women's. Zero-order correlations among the Study 2 variables are shown in Table 4.

APIM analyses and tests of predictions. Because partners' scores were significantly correlated, we analyzed the data using the APIM (Kashy & Kenny, 2000; Kenny, 1996). Actor effects are reported as regression coefficients, the independent variables are standardized, and the primary dependent variable (empathic accuracy) is unstandardized. All predictor variables were centered on the grand sample mean (Aiken & West, 1991).

The APIM analyses were conducted using the PROC MIXED program in SAS 9.0. The dependent measure was each actor's empathic accuracy score. The ease-of-inference index was entered as a covariate to control for variability in how easy it was to infer each partner's thoughts/feelings based on what he or she said or did during the conflict discussion. The predictor variables were actor and partner scores on attachment anxiety and avoidance, the actor's observer-rated stress/anxiety index, actor gender, and the

Table 3. Descriptive Statistics, Study 2

	Men M (SD)	Women M (SD)	Mean difference (SD)	Matched-pairs t test
Empathic accuracy	20.22 (13.58)	22.24 (13.64)	-1.95 (16.72)	$t = -1.11, ns$
Attachment avoidance	25.69 (8.27)	25.97 (7.79)	-.28 (11.44)	$t = -0.24, ns$
Attachment anxiety	27.53 (9.38)	29.02 (10.00)	-1.49 (11.61)	$t = -1.26, ns$
Stress/anxiety (observer rated)	24.77 (1.83)	25.02 (1.73)	-0.25 (1.49)	$t = -1.68, ns$
Ease of inference (observer rated)	4.06 (1.23)	4.35 (1.12)	-0.29 (1.46)	$t = -1.85, p = .068$

Note: $N = 96$ couples.

condition to which each couple was assigned (major vs. minor conflict). All two-way and theoretically relevant three-way interactions were also entered. No significant three-way interactions emerged. None of the interactions involving gender were significant, so none of the effects reported below are qualified by gender differences.

Both of the effects we predicted were found. First, a main effect for avoidance indicated that highly avoidant individuals were less empathically accurate in general than were their less avoidant counterparts, $b = -.37$, $t(142) = -2.65$, $p < .01$. This replicates what we found in Study 1, and it is consistent with other research showing that highly avoidant people use deactivating strategies in relationship-threatening situations (Fraley & Shaver, 2000; Mikulincer & Florian, 1998). It also provides further evidence that highly avoidant people do, in fact, limit the monitoring of their partners' thoughts and feelings in attachment-relevant situations.

Second, as depicted in Figure 2, the interaction between actor's attachment anxiety and observer ratings of actor's stress/anxiety was found, $b = .13$, $t(150) = 1.92$, $p = .056$.⁶ Compared to less anxious people, highly anxious individuals displayed greater empathic accuracy if they were rated as more stressed/anxious during their discussions but less empathic accuracy if their stress/anxiety was rated as lower. Simple slope analyses revealed that neither slope differed significantly from 0 (both t s < 1.50 , ns). Thus, similar to Study 1, highly anxious people displayed heightened empathic accuracy when they were more distressed than when they were less distressed relative to less anxious people. These results suggest that highly anxious individuals become more vigilant to what their partners are thinking and feeling when their partners might be harboring relationship-threatening thoughts/feelings.

Both of the effects reported above also held when the readability of partners' thoughts/feelings (the ease-of-inference index) was partialled (both p s $< .05$). This discounts the possibility that highly anxious individuals become more empathically accurate when distressed because their partners' thoughts/feelings are more directly conveyed in their discussions, or that highly avoidant individuals are generally less

empathically accurate because their partners' thoughts/feelings are more difficult to infer from their statements or actions.

Discriminant validity analyses. To provide further evidence for the discriminant validity of these effects, we controlled for three potential confounds: relationship length, relationship satisfaction, and neuroticism. When each potential confound was partialled, both of the effects reported above remained statistically significant or marginally significant.

We also reconducted the Study 2 analyses to determine whether the effects remained significant when the proportion (the percentage) of negative to total thoughts and feelings reported by each actor's partner was controlled. Insecurely attached people may, for example, have partners who report a higher percentage of negative thoughts/feelings relative to their total thoughts/feelings during the conflict discussion, which might have affected the empathic accuracy results. Both of the effects reported above, however, were significant when the proportion of negative to total partner thoughts/feelings was statistically controlled (both p s $< .05$). These predicted effects, therefore, are robust.

General Discussion

The goal of this research was to investigate how individuals who have different attachment orientations manage empathic accuracy in relationship-threatening situations with their romantic partners. In two social interaction studies, we examined patterns of empathic accuracy associated with attachment anxiety and avoidance in different attachment-relevant interactions (intimacy vs. jealousy problem discussions, and conflict-resolution discussions) that entailed different types of relationships (marital and dating) and different methods of measuring distress (experimentally manipulated and observer rated). Study 1 tested empathic accuracy patterns in married couples who discussed a major or minor relationship problem that focused on intimacy or jealousy issues. Study 2 tested empathic accuracy patterns in long-term dating couples who discussed an unresolved conflict in their relationship. For both studies, we hypothesized that highly avoidant people should display lower levels of empathic accuracy in general than less avoidant (more secure) people. This hypothesis was supported in both studies. In fact, in many cases, the level of empathic accuracy exhibited by highly avoidant persons was slightly above zero, representing almost total inaccuracy.

We also hypothesized that highly anxious people would display greater empathic accuracy when discussing relationship issues that were more versus less relationship threatening. Although highly anxious individuals did not experience significant increases in empathic accuracy in higher relative to lower threat conditions, they *did* display significantly greater empathic accuracy when discussing relationship issues that were more versus less relationship-threatening

Table 4. Correlations Among the Variables, Study 2

	1	2	3	4	5	6	7	8	9	10
1. Male empathic accuracy	—	-.16	-.19	-.05	.03	.25*	-.09	.03	.03	.29**
2. Male avoidance		—	.16	.15	-.07	.08	-.01	.23*	-.05	.07
3. Male anxiety			—	.06	-.02	-.02	.14	.28**	-.15	-.08
4. Male stress/anxiety (observer rated)				—	.01	-.06	.08	-.12	.65**	-.08
5. Male ease of inference (observer rated)					—	.09	-.22*	-.11	-.07	.22*
6. Female empathic accuracy						—	-.27*	.02	.00	.02
7. Female avoidance							—	.16	.11	-.02
8. Female anxiety								—	-.08	-.02
9. Female stress/anxiety (observer rated)									—	-.02
10. Female ease of inference (observer rated)										—

Note: $N = 96$ couples. All correlations are two-tailed. Higher scores indicate higher values on each variable.

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

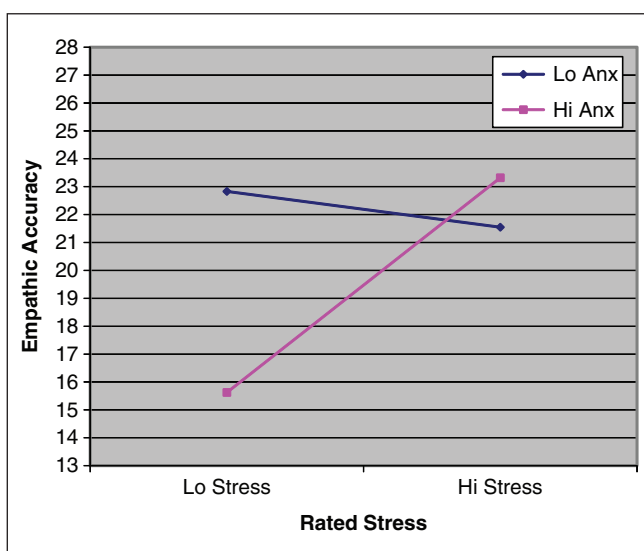


Figure 2. The interaction of actors' attachment anxiety and observer-rated stress/anxiety predicting actors' empathic accuracy

Note: Values are plotted for individuals scoring 1 SD above and 1 SD below the mean for each predictor variable. Lo Anx = low actor anxiety; Hi Anx = high actor anxiety; Lo Stress = low observer-rated stress; Hi Stress = high observer-rated stress.

compared to less anxious (i.e., more secure) people. Perhaps to protect themselves or their relationships from harmful information, less anxious people experienced slight *decreases* in empathic accuracy when more relationship-threatening problems were discussed. This pattern emerged for high- versus low-anxious spouses who discussed more severe relationship-relevant intimacy problems (in Study 1) and for high- versus low-anxious dating partners who discussed relationship conflicts that generated more observer-rated distress (in Study 2).

Our confidence that these effects are likely to be the result of motivational tendencies of highly anxious and highly

avoidant individuals is bolstered by the fact that the results of Study 2 remain even after both partners' scores on neuroticism, relationship satisfaction, and relationship length were partialled out. In other words, the relation between attachment anxiety and greater empathic accuracy when individuals are more distressed is *not* attributable to the variance that attachment anxiety shares with these potential confounds.

These findings clarify the conditions that generate empathic accuracy and inaccuracy in romantic relationships when individuals who have different attachment orientations discuss difficult, potentially relationship-threatening topics. When interpreting the results, a few key points must be kept in mind. First, in Study 1, the experimentally manipulated variable of relationship problem severity generated increases in empathic accuracy only in people who, according to attachment theory, should experience such increases—highly anxious people. Second, the experimental instructions in both studies were designed to decrease the likelihood that empathic inaccuracy could have resulted from participants' censoring or failing to report their own actual thoughts and feelings or the thoughts/feelings inferred from what their *partners* were thinking/feeling during the discussions. In both studies, each partner was explicitly instructed to be *as accurate as possible*, and all participants reported during debriefing that they followed these instructions. This suggests that the low levels of empathic accuracy exhibited by highly avoidant persons—in some cases approaching 0—were not attributable to a failure to perform the empathic accuracy task properly. Moreover, our patterns of empathic accuracy are not the result of anxious participants' partners conveying their thoughts/feelings more clearly or the result of avoidant participants' partners' thoughts/feelings being more difficult to infer. In both studies, the effects remained significant after controlling for the partner's readability.

The current findings contribute to our understanding of attachment and empathic accuracy in two significant ways. First, both studies provide the first evidence that highly anxious

people may be more motivated to get into their partner's head during relationship-threatening discussions. Second, both studies provide the first evidence that highly avoidant people display lower levels of empathic accuracy *in general*, even if the topics and issues being discussed are not likely to be highly threatening in nature. No prior studies, including the one by Simpson et al. (1999), have documented that highly avoidant people display empathic inaccuracy as a default strategy during attachment-relevant interactions with their romantic partners.

The Findings in Relation to the Empathic Accuracy Model

The revised empathic accuracy model (Ickes & Simpson, 2001) specifies when certain behavioral or cognitive tactics should be used to protect and maintain relationships, particularly when partners have to deal with actual or impending relationship threats. According to the model, if individuals are uncertain about whether their partners are harboring relationship-threatening thoughts or feelings, the easiest and most direct default tactic should be to limit exposure to (or awareness of) information that could clarify the actual negative content of their partner's thoughts or feelings.

In relationship-threatening contexts when individuals feel threatened but evidence of what their partners are thinking or feeling is ambiguous, individuals should use tactics that decrease empathic accuracy (i.e., they should display motivated *inaccuracy*; Ickes et al., 2005; Simpson, Ickes, & Oriña, 2001). Empathic inaccuracy can be achieved in several ways, including (a) not listening to, selectively listening to, or distorting the interpretation of what one's partner is saying during an interaction; (b) ignoring, selectively attending to, or distorting the interpretation of nonverbal cues that might clarify what one's partner is really thinking or feeling; (c) shifting one's attention (or the partner's attention) to irrelevant or distracting topics/issues; or (d) refusing to think about what is actually happening during an interaction.

The revised empathic accuracy model places special emphasis on the moderating role of individual differences, particularly attachment orientations. With regard to relationship maintenance maneuvers, securely attached people (those who score lower on anxiety and/or avoidance) and perhaps those who are more committed to their partners/relationships may use perceptual or cognitive tactics to maintain positive impressions of their partners and relationships, especially when their partners might be harboring deleterious or relationship-damaging thoughts and feelings. Highly avoidant individuals, on the other hand, should work to limit their exposure to "clarifying" information in these situations. One of the easiest and most effective ways to do so is to simply "tune out" information that could be threatening or selectively encode only its less threatening features (see also Fraley et al., 2000). Highly anxious individuals should latch

onto potentially threatening information in these situations, displaying motivated accuracy. When doing so, they should make more benevolent partner or relationship attributions than highly avoidant people. However, highly anxious individuals should be *less* successful than secure people at making benevolent inferences, given the more distrusting nature of their working models.

In sum, the revised empathic accuracy model proposes that relationships should be happier and more stable when partners display motivated inaccuracy in *select* situations (see Ickes & Simpson, 1997, 2001; Simpson, Ickes, & Blackstone, 1995; Simpson, Oriña, & Ickes, 2003). Not all people, however, are equally able or willing to use this tactic. As revealed in the current studies, motivated inaccuracy is less likely to be witnessed in highly anxious individuals, who are driven to know what their partners are thinking and feeling, especially in relationship-threatening contexts. Over time, relationships may benefit the most from a situationally sensitive mix of controlled confrontation and discreet circumvention regarding what one's partner is actually thinking and feeling (see also Bonanno, Keltner, Holen, & Horowitz, 1995). Highly secure individuals should be most adept at managing this situational mix, knowing when to "turn on" and "turn off" the monitoring of their partners.

Strengths, Limitations, and Future Directions

The present research melds two major models, the revised empathic accuracy model and attachment theory, both of which have important implications for how different people should manage empathic accuracy in relationship-threatening contexts. In addition, the different research designs of the two studies and the consistent results that each study generated increases our confidence in the stability and replicability of these effects. The hypothesized findings emerged across two samples of romantic couples (married and dating partners) who engaged in different types of attachment-relevant discussions (intimacy vs. jealousy problems, and conflict resolution) in which distress was experimentally manipulated or rated by trained observers. Several confounds that could have affected the results (e.g., the readability of each partner, each partner's scores on neuroticism, relationship length, and relationship satisfaction) were statistically controlled, lending greater confidence in our interpretations. In addition, both studies examined free-flowing interactions in a relatively controlled, quasi-experimental manner using a sophisticated method for evaluating empathic accuracy. Finally, the APIM allowed us to estimate and test actor and partner effects precisely and accurately.

Despite these strengths, the current research has some limitations. For example, the correlational nature of the studies precludes causal conclusions. The various methodological controls used in each study, however, lend greater confidence that the patterns of empathic accuracy we

observed in each study were probably motivationally driven, at least in part. Participants were instructed to be as accurate as possible when inferring their partners' thoughts/feelings, and we controlled for the readability of each partner when conducting the analyses.

Although both studies suggest that people who score higher in attachment anxiety and avoidance are differentially motivated to manage their empathic accuracy in relationship-threatening situations, we do not know whether these motivational mechanisms are conscious or unconscious in nature. We also do not know how these patterns of empathic accuracy are associated with long-term relationship outcomes. Although increased or decreased empathic accuracy might serve the current needs of highly anxious and highly avoidant individuals, future research needs to examine the influence of empathic accuracy on long-term satisfaction and relationship stability. Indeed, knowing more might strengthen the ties that bind, but it could also introduce information ensuring that those ties will eventually be broken.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

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Notes

- Empathic accuracy decreases with increasing marriage length (Thomas, Fletcher, & Lange, 1997), perhaps because couples in long-standing relationships become complacent or overly familiar with each other. Instead of accurately inferring their partners' thoughts and feelings during an interaction, individuals in long-term marriages may assume they know what their partners are thinking/feeling based on prior interactions. Thus, we limited the length of marriages to 15 years to ensure that participants would be engaged in the interactions and be as empathically accurate as possible.
- To confirm that participants experienced relationship-threatening thoughts/feelings during their discussions, raters also coded the degree to which each thought/feeling reported by each participant contained evidence of threat (1 = *low threat*, 7 = *high threat*). The mean scores were 2.53 ($SD = 1.10$) for men and 2.34 ($SD = 1.02$) for women. There was no gender difference.
- An examination of the discussion topics revealed that the topics chosen in the jealousy condition were somewhat more heterogeneous and less relationship-threatening than those chosen in the intimacy condition. This could explain why the predicted interaction emerged only in the intimacy condition.
- We also tested whether attachment anxiety interacted with the self-reported distress measure in predicting empathic accuracy. It did, $t(150) = 2.23, p < .03$. The interaction pattern was similar to the pattern reported for intimacy in Figure 1.
- Some couples who had been randomly assigned to the minor problem conflict condition got off topic and discussed more severe relationship problems. In addition, a few couples assigned to the major problem condition could not identify a major relationship problem, so they discussed the most significant one they had, which was relatively minor. This may have attenuated the impact of the major versus minor experimental manipulation.
- When we pooled the Actor Anxiety \times Stress interaction effects predicting empathic accuracy across Studies 1 and 2, the pooled interaction was significant, $t(296) = 2.15, p < .05$.

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