Emotion

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Empathic Accuracy in Couples: A Daily Diary Study of Relationship-Related Emotions

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Empathic accuracy-the ability to accurately infer one's partner's emotions-has important implications for couples' relational well-being. Although distinct emotions convey various needs and elicit different responses between romantic partners, research on empathic accuracy-its patterns, underlying processes and relational consequences-across a spectrum of discrete emotions directed towards the partner or the relationship remains sparse. This study employed a 35-day dyadic daily diary design to examine empathic accuracy in couples, focusing on seven emotions (joy, feeling loved, anger, contempt, sadness, fear, and guilt) while also investigating the reliance on bias of assumed similarity, the moderating role of the target's social sharing, and the links between empathic accuracy and perceived partner responsiveness (PPR). The sample included 327 couples who reported on their own emotions, their perceptions of their partner's emotions, their perceptions of their own social sharing and their perception of their partner's responsiveness. Results showed that partners tend to hold a slight negativity bias when inferring each other's emotions. However, most are adept at tracking changes in their partner's emotions, especially when partners verbalize how they are feeling, and they strongly rely on their own emotions to make such inferences. In addition, the intensity of felt or perceived emotions-rather than empathic accuracy-were associated with PPR, though some distinct patterns emerged across emotions. These results provide partial support for error-management theory and highlight the importance of examining emotions beyond valence, as both similarities and distinctions emerge in patterns of empathic accuracy and their links to relational outcomes.

Keywords: empathic accuracy, emotions, couples, bias

Emotions are an intrinsic part of the human experience (Trampe et al., 2015), providing important signals concerning our inner state and responses to our external environment (Van Kleef, 2009). Importantly, emotions are inherently interpersonal, as they are often elicited, modulated, and processed through our interactions with others (Rusbult & Van Lange, 2003; Zaki & Williams, 2013). In couples, the ability to accurately perceive a partner's emotions—known as empathic accuracy—is closely tied to relational wellbeing, as it enables partners to respond more effectively to each other's needs (Gregory et al., 2020; Howland, 2016). Research has shown that while partners tend to have a good sense of their partner's emotional states, they may sometimes misinterpret these emotions

or misjudge their intensity, either underestimating or overestimating them (LaBuda & Gere, 2023). However, it remains unclear which emotions are more likely to be accurately perceived, overestimated, or underestimated on a daily basis, particularly when directed at the perceiver or the relationship, thereby potentially activating attachment or defensive systems more than emotions elicited outside the relationship (Harmon-Jones et al., 2017). In addition, studies examining factors that moderate empathic accuracy and its links to key relationship outcomes such as perceived partner responsiveness (PPR) are scarce and have yielded mixed results (Lazarus et al., 2018; Overall et al., 2020; Simpson et al., 2003). The variability in findings underscores the need for a more detailed examination of

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general patterns in empathic accuracy and its moderating factors focusing specifically on a wide range of discrete emotionsdiffering in valence, arousal, threat level, and conveyed needselicited within the relationship context. Moreover, given the central role of PPR in positive personal and relational outcomes and its close interrelation with emotional experiences, examining how empathic accuracy relates to PPR is warranted (Ruan et al., 2020; Slatcher et al., 2015). Taking a step toward addressing these gaps can help clarify the complex interplay between emotion, perception, and relationship dynamics, contributing to a better understanding of factors that foster positive interactions as well as relationship challenges. To this end, this 35-day dyadic daily diary study examined empathic accuracy among couples (i.e., mean-level bias and tracking accuracy) across seven emotions (i.e., joy, feeling loved, anger, contempt, sadness, fear, and guilt). It also explored the extent to which the perceiver's own emotions informed their inferences about the target's emotional intensity (i.e., bias of assumed similarity) and examined the moderating role of the target's social sharing. Finally, the study examined the associations between empathic accuracy and PPR. Figure 1 illustrates the study framework.

Empathic Accuracy in Couples

To assess empathic accuracy, the literature emphasizes two critical components: mean-level bias and tracking accuracy (Stern & West, 2018; West & Kenny, 2011). Mean-level bias assesses whether the perceiver's judgments align with, underestimate, or overestimate the target's self-reported emotions. Tracking accuracy, on the other hand, measures how accurately the perceiver can follow fluctuations in the target's self-reported emotional movements. High tracking accuracy occurs when the perceivers' ratings correlate with targets' actual self-reported emotions, suggesting that the perceiver is effectively attuned to the target's ebb and flow of emotional states. Thus, a person can simultaneously exhibit bias and accuracy as they may under/overestimate their partner's emotions (mean-level bias) while accurately tracking fluctuations in their partner's emotions (tracking accuracy). Studies using daily diaries, spanning 7-21 days, suggest that while partners are generally attuned to changes in each other's emotions (significant high tracking accuracy), they tend to exhibit a slight negativity bias, underestimating each other's positive affect and overestimating their negative affect (Kouros & Papp, 2019; Overall et al., 2015, 2020; Sadikaj et al., 2018). These trends provide partial support for error-management theory, which posits that such a negativity bias may help reduce complacency and

Figure 1

Conceptual Framework of the Present Study

decrease the likelihood of costly mistakes in relationships (Haselton & Buss, 2000).

Empathic accuracy is sensitive to context, with partners often being less accurate in perceiving each other's emotions during relationship-threatening situations (Miano et al., 2017). In such emotionally charged contexts, where emotions are elicited within or directed toward the relationship, perceivers are actively involved rather than passive observers. This involvement may trigger stronger emotional responses and activate attachment and defense systems that inform emotional perception (Garofalo et al., 2017; Mikulincer & Shaver, 2019). Despite the specificity of this context, most studies on empathic accuracy in daily life do not focus exclusively on emotions arising within the relationship. Exceptions include two 21-day studies sampling 78 and 73 couples, respectively. These studies examined negatively valenced emotionsrepresented by a composite score of anger, sadness, and hurtdirected at the partner (Overall et al., 2020). Echoing broader trends in research on empathic accuracy, results showed that partners tended to overestimate these emotions. However, like much of the research in this area, emotions were grouped by valence (i.e., positive or negative) rather than examined as discrete emotions. While valence is a key component of emotions, this approach overlooks other key characteristics, such as arousal, approachwithdrawal tendencies, and relationship-threat levels, which may shape the perceiver's perception and response (Harmon-Jones et al., 2017; Russell, 2009).

Empathic Accuracy Across Discrete Emotions

To our knowledge, no study to date has specifically examined empathic accuracy for discrete emotions elicited within the relationship using daily diaries. However, a cross-sectional study examining empathic accuracy for nine discrete emotions among 118 couples provides preliminary evidence to support the value of this approach (Clark et al., 2017). While reaffirming a general negativity bias, the results also revealed distinct patterns among emotions with the same valence. While anger, a high-arousal emotion with approach motivation, tended to be accurately perceived, guilt—a self-evaluative emotion—was more often underperceived. In contrast, sadness, fear, and disgust, which differ in arousal and motivation but share a common role in signaling threat, tended to be overperceived (Clark et al., 2017). These findings suggest that relying solely on a dimensional approach to emotions may overlook fine-grained patterns valuable for advancing our understanding of



the interplay between emotion and perception in couples. However, the study's cross-sectional design, reliance on retrospective self-reports spanning 2 weeks or 3 months, and use of a single measure rather than repeated measures present important limitations. Addressing these gaps requires examining mean-level biases and tracking accuracy for discrete emotions through a daily diary design.

To examine empathic accuracy for relationship-related emotions (i.e., emotions directed at the partner or the relationship), seven discrete emotions were selected for their psychological relevance and role in relational dynamics. These include four basic emotions-joy, anger, sadness, and fear-which convey distinct needs (Plutchik, 1980; Shaver et al., 1987; Tracy & Randles, 2011). For example, anger may signal a boundary violation, prompting re-establishment of limits, while sadness often reflects a sense of loss (Wiesel et al., 2021). Although disgust is a basic emotion, it was replaced with contempt, as contempt-marked by feelings of superiority-is more closely tied to relational conflict and breakdowns (Gottman, 1993; Miceli & Castelfranchi, 2018). Two additional emotions were included for their relational significance: feeling loved, which reflects attachment and care, and self-evaluative emotions (shame and guilt), which often emerge in relational contexts. Though shame focuses on the self and guilt on actions, they were combined due to their shared emphasis on self-evaluation, enriching the analysis of relational dynamics.

The Role of Perceiver's Emotions and Target Social Sharing

Empathic judgments are both accurate and biased, shaped not only by the target's emotional reality but also by the perceiver's own emotional experiences-a process known as the bias of assumed similarity (Kenny & Acitelli, 2001; LaBuda & Gere, 2023). When such a bias is high, perceivers' ratings of the target's emotional intensity are more closely aligned with their own emotional experiences, regardless of accuracy. Research consistently shows that assumed similarity bias is typically high among couples, which may partly stem from actual emotional similarity due to shared experiences and/or emotional contagion or from a true bias-where perceivers rely on their own emotions to infer the target's feelings, particularly in ambiguous situations (Hodges et al., 2015; Lin et al., 2024). Interestingly, Clark et al.'s (2017) two-part cross-sectional work suggests that this bias may vary across discrete emotions, as significant bias was observed for fear and sadness in only one of the two studies. These findings reinforce the value of examining accuracy and bias across specific emotions rather than grouping emotions into broad categories.

Both perceivers and targets contribute information that perceivers use to infer the target's emotions (Hodges et al., 2015). For instance, perceivers may rely on the target's verbal emotional expression labeled social sharing—as a direct source of information (Funder, 1995; Overall et al., 2020). In their 3-week daily diary study, Overall et al. (2020) showed that higher target social sharing was associated with improved tracking accuracy, as well as greater overestimation of negative emotions. Yet, Clark et al. (2017) found little evidence that social sharing moderates empathic accuracy; however, these results may reflect methodological limitations, such as reliance on a crosssectional design as social sharing may vary from 1 day to another. Thus, the extent to which the target's social sharing moderates meanlevel bias, tracking accuracy, and assumed similarity bias across different emotions remains unclear. Focusing on discrete emotions within a daily design could help clarify these relationships.

Empathic Accuracy and PPR

Research indicates that empathic accuracy is closely tied to relational well-being, as evidenced by its links to greater relationship satisfaction, more accommodative behaviors, and lower aggression (Cohen et al., 2015; Kilpatrick et al., 2002; Rafaeli et al., 2017; Sened et al., 2017). One proposed mechanism linking empathic accuracy to couples' well-being is PPR (Ickes & Hodges, 2013). Indeed, accurately perceiving a partner's emotions is central to fostering understanding, providing supportive responses, and strengthening relationship closeness (Gregory et al., 2020; Howland, 2016; Reis et al., 2004). Yet, studies exploring the relationship between empathic accuracy and PPR-feeling validated, cared for, and understood by the partner-have yielded mixed findings, underscoring the importance of context. For instance, a laboratory-based study involving 91 couples found that empathic accuracy was related to higher responsive behavior only when the perceiver was highly motivated to care for their partner (Winczewski et al., 2016). Similarly, another laboratory-based study with 95 couples reported that the links between empathic accuracy and closeness depended on whether the inferred emotion was perceived as threatening to the relationship (Simpson et al., 2003). Further emphasizing the role of context, two daily diary studies with 36 and 77 couples revealed that empathic accuracy was unrelated to PPR on nonconflict days but positively linked to PPR during conflicts (Lazarus et al., 2018). Building on this body of work, this study investigated whether overestimating or underestimating discrete emotions-emotions that may differentially activate attachment or defensive systems-in day-to-day interactions was associated with the target's PPR.

The Present Study

This 35-day dyadic daily diary study aimed to provide an in-depth examination of empathic accuracy in couples, focusing on a range of emotions elicited within relationships and expanding current knowledge of the factors that inform it and its associated relationship outcomes. The first objective was to assess mean-level bias, tracking accuracy, and bias of assumed similarity in perception of the partner's emotions across seven emotions (i.e., joy, feeling loved, anger, contempt, sadness, fear, and guilt). The second objective was to investigate how the target's social sharing moderates the perceiver's mean-level bias, tracking accuracy, and bias of assumed similarity across these seven emotions. The third objective was to examine whether daily variations in perceivers' empathic (in)accuracy across these seven emotions were related to targets' PPR. Given the lack of studies using daily diaries to examine discrete emotions, the study adopts an exploratory approach to account for potential variations across emotions.

Method

Participants

A convenience sample of 327 couples (n = 654 individuals) was included in this study. A post hoc power analysis indicated that a minimum of 92 participants is required, such that the current sample size ensures sufficient power to meet the study's objectives. The 4

sample comprised 299 (45.7%) cisgender men, 331 (50.6%) cisgender women, and 22 (3.4%) gender diverse individuals (i.e., transgender, nonbinary, genderfluid, multigender, genderqueer, agender, another gender). Participants' age ranged from 18 to 69 years (M = 31.51, SD = 8.42). According to participants' selfreported ethnicity, the sample included individuals who were White (n = 603; 92.2%), Latin American (n = 12; 1.8%), Asian (n = 26;4.0%; i.e., Central Asian, East Asian, South Asian, Southeast Asian, West Asian), Indigenous (n = 11; 1.7%; i.e., First Nations, Inuk, Métis, Alaskan Native, Native Hawaiian), Black (n = 5; 0.8%), and other ethnic/racial backgrounds (n = 22; 3.4%; e.g., Arab, Caribbean). Most participants (n = 653; 99.8%) were currently living in Canada. Regarding participants' educational level, 23 (3.5%) reported having an elementary school degree, 49 (7.5%) had completed high school, 68 (10.4%) had a vocational degree, 174 (26.6%) had a college degree, 213 (32.6%) reported having a bachelor's degree, 90 (13.8%) a master's degree, 17 (2.6%) a doctoral degree, and 20 (3.1%) reported other education degrees. In terms of employment status, 430 (65.7%) participants were working full or part time, 131 (20.0%) were studying, 27 (4.1%) were on parental leave, 17 (2.6%) were unemployed, 12 (1.8%) were homemakers, eight (1.2%) were retired, and 29 (4.4%) reported other principal occupations. As for participants' annual income, the sample predominantly fell into the lower- to middle-income brackets: 133 (20.7%) participants earned below \$20,000, 168 (30.6%) between \$20,000 and \$39,999, 199 (30.4%) between \$40,000 and \$59,999, 76 (11.6%) between \$60,000 and \$79,999, 54 (8.2%) between \$80,000 and \$99,999, and 16 (2.5%) above \$100,000.

In terms of sexual orientation, 482 participants (73.7%) identified as heterosexual, 56 (8.6%) as bisexual, 40 (6.1%) as heteroflexible, 23 (3.5%) as gay or lesbian, 22 (3.4%) as pansexual, 15 (2.3%) as queer, eight (1.2%) as questioning, three (0.5%) as asexual, and four (0.6%) identified with orientations not listed. Most couples (287; 87.8%) were in mixed-gender couples (i.e., cisgender man-cisgender woman), 19 couples (5.8%) in same-gender couples, and 19 couples (5.8%) included at least one gender diverse partner. All couples cohabited, with 30 couples (9.2%) being married. The duration of relationships ranged from 6 months to 34.67 years (M = 6.32 years, SD = 5.88). Among these couples, 183 (56.0%) had no children, while others reported having between one and five children (M = 0.90, SD = 1.21).

Procedure

Data for this study were collected as part of the Zephyr Project, a larger dyadic daily diary and longitudinal study focusing on couples' emotional, sexual, and relational well-being. Recruitment occurred online from December 2020 to June 2021. Potential participants first engaged in an online screening process, providing contact information. Those meeting the initial criteria were then contacted by a research assistant for a brief telephone eligibility interview. To be eligible, both partners had to be at least 18 years old and living together for a minimum of 6 months. Partners of all gender identity, sexual orientations, and relationship configurations could participate in this study. Eligible couples received a unique hyperlink to give informed consent and complete self-reported questionnaires using the Qualtrics Research Suite. The baseline survey incorporated three attention-testing questions to ensure accurate data collection. Participants failing at least two of these questions were excluded, and their data were deleted. Completion of

the baseline survey earned each partner a \$10 Canadian dollars compensation. After both partners completed the baseline survey, they were briefed by a research assistant on the daily diaries' procedure and a starting date was set. Each partner was required to complete a brief survey daily for 35 consecutive days, typically before sleeping. The daily diary participation was compensated on a prorated basis, with a maximum of \$70 Canadian dollars each for completing at least 85% of the entries (30 out of 35).

From the initial 1,249 couples who started the online screening, 401 were eligible and gave their contact information. Of these, 372 couples (744 participants) remained eligible and interested after telephone interview. Following the baseline survey, 339 couples proceeded to the daily diaries as 31 couples dropped out and two failed the attention test. During daily diaries, an additional 10 couples withdrew and two were excluded due to separation. The final sample included 327 couples (654 participants), who collectively completed a total of 19,735 diaries out of 22,890 (654 participants for 35 days) for a completion rate of 86.2% (M = 30.18 diaries out of 35, SD = 7.94).

Measures

Emotions

Participants indicated the extent to which they experienced seven emotions related to their romantic relationship today (i.e., emotions directed toward their partner or elicited by the relationship) and the extent to which they believed their partner experienced these same seven emotions in the context of their romantic relationship today. Items were derived or adapted from the Profile of Mood States (Fillion & Gagnon, 1999) and the Positive and Negative Affect Schedule (Gaudreau et al., 2006). Participants rated both their own emotions and their perceptions of their partner's emotions on a 7point scale (1 = not at all, 7 = very much). Higher mean scores indicated a higher intensity of the felt or perceived emotion. As shown in Figure 1, positively valenced emotions included: joy and feeling loved (i.e., wanted or cared for). Negatively valenced emotions characterized by high levels of arousal included: anger (i.e., angry, furious, or resentful), contempt (i.e., contemptuous or hostile) and fear (i.e., fearful, worried, or anxious). Negatively valenced emotions characterized by lower levels of arousal included: sadness (i.e., sad or hurt) and guilt (i.e., guilty or ashamed).

Social Sharing

To assess the extent to which participants verbally expressed their emotions during their interactions with their partner today, participants rated two items used in a previous daily diary study (Cameron & Overall, 2018). Items (i.e., "I shared and discussed my thoughts and feelings with my partner," "I expressed my true emotions to my partner"; r = .84, p < .001) were rated on a 7-point scale (1 = not at all, 7 = very much). The two items were summed and higher scores indicated higher social sharing today.

PPR

PPR was assessed using four items measuring the extent to which partners felt understood, validated, accepted, and cared for by their partner (Laurenceau et al., 2005). Items were rated on a 7-point Likert scale and summed to produce a total score ranging from 7 to 28, with higher scores indicating greater PPR. In the present sample, reliability was good ($\alpha = 0.87$).

Statistical Analyses

Descriptive statistics, correlations, reliability, and mixed models were conducted in SPSS 29, whereas the multilevel dyadic response surface analyses were conducted in Mplus 8.10. All models accounted for the nested structure of the daily and dyadic data (i.e., days nested within couples).

To address the first objective, which involved assessing mean-level bias, tracking accuracy, and assumed similarity bias in perceiving a partner's emotions (i.e., joy, love, anger, contempt, sadness, fear, and guilt), the truth and bias model was used (West & Kenny, 2011).

Within this framework, the terms *perceiver* and *target* differentiate the two roles each partner plays within the dyad: the target, who self-reports their emotions (i.e., independent variable) which is considered as the truth, and the perceiver, who makes inferences about the target's emotions (i.e., dependent variable). We tested two-level cross-classified models with random intercepts and random slopes for all within-person main effects, in which partners' ratings of their own and their partners' emotions over 35 days (level 1) are nested within dyads (level 2), and individuals and days are crossed to account for the fact that both partners completed the daily surveys on the same day. Dyads were considered indistinguishable as this sample included both same-gender and mixed-gender couples, therefore gender could not distinguish partners within all dyads (Kenny et al., 2006).

The truth and bias model simultaneously estimates two forms of accuracy and bias: mean-level bias and tracking accuracy. The mean-level bias indicates whether the perceiver's judgment generally over or underestimates the target's self-rating, which is considered as the "truth." Tracking accuracy refers to the extent to which the perceiver is able to track patterns (i.e., ups and downs) analogous of the target's self-reported emotions across the 35 days. As the perceiver's own emotions may serve as a source of information that shapes their inferences about the target's emotions, we also estimated levels of assumed similarity, which refers to the effect of the perceiver's self-ratings of their own emotions. If the perceiver's own emotional state is significantly associated with their evaluations of the target's emotions over and above the target's selfrating (i.e., truth), then part of the ratings assigned to the target's emotions hinges on the bias of assumed similarity. To compute these indicators for each of the seven emotions examined, the perceivers' judgements of the targets' emotions were centered on the targets' actual emotions by subtracting the targets' self-reported emotions across the 35 days, from the perceivers' judgements for each emotion. By centering this way, the intercept represents the meanlevel or directional bias. A significant negative intercept indicates that perceivers generally underestimate targets' emotion, whereas a significant positive intercept indicates that perceivers generally overestimate targets' emotion. In line with the truth and bias model, the perceivers' judgment of the targets' emotion was regressed on two predictors: the targets' self-reported emotion (to estimate tracking accuracy) and the perceivers' emotion (to estimate assumed similarity bias). Positive significant slopes indicate greater tracking accuracy or assumed similarity bias.

To address the second objective, which aimed to examine the moderating role of the target's daily social sharing on accuracy and bias in the perception of partners' emotions, social sharing was group mean centered and included as a Level-1 predictor in the truth and bias models. A significant association with the perceivers' judgment of the targets' emotion indicates that the directional bias is significantly different at varying levels of social sharing. Next, interactions between the target's self-reported social sharing and both the targets' and perceivers' emotions were added to assess whether tracking accuracy and assumed similarity bias were moderated by targets' daily social sharing. When an interaction term was significant, simple slope tests were used to report the associations (simple slopes of tracking accuracy or projection) at lower (-1 SD) and higher levels (+1 SD) of the target's social sharing.

To address the third objective, which examined whether daily variations in perceivers' empathic (in)accuracy were related to targets' PPR, dyadic response surface analysis was conducted within a multilevel polynomial regression framework (Huberman et al., 2025; Nestler et al., 2019; Schönbrodt et al., 2018). Five predictor variables were computed by centering perceiver perceptions (X) and target self-reports (Y) around the scale midpoint (i.e., 4) and calculating squared terms (X^2, Y^2) and their interaction $(X \times Y; Barranti$ et al., 2017). These daily predictor variables (Level 1; within couples/individuals) were nested within couples (Level 2; between couples/individuals). For all seven models, the outcome (the target's PPR) was regressed on Level 1 predictor variables for each partner, while accounting for correlations among predictors and outcomes, as well as the interdependence between each partner's predictors and outcomes. Partners were randomly assigned to "Partner A" and "Partner B," either of whom could serve as the target or perceiver. Equality constraints were applied to all parameters between partners, as the dyads were indistinguishable. A polynomial regression model was fitted to the data, yielding the following regression coefficients: b_1 (β for X, i.e., the effect of the perceiver's perception), b_2 (β for Y, i.e., the effect of the target's self-reported emotion), b_3 (β for X^2 , i.e., the curvilinear effect of the perceiver's perception), b_4 (β for the interaction term $X \times Y$, i.e., for the effect of the perceiver's perception at different level of the target's self-reported emotion), and b_5 (β for Y^2 , i.e., the curvilinear effect of the target's self-reported emotion). These coefficients were used to calculate five surface test values (intercepts), of which four (a_1, a_2, a_3, a_4) were relevant to the present study. For each model, a graph of the estimated response surface was generated using the Excel spreadsheet provided by Shanock et al. (2010) to complement the statistical interpretation with a graphical representation.

The first two intercepts represent the slope (a_1) and curvature (a_2) of the line of congruence, which reflects perfect agreement between the partner's perception of an emotion and the target's reported emotion. A significant positive a_1 indicates a linear association, where the target's PPR is higher when partners agree on higher levels of an emotion, while a negative a_1 suggests that PPR is higher when partners agree on lower levels of an emotion. A significant a_2 implies that the association between predictors and outcomes is curvilinear, meaning instances of congruence at extreme levels of the predictors relate differently to the outcome compared to midrange levels. A positive a_2 indicates that the target's PPR increases more sharply as both the target's self-report and the perceiver's inference deviate further from the midrange, while a negative a_2 indicates a sharper decrease under the same conditions. The next two intercepts are the slope (a_3) and curvature (a_4) of the line of incongruence, which represents instances of disagreement or mismatch between partners' responses. When a_4 is significant and negative, and a_3 is nonsignificant, it suggests a broad congruence effect, where higher levels of agreement are linked to higher levels of PPR (Humberg et al., 2019). Finally, a_3 tests whether outcomes differ depending on the direction of incongruence between partners, specifically whether overperceiving (positive a_3) or underperceiving (negative a_3) is linked differently to PPR.

Transparency and Openness

The data used in this study is available upon request to the last author. The code is publicly available on the Open Science Framework and can be accessed at https://osf.io/xjfeu/. The study's design and analysis were not preregistered. All procedures were approved by the Université du Québec à Trois-Rivières Institutional Review Board. We report how sample size was determined, all data exclusions, and all measures in the study.

Results

Descriptive Statistics

Results of aggregated daily descriptive statistics are reported in Table 1 and indicated that over 35 days, partners typically experienced higher mean levels of positively valenced emotions as opposed to negatively valenced emotions in their relationship. Table 2 presents correlations among self-reported emotions, perceptions of partner emotions, and self-reported social sharing. Results showed that positively valenced emotions were all inversely related to negatively valenced emotions. Moreover, high and low arousal negatively valenced emotions were strongly correlated with one another. Except for self-reported guilt, positive correlations between individuals' own emotions and their perceptions of their partners' emotions were significant. In addition, results showed strong positive correlations between self-reported social sharing and positively valenced emotions, as well as weak negative correlations with negatively valenced emotions, with the exceptions of self-reported contempt and guilt.

Accuracy and Bias in Perception of Target's Emotions

Results of the truth and bias model are reported in Table 3. Meanlevel bias (i.e., intercept) showed that perceivers strongly underestimated targets' positively valenced emotions such as joy and

Table 1	
Descriptive	Statistic

	5	Self-repoi	ted		Perceive	d
Study variable	М	SD	Range	М	SD	Range
Joy	5.35	1.08	1–7	5.11	1.10	1–7
Feeling loved	4.82	1.34	1-7	4.62	1.27	1-7
Anger	1.34	0.48	1-7	1.35	0.51	1-7
Contempt	1.11	0.27	1-7	1.15	0.35	1-7
Sadness	1.32	0.51	1-7	1.31	0.51	1-7
Fear	1.41	0.69	1-7	1.48	0.76	1-7
Guilt	1.18	0.38	1-7	1.22	0.50	1-7
Social sharing	9.31	2.77	2-14			
Perceived partner responsiveness	5.23	1.46	1–7			

feeling loved, and slightly overestimated feelings of contempt, fear, and guilt. However, on average, participants did not significantly under or overestimate the degree of their partners sadness or anger across the 35 days. Tracking accuracy results indicated that for all emotions, perceivers exhibited moderate to strong tracking accuracy (joy, r = .63; feeling loved, r = .64; anger, r = .66; contempt, r = .46; sadness, r = .71; fear, r = .58; guilt, r = .58). In addition, perceivers showed bias of assumed similarity. When perceivers reported higher levels of a given emotion, their perception of their partners' (targets) same emotion tended to be higher. Effect sizes were strong for all emotions (joy, r = .95; love, r = .91; anger, r = .87; contempt, r = .75; sadness, r = .84; fear, r = .80; guilt, r = .68).

Targets' Social Sharing as a Moderator

When social sharing was examined as a predictor in the truth and bias model, it was not significantly associated with mean-level bias (i.e., under- or overestimation) of the perceiver's perception of the target's emotions, except for joy. The association between the target's social sharing and the perceiver's judgement of the target's joy was significant and positive (b = 0.01, SE = 0.00, p = .017, 95% CI [0.001, 0.012], r = .17) and showed higher levels of underestimation at lower levels of social sharing ($b_{low} = -0.25$, SE = 0.02, p < .001) compared to higher levels ($b_{high} = -0.22$, SE = 0.02, p < .001).

Targets' social sharing moderated perceivers' tracking accuracy for feeling loved (b = 0.01, SE = 0.002, p = .023, 95% CI [0.001, 0.010]), anger (b = 0.01, SE = 0.002, p < .001, 95% CI [0.007, 0.017]), contempt (b = -0.02, SE = 0.003, p < .001, 95% CI [-0.022, -0.010]), sadness (b = 0.01, SE = 0.003, p < .001, 95% CI [0.003, 0.012]), and guilt (b = 0.01, SE = 0.003, p = .025, 95% CI [0.001, 0.013]). The simple slopes of the significant interactions presented in Figure 2 indicate that tracking accuracy was higher at greater levels of target social sharing compared to lower levels for feelings of love, anger, sadness, and guilt. Conversely, at higher levels of target social sharing, tracking accuracy was weaker compared to lower levels of social sharing for contempt.

Targets' social sharing also moderated perceivers' bias of assumed similarity for feelings of love (b = 0.01, SE = 0.002, p = .031, 95% CI [.000, .008]), contempt (b = 0.02, SE = 0.003, p < .001, 95% CI [0.011, 0.022]) and sadness (b = 0.01, SE = 0.002, p < .001, 95% CI [0.005, 0.013]). The simple slopes of the significant interactions presented in Figure 3 indicate that at higher levels of target social sharing, bias of assumed similarity was stronger compared to lower levels of social sharing for feeling loved, contempt, and sadness.

Empathic (In)Accuracy and Targets' PPR

Within-person results of multilevel polynomial regression with dyadic response surface analysis are presented in Table 4 and Figure 4. For all emotions, no evidence of a congruence effect was found, as the combination of a significant negative a_4 and a nonsignificant a_3 was not observed. For positively valenced emotions—joy and love—a linear common main effect of X and Y was identified, as evidenced by a significant positive a_1 and a nonsignificant a_2 . This indicates that targets' PPR is higher when both perceivers and targets agreed on higher levels of joy and love. In addition, for both joy and love, the slope of the line of incongruence (a_3) was significant and negative, suggesting that associations between disagreement and targets' PPR varied based on the direction of incongruence. Specifically, when

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Table 2	Correlations

ily Variables

.57** .56** sponding	.29** .34** ween corre	09* 16** elations bet	03 11** resent corre	13** 19** 1 bold) repr	–.09** –.19** liagonal (ir	12** 24** along the 6	12** 25** and those	13** 22** t variables,	07 18** nal to target	17^{**} 27^{**}	16** 25** hose above	.60** .51** variables, t	.60** .47** perceiver	.64** .54** al relate to	.65** .53** e diagon	the
: ?		.16**	.52**	.72**	.67**		.64	.54**	.59**	.56**	.62**	17^{**}	19^{**}	· i	27**	27^{**} 27^{**} 27^{**} $$
15**	07	$.51^{**}$.08	$.51^{**}$.65**	.55**	.54**	.45**	.49**	.53**	.49**	11**	$.10^{*}$	ľ	17** -	16**17** -
23**	16^{**}	.71**	.48**	.45**	.76**	.79**	.64**	.59**	.53**	.74**	.66**	21**	25**	ï	35**	31**35**
23**	12**	.64**	.61**	.75**	.37**	.70**	.78**	.57**	.59**	.69**	.71**	19^{**}	3**	1 Ci	30**2	30**30**2
27**	14**	.66**	.53**	.77**	.68**	.52**	.70**	.68**	.60**	.80**	.69	22**	3**	1	36**2	30^{**} 36^{**} 2
34**	15**	.62**	.54**	.61**	.76**	.68**	.35**	.63**	.61**	.67**	.74**	25**		31	36**31	37^{**} 36^{**} 31
28**	15**	.55**	.42**	.57**	.54**	.61**	.58**	.25**	.79**	.82**	.72**	22**	**	2(34**26	30**34**26
22**	09*	.58**	.45**	$.51^{**}$.57**	.59**	.59**	.78**	.30**	.66**	.76**	20^{**}	1^{**}		24**2	26^{**} 24^{**} 2
33**	21**	$.56^{**}$.48**	.71**	.67**	.78**	.64	.76**	.62**	.48**	.83**	29**	**	, Ç	40^{**} 32	34 ^{**} 40 ^{**} 3
33**	20^{**}	.60**	.47**	.62**	.68**	.63**	.71**	.66**	.71**	$.80^{**}$.46**	31**	**	 	37**35	38**37**35
.67**	.61**	19^{**}	14**	23**	21**	26**	29^{**}	23**	22**	31**	32**	.66**	*	.88	.81** .88	.79** .81** .88
.74**	.61**	18^{**}	11**	24**	22**	22**	32**	27**	20^{**}	32**	33**	.88**	*	·56*	.80** .56*	.83** .80** . 56 *
.73**	.64	27**	20**	35**	31**	37**	38**	34**	25**	41**	36**	.82**	*	[*] 08.	.70** .80*	.93** .7 0** .80*
.75**	.65**	25**	19**	29**	29**	29**	37**	30**	26^{**}	34**	36**	** <i>6</i> L:	*	.82	.92** .82	.66** .92** .82
6	8	7b	7a	6b	6a	5b	5a	4b	4a	3b	3a	2b		2a	1b 2a	1a 1b 2a

= perceived partner responsiveness = self-reported; PE = perception of the partner's emotion; PPR perceiver and target variables. S-R * p < .05. * * p < .01. perceivers underestimated the target's feelings of joy or love, targets reported higher PPR compared to days when perceivers overestimated these emotions.

Regarding negatively valenced emotions, a negative linear common main effect of X and Y was identified for fear and guilt. This indicates that targets' PPR was higher when both perceivers and targets agreed on lower levels of fear and guilt. Curvilinear main effects of X and Y were identified for anger, contempt and sadness as evidenced by a significant negative a_1 and a significant positive a_2 . Targets' PPR was higher when both the perceiver's perception and the target's self-report were congruent at extreme (very high or very low) levels of these emotions compared to midrange levels. A visual analysis of the graphs suggests that PPR levels were higher at very low levels compared to very high levels. For anger and sadness, the slope of the line of incongruence (a_3) was significant and positive hinting that when perceivers overestimated targets' anger or sadness, targets reported higher PPR compared to days when perceivers underestimated these emotions.

Discussion

This study extends current knowledge of empathic accuracy in couple relationships by identifying patterns of accuracy and bias in inferring partner relationship-related emotions and examining the extent to which daily variations in empathic (in)accuracy relate to PPR. Consistent with previous research (Overall & Hammond, 2013; Wilhelm & Perrez, 2004), the findings indicate that partners' inferences about each other's emotions were both accurate and biased. Notably, there was a mild tendency toward negativity bias, even though distinct patterns emerged across specific negatively valenced emotions. In addition, while social sharing moderated tracking accuracy and assumed similarity bias for certain discrete emotions, it only moderated over- or underestimation for joy. Importantly, the results reinforce the context-specific nature of empathic accuracy and bias, revealing both commonalities and differences across discrete emotions in how daily fluctuations in targets' self-reported emotions and perceivers' perceptions relate to PPR. By providing a multidimensional perspective on empathic accuracy, this study offers further support for Error Management Theory (Haselton & Buss, 2000; Johnson et al., 2013) and highlights the complex interplay between emotion, perception, and relational outcomes.

Patterns of Empathic Accuracy and Assumed Similarity Bias in Partners' Daily Inferences **About Relationship-Related Emotions**

The first objective was to identify patterns of empathic accuracy and bias across seven discrete emotions (i.e., joy, feeling loved, anger, contempt, sadness, fear, and guilt) by examining mean-level bias, tracking accuracy and bias of assumed similarity. Previous research had shown that couples tend to exhibit a negativity bias, but most studies had grouped positive and negative emotions together (Kouros & Papp, 2019; Overall & Hammond, 2013). The present findings further support this bias, aligning with Error Management Theory while adding nuance by demonstrating that patterns of empathic accuracy and bias vary across discrete negatively valenced emotions (Fletcher & Kerr, 2010; Haselton & Buss, 2000). Specifically, while perceivers tended to underestimate their partners' joy and feelings of love, they consistently overestimated contempt,

Table	3
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Mean-Level Bias, Tracking Accuracy, and Bias of Assumed Similarity in Perceivers' Perceptions of Targets' Emotions

				95%	6 CI	
Emotion	b	SE	р	LL	UL	r
Joy						
Mean-level bias	-0.24	0.02	<.001	-0.30	-0.23	
Tracking accuracy	0.13	0.01	<.001	0.12	0.15	.64
Assumed similarity	0.67	0.01	<.001	0.65	0.70	.95
Feeling loved						
Mean-level bias	-0.23	0.03	<.001	-0.36	-0.27	
Tracking accuracy	0.14	0.01	<.001	0.12	0.16	.64
Assumed similarity	0.56	0.01	<.001	0.53	0.59	.91
Anger						
Mean-level bias	0.03	0.01	.235	-0.01	0.04	
Tracking accuracy	0.20	0.02	<.001	0.17	0.23	.66
Assumed similarity	0.52	0.02	<.001	0.48	0.56	.87
Contempt						
Mean-level bias	0.03	0.01	<.001	0.02	0.06	
Tracking accuracy	0.18	0.03	<.001	0.12	0.23	.46
Assumed similarity	0.57	0.04	<.001	0.49	0.64	.75
Sadness						
Mean-level bias	-0.01	0.01	.446	-0.03	0.02	
Tracking accuracy	0.30	0.02	<.001	0.25	0.33	.71
Assumed similarity	0.44	0.02	<.001	0.40	0.48	.84
Fear						
Mean-level bias	0.06	0.02	<.001	0.03	0.09	
Tracking accuracy	0.17	0.02	<.001	0.14	0.21	.58
Assumed similarity	0.44	0.02	<.001	0.39	0.48	.80
Guilt						
Mean-level bias	0.04	0.01	.009	0.01	0.06	
Tracking accuracy	0.18	0.02	<.001	0.13	0.22	.48
Assumed similarity	0.31	0.02	<.001	0.26	0.35	.68

Note. SE = standard error; CI = confidence interval; LL = lower limit; UL = upper limit.

fear, and guilt. These results contrast with those of Clark et al.'s (2017) cross-sectional study, which found that partners tended to underestimate worry and guilt. This discrepancy may be due to methodological differences, particularly the use of a daily diary approach, which offers a more detailed and ecologically valid assessment, reduces recall bias, improves detection of subtle or infrequent emotions like guilt and contempt, and accounts for withinindividual variability. Another explanation for these mixed findings could be that guilt and worry, when assessed in relational contexts involving the perceiver, may trigger heightened sensitivity to safeguard against potential relational threats such as rejection. However, in line with findings from Clark et al. (2017), perceivers did not tend to over- or underestimate the targets' levels of anger and sadness. This pattern may be explained by the greater verbal and nonverbal manifestations of anger and sadness, making them easier to interpret, as well as their frequent depiction both in language and lay discourses (Lindquist, 2017; Shablack et al., 2020; Zinck & Newen, 2008).

The findings further highlight that inferences about a partner's emotions are both grounded in reality, as reflected in high tracking accuracy across all emotions, and colored by the perceivers' own emotions, as evidenced by a strong bias of assumed similarity (LaBuda & Gere, 2023). Such differences between mean-level bias and tracking accuracy further support the distinct nature and independence of these empathic accuracy components (Fletcher & Kerr, 2010). Partners may make accurate or biased inferences about each other's emotions while still demonstrating a keen awareness of

changes in their partner's emotional state. Regarding the strong bias of assumed similarity observed across emotions, this pattern may stem from shared interactions (e.g., conflicts) or emotional contagion with one partner's emotions triggering similar feelings in the other, thus merging individual emotional states into collective experiences within the relationship (Kenny & Acitelli, 2001; Overall et al., 2015). However, it is important to note that the bias of assumed similarity does not imply that the inference is inaccurate; rather, it indicates that the inference is based on information from the perceiver rather than the target's "truth" (West & Kenny, 2011).

The Moderating Role of Social Sharing in Partners' Empathic Accuracy and Assumed Similarity Bias

The second objective was to examine how the target's social sharing moderates the perceiver's mean-level bias, tracking accuracy, and bias of assumed similarity across seven discrete emotions. The present findings indicated that targets' self-reported daily social sharing generally did not moderate the mean-level bias in perceivers' judgments, except for joy, where higher social sharing was associated with a lower degree of underestimation. This suggests that expressing joy may help counteract negativity bias in couples and foster intimacy by reinforcing positive affect (Mehta et al., 2016; Rusu et al., 2023). In turn, recognizing and responding to positive emotions can create a nurturing feedback loop that strengthens relational well-being (Smith & Karam, 2019). Regarding negatively valenced emotions, it is





possible that the absence of significant moderating effects reflects a mismatch between the target's self-reported social sharing and the verbal and nonverbal cues detected by their perceiver. In combination with prior knowledge of their partner, these cues may moderate empathic accuracy in ways not captured in this study.

Still, social sharing significantly moderated the extent to which partners could attune to the ebb and flow of each other's emotions (i.e., tracking accuracy). When targets exhibited high social sharing, perceivers were more accurate in tracking changes relative to feelings of love, anger, sadness, and guilt in their partners. Verbal emotional expression likely provides clearer and more frequent cues about changes in these emotions, enabling perceivers to accurately monitor their partners' emotions (Hodges et al., 2015). However, the opposite was true for contempt; perceivers were less likely to accurately track this emotion when the target's self-reported social sharing was high. Interestingly, contempt, along with guilt, was one of the few emotions not significantly correlated with one's own selfreported social sharing. When targets experience contempt, they may either withdraw or stonewall, or express their emotions in a way that masks their true feelings, rather than providing cues that are more typical of related "attack" emotions like anger (Fischer & Giner-Sorolla, 2016). Interestingly, perceivers' bias of assumed similarity for feelings of love, contempt, and sadness was higher when target social sharing was high compared to when it was low. Although social sharing provides perceivers with information to infer their partners' emotions, their own emotional states may still resemble those of the target due to shared contexts or the activation

of defense and attachment systems in response to the expression (Goff & Smith, 2005). However, it remains unclear why this pattern emerged for these specific emotions but not others, highlighting the need for further research. Nonetheless, the modest moderating effects observed for both tracking accuracy and assumed similarity bias call for cautious interpretation.

Empathic (In)Accuracy and Targets' PPR

The third objective was to examine how variations in empathic (in)accuracy across seven discrete emotions were associated with targets' PPR. None of the models for the seven emotions supported the strict congruence hypothesis, which posits that agreement between self-reported and perceived emotions (i.e., empathic accuracy) is linked to PPR (Humberg et al., 2019). This suggests that the overall intensity and context of the emotion are more strongly linked to relational outcomes than accuracy. This aligns with previous research emphasizing that the links between empathic accuracy and relational outcomes are not straightforward and depend on the emotional context (Lazarus et al., 2018; Simpson et al., 2003; Winczewski et al., 2016). However, distinct linear, curvilinear, and bias-related patterns emerged in the associations between targets' self-reported emotions, perceivers' inferences, and daily PPR.

For positively valenced emotions, the experience of feelings of joy and love, but not their accurate perception, was linked to higher target PPR. This pattern aligns with research on the benefits of shared positive affect in relationships (Rusu et al., 2023).



Simple Slopes for the Moderation Effect of Target's Social Sharing on Bias of Assumed Similarity

Furthermore, targets reported higher PPR when perceivers underestimated joy and love compared to when they overestimated these emotions. In line with Error Management Theory, these findings suggest that a slight negativity bias may be less detrimental than overestimating positive affect (Haselton & Buss, 2000). Moreover, consistent with mood-congruency effects, when targets experience higher levels of joy, they may perceive their partner as more responsive, as their emotional state shapes how they interpret their partner's responses (Greifeneder & Bless, 2017).

Low self-reported

High self-reported

Perceiver's self-reported sadness

Figure 3

For negatively valenced emotions, results highlight both shared patterns and differences across emotions that vary in arousal, relationship threat, and conveyed needs. The associations between targets' self-reports, perceivers' perceptions, and target PPR were linear for fear and guilt, indicating that PPR decreased as both targets' selfreports and perceivers' perception of these emotions increased. Fear and guilt may encourage withdrawal, self-focused rumination, or a need for reassurance, making higher levels—whether self-reported or perceived—consistently linked to lower PPR. These emotions may foster withdrawal, self-focused rumination, or a need for reassurance, making higher levels—whether perceived or self-reported—consistently linked to lower PPR. For anger, contempt, and sadness, the highest levels of target PPR occurred when both partners reported lower levels of these emotions, but the associations were curvilinear. Targets reported higher PPR when both partners agreed on either very high or very low levels of these emotions compared to when agreement was at mid-range levels. Thus, results suggest a link between empathic accuracy and PPR for these emotions, but this link depends on the intensity of the emotions. It may be that emotional agreement is most beneficial for relational responsiveness when these emotions are either strong enough to elicit a clear response or low enough to not interfere with connection. In addition, for anger and sadness, targets reported higher PPR when perceivers overestimated these emotions rather than underestimated them. This partially supports Error Management Theory, which suggests that a negativity bias in perception of negatively valenced emotions may reduce complacency and encourage behaviors that enhance connection or reduce relational strain (Fletcher & Kerr, 2010; LaBuda & Gere, 2023). Overestimating emotions like anger and sadness may have minimal downsides but offer significant relational benefits. Moreover, as with joy and love, overestimation may also reflect the target's low levels of reported-and thus felt-anger and sadness, which in turn contributes to perceiving their partner as more responsive. In contrast, no difference in PPR was observed between days of perceiver under-versus overestimation for contempt, fear, and guilt. This may reflect the distinct social and relational functions of these emotions: contempt is inherently distancing, making relational repair unlikely regardless of perception accuracy, while fear and guilt are more internally focused and less likely to directly affect relational responsiveness.

lable 4

Within-Person Dyadic Polynomial Regression Coefficients and Response Surface Parameters of Perception of Target's Emotion and Target's Emotion on Target's Perceived Partner Responsiveness

								Response surf	face parameter	
		Dy	adic polynomial re	sgression coefficie	ent		Slope of LOC	Curvature of LOC	Slope of LOIC	Curvature of LOIC
Emotion	b_0	b_1	b_2	b_3	b_4	b_5	a_1	a_2	<i>a</i> ₃	a_4
Joy	16.20 (0.19)	0.70 (0.09)	2.56 (0.09)	0.01 (0.04)	-0.05 (0.05)	0.12 (0.04)	$3.26 (0.08)^{**}$	0.08 (0.03)	$-1.86 (0.16)^{***}$	$0.18 (0.10)^{*}$
Love	18.67 (0.17)	0.58 (0.07)	2.21 (0.07)	-0.03(0.03)	-0.05 (0.04)	0.03(0.03)	$2.79(0.09)^{***}$	-0.06(0.04)	$-1.63(0.11)^{***}$	0.05(0.07)
Anger	13.35 (0.46)	-0.61(0.13)	-0.97(0.11)	0.13(0.06)	-0.13(0.06)	0.38 (0.05)	$-1.59(0.18)^{***}$	$0.39 (0.07)^{***}$	$0.36 (0.15)^{*}$	$0.65 (0.13)^{***}$
Contempt	12.44 (0.76)	-0.04 (0.02)	-0.06 (0.02)	0.04(0.03)	0.04(0.03)	0.09 (0.02)	$-1.08(0.24)^{***}$	$0.61 (0.12)^{***}$	0.28(0.26)	$0.40(0.17)^{*}$
Sadness	14.85 (0.49)	-0.39(0.11)	-1.09(0.11)	0.03(0.07)	0.08 (0.06)	0.14(0.04)	$-1.47 (0.15)^{***}$	$0.25 (0.07)^{***}$	$0.70(0.17)^{***}$	0.08(0.12)
Fear	17.58 (0.42)	-0.41(0.13)	-0.70 (0.12)	-0.04(0.06)	0.03 (0.05)	0.06(0.04)	$-1.10(0.16)^{***}$	0.05(0.06)	0.29(0.19)	-0.01(0.10)
Guilt	18.38 (0.57)	-0.28 (0.18)	-0.48 (0.14)	-0.11 (0.08)	0.12 (0.07)	0.02 (0.05)	$-0.75 (0.20)^{***}$	0.04(0.08)	0.20(0.26)	-0.21 (0.14)
Note. LC $* p < .05$.	C = line of congr** $p < .01.$	uence; LOIC = li * $p < .001$.	ine of incongruend	ce.						

Limitations and Future Directions

Findings need to be interpreted in light of some study limitations. These findings should be interpreted in light of some study limitations. First, key factors that may influence empathic accuracy and the bias of assumed similarity-such as the nature of daily interactions, nonverbal social sharing, relational history, the frequency of emotions experienced within the relationship, partners' motivation to assess each other's emotions accurately, and prior knowledge of their partner's emotional responses-were not assessed. A future research direction would be to focus more intently on potential moderating factors in both laboratory-based and daily diary empathic accuracy studies. Second, the reliance on self-report measures introduces potential biases, especially when considering the challenges individuals face in emotional identification. Those with conditions such as alexithymia or personal inhibitions regarding social sharing, often find it difficult to accurately recognize and articulate their emotions. This discrepancy can lead to mismatches in attunement between partners, as there might be a significant gap between a person's self-reported state and the external cues (e.g., tense posture, tone of voice) that their partner observes, potentially leading to misunderstandings. Future research would benefit from integrating observational methods with selfreports. This approach would offer additional insight into the personal and dyadic factors that may contribute to accuracy and bias in perception relative to relational emotions. Third, combining certain emotions (e.g., shame and guilt) in the questionnaire to enhance parsimony might have led to a loss of information and increased participant confusion. Replicating the study with distinct emotions, each paired with a clear definition, may improve the reliability and depth of the findings. Fourth, the sample was relatively homogeneous in terms of ethnocultural background, which may limit the generalizability of the results to individuals from cultures with different norms regarding social sharing and interpretation. Most studies on empathic accuracy have been conducted in Western, Educated, Industrialized, Rich, and Democratic societies, which underscores the importance of diversifying recruitment efforts to ensure more representative findings (Clark et al., 2017; Kouros & Papp, 2019; LaBuda & Gere, 2023; Overall et al., 2015).

Clinical Implications

Given the critical role of empathic accuracy as a prerequisite for empathetic responses (Winczewski et al., 2016), it is essential to raise couples' awareness of the negativity bias associated with relationshiprelated emotions. Specifically, encouraging couples to be mindful of and share positive experiences can create a reinforcing feedback loop that strengthens positive dynamics, fostering closeness and intimacy (Crenshaw et al., 2023; Mehta et al., 2016). Additionally, helping partners become more attuned to their explicit and implicit emotional signals-which shape their partner's perceptions-while also increasing their awareness of how their own emotions inform their interpretation of their partner's emotional intensity can foster greater attunement in couples. Moreover, the findings reinforce that accurately perceiving a partner's emotions alone is not sufficient to ensure responsiveness. Rather, the experience of the emotion-whether selfreported or perceived-remains a key predictor of PPR, regardless of empathic accuracy (i.e., agreement). Thus, helping couples develop awareness of how their relationship-related emotions influence

Panel c: anger

18

17

16

15

13

21

2

1 0

Panel g: guilt

1 0

Perceiver

perception (X)

-1

Perceive

perception (X)

-1

-2 _:

Target

self-report (Y)

Target

self-report (Y)



Note. PPR = perceived partner responsiveness.

Within-Person Dyadic Response Surface Plots

partner responsiveness-and, in turn, foster coregulation-is an essential complement to accurately interpreting a partner's mental states. In sum, by providing couples with information about emotions and perception, and by fostering reflexivity and curiosity, interventions may support couples in navigating the complexities of daily relationship-related emotional experiences.

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Panel d: contempt

1 0

Perceive

perception (X)

-1 -2 -2

Target

self-report (Y)

18

17

N¹⁶

H15

arget

14

13

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