Empirical Research Paper

Do You See What I See? Actor and Partner Attachment Shape Biased Perceptions of Partners

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Lindsey M. Rodriguez[1], Jennifer Fillo[2], Benjamin W. Hadden[4], Camilla S. Øverup[5], Zachary G. Baker[3], and Angelo M. DiBello[6]

Abstract

The present research examined how actor and partner attachment insecurity relates to biases in perceptions of partners' core relationship-relevant constructs. Across three dyadic studies ($N_{couples}$ = 333, $N_{individuals}$ = 666), we examined attachment anxiety and avoidance as predictors of over- or underestimation of partners' relationship satisfaction, commitment, and responsiveness, using partners' own reports as the reference point for evaluating bias. Actors higher in avoidance and actors with partners higher in avoidance perceived their partners to be less satisfied and committed. In addition, actors higher in avoidance and actors higher in anxiety displayed a *pessimistic bias*, perceiving their partners to be less satisfied and committed than their partners reported being. Finally, actors with partners higher in avoidance displayed an *optimistic bias*, perceiving their partners to be more satisfied and committed than their partners reported being. Results underscore the importance of adopting a dyadic perspective on perceptual biases in romantic relationships.

Keywords

bias, attachment anxiety, attachment avoidance, romantic relationships, partner perceptions

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> "There are things known and there are things unknown, and in between are the doors of perception."
>
> —Aldous Huxley

Rarely do partners explicitly articulate *all* of their thoughts and feelings about their relationship. Correctly perceiving partners' thoughts and feelings can be good for relationships, particularly when these perceptions are more positive or mundane. However, correctly perceiving a partner's emotions can also expose individuals to distressing or threatening information (Simpson, Ickes, & Blackstone, 1995). Similarly, biased perceptions of partners' thoughts and feelings may serve adaptive or maladaptive functions (e.g., Simpson, Ickes, & Grich, 1999; Simpson et al., 2011). For instance, perceiving partners as less satisfied or committed than they are may lead to more hostile and damaging responses in conflict situations, whereas perceiving partners as more satisfied or committed than they are may buffer against negative partner responses and lead to more constructive reactions.

Perceptual biases play a key role in how attachment insecurity interferes with healthy functioning within relationships (Collins & Allard, 2001; Mikulincer & Shaver, 2003). Using three dyadic studies, the present research examines the roles of attachment anxiety and avoidance in shaping perceptions of partners' thoughts and feelings, as well as biases in these perceptions. The current research is among the first to examine the roles of *both* romantic partners' attachment orientations in their influence on partner perceptions with respect to core relationship-relevant constructs and behaviors. Specifically, we examine the roles of actor and partner attachment anxiety and avoidance in shaping self-reports and perceptions of partners' relationship satisfaction (Studies 1-3), commitment (Studies 2 and 3), and responsiveness (Study 3). We examine

[1]University of South Florida St. Petersburg, FL, USA
[2]University at Buffalo, NY, USA
[3]University of Houston, TX, USA
[4]Purdue University, West Lafayette, IN, USA
[5]Fairleigh Dickinson University, Teaneck, NJ, USA
[6]Brown University, Providence, RI, USA

Corresponding Author:
Lindsey M. Rodriguez, Ph.D., Department of Psychology, University of South Florida St. Petersburg, 140 7th Ave. S., St. Petersburg, FL 33701, USA.
Email: Lindsey.rodriguez1@gmail.com

these associations with respect to both the absolute levels of each outcome and biases in partner perceptions.

Attachment and Biased Information Processing

Attachment orientations develop in response to relationship experiences across the life span, beginning in early childhood (Bowlby, 1969, 1973, 1980). Early experiences with primary caregivers become internalized in the form of internal working models of the self and others, which include conditional expectations regarding the availability of attachment figures and how they are likely to respond in certain contexts. Once formed, internal working models remain relatively stable, continuing to influence cognition, affect, and behavior in close relationships throughout life (Bowlby, 1988).

Individual differences in attachment orientations arise from variations in the content of these internal working models. In adulthood, individual differences in attachment insecurity have been conceptualized in terms of two dimensions (Brennan, Clark, & Shaver, 1998; Simpson, Rholes, & Phillips, 1996). *Anxiety* reflects a dependence on others' acceptance for the development of positive views of the self. Anxiously attached individuals' cravings for closeness and chronic concerns of rejection and abandonment make them hypervigilant to threat-related cues (Cassidy & Kobak, 1988; Mikulincer & Shaver, 2003). *Avoidance* reflects a discomfort with closeness and intimacy. Avoidantly attached individuals' history of rejection and neglect from caregivers leads them to believe that close others cannot be relied upon in times of need, avoid dependence and intimacy, and distance themselves from threat-related cues in an attempt to keep the attachment system deactivated (Cassidy & Kobak, 1988; Mikulincer & Shaver, 2003).

Attachment Orientations Shape Perceptions of Partners

Attachment anxiety and avoidance influence information processing in close relationships by shaping which aspects of a partner's behavior are attended to and remembered, as well as judgments and attributions about that behavior (Collins & Allard, 2001; Collins, Guichard, Ford, & Feeney, 2004). Individuals higher in attachment anxiety and/or avoidance engage in schema-driven processing (see Dykas & Cassidy, 2011), in which perceptions of partners are colored by negative relationship beliefs and expectations. These perceptual biases play a key role in how attachment anxiety and avoidance can interfere with healthy relationship functioning, particularly by activating maladaptive responses (Collins & Allard, 2001; Mikulincer & Shaver, 2003).

Evidence of this schema-driven processing has been found across a range of domains. Individuals with more negative models of the self (characteristic of higher attachment anxiety) perceive that their partners love them less and are less committed to the relationship than those with more positive models of the self (Murray, Holmes, Griffin, Bellavia, & Rose, 2001). These negative partner perceptions are also reflected in insecure individuals' negative overall relationship evaluations. Numerous studies have found greater attachment anxiety and avoidance to be associated with lower levels of relationship satisfaction and commitment compared with lower anxiety and avoidance (see Hadden, Smith, & Webster, 2014 for a meta-analysis). Individuals with higher attachment anxiety and/or avoidance have also been shown to perceive messages from their partners during a stressful task as less supportive than do less anxious and avoidant individuals (Collins & Feeney, 2004a). In addition, multiple studies have found more anxious and/or avoidant individuals perceive their partners to be generally less responsive than do less anxious and/or avoidant individuals (Beck, Pietromonaco, DeVito, Powers, & Boyle, 2014; Segal & Fraley, 2016; Shallcross, Howland, Bemis, Simpson, & Frazier, 2011).

Attachment Orientations Predict Bias in Partner Perceptions

The studies cited above reveal that more anxious and avoidant individuals have more negative perceptions of their relationships and partners than do less anxious and avoidant individuals. However, research using partners' self-reports or observers' reports as a benchmark for evaluating directional bias can shed light on whether these more negative perceptions are warranted. Previous research has shown that individuals higher in attachment avoidance tend to have more negatively biased perceptions of their partners. For example, women higher in avoidance underestimate their partners' faith and trust in them (Tucker & Anders, 1999), and more avoidant individuals underperceive their partners' responsiveness compared with observer ratings more than less avoidant individuals (Shallcross et al., 2011). In addition, more avoidant individuals display poorer accuracy regarding partners' thoughts and feelings (i.e., empathic accuracy) during relationship-threatening discussions than do less avoidant individuals (Simpson et al., 2011). This lack of accuracy may be due to a pervasive tendency among more avoidant individuals to overperceive partners' negative emotions both in conflict situations and in everyday life (Overall, Fletcher, Simpson, & Fillo, 2015).

In contrast, research examining perceptual biases among individuals higher in attachment anxiety has revealed mixed results. In some cases, more anxious individuals' fears of rejection and neglect lead them to engage in schema-driven processing in line with these fears (Dykas & Cassidy, 2011). For example, more anxious men are consistently less accurate in perceiving partners' feelings about the relationship (Tucker & Anders, 1999). In addition, other research has found that individuals higher in anxiety tend to underperceive partners' levels of commitment (Arriaga, Reed, Goodfriend, & Agnew,

2006). However, more anxious individuals' hypervigilance to signs of relationship threats (Mikulincer & Shaver, 2003) can also lead them to be more accurate in certain types of situations. Indeed, during relationship-threatening situations, more anxious individuals have *more* accurate perceptions of partners' thoughts and feelings (i.e., empathic accuracy) than less anxious individuals (Simpson et al., 1999; Simpson et al., 2011). Further complicating this picture, Overall and colleagues (2015) found no association between attachment anxiety and bias regarding partners' negative emotions. Other studies also found no association between attachment anxiety and any bias in individuals' perceptions of partner responsiveness compared with observer ratings (Beck et al., 2014; Shallcross et al., 2011). Thus, additional research is needed to elucidate the contexts in which more anxious individuals' perceptions of their partners may be more or less biased.

Key Domains for Examining Partner Perceptions

The apparent inconsistency in more anxious individuals' perceptions of partners may be related to the domains and level of specificity examined in various studies. Most research examining partner perceptions has focused on situations which may reveal negative, painful, and/or potentially relationship-threatening information about partners' thoughts or feelings (Ickes & Simpson, 2001). However, it is unclear to what extent situation-specific perceptions color individuals' perceptions of partners more generally. Perhaps the inconsistencies in the literature are due to differences in the particular domain and level of specificity being examined across studies. Hypervigilance in more threatening situations may lead more anxious individuals to be less biased in the moment, but their internal working models may still negatively bias more global perceptions of their relationships. In contrast, prior research suggests that more avoidant individuals display negative biases both during specific situations and at more global levels.

To examine this issue more fully, the present research focused on examining partner perceptions in the context of key global relationship-relevant constructs (i.e., satisfaction, commitment, responsiveness). Relationship satisfaction and commitment are both core measures of romantic relationship quality. They are among the most frequently studied relationship quality variables and are highly predictive of relationship stability and dissolution over time (Berscheid & Reis, 1998; Le & Agnew, 2003; Le, Dove, Agnew, Korn, & Mutso, 2010). Perceptions of partners' responsiveness is also one of the central organizing constructs of relationship functioning (Reis, 2007; Reis, Clark, & Holmes, 2004). According to the interpersonal process model of intimacy, closeness between partners develops when: (a) one person discloses self-revealing information to their partner; and (b) the partner behaves in a way that is responsive to the self-disclosure (Reis & Shaver, 1988). Behaviors are considered to be responsive to the extent that they demonstrate understanding, validation, and acceptance. Ample evidence demonstrates that partner responsiveness is a key factor in the development of close relationships, predicting increased relationship quality over time (Laurenceau, Barrett, & Pietromonaco, 1998; Laurenceau, Barrett, & Rovine, 2005; Laurenceau, Rivera, Schaffer, & Pietromonaco, 2004; Reis et al., 2004).

Partner Characteristics May Influence Perceptual Accuracy

The present research also aims to build upon prior work in these domains by examining the influence of *both* actor and partner attachment on partner perceptions. Examining only the influence of actor attachment overlooks at least half of the picture (Kenny, Kashy, & Cook, 2006). Features of the target persons being perceived also shape partner perceptions (Human & Biesanz, 2013). Ickes and Simpson's (2001) revised empathic accuracy model acknowledges partner readability as an important factor that may constrain individuals' ability to accurately infer partners' thoughts and feelings; however, other partner factors, including attachment orientations, have not been systematically studied. Prior research has examined the effects of partner attachment on absolute levels of the relationship-related thoughts and behaviors. For example, partners of insecure individuals report lower satisfaction and commitment in their relationships than partners of secure individuals (e.g., Davila, Karney, & Bradbury, 1999; Paley, Cox, Burchinal, & Payne, 1999). However, the authors are aware of no research to date which has simultaneously examined the roles of both the perceiver's and the target's attachment orientations in biasing perceptions of romantic partners. Given the importance of perceiving partners as having more positive thoughts about the relationship and as engaging in more positive behaviors (Joel, Gordon, Impett, MacDonald, & Keltner, 2013; Macher, 2013), it is possible that there are protective mechanisms used by partners of more anxious and/or avoidant individuals (e.g., Overall, Simpsons, & Struthers, 2013; Simpson & Overall, 2014). For example, they may be systematically biased to perceive partners as more satisfied, committed, or responsive than their partner reports being. This hypothesis is tested in the present research.

Overview of the Present Research

Perceptual biases play a key role in how attachment insecurity interferes with relationship functioning (Collins & Allard, 2001; Mikulincer & Shaver, 2003). The present research contributes to a greater understanding of the nature and scope of these perceptual biases by (a) examining the roles of *both* actor and partner attachment anxiety and avoidance in shaping biases in romantic partner perception; (b) focusing on a set of key relationship-relevant constructs and behaviors, which have important implications for relationship health and functioning: satisfaction (Studies 1-3), commitment (Studies

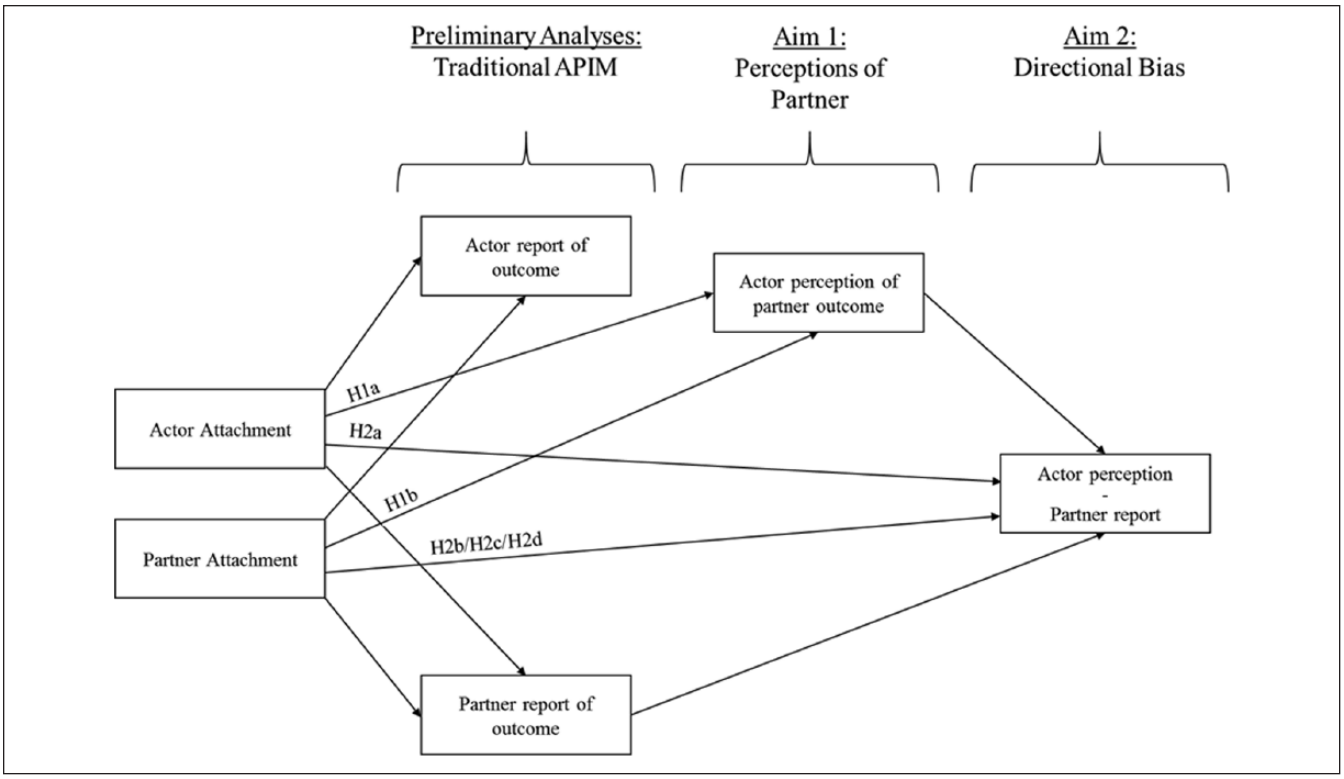

Figure 1. Conceptual model of actor and partner attachment (anxiety and avoidance, separately) on own and perceived partner relationship outcomes (i.e., satisfaction, commitment, responsiveness), as well as the discrepancy between actor perceived partner outcomes and partner self-reported outcomes.

2 and 3), and responsiveness (Study 3); and (c) conducting this examination using three distinct samples of married and dating couples to examine the replicability of the effects. Finally, we conduct an integrative data analysis (IDA; Curran & Hussong, 2009) examining these relations with respect to satisfaction and commitment to provide a more comprehensive test of our hypotheses.

Analyses for each study are structured around two overarching aims (Figure 1):

> **Aim 1:** Examine how actor and partner attachment anxiety and avoidance shape perceptions of partners' relationship-relevant thoughts and behaviors.

For example, consider hypothetical couple Harry and Sally[1]. How does Harry's degree of anxiety and avoidance influence his perception of Sally's satisfaction (actor effects, H1a)? How does Sally's degree of anxiety and avoidance influence Harry's perception of her satisfaction (partner effects, H1b)?

> **Hypothesis 1a (H1a; actor anxiety/avoidance effect):** Actors higher in attachment anxiety or avoidance will perceive their partners to be less satisfied, committed, and responsive than do actors lower in attachment anxiety or avoidance, respectively.
>
> **Hypothesis 1b (H1b; partner anxiety/avoidance effect):** Actors with partners higher in attachment anxiety or avoidance will perceive their partners to be less satisfied, committed, and responsive than do actors with partners lower in attachment anxiety or avoidance, respectively.
>
> **Aim 2:** Using partner self-report as a benchmark for evaluating directional bias, examine how actor and partner attachment anxiety and avoidance shape biases in partner perceptions.

For example, how does Harry's degree of anxiety and avoidance affect his tendency to over- or underestimate Sally's satisfaction (actor effects, H2a)? How does Sally's degree of anxiety and avoidance affect Harry's tendency to over- or underestimate Sally's satisfaction (partner effects, H2b)?

> **Hypothesis 2a (H2a; actor anxiety/avoidance effect):** Actors higher in attachment anxiety or avoidance will perceive their partners to be *less* satisfied, committed, and responsive than their partners report being (i.e., *a pessimistic bias*).

Hypothesis 2b (H2b; partner anxiety/avoidance effect): Actors with partners higher in attachment anxiety or avoidance will perceive their partners to be *more* satisfied and committed than their partners report being (i.e., *an optimistic bias*).

Hypotheses related to the effects of partner attachment anxiety and avoidance on biased perceptions of partner responsiveness are discussed below in Study 3.

General Data Analytic Plan

Obtaining self-reports and perceived partner reports from both partners in a dyad allows a test of whether individuals are correctly perceiving their partner's reports, as well as systematic measurement of misperceptions. All studies in the current research utilize actor–partner interdependence models (APIM; Kenny et al., 2006) to examine actor and partner effects of attachment anxiety and avoidance on perceived partner relationship-relevant thoughts and behaviors (Aim 1) and on the discrepancy between perceived partner thoughts/behaviors and partner-reported thoughts/behaviors (Aim 2). All analyses were conducted using in SAS 9.4 using the PROC MIXED procedure.

Analyses for each study were completed in three steps. First, preliminary analyses evaluated whether actor or partner attachment anxiety or avoidance were related to self-reported relationship outcomes. These analyses were not included as a primary aim of the current research because they are well-documented in the existing literature. However, they are included as a component in the Aim 2 standardized discrepancy score calculations. Second, Aim 1 analyses examined whether actor or partner attachment anxiety or avoidance were related to actor perceptions of partner relationship outcomes. These perceptions are also included as a component in the Aim 2 standardized discrepancy score calculations. Third, Aim 2 analyses tested hypotheses surrounding actor and partner attachment anxiety and avoidance on the discrepancy between actor perceptions of partner outcomes and partner self-reported outcomes, described below.

Standardized Discrepancy Scores

Prior research has used a number of different approaches to examining perceptual processes in relationships. Given our self-reported, cross-sectional data, we conducted analyses corresponding to Aim 2 using standard discrepancy scores (Z_{diff}), which were computed for each relationship construct according to the procedures used by De Los Reyes and Kazdin (2004). The use of Z_{diff} and the rationale for choosing Z_{diff} over other discrepancy measures (e.g., residual difference scores) have been reviewed and reported elsewhere (De Los Reyes & Kazdin, 2004; Ehrlich, Cassidy, Lejuez, & Daughters, 2014; Ehrlich, Richards, Lejuez, & Cassidy, 2016; Guion, Mrug, & Windle, 2009; Stuart & Jose, 2012). It was primarily adopted for the present research because it is among the most frequently used methods of measuring informant discrepancies (e.g., raw difference, residualized difference, standardized difference), it produces the most consistent estimates among informant discrepancies, and it is statistically discernable from the ratings from which it was created.

Specifically, all scale scores for individual and partner perception measures were converted to *z* scores, then standardized scores of partner reports were subtracted from standardized scores of actor perception (e.g., $Z_{diff} = Z_{actor\ perception\ of\ partner\ satisfaction} - Z_{partner-reported\ satisfaction}$) Positive Z_{diff} scores reflect perceptions that *overestimate* a partner's report (e.g., thinking one's partner is more satisfied than they report being). Conversely, negative Z_{diff} scores reflect perceptions that *underestimate* a partner's report (e.g., thinking one's partner is less satisfied than they report being). Standard difference scores close to zero reflect high agreement between a person's perception of their partner's thoughts or behaviors and his or her partner's actual report.

Distinguishability

Tests of distinguishability were used to evaluate whether information is lost by treating dyad members as if they were indistinguishable. Specifically, models where the paths, means, and variances were free to vary across gender were compared with models where they are constrained to be equal. Results from these analyses revealed that in two of the three studies, constraining men and women to be equal did not result in a poorer fitting model. Because we wanted to use a consistent covariance structure across studies in the subsequent IDA (presented after Study 3), we considered men and women to be indistinguishable in all studies. Nonindependence was estimated by the correlation between partner reports. All predictors were grand mean centered.

IDA

We were interested in increasing power and providing an overall test of hypotheses across data sets, and thus used IDA (Curran & Hussong, 2009) to test hypotheses from Aims 1 and 2 on satisfaction and commitment across studies. IDA is an analytic approach for analyzing raw data to provide comprehensive tests of hypotheses across multiple samples and is preferable when raw data are available (Curran & Hussong, 2009). As with all the analyses in Studies 1 to 3, IDA analyses were conducted using multilevel modeling in SAS 9.4, treating individuals as Level 1, couples as Level 2, and study as Level 3 sources of variance. We specified a random intercept for study and included it in our fixed effects (as two dummy-coded variables for satisfaction and one dummy-coded variable for commitment). In all reported IDAs, we standardized predictors and outcomes within their respective sample, removing sample-level mean

Table 1. Study 1: Zero-Order Correlations Among All Study Variables.

	1	2	3	4	5	6
1. Actor anxiety	—					
2. Actor avoidance	.35***	—				
3. Partner anxiety	−.02	.28***	—			
4. Partner avoidance	.28***	.32***	.35***	—		
5. Actor perception of partner relationship satisfaction	−.32***	−.58***	−.20**	−.41***	—	
6. Partner self-reported relationship satisfaction	−.15*	−.37***	−.34***	−.59***	.59***	—
M	3.22	1.87	3.22	1.87	4.26	4.41
SD	1.22	.88	1.22	.88	.74	.69

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

and variance differences. This standardization has two implications: First, all reported findings reflect within-study associations, and should be interpreted as the average associations across samples. Second, satisfaction was measured with three separate scales across Studies 1 to 3 (Studies 2 and 3 used the same measure of commitment). By standardizing satisfaction within each study, we removed scaling differences that are the result of differences in measurement. Because of this, we can thus directly compare associations across studies (Curran & Husson, 2009). The processes of standardization does not necessarily affect associations among variables, which are of principal interest in this article. In all analyses examining commitment, although not necessary, we maintained the standardized approach for consistency.

Study 1 Method

Participants and Procedure

Data were drawn from the baseline wave of a larger study of heterosexual married couples. Eligible couples included at least one undergraduate student and at least one member of the dyad consuming alcohol 1 or more times per week (this larger study placed an emphasis on alcohol use in marriage; the same person did not need to fulfill both requirements). One hundred twenty-three couples ($n = 246$) were compensated US$15 for participation. The majority (69.6%) were White, with 9.2% African American, 7.7% Asian, 7.3% "Other," 5.0% Multi-ethnic, 0.8% Native American/American Indian, and 0.4% Native Hawaiian/Pacific Islander. The sample was 26.5% Hispanic/Latino. On average, participants were 29.8 ($SD = 6.1$) years old (husbands, $M = 30.6$, $SD = 6.0$; and wives, $M = 28.8$, $SD = 6.0$) and had been married 4.2 ($SD = 4.9$) years.

Measures

Attachment anxiety and avoidance. Attachment anxiety and avoidance were measured with the Experiences in Close Relationships Scale (ECR)—Short Form (Wei, Russell, Mallinckrodt, & Vogel, 2007). This measure closely approximates the ECR in its reliability and psychometric properties and correlates with the longer ECR at .95 for both anxiety and avoidance (Wei et al., 2007). Twelve items asked participants about their experiences in romantic relationships and were measured on a Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Items included, "I need a lot of reassurance that I am loved by my partner" (anxiety: $\alpha_{men} = .68$, $\alpha_{women} = .77$), and "I try to avoid getting too close to my partner" (avoidance: $\alpha_{men} = .80$, $\alpha_{women} = .79$).

Relationship satisfaction. Satisfaction with the relationship was assessed with the seven-item Relationship Assessment Scale (RAS; Hendrick, 1988), which is among the most widely cited measures of relationship satisfaction (Funk & Rogge, 2007). Participants' responses about their own satisfaction were averaged to create a general satisfaction score ($\alpha_{men} = .90$, $\alpha_{women} = .91$). Participants also rated their perceptions of partner's relationship satisfaction using the RAS in response to the following instructions: "For each statement, please write the number that best reflects *how you think your partner feels*" ($\alpha_{men} = .90$, $\alpha_{women} = .91$).

Study 1 Results

Preliminary Analyses

Zero-order correlations and descriptive statistics among all study variables are presented in Table 1. A paired *t*-test showed no systematic misperceptions of partner satisfaction across the entire sample, indicating that there were no mean differences between actor-perceived partner satisfaction and partner self-reported satisfaction ($p = .15$). Although not a focal aim due to its prevalence in the literature, APIM analyses examined main effects of actor and partner attachment anxiety and avoidance on self-reported relationship satisfaction. There were no significant actor or partner effects of attachment anxiety on satisfaction ($ps > .15$). However, analyses revealed significant effects of actor avoidance, $b = –.489$, $p < .001$, and partner avoidance, $b = –.211$, $p < .001$, suggesting that actors higher in avoidance and actors

Table 2. Aim 2: Actor and Partner Effects of Attachment Anxiety and Avoidance on Discrepancy Between Perception of Partner Relationship-Related Thought/Behavior and Actual Partner-Reported Thought/Behavior.

								95% CI	
Study	Outcome	Predictor	Hypothesis	$r_{partial}$	*b*	*t*	*p*	LL	UL
1	Satisfaction	**Actor anxiety**	**H2a**	**–0.173**	**–.137**	**–2.37**	**.019**	**–.251**	**–.023**
		Actor avoidance	**H2a**	**–0.285**	**–.254**	**–4.00**	**<.001**	**–.380**	**–.129**
		Partner anxiety	**H2b**	**0.140**	**.100**	**1.73**	**.085**	**–.014**	**.214**
		Partner avoidance	**H2b**	**0.291**	**.235**	**3.70**	**<.001**	**.109**	**.361**
2	Satisfaction	**Actor anxiety**	**H2a**	**–0.213**	**–.215**	**–2.26**	**.025**	**–.403**	**–.027**
		Actor avoidance	H2a	−0.038	−.043	−0.43	.666	−.239	.153
		Partner anxiety	**H2b**	**0.163**	**.166**	**1.75**	**.083**	**–.022**	**.354**
		Partner avoidance	H2b	0.122	.130	1.32	.189	−.065	.325
	Commitment	**Actor anxiety**	**H2a**	**–0.266**	**–.269**	**–2.96**	**.004**	**–.449**	**–.089**
		Actor avoidance	**H2a**	**–0.171**	**–.194**	**–2.07**	**.040**	**–.378**	**–.009**
		Partner anxiety	H2b	0.111	.115	1.26	.209	−.065	.294
		Partner avoidance	**H2b**	**0.390**	**.454**	**4.88**	**<.001**	**.270**	**.638**
3	Satisfaction	Actor anxiety	H2a	0.006	.005	0.07	.945	−.145	.156
		Actor avoidance	**H2a**	**–0.190**	**–.203**	**–2.42**	**.017**	**–.368**	**–.037**
		Partner anxiety	H2b	−0.045	−.043	−.56	.574	−.194	.108
		Partner avoidance	**H2b**	**0.252**	**.263**	**3.15**	**.002**	**.098**	**.428**
	Commitment	Actor anxiety	H2a	−0.067	−.066	−.82	.411	−.223	.092
		Actor avoidance	**H2a**	**–0.187**	**–.201**	**–2.29**	**.024**	**–.374**	**–.027**
		Partner anxiety	H2b	0.102	.098	1.23	.221	−.060	.256
		Partner avoidance	**H2b**	**0.195**	**.208**	**2.38**	**.018**	**.036**	**.381**
	Responsiveness	Actor anxiety	H2a	0.124	.127	1.53	.128	−.037	.290
		Actor avoidance	**H2a**	**–0.372**	**–.450**	**–4.95**	**<.001**	**–.629**	**–.270**
		Partner anxiety	**H2c**	**–0.207**	**–.212**	**–2.54**	**.012**	**–.376**	**–.047**
		Partner avoidance	**H2d**	**0.394**	**.464**	**5.12**	**<.001**	**.285**	**.644**

Note. Significant and marginally significant effects are bolded for ease of interpretation. Positive coefficients represent an optimistic bias (i.e., that participants perceived their partners were more satisfied/committed/responsive than their partners actually reported). Conversely, negative coefficients represent a pessimistic bias (i.e., that participants perceived their partners were less satisfied/committed/responsive than their partners reported). Confidence intervals represent 95% CIs. LL = lower limit; UL = upper limit.

with partners higher in avoidance were less satisfied than actors lower in avoidance and actors with partners lower in avoidance, respectively.

Focal Analyses

Aim 1: How do attachment anxiety and avoidance shape perceptions of partner satisfaction? There were no significant effects of actor anxiety (H1a) or partner anxiety (H1b) on perceptions of partner satisfaction (ps > .24). However, analyses revealed the hypothesized significant effect of actor avoidance (H1a), $b = –.465$, $p < .001$, suggesting that actors higher in avoidance perceived their partners to be less satisfied than do actors lower in avoidance. Furthermore, the anticipated effect of partner avoidance also emerged (H1b), $b = –.254$, $p < .001$, suggesting that actors with partners higher in avoidance also perceived their partners to be less satisfied than do actors with partners lower in avoidance.

Aim 2: How do attachment anxiety and avoidance shape biases in partner perceptions? Results generally supported hypotheses and are presented in Table 2. The significant effect of actor anxiety suggested that actors higher in anxiety displayed a pessimistic bias (H2a; i.e., perceived their partners to be less satisfied than their partners reported being). A similar pessimistic bias emerged for actor avoidance (H2a). In addition, a marginal effect of partner anxiety emerged, suggesting actors with partners higher in anxiety displayed an optimistic bias (H2b; i.e., perceived their partners to be more satisfied than their partners reported being). Finally, a significant effect of partner avoidance showed that actors with partners who were higher in avoidance displayed an optimistic bias (H2b; i.e., perceived that their partners were more satisfied than their partners reported being).

Study 1 Discussion

Results from Study 1 largely supported hypotheses. Aim 1 results suggest that more avoidant actors perceived their partners to be less satisfied than less avoidant actors. Moreover, compared to those with less avoidant *partners*, actors with more avoidant partners perceived them to be less satisfied.

Importantly, Aim 2 results suggested that both more anxious and more avoidant actors displayed pessimistic biases (i.e., perceived their partners to be less satisfied than their partners reported), and that actors with more anxious or avoidant partners displayed optimistic biases (i.e., perceived their partners to be more satisfied than their partners reported). In other words, Harry's higher anxiety/avoidance is associated with him perceiving that Sally is *less* satisfied than she reports being (actor anxiety/avoidance effect), and Sally's higher anxiety/avoidance is associated with Harry perceiving that Sally is *more* satisfied than she reports being (partner anxiety/avoidance effect).

It is important to note that although actors with more avoidant partners perceived their partners to be less satisfied than less avoidant partners, when compared with what the partners reported, actors with more avoidant partners showed an *optimistic bias* (i.e., they perceived their partner was more satisfied than the partner reported being). It appears, then, that Harry does recognize that Sally (higher in avoidance) is less satisfied than less avoidant partners, but does not fully grasp the extent of Sally's dissatisfaction.

Study 2

Study 1 provided initial evidence of the roles of both actor and partner attachment orientations in shaping biased perceptions of partner satisfaction among married couples. Study 2 further builds upon these findings by examining the roles of actor and partner attachment in shaping biased perceptions of partner satisfaction along with an additional key relationship-related construct (i.e., commitment) and using an additional type of romantic relationship (i.e., dating couples). If the findings of Study 1 are robust, they should replicate across this new relationship-related construct and sample.

Study 2 Method

Participants and Procedure

Participants included 78 heterosexual romantic dyads (n = 156) who reported being in a committed romantic relationship for at least 3 months. Undergraduates were issued extra credit in exchange for their participation. The sample was racially diverse, with 37.9% Hispanic/Latino, 28.8% White, 16.7% Asian, 7.7% African American, and 9.0% reporting "Other." On average, participants were 25.0 years old (SD = 5.9; male, M = 26.0, SD = 6.3; and female, M = 24.0, SD = 5.3) and had been in a relationship for 3.4 years (SD = 4.1). Four percent of the sample reported casually dating, 50% exclusively dating, 23% nearly engaged, 8% engaged, and 15% married.

Measures

Attachment anxiety and avoidance. Attachment was measured using the same scale as Study 1 (anxiety: α_{men} = .71, α_{women} = .81; avoidance: α_{men} = .70, α_{women} = .86).

Relationship satisfaction. Relationship satisfaction was assessed with the Quality of Marriage Index (QMI; Norton, 1983), the third most widely cited measure of relationship satisfaction (Funk & Rogge, 2007). Because our sample included individuals in dating and married relationships, the items were modified in the current study such that "marriage" was changed to "relationship." The QMI includes six items that ask partners to report the extent to which they agreed or disagreed with general statements about their relationship. Participants' responses about their own satisfaction were averaged to create a general satisfaction score (α_{men} = .91, α_{women} = .95). Participants also rated their perceptions of their partners' relationship satisfaction using the QMI, with modified instructions as in Study 1 (α_{men} = .94, α_{women} = .92).

Relationship commitment. Commitment was assessed with seven items from the Investment Model Scale (IMS; Rusbult, Martz, & Agnew, 1998), which measures the extent to which individuals report being committed to their romantic relationship (α_{men} = .92, α_{women} = .93). Participants also rated their perceptions of their partner's relationship commitment via the IMS (α_{men} = .93, α_{women} = .91).

Study 2 Results

Preliminary Analyses

Zero-order correlations and descriptive statistics among all study variables are presented in Table 3. Similar to Study 1, results from paired t-tests revealed no systematic misperceptions of partner satisfaction or commitment across the entire sample (i.e., people did not perceive their partner to be different in satisfaction or commitment compared with what their partner reported; ps $>$ .35). APIM models revealed no significant actor or partner effects of anxiety on self-reported relationship satisfaction or commitment (ps $>$ .20). However, there were significant actor effects of avoidance on satisfaction, b = –.496, p < .001, and commitment, b = –.718, p < .001, suggesting that actors higher in avoidance were less satisfied and committed than actors lower in avoidance. There were also significant partner effects of avoidance on satisfaction, b = –.330, p < .001, and commitment, b = –.193, p = .005, suggesting that actors with partners higher in avoidance were also less satisfied and committed than actors with partners lower in avoidance.

Focal Analyses

Aim 1: How do attachment anxiety and avoidance shape perceptions of partner satisfaction and commitment? There were no significant effects of actor anxiety on perceived partner satisfaction or commitment (H1a; ps $>$ .05). Consistent with Study 1, significant effects of actor avoidance on perceived partner satisfaction (H1a), b = –.376, p < .001, and

Table 3. Study 2: Zero-Order Correlations Among All Study Variables.

	1	2	3	4	5	6	7	8
1. Actor anxiety	—							
2. Actor avoidance	.54***	—						
3. Partner anxiety	.27***	.39***	—					
4. Partner avoidance	.39***	.36***	.54***	—				
5. Actor perception of partner relationship satisfaction	−.43***	−.52***	−.23**	−.49***	—			
6. Partner self-reported relationship satisfaction	−.29***	−.46***	−.38***	−.59***	.50***	—		
7. Actor perception of partner relationship commitment	−.43***	−.52***	−.19*	−.41***	.58***	.41***	—	
8. Partner self-reported relationship commitment	−.26**	−.37***	−.40***	−.72***	.47***	.69***	.46***	—
M	3.31	2.20	3.31	2.20	6.03	5.96	6.96	6.94
SD	1.30	1.11	1.30	1.11	1.20	1.23	1.42	1.54

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

commitment (H1a), $b = –.389$, $p < .001$, suggested that actors higher in avoidance perceived their partners to be less satisfied and committed than did actors lower in avoidance. Results also revealed a significant effect of partner anxiety on perceived partner satisfaction (H1b), $b = .157$, $p = .045$, and a marginal effect of partner anxiety on perceived partner commitment (H1b), $b = .155$, $p = .057$, suggesting that actors with partners higher in anxiety perceived their partners to be more satisfied and marginally more committed than did actors with partners who were lower in anxiety. Finally, significant effects of partner avoidance on satisfaction (H1b), $b = –.377$, $p < .001$, and commitment (H1b), $b = –.284$, $p < .001$, emerged; actors with partners higher in avoidance perceived their partners to be less satisfied and committed than did actors with partners lower in avoidance.

Aim 2: How do attachment anxiety and avoidance shape biases in partner perceptions? As can be seen in Table 2, actor and partner effects showed a similar pattern to Study 1. For both relationship satisfaction and commitment, there were significant effects of actor anxiety, suggesting that actors higher in anxiety displayed a pessimistic bias (e.g., perceived their partners to be less satisfied and committed than their partners reported being; H2a). In addition, for commitment, a significant effect of actor avoidance emerged, suggesting that actors higher in avoidance also exhibited a pessimistic bias (H2a). For satisfaction, a marginal effect of partner anxiety suggested that actors with partners who were higher in anxiety displayed an optimistic bias (e.g., perceived their partners to be marginally more satisfied than their partners reported being; H2b). Finally, for commitment, a significant effect of partner avoidance emerged, suggesting that actors with partners who were higher in avoidance also displayed an optimistic bias (H2b).

Study 2 Discussion

Results from Study 2 replicated those of Study 1, demonstrating that more avoidant actors and actors with more avoidant partners perceived their partners to be less satisfied in their relationships than did less avoidant actors and actors with less avoidant partners, respectively. Results were extended by showing a similar pattern for commitment. In addition, bias analyses revealed a similar pattern to Study 1, suggesting that more anxious and avoidant actors show pessimistic biases and that actors with more anxious and more avoidant partners show optimistic biases. Taken together, these results reveal that partner perceptions are both somewhat on base and somewhat biased. Actors do know that their more avoidant partners were less satisfied and committed than less avoidant partners. However, these actors did not perceive the full extent to which this was true; actors with more avoidant partners still perceived that their partners were *more* satisfied and committed than the partners reported being.

Study 3

Studies 1 and 2 revealed that the association between both actor and partner attachment anxiety and avoidance and partner perceptions replicates across multiple samples and key indicators of relationship quality. Study 3 examined whether these associations replicated across a third sample, and further built upon Studies 1 and 2 by examining the roles of actor and partner attachment in shaping perceptions of a key relationship-relevant *behavior*: responsiveness.

Inherent in the responsiveness process is the *perception* of partner's responsiveness (Reis, 2007; Reis et al., 2004). Individuals will only feel intimate and be more likely to disclose information in the future to the extent that they *perceive* their partners as validating and accepting. However, if partners are *perceived* as judgmental, dismissing, or disinterested, the lack of responsiveness discourages future disclosure, signaling that private thoughts are not valued (Reis & Shaver, 1988). More avoidant individuals' discomfort with closeness and intimacy is likely to lead them to be less responsive toward partners. However, more anxious individuals' relationship insecurities may influence their own

responsiveness given, their perception of responsiveness received from partners, and partners' perceptions of the more anxious individuals' responsiveness toward themselves. Prior research has shown that anxious individuals' positive behavior toward partners, such as support and caregiving, are often motivated by their desire to benefit themselves or the relationship, and as such, these attempts are often out of sync with partners' actual needs (see Collins & Feeney, 2004b, for review). Thus, these attempts can get "lost in translation," and not be perceived by the partner. Responsiveness attempts may follow a similar pattern, with anxious individuals reporting being highly responsive, but with their partners not perceiving these behaviors as responsive. More anxious individuals' chronic desire for high levels of intimacy may also lead them to underperceive partners' responsiveness. Given more anxious individuals' needs for constant reassurance from partners (Shaver, Schachner, & Mikulincer, 2005), even relatively high levels of responsiveness may still fall short. The present research will examine this possibility.

Based on previous work, we expect that actors higher in attachment anxiety or avoidance will perceive their partners to be less responsive than do actors lower in anxiety or avoidance, respectively (H1a; actor anxiety/avoidance effect), and that actors with partners higher in anxiety or avoidance will perceive their partners to be less responsive than do actors with partners lower in attachment anxiety or avoidance, respectively (H1b; partner anxiety/avoidance effect). Hypotheses surrounding Aim 2 were that actors higher in attachment anxiety or avoidance will perceive their partners to be *less* responsive than their partners report being (H2a; actor anxiety/avoidance effect). Finally, given the tendency for the positive behaviors of actors higher in attachment anxiety toward their partners to be out of sync with partner's needs (Collins & Feeney, 2004b) and thus get "lost in translation," we expect that actors with partners higher in attachment anxiety will perceive their partners to be *less* responsive than their partners report being (H2c; partner anxiety effect; that is, *a pessimistic bias*). However, in line with our hypotheses regarding the effects of partner avoidance on perceived partner satisfaction and commitment, we expect that actors with partners higher in attachment avoidance will perceive that their partners are *more* responsive than their partners report being (H2d; partner avoidance effect; that is, *an optimistic bias*).

Study 3 Method

Participants and Procedure

Participants included 132 dating and married heterosexual couples ($n = 264$). At least one partner was an undergraduate student currently enrolled in a psychology course and undergraduates were compensated with course credit. The sample was ethnically diverse, with 41.9% being White, 17.0% Asian, 8.3% African American, 1.2% Native American, 1.7% Native Hawaiian, and 29.9% reporting being multi-ethnic or "Other." On average, participants were 24.2 years old ($SD = 5.8$; male, $M = 25.0$, $SD = 6.6$; and female, $M = 23.4$, $SD = 4.8$) and had been in a relationship 3.4 years ($SD = 3.3$). 4.1% of the sample reported casually dating, 52.0% exclusively dating, 19.7% nearly engaged, 7.8% engaged, and 16.4% married.

Measures

Attachment anxiety and avoidance. Attachment anxiety and avoidance were measured using the same scale as previous studies (anxiety: $\alpha_{men} = .73$, $\alpha_{women} = .70$; avoidance: $\alpha_{men} = .79$, $\alpha_{women} = .82$).

Relationship satisfaction. Relationship satisfaction was assessed using the five-item relationship satisfaction subscale of the IMS (Rusbult et al., 1998). Participants' responses about their own satisfaction were averaged across items to create a general satisfaction score ($\alpha_{men} = .96$, $\alpha_{women} = .93$). Participants also rated their perceptions of their partner's relationship satisfaction using the satisfaction subscale of the IMS, with modified instructions as in Study 1 and 2 ($\alpha_{men} = .94$, $\alpha_{women} = .94$).

Commitment. Participants' own relationship commitment ($\alpha_{men} = .91$, $\alpha_{women} = .89$) as well as their perceptions of their partner's commitment ($\alpha_{men} = .90$, $\alpha_{women} = .88$) was measured using the same scale as Study 2.

Responsiveness. Responsiveness given was measured with a six-item scale designed to measure how responsive individuals are to partners' needs and emotions (Canevello & Crocker, 2010). The scale asks participants, "Select the answer that corresponds to how much you feel the following statements are accurate about you," followed by items (e.g., "I try to be sensitive to my partner's feelings"), which were rated on a 7-point Likert-type scale from 1 (*not at all*) to 7 (*very much so*). Participants' responses were averaged across items to create a general score for responsiveness given ($\alpha_{men} = .96$, $\alpha_{women} = .95$). Participants also rated their perceptions of partners' responsiveness given to them using the same measure (i.e., responsiveness received; $\alpha_{men} = .95$, $\alpha_{women} = .93$).

Study 3 Results

Preliminary Analyses

Zero-order correlations and descriptive statistics among all study variables are presented in Table 4. Consistent with Studies 1 and 2, there were no systematic misperceptions of partner satisfaction or commitment across the entire sample ($ps > .08$). However, paired t-tests showed that actors reported giving more responsiveness than their partners reported receiving, $t(240) = 3.25$, $p = .001$. APIM analyses revealed no actor or partner effects of attachment anxiety on

Table 4. Study 3: Zero-Order Correlations Among All Study Variables.

	1	2	3	4	5	6	7	8	9	10
1. Actor anxiety	—									
2. Actor avoidance	.35***	—								
3. Partner anxiety	.39***	.35***	—							
4. Partner avoidance	.35***	.51***	.35***	—						
5. Actor perception of partner relationship satisfaction	−.24***	−.48***	−.22***	−.38***	—					
6. Partner self-reported relationship satisfaction	−.25***	−.40***	−.20**	−.53***	.51***	—				
7. Actor perception of partner relationship commitment	−.20**	−.56***	−.12†	−.47***	.62***	.41***	—			
8. Partner self-reported relationship commitment	−.18**	−.48***	−.19**	−.59***	.35***	.69***	.47***	—		
9. Actor responsiveness received	−.19**	−.57***	−.24***	−.34***	.59***	.33***	.49***	.33***	—	
10. Partner responsiveness given	−.25***	−.33***	−.09	−.55***	.31***	.54***	.33***	.53***	.34***	—
M	3.64	2.24	3.64	2.24	6.77	6.82	6.93	6.97	6.17	6.42
SD	1.18	1.04	1.18	1.04	1.37	1.41	1.30	1.29	1.14	.92

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

satisfaction or commitment; however, actors higher in anxiety reported being more responsive than actors lower in anxiety, $b = .159$, $p = .006$. In addition, actors higher in avoidance were less satisfied, $b = –.440$, $p < .001$, committed, $b = –.501$, $p < .001$, and responsive, $b = –.543$, $p < .001$ than actors lower in avoidance. Furthermore, actors with partners higher in avoidance reported lower levels of satisfaction, $b = –.169$, $p = .008$, and commitment, $b = –.272$, $p < .001$, than those with partners who were lower in avoidance. The effect of partner avoidance on actor responsiveness given was not significant.

Focal Analyses

Aim 1: How do attachment anxiety and avoidance shape perceptions of partner satisfaction, commitment, and responsiveness? There were no significant effects of actor anxiety (H1a) or partner anxiety (H1b) on perceptions of partner satisfaction, commitment, or responsiveness. As hypothesized, results showed that actors higher in avoidance perceived their partners to be less satisfied (H1a), $b = –.440$, $p < .001$, committed (H1a), $b = –.502$, $p < .001$, and responsive, $b = –.536$, $p < .001$ than did actors lower in avoidance. In addition, the hypothesized effects of partner avoidance emerged for satisfaction (H1b), $b = –.220$, $p = .009$, and commitment (H1b), $b = –.355$, $p < .001$, suggesting that actors with partners higher in avoidance perceived their partners to be less satisfied and committed than did actors with partners lower in avoidance. The effect of partner avoidance on actor responsiveness received were not significant.

Aim 2: How do attachment anxiety and avoidance shape biases in partner perceptions? The discrepancy score for responsiveness was computed in a manner consistent with the approach used for satisfaction and commitment; however, because the framing of this variable is a bit different (responsiveness given/received vs. satisfaction reported/perceived), we explain here standardized values of partner-reported responsiveness given were subtracted from standardized values of actor-reported responsiveness received (i.e., $Z_{diff} = Z_{actor\ responsiveness\ received} - Z_{partner-reported\ responsiveness\ given}$). Positive Z_{diff} scores reflect perceptions that *overestimate* a partner's report (e.g., thinking one receives more responsiveness than the partner reports giving; an optimistic bias). Conversely, negative Z_{diff} scores reflect perceptions that *underestimate* a partner's report (e.g., thinking one receives less responsiveness than the partner reports giving; a pessimistic bias).

Results from these analyses are presented in Table 2. There were no significant effects of actor anxiety for any of the outcome variables (H2a). Consistent with Studies 1 and 2, results revealed significant effects of actor avoidance on satisfaction, commitment, and responsiveness (H2a). These results suggest that actors higher in avoidance displayed a pessimistic bias (i.e., perceived their partners to be less satisfied, committed, and responsive than the partners reported being). Examination of partner effects revealed a significant effect of partner anxiety on responsiveness (H2c), suggesting that actors with partners who were higher in anxiety displayed a pessimistic bias related to their partner's responsiveness given (i.e., perceived less responsiveness than their partners reported giving). Finally, results revealed significant effects of partner avoidance on satisfaction, commitment, and responsiveness (H2d), suggesting that actors with partners who were higher in avoidance displayed an optimistic bias (i.e., perceived their partners to be more satisfied, committed, and responsive than the partners reported being).

Study 3 Discussion

Study 3 aimed to replicate findings from Studies 1 and 2 and incorporate an important relationship-relevant behavior, responsiveness. Results from Study 3 echoed our previous studies in showing that more avoidant actors and actors with more avoidant partners perceived their partners to be less satisfied, committed, and responsive than less avoidant actors and actors with less avoidant partners, respectively. Moreover, using partner report as the benchmark for evaluating directional bias, results revealed that more avoidant actors displayed a pessimistic bias and actors with more avoidant partners showed an optimistic bias with respect to all three outcomes. These results replicate the findings from Studies 1 and 2 that actors perceive their more avoidant partners to be less happy compared with less avoidant partners, but this perception is still more optimistic as compared with their partners' self-report.

As expected, more anxious actors reported being more responsive to their partners than less anxious actors. However, some of this responsiveness appears to have been lost in translation, as actors with more anxious partners underperceived the responsiveness purportedly given to them. As with their support and caregiving efforts (Collins & Feeney, 2004a, 2004b), anxious individuals' responsiveness attempts appear to be ineffective or out of sync with their partners' needs. This effect occurred above and beyond the general tendency in the sample for actors to report receiving lower levels of responsiveness than their partners reported giving.

IDA

To provide a comprehensive test of hypotheses across data sets, we performed an IDA (Curran & Hussong, 2009) to test hypotheses from Aims 1 and 2 on satisfaction and commitment across studies.

Aim 1: How Do Attachment Anxiety and Avoidance Shape Perceptions of Partner Satisfaction and Commitment?

Results of the IDA revealed no actor or partner effects of anxiety on satisfaction (ps $> .42$) and no actor effect of anxiety on commitment ($p = .927$). There was a significant partner effect of anxiety on commitment (H1b), $b = .139$, $p = .010$, suggesting that actors with partners higher in anxiety perceived their partners to be more committed than actors with partners lower in anxiety.

Results also revealed significant effects of actor avoidance for both satisfaction (H1a), $b = –.509$, $p < .001$, and commitment (H1a), $b = –.568$, $p < .001$, suggesting that across studies, actors higher in avoidance perceived their partners to be less satisfied and committed than did actors lower in avoidance. Furthermore, results revealed significant effects of partner avoidance for both satisfaction (H1b), $b = –.280$, $p < .001$, and commitment (H2b), $b = –.338$, $p < .001$, suggesting that across studies, actors with partners higher in avoidance perceived their partners to be less satisfied and committed than actors with partners lower in avoidance.

Aim 2: How Do Attachment Anxiety and Avoidance Shape Biases in Partner Perceptions?

Results of the IDA revealed significant effects of actor avoidance for both satisfaction (H2a), $b = –.188$, $p < .001$, and commitment (H2a), $b = –.228$, $p < .001$, suggesting that across studies, actors higher in avoidance perceived their partners to be less satisfied and committed than their partners reported being (i.e., a pessimistic bias). Moreover, results revealed significant effects of actor anxiety for both satisfaction (H2a), $b = –.103$, $p = .015$, and commitment (H2a), $b = –.139$, $p = .018$, suggesting that across studies, actors higher in anxiety also displayed a pessimistic bias in their perceptions of their partners' satisfaction and commitment to the relationship.

Results from partner effects revealed significant effects of partner avoidance for both satisfaction (H2b), $b = .226$, $p < .001$, and commitment (H2b), $b = .303$, $p < .001$, suggesting that across studies, actors with partners higher in avoidance perceived their partners to be more satisfied than their partners reported being (i.e., an optimistic bias). Finally, results revealed a significant effect of partner anxiety for commitment (H2b), $b = .132$, $p = .026$, suggesting that across studies, actors with partners higher in anxiety also displayed an optimistic bias in their perceptions of their partners' commitment to the relationships. However, the effect of partner anxiety was not significant for satisfaction (H2b), $b = .067$. $p = .113$.

General Discussion

Results presented here contribute to our understanding of how attachment-related perceptual biases can influence—and indeed often interfere with—healthy adult romantic relationship functioning. The present research enhances knowledge of the nature and scope of these perceptual biases by: (a) examining the roles of *both* actor and partner attachment in shaping biases in partner perception; (b) focusing on a set of core relationship-relevant constructs and behaviors; and (c) conducting this examination using three distinct samples of couples and an IDA approach to examine the replicability of the effects. Results consistently demonstrated that greater actor and partner attachment avoidance were associated with more negative perceptions of partner satisfaction, commitment, and responsiveness. Moreover, analyses using the partner's actual report as the benchmark for evaluating directional bias suggested that more insecure actors displayed pessimistic biases in their partner perceptions but that actors with more insecure partners (particularly more avoidant partners) displayed optimistic biases in their partner

perceptions. Taken together, these results demonstrate degrees of both correct and biased perceptions among actors with more insecure partners.

Results Overview

The present research examined how actor and partner attachment anxiety and avoidance shape perceptions of partner relationship-relevant thoughts and behaviors (Aim 1) and how actor and partner attachment anxiety and avoidance shape biases in partner perceptions, using partner self-report as the benchmark evaluating directional bias (Aim 2). Results related to Aim 1 consistently showed that greater actor attachment avoidance was associated with perceptions of lower partner satisfaction, commitment, and responsiveness (associations which were confirmed in the IDA). Thus, more avoidant actors perceive that their partners are not as fulfilled in the relationship when compared with their less avoidant counterparts. Aim 1 partner effects showed that in all cases, actors with more avoidant partners were correctly detecting that their partners were not as satisfied and committed as less avoidant partners (as shown in preliminary analyses for each study). Aim 1 results reveal important information about how attachment shapes interindividual perceptions; that is, how attachment shapes our perceptions of our partners compared with other people.

By comparing one person's perception of their partner's thoughts/behaviors to their partner's actual reported thoughts/behaviors, Aim 2 allowed for an examination of pessimistic and optimistic biases, with the partner's self-report being used as a benchmark for evaluating directional bias. These results consistently showed that more avoidant actors displayed a pessimistic bias with regard to perceptions of their partner's satisfaction, commitment, and responsiveness; more avoidant actors perceived their partners to be even less satisfied than their partners reported being. Aim 2 results also consistently showed that actors with more avoidant *partners* displayed an *optimistic* bias with regard to perceptions of their partner's satisfaction, commitment, and responsiveness. Actors with more avoidant partners perceived their partners to be *more satisfied* than their partners reported being. Again, this finding emerged consistently across each sample and outcome.

These findings provide valuable information about the nature and scope of the perceptual biases associated with attachment anxiety and avoidance, which may interfere with healthy relationship functioning. However, another novel contribution of the present research is combining the examination of partner perceptions using *inter*personal comparisons (Aim 1: How satisfied/committed/responsive do I think my partner is compared with other people?) and *intra*personal comparisons (Aim 2: How satisfied/committed/responsive do I think my partner is compared with his or her self-report?). Taken together, these findings suggest that actors with more avoidant partners are somewhat correct in their partner perceptions, but somewhat biased as well. For instance, actors with more avoidant partners understand that their partners are less satisfied than less avoidant individuals, but they do not perceive the full extent of their partner's dissatisfaction as compared with their partner's actual report. Our results suggest that this may also be true of actors with more anxious partners.

Although speculative at this point, there are several possible interpretations of this pattern of results. One explanation is that actors with more avoidant partners adopt "rose-colored" glasses, and in doing so may buffer themselves—and the relationship—from the negative effects of their partner's avoidance. Perhaps to know this level of their partner's dissatisfaction would undermine the relationship. Alternatively, this bias may be due to more avoidant partners not conveying the same quantity or quality of information regarding their feelings about the relationship. Indeed, partner readability is an important factor in determining the extent to which any individual can understand their thoughts and feelings (Ickes & Simpson, 2001). These optimistic biases may be more adaptive when the issues are minor or fleeting, but may harm the relationship when they mask critical problems that need to be addressed. In this way, failing to know or acknowledge the full extent of a partner's dissatisfaction or lack of commitment to the relationship may have costs for the relationship. Additional research is needed to further examine these possibilities.

The present research makes a number of important contributions to the self, interpersonal perception, romantic relationship, and attachment theory literatures. This work is, to the authors' knowledge, the first to examine the role of both actor and partner attachment orientations in shaping partner perceptions in the context of romantic relationships. As our results demonstrate, taking a dyadic perspective on perceptual biases is important because the effects of attachment insecurity do not exist solely at the individual level. Measuring partner perceptions and self-reports for both partners allows not only for an examination of how attachment insecurity may influence partner perceptions and partner self-reports, but also how both partners' attachment insecurity predicts the discrepancy between the two. In addition, the present research examined perceptual biases in the context of key relationship-relevant constructs and behaviors. Prior work in this literature has examined these processes with respect to very broad (e.g., anything the partner is thinking or feeling; Simpson et al., 2011) or very narrow (e.g., negative emotions in a specific interaction; Overall et al., 2015) constructs. The present research reveals important information about the ways in which attachment shapes perceptions of core relationship-relevant constructs (satisfaction and commitment) as well as a key relationship-relevant behavior that may be driving these more global relationship evaluations (responsiveness).

Consistency of Anxiety and Avoidance Findings

Results related to actor and partner attachment anxiety were similar to but not as consistent as those related to avoidance. In examining results from the combined IDA (i.e., across studies), although more anxious actors did not perceive their partner's thoughts and behaviors to be more negative than less anxious actors (Aim 1), when compared with actual partner reports, more anxious actors did show pessimistic biases (Aim 2). Furthermore, similar to attachment avoidance, partner effects of anxiety on commitment demonstrated that actors with more anxious partners showed an optimistic bias; they believed their partners were more committed than their partners actually reported. Once again, these findings provide some evidence that actors with more anxious partners may be engaging in adaptive misperception of their partners, likely to their own and the relationship's benefit.

The present research continues an ongoing trend in the literature of finding less consistent results for the effects of attachment anxiety on partner perceptions. However, adopting Neff and Karney's (2002, 2003, 2005) distinction between global and specific evaluations of one's partner may help explain the appearance of inconsistency in this literature. Prior research focusing on partner perceptions in the context of very *specific* relationship-threatening situations has found that anxious actors' hypervigilance can cause them to be more accurate in perceiving their partners' thoughts and feelings during the interaction (e.g., Simpson et al., 2011). However, the present findings are in line with prior research suggesting that anxious individuals' chronic concerns about abandonment and negative internal working models nonetheless negatively bias their more *global perceptions* of their partners' satisfaction and commitment (e.g., Arriaga et al., 2006; Tucker & Anders, 1999). Additional research is needed to further clarify the role of attachment anxiety in shaping partner perceptions. Future research may benefit from considering this specific/global distinction and focusing on *when* and *about what* anxious individuals may be more accurate or biased.

Strengths, Limitations, and Future Directions

The present research has a number of methodological and statistical strengths. By using the partner's self-report as a benchmark, this research was able to examine *directional bias* in partner perceptions. In doing so, the present research demonstrates that actors with more insecure partners adopt optimistic biases in perceiving how their partners think and feel. This adaptive misperception of their partners possibly buffers themselves and the relationship from the negative influences of their partner's attachment insecurity. In addition, in line with social psychology's growing emphasis on replicability (e.g., Nosek, Spies, & Motyl, 2012), the present research utilized advanced statistical models (e.g., APIMs with standardized discrepancy scores as outcomes; IDA) to show these effects consistently across three samples of married and dating couples and three core relationship constructs. That our results were consistent across domains and samples enhances confidence in these actor and partner effects for all study aims. Racial and ethnic diversity in Studies 2 and 3 also bolsters generalizability.

Although our studies advance the field in several ways, the present research is not without limitations. Our findings cannot speak to actors' ability to accurately track changes in their partner's feelings and behaviors over time. In addition, given that fluctuations in perceptions of partner commitment have been found to be associated with termination of the relationship (e.g., Arriaga et al., 2006), a logical next step would be to examine how attachment anxiety and/or avoidance are associated with fluctuations in perceptions, and whether fluctuations mediate associations between attachment insecurity and relationship dissolution. Finally, all of our variables were self-reported. Although this is likely the only way to measure actors' own and perceptions of partners' relationship thoughts and feelings, future research utilizing behavioral observations would serve to also show how these biases influence individuals' behaviors (e.g., during conflict discussions).

Conclusion

Interpersonal perceptions are permeated by two, often competing motivations: a motivation to be accepted, loved, and well-received by the partner, and a motivation to accurately know the partner's thoughts and feelings. We presented three studies that examined how actor and partner attachment anxiety and avoidance predict perceptions of partners, as well as discrepancies between perceived and actual partner relationship-relevant constructs. Greater attachment insecurity—primarily avoidance—was related to poorer perceived relationship-relevant thoughts and behaviors for actors and actors with more insecure partners. Furthermore, insecure individuals—primarily more avoidant individuals—showed pessimistic biases wherein they believe their partners were less satisfied, less committed, and less responsive to the relationship than their partners report being. However, actors with more insecure *partners*—primarily more avoidant partners—showed optimistic biases wherein they believe their partners are more satisfied, more committed, and more responsive than their partners reported being. These misperceptions may serve as a buffer to the negative relational effects of attachment avoidance. The results highlight the importance of adopting a dyadic approach in understanding how well partners really know—or want to know—their partners.

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Note

1. We refer to Harry as the actor and Sally as the partner here to keep the conceptual presentation as parsimonious as possible in giving examples of actor and partner effects. In actor–partner interdependence models (APIMs), every person is recognized statistically as both an actor and a partner.

Supplemental Material

Supplemental material is available online with this article.

ORCID iDs

Lindsey M. Rodriguez https://orcid.org/0000-0001-7594-3546
Benjamin W. Hadden https://orcid.org/0000-0001-8386-3116

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