

Article

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I "get" you, babe: Reflective functioning in partners transitioning to parenthood Journal of Social and Personal Relationships 2020, Vol. 37(6) 1785–1805 © The Author(s) 2020 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0265407520905641 journals.sagepub.com/home/spr

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#### **Abstract**

Reflective functioning (RF) is a construct that has gained tremendous traction in the developmental psychology literature, demonstrating robust associations with parentchild attachment and interactional quality. Although theorists argue that RF should have meaningful links with relationship quality across the life span, to date this construct has not been applied to the study of adult romantic partnerships. The goal of the present investigation is to introduce the construct of Partner RF, the capacity to reflect on the thoughts and feelings of one's partner and to consider their roles in guiding behavior in one's partner and oneself. Next, we explore the degree to which Partner RF is associated with a range of theoretically related constructs—one's partner's Partner RF, as well as one's own parental RF, attachment, relationship satisfaction, and coparenting—in first-time parents. In a longitudinal study of N=107 primiparous couples, we found positive associations between mothers' and fathers' Partner RF and between mother's Partner RF and their parental RF. Partner RF is higher among women who report lower prenatal attachment avoidance and demonstrate more prenatal positive communication with their partners. Counterintuitively, higher levels of maternal Partner RF predict greater decreases in couple and coparenting satisfaction across the transition to

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parenthood. Partner RF may be an important construct to measure and understand in terms of its role in couple relationship functioning and parental well-being.

## **Keywords**

Attachment, coparenting, mentalizing, reflective functioning, relationship satisfaction, romantic partner

Mentalizing, namely the capacity to interpret behavior in the self and others on the basis of underlying mental states (cognitions or emotions), is key to emotion regulation as well as to self and social understanding (Fonagy & Target, 1997). It enables us to make sense of our own experience and behavior and to reflect upon the experience and behavior of others. This capacity to make meaning can manifest in many ways—implicitly, as exemplified by a mother's recognition of her child's sad face as a need for comfort (Shai & Belsky, 2011), or explicitly, as exemplified by an individual's capacity to consciously reflect upon or reason about mental states in the self or other. The latter is operationalized as reflective functioning (RF) and is typically assessed by coding interviews in which the respondent is asked to describe important, meaningful (and thus emotionally charged) attachment relationships (i.e., with a parent, Main et al., 1985; a child, Slade, 2005; or one's therapist, Levy, et al., 2006).

Mentalization theorists (Fonagy & Target, 1997; Luyten & Fonagy, 2015) have consistently described the capacity to envision one's own or another's mental states in light of attachment, developing within the context of a secure relationship in which one's thoughts and feelings are valued and considered meaningful. As such, "the extent to which our early and later environment fosters a focus on internal mental states is crucial for its development" (Luyten & Fonagy, 2015, p. 366). Thus, parents who are high in RF report secure childhood relationships with their own parents (Fonagy et al., 1995) and are more likely to have secure children (Slade et al., 2005). In addition, mentalizing capacities are associated with greater attachment security (or low levels of attachment avoidance and attachment anxiety) into adulthood (Borelli et al., 2018; Esbjørn et al., 2013).

Mentalization theorists have emphasized its *particular value* in highly charged, stressful situations, when biased automatic assumptions can easily overwhelm conscious reflection (Luyten & Fonagy, 2015). That is, being able to think and feel or to remain aware of another's perspective at times of high arousal is crucial and regulating. However, the more activating and challenging a situation is, the harder this can be. And yet this is when mentalizing is most important, as it supports emotion regulation, and allows for smooth, coherent, and positive interactions (Borelli et al., 2017; Rutherford et al., 2015).

One of the most highly charged and stressful times in an adult's life is the transition to parenthood, a unique developmental phase within the life cycle of a family characterized by psychological upheaval (Campbell et al., 1992) and, of particular relevance for the current study, marked changes within the romantic relationship (Kurdek, 1993; Mitnick et al., 2009). In this article, we consider the role of Partner RF—namely the capacity to

attune to the thoughts and feelings of one's partner and to understand these as being important in influencing behavior—in navigating this transition, and specifically its role in promoting greater relationship and coparenting satisfaction.

## Partner RF during the transition to parenthood

Exploring RF as it pertains to romantic partnerships seems a logical and important step in advancing the study of human relationships. Partner RF may enable an adult to take their partner's perspective during a conflict, perceive their partner's need for help and support, and express their own thoughts and feelings in a way that their partner can understand and respond to them. It is our thesis that mentalizing ought to help couples weather the maelstroms of this particular stage in their lives in a variety of ways.

Relationship specificity and stability of Partner RF. Mentalization theorists (Fonagy & Target, 1997) have argued that while mentalizing is—to some extent—trait-like, emerging as it does from one's earliest attachment relationships, it is also "relationship and context specific (e.g., mentalizing levels may differ considerably among relationships)" (Luyten & Fonagy, 2015, p. 367). That is, mentalizing is a "bidirectional and transactional social process." Thus, while we might expect an individual's mentalizing capacity to be relatively stable across relationships, it might also vary considerably, depending on the qualities of a particular relationship. To date, the degree to which a parent's mentalizing capacities transfer across relational domains (from the domain of the romantic partnership to the domain of parenting) is unknown. Our first question, then, is whether partners' level of Partner RF will be positively correlated, such that when one partner has high levels of Partner RF, their partner will also have higher levels of Partner RF. For example, interactions between partners high in RF may be iterative, with high Partner RF in one partner, in effect, eliciting higher RF in the other partner. Conversely, one partner's difficulties in mentalizing might increase defensiveness and non-mentalizing in the other. Our second question pertains to the stability of RF across relationships: Will an individual's Partner RF be correlated with their capacity to reflect on their child's experience? That is, will a parent who can think about her partner's mental states be more able to consider the mind of her child as well?

Attachment and Partner RF. As described above, trusting, secure relationships are foundational to the capacity to mentalize. Thus, we would expect Partner RF to be associated with adult attachment style. Couples reporting greater attachment security and perceiving more social support prior to becoming parents show better coping and adjustment to life following the transition to parenthood (Alexander et al., 2001; Simpson & Rholes, 2002). In addition, partners higher in avoidance report greater depressive symptoms when they perceive that the relationship with the infant is interfering with the relationship with the partner (Rholes et al., 2011). Given that attachment appears to be a protective factor for other indicators of romantic relationship functioning across this transition, it stands to reason that greater attachment security during the prenatal phase may also predict higher postnatal Partner RF.

Relationship satisfaction and Partner RF. Of the many changes and opportunities for growth introduced into the romantic relationship during the transition to parenthood, one of the most well-characterized of these is the steep decline in relationship satisfaction (Doss et al., 2009; MacDermid et al., 1990; Van Egeren, 2004). Increases in stress (Östberg, 1998), changing sleep patterns (Condon et al., 2004), shifting roles (Voydanoff & Donnelly, 1999), and new challenges introduced into the family system (Cowan & Cowan, 2000) may all contribute to plummeting satisfaction with the relationship, especially for women (Belsky et al., 1983). While the quality of romantic attachment clearly plays a role in relationship satisfaction (Collins & Feeney, 2000; Kohn, et al., 2012), a partner's mentalizing capacities would likely also contribute to enhanced partner responsiveness and thus greater intimacy (e.g., Collins & Ford, 2010), as well as higher levels of relationship satisfaction.

Coparenting and Partner RF. In making the transition to parenthood, couples must also negotiate a new relationship as co-parents. This involves negotiating and balancing the responsibilities of caregiving while navigating different views of parenthood that stem at least in part from their own families of origin and histories receiving care within attachment relationships (Bowlby, 1988). Coparenting satisfaction is related to and may influence but is not the same as couple relationship satisfaction (Altenburger et al., 2014; Schoppe-Sullivan, Mangelsdorf, Brown, & Sokolowski, 2007). Higher quality coparenting relationships are characterized by greater support, collaboration, and affirmation (Feinberg, 2003) and require trust, effective communication, and understanding for the other partner's perspective (Dush et al., 2011; McHale, 2007). Although creating a high-quality coparenting relationship is challenging for most people making the transition from partner to parent, partners higher in RF may weather this transition with greater ease. Understanding one's own and one's partner's mental states may enable an individual to respond to the partner more sensitively in this context of the coordination between parents as well.

Elucidating factors that contribute to better coparenting relationships is especially important when considering that this triadic aspect of the family system predicts children's adjustment independently from relationship satisfaction. For example, children whose caregivers demonstrate higher-quality coparenting have more advanced socioemotional (Cabrera et al., 2012) and cognitive outcomes (Shai, 2018) than children of parents with a lower quality of coparental functioning. Coparenting behaviors assessed prenatally likely reflect each partner's expectations of the postnatal coparenting relationship (Kuersten-Hogan, 2017; Shai, 2018), and indeed prenatal coparenting predicts postnatal coparenting (e.g., McHale et al., 2004). Thus, we measure coparenting both prenatally and postnatally to capture this aspect of dyadic adjustment across a phase of heightened vulnerability for couples (Cowan & Cowan, 2000).

# Current investigation

In a longitudinal investigation of first-time parents, we explored a set of hypotheses pertaining to whether Partner RF, assessed at 6 months postnatally, is associated with theoretically related constructs measured prenatally (attachment style, relationship

satisfaction, coparenting behavior), 3 months postnatally (relationship satisfaction), concurrently at 6 months postnatally (one's partner's Partner RF, parental RF), and at 18 months postnatally (coparenting satisfaction). When possible, we employ a multimethod approach in which we assess observed or demonstrated capacity for the psychological construct in question (e.g., observed coparenting behavior, RF) as well as perceptions of the psychological capacity or characteristic (e.g., satisfaction with the relationship). Because the decline in relationship satisfaction is relatively stable across early infancy (e.g., Favez et al., 2006; Van Egeren, 2004), we chose to examine relationship satisfaction during the prenatal phase (at 6 months of pregnancy) and shortly after the transition to parenthood (at 6 months postpartum), a time for assessment during which parents had passed through their initial transition into parenthood and had begun to establish their roles as coparents. We evaluated whether Partner RF is a useful construct to consider in the understanding of variability in relationship quality across the transition to parenthood.

In this study, we pursued the following hypotheses. First, we predicted that the Partner RF of husbands and wives would be positively associated. Second, we predicted that Partner RF and parental RF would be positively associated. Third, we predicted that attachment style would be associated with Partner RF. Fourth, we hypothesized that relationship satisfaction measured at 3 months postpartum would predict Partner RF at 6 months postpartum, controlling for prenatal relationship satisfaction. Fifth, we predicted that (a) observed coparenting behavior, measured prenatally during a stressful parenting task (inconsolable infant cry task), would be associated with Partner RF and (b) that Partner RF would be associated with reported coparenting relationship quality measured at 18 months postnatal, controlling for coparenting satisfaction at the prenatal assessment.

## **Method**

# **Participants**

Researchers recruited participants using flyers and advertisements posted on the Internet and in medical centers for a study of couples and families. One hundred and seven Israeli cohabiting heterosexual couples (mothers:  $M_{\rm age}=30.82$ ,  $SD_{\rm age}=3.63$ , range $_{\rm age}=23-42$ ; fathers:  $M_{\rm age}=32.41$ ,  $SD_{\rm age}=4.01$ , range $_{\rm age}=23-42$ ), each expecting their first child (51.6% male), participated in this longitudinal study ( $M_{\rm gestation}=29.7$  weeks,  $SD_{\rm gestation}=2.55$ , range $_{\rm gestation}=22.27-37.08$  weeks). Fathers' average number of years of education was 15.36 years (SD=2.41) and the mothers' was 16.3 years (SD=2.1). All participants were Caucasian/Jewish, with different levels of religiosity: 71.7% secular, 16.2% observant, and 12.1% Orthodox Jewish. Approximately half of the sample (45.5%) reported being below the national mean income level, 12.7% reported being at mean level, and 31.8% reported being above the national mean income level.

We experienced attrition across the course of this study (prenatal mothers = 107; 18 months = 100; prenatal father = 106; 18 months = 95) due to the families' relocation or difficulty to commit to the study. Families received vouchers, as well as a developmental report of the child to reduce attrition and to show the families appreciation for their time

and efforts. No differences in key study variables (Partner RF, parent RF, relationship satisfaction, attachment style) were revealed as a function of attrition.

#### **Procedures**

A prenatal assessment was conducted during the latter trimester of pregnancy, during which participants signed a consent form. Demographic information (salary, religion, education level) was collected, and both members of the couple completed questionnaires assessing romantic attachment style and anticipated coparenting satisfaction within the romantic partnership. Participants also completed an observational task designed to measure coparenting behavior under high arousal. At 3 months postpartum, participants reported on their relationship satisfaction. At 6 months postpartum (M = 27.98 weeks old, range = 20.78-42.76, SD = 6.71), researchers conducted a home visit during which they administered the partner and parent RF interviews with each of the parents. Finally, participants reported on their experienced coparenting satisfaction when the infant was 18 months of age.

## **Measures**

## Demographics

Participants reported on their personal/family demographics during the prenatal assessment; these were used as control variables when they were significantly associated with variables and were explored as potential confounds in the assessment of Partner RF.

# Reflective functioning

The partner development interview (PartnerDI; authors). The PartnerDI is composed of seven questions probing Partner RF. (e.g., Does [partner's name] ever need attention from you? What gives you the most pain or difficulty with your partner? Tell me about a time when you were really clicking together or getting along?). All PartnerDI questions are presented in Supplemental Table 1. The interview contains three questions that explicitly probe for mentalizing, and three that inquire about emotional experiences within the partner relationship.

Prior to conducting the PartnerDI with this sample, we conducted a brief validation study to preliminarily evaluate its psychometric properties. The PartnerDI was administered online to a group of adults who were in long-term cohabiting relationships for more than 2 years (N = 114; n = 83 women and n = 31 men). Their written responses generated codable responses to PartnerDI interview questions, samples of which are provided in Supplemental Table 2. Coders were able to achieve high levels of inter-rater reliability using the PartnerDI coding system, ICC(5) = .86, p < .0001. Women were coded as having significantly higher Partner RF than men, t(101) = -4.65, p < .0001. This led us to include gender as a covariate in subsequent analyses. We also found that participants' Partner RF was associated with attachment anxiety and avoidance on the Experiences in Close Relationships—Relationship Structures (Fraley et al., 2011;  $\alpha = .86$ , avoidance  $\alpha = .89$ ; inverse associations). Controlling for gender, both anxiety and

	Total, <sup>a</sup> Mean (SD)	ı	2	3	4	5	6	7	8
I. Father Attach. Anx	3.60 (1.15)	_							,
2. Father Attach. Avoid	3.59 (0.83)	.51	_						
3. Father Partner RF	4.18 (1.08)	05	09	_					
4. Father parental RF	3.61 (1.27)	.09	14	.50**	_				
5. Mother Attach. Anx	4.02 (1.12)	.05	.14	.10	02	_			
6. Mother Attach. Avoid	3.18 (0.84)	.14	.07	09	10	11	_		
7. Mother Partner RF	4.21 (1.04)	.12	06	.25*	.01	.06	−.22**	_	
8. Mother parental RF	3.94 (1.20)	.03	06	.22	05	.09	16	.51**	_

Table 1. Descriptive statistics and zero-order correlations for study sample.

Note. RF = reflective functioning, RS = relationship satisfaction, Pre = prenatal assessment, Attach = attachment, Anx = anxiety, Avoid = avoidance.

avoidance were inversely associated with Partner RF ( $\Delta R^2 = .04$ , p = .03). There was no direct association between Partner RF and relationship satisfaction (Couple Satisfaction Index [CSI]; Funk & Rogge, 2007;  $\alpha = .98$ , r = .01, p = .93). Sample responses for our main study sample are provided in Supplemental Table 3.

The Parent Development Interview. The Parent Development Interview (PDI) (Slade, Aber et al., 2004) is the gold standard measure of parental RF. In this validated semi-structured interview, parents discuss their emotional experience of parenting (Sleed et al., 2018) by answering a series of questions about their emotional experiences (e.g., Can you describe a time in the last week when you and child were really clicking?) and about their children's emotions (e.g., Can you tell me about a time when your child felt rejected?). Parents' scores on the PDI are associated with parenting sensitivity and children's attachment security (Grienenberger et al., 2005; Slade et al., 2005; Stacks et al., 2014; Suchman et al., 2010).

Administration and coding of RF interviews. Both interviews were administered separately to each member of the couple at 6 months postpartum by a trained research assistant. Audio-recorded interviews were transcribed verbatim and coded by two postgraduate researchers trained in the coding of RF by a certified PDI RF trainer using the standard training procedures (Slade, Bernbach et al., 2004) recommended by the developers of the PDI (see Supplemental Table 3 for sample narratives). A period of training is followed by a reliability testing phase, during which the coder must demonstrate 80% accuracy in coding. A portion of the interviews (15%) were double-coded to establish inter-rater reliability on this sample, ICC(2, 30) = .90, p < .0001. With respect to missing data, we had usable data from n = 91 mothers and n = 83 fathers (data were unusable when interview files were inaudible or corrupted).

<sup>&</sup>lt;sup>a</sup>N = 91. \*p < .01; \*\*p < .001.

**Table 2.** Summary of hierarchical regression analyses of the association between Partner RF and other key variables.

					Depen	Dependent variable				
		4	Mothers					Fathers		
Focal predictor	Parental RF	Partner RF	Pos Comm	<b>П8</b> ш	RelSat 3 m	Parental RF	Partner RF	Pos Comm	arental RF Partner RF Pos Comm 18 m RelSat 3 m Parental RF Partner RF Pos Comm CopSat 18 m RelSat 3 m	RelSat 3 m
Mother Partner RF <sup>b</sup>	.59**	I	1	29**	29**15*	1	.26*	1	12	1
Father Partner RF <sup>b</sup>		1		71.	1	.53*	1	.05	61.	04
Mother Attach. Anx <sup>a</sup>		.05		I	1	1	1	1	1	1
Mother Attach. Avoid <sup>a</sup>	I	21*	I	1	I	I	I	I	I	I
			:		9					

attachment, Anx = anxiety, Avoid = avoidance. Values reflect standardized regression coefficients,  $\beta$ s, RF = reflective functioning, RelSat = relationship satisfaction, Note. CopSat = coparenting satisfaction, Pos Comm = positive communication, RelSat = relationship satisfaction, 3 m = 3 months, 18 m = 18 months, Attach. Pre = prenatal assessment, dv = dependent variable.

<sup>a</sup>Included as predictors in the same model predicting the dv of Partner RF.

<sup>b</sup>Both mother and father Partner RF included as predictors in the same model predicting the dv of coparenting satisfaction at 18 months, controlling for prenatal coparenting satisfaction, thus estimates for each variable reflect partial weights.

## Attachment style

Participants completed the Experiences in Close Relationships–Revised scale (ECR-R; Fraley et al., 2000), a well-established self-report measure of adult attachment in romantic relationships. The ECR-R contains two subscales (each 18 items) measuring attachment anxiety (e.g., *I worry a lot about my relationships*) and avoidance (e.g., *I prefer not to be too close to my romantic partners*). Using a 7-point Likert-type scale ranging from *strongly disagree* (1) to *strongly agree* (7), participants report on the extent to which items describe them. This measure of attachment style is reliable and valid (Sibley et al., 2005). Due to time constraints and assessment demands within this study, and because the ECR-R is a widely used measure, study participants completed only the first nine items of each subscale. Couples' scores on this reduced version of the scale have been associated with their emotional support behavior (Borelli et al., 2019). Importantly, internal consistency for both subscales was high: Fathers<sub>anxiety</sub>  $\alpha = .85$ , Mothers<sub>anxiety</sub>  $\alpha = .84$ , Fathers<sub>avoidance</sub>  $\alpha = .72$ , Mothers<sub>avoidance</sub>  $\alpha = .73$ .

## Relationship satisfaction

Participants completed the CSI (RelSat; Funk & Rogge, 2007), an established 32-item measuring relationship satisfaction, administered prenatally ( $^{prenatal}\alpha_{fathers} = 0.92$ ;  $^{prenatal}\alpha_{mothers} = 0.92$ ) and at the 3-month visit ( $^{postnatal}\alpha_{fathers} = 0.95$ ;  $^{postnatal}\alpha_{mothers} = 0.94$ ). Higher scores signify greater relationship satisfaction.

# Prenatal coparenting behavior

During the prenatal visit, couples completed a task intended to simulate a stressful coparenting interaction—the Inconsolable Doll Task (IDT), the full details of which are described elsewhere (Shai, 2018). In brief, this involves having one member of the couple (randomly assigned) first interact with a lifelike infant simulator (RealCare Baby II-Plus; Realityworks, Eau Claire, Wisconsin, USA) and observe a researcher-led demonstration period of effective soothing. This was followed by a phase in which—without the parents' knowledge—the doll was programmed to be nonresponsive to parental care while crying. Next, the other parent joins the first parent in soothing the baby for another 5 min, during which the baby behaves in the same way in terms of the temporal patterning of the crying. The doll's cry varies in volume, pitch, and duration to create an infant cry stimulus that is maximally ecologically valid.

Coparenting was coded during this task using the Interactional Dimensions Coding System (IDCS; Julien et al., 1989), which assesses spousal communication behaviors in a difficult or stressful context. Given the scope of this study, we cannot report all scales assessed on the IDCS here; therefore, we focus solely on the behaviors we considered to be most centrally related to Partner RF—the ability to maintain a positive coparenting relationship with one's partner during a stressor. Three observers rated three positive communication behaviors: (A) communication skills—the extent to which an individual is clear in communicating his or her emotions both verbally and nonverbally; (B) support and validation—the extent to which an individual is being responsive to his or her

partner; and (C) problem-solving—one's attempts to find positive solutions in the situation. Scores were averaged to create a *positive communication* score.

## Coparenting relationship quality

The Coparenting Relationship Scale (CRS; Feinberg et al., 2012) is a self-report questionnaire used for evaluating parents' perceptions about coparenting relationships. Originally designed for postnatal assessments of coparenting, Shai (2018) recently modified the CRS for use in the prenatal phase by changing all items to be worded in the future tense and eliminating the exposure to conflict subscale. Participants completed the prenatal CRS and the postnatal CRS at the 18-month assessment.

The prenatal CRS is composed of 30 items loading onto six subscales: coparenting agreement (e.g., *My partner and I will have the same goals for our child*), coparenting closeness, coparenting support, coparenting undermining, endorse partner parenting, and division of labor.

The postnatal CRS consists of one additional subscale, exposure to conflict (e.g., How often in a typical week when the three of you are together do you argue about your relationship or marital issues unrelated to your child, in the child's presence?). All CRS items are rated on a 7-point Likert-type rating system ranging from 1 ('not true of us') to 7 ('very true of us'). Higher scores correspond to a more positive coparenting partnership. We used the global CRS score (mean). Cronbach's  $\alpha$ s were high: fathers—prenatal: 0.91/postnatal: 0.92; mothers—prenatal: 0.91/postnatal: 0.92.

## Results

# Descriptive statistics and correlations

There were no significant differences between women's and men's Partner RF, t(77) = -.08, p = .93. Correlations among attachment-related study variables are reported in Table 1, whereas correlations among other study variables are reported in Supplemental Table 4. While there were no associations between mothers' Partner RF and any demographic variables, there were a number of significant associations for fathers: Fathers' Partner RF was positively correlated with their religiosity (see Table 1, Supplemental Table 4), and an independent samples t-test revealed that fathers who reported not having undergone fertility treatment had higher Partner RF, t(82) = 2.12, p = .04, than those who had. The partners of fathers with higher Partner RF were further along in their pregnancies at baseline, r = .35, p = .001, and earned lower incomes, r = -.25, p = .03. As a result, we controlled for these demographic covariates whenever fathers' Partner RF was a variable in the analysis.

Paired samples *t*-tests revealed that the relationship satisfaction of both parents significantly decreased from the prenatal to the 3-month assessment: fathers, t(90) = 3.26, p = .002 and mothers, t(95) = 3.65, p < .001. By contrast, neither mothers (p = .06) nor fathers (p = .60) significantly changed from prenatal to 18-month coparenting relationship quality.

Mothers' attachment anxiety was negatively associated with father Partner RF (see Table 1), and mothers' attachment anxiety and avoidance were inversely correlated with their own coparenting quality at the prenatal assessment (see Supplemental Table 4). Mothers' perceptions of coparenting quality at both assessments were positively associated with fathers' coparenting quality at both assessments; mothers reported coparenting quality at the prenatal assessment was positively associated with mothers' Partner RF. Fathers' attachment avoidance and anxiety were positively intercorrelated.

Using a series of independent samples t-tests, we compared the values of fathers and mothers on key study constructs. The results revealed that mothers reported higher attachment anxiety, t(99) = -2.53, p = .01, and fathers reported higher attachment avoidance, t(99) = 3.37, p = .001. No other gender differences in key study variables emerged.

Supplemental Tables 5 through 15 present the results of regressions testing Hypotheses 1–5.

## Research questions

**Hypothesis 1:** Mothers' Partner RF will be positively associated with fathers' Partner RF. After controlling for demographic covariates (mother salary, fertility treatment, father religiosity),  $R^2 = .19$ , p = .002, mothers' Partner RF was significantly associated with fathers' Partner RF,  $\Delta R^2 = .06$ , p = .02, such that mothers with higher Partner RF were more likely to be coupled with fathers with higher Partner RF, b = .27, SE = .11 (see Table 2, Supplemental Table 5).

**Hypothesis 2:** Partner RF will be positively associated with parental RF. Mothers' Partner RF was significantly positively associated with mothers' parental RF,  $R^2 = .35$ , b = .64, SE = .09, p < .001 (Table 2, Supplemental Table 6). Similarly, after controlling for covariates,  $R^2 = .10$ , p < .05, fathers' Partner RF was significantly positively associated with fathers' parental RF,  $\Delta R^2 = .24$ , b = .53, SE = .10, p < .001 (Supplemental Table 7).

**Hypothesis 3:** Attachment style as a correlate of Partner RF. We evaluated whether mother and father attachment style variables were associated with fathers' Partner RF. With respect to mothers' Partner RF, bivariate correlations revealed that it was associated only with avoidance (higher avoidance was linked to lower Partner RF). To evaluate whether this association was significant after controlling for maternal attachment anxiety, we conducted a regression: After controlling for anxiety,  $R^2 = .003$ , p = .60, the association between mothers' Partner RF and avoidance remained significant,  $\Delta R^2 = .05$ , b = -.27, SE = .13, p < .05 (Supplemental Table 9).

None of the attachment variables were significantly associated with fathers' Partner RF at the bivariate level (see Table 1). Thus, we did not follow up with a regression.

**Hypothesis 4:** Relationship satisfaction will predict Partner RF across the transition to parenthood. Controlling for mothers' prenatal relationship satisfaction,  $R^2 = .00$ , p = .94, mothers' postnatal relationship satisfaction was significantly

associated with their Partner RF,  $\Delta R^2 = .05$ , p = .04, such that mothers' lower postnatal relationship satisfaction, controlling for prenatal relationship satisfaction, was associated with higher Partner RF, b = -.52, SE = .25, p = .04 (Supplemental Table 10). However, fathers' postnatal relationship satisfaction was not significantly associated with their Partner RF,  $\Delta R^2 = .001$ , p = .72, controlling for covariates on a first step,  $R^2 = .02$ , p = .84, and fathers' prenatal relationship satisfaction,  $\Delta R^2 = .31$ , p < .001 (Supplemental Table 11).

**Hypothesis 5:** Coparenting behavior and satisfaction will predict partner RF across the transition to parenthood. First, we evaluated whether observed coparenting behavior, assessed using the IDT (coded with the IDCS positive communication scale), predicted Partner RF at 6 months. Controlling for the gender of the first parent to interact with the infant,  $R^2 = .00$ , p = .98, mothers' prenatal positive communication was associated with higher maternal Partner RF at 6 months postpartum,  $\Delta R^2 = .07$ , b = .30, SE = .13, p = .03 (Supplemental Table 12). With respect to fathers' Partner RF, after controlling for the five potential confounds (gender of first parent, paternal income, fertility treatment, weeks of pregnancy, and paternal religiosity),  $R^2 = .05$ , p = .67, fathers' prenatal positive communication was not a significant predictor of fathers' Partner RF,  $\Delta R^2 = .001$ , p = .77 (Supplemental Table 13).

Next, we tested hypotheses pertaining to reported coparenting relationship and Partner RF. Here, we included both mothers' and fathers' Partner RF as independent variables in the models to test their shared contribution to the prediction of a dyadic construct—the functioning of the coparenting relationship. Examination of the  $\Delta R^2$  value enabled us to understand their shared role, and the examination of individual b weights enabled us to understand the individual roles of each member of the dyad's Partner RF. We assessed whether Partner RF predicted 18-month coparenting quality after controlling for prenatal coparenting satisfaction. After controlling for mothers' prenatal coparenting satisfaction,  $R^2 = .28$ , p < .001, the step containing mother and father Partner RF significantly contributed to the prediction of mothers' postnatal coparenting satisfaction,  $\Delta R^2 = .08, p = .02$ , with the individual b weights suggesting that mothers' Partner RF, b =-.17, SE = .06, p = .005, but not fathers' Partner RF, b = .05, SE = .06, p = .39, was a significant predictor of postnatal coparenting satisfaction (Supplemental Table 14). However, Partner RF of either partner did not significantly contribute to the prediction of fathers' reported postnatal coparenting satisfaction, controlling for prenatal coparenting satisfaction,  $\Delta R^2 = .01$ , p = .39 (Supplemental Table 15).

Thus, only mothers who at 6 months postpartum had higher RF for their partners reported lower coparenting quality 1 year later, controlling for their prenatal coparenting satisfaction.

## Discussion

The present study sought to explore the role of Partner RF in navigating the transition to parenthood. This is, to our knowledge, the first study to explore RF within an adult romantic relational context.

# Associations across different types of RF

Since Partner RF is a new construct, our first goal was to assess its association within couples. Here we found that mothers' and fathers' Partner RF were, in fact, correlated. This is consistent with Fonagy's notion that mentalizing has strong trait-like components, rooted in one's one history of attachment experiences (Fonagy & Target, 1997; Luyten & Fonagy, 2015), and suggests that one partner's capacity to mentalize is, in fact, linked to these same capacities in the other partner. While these findings seem intuitively valid, however, we cannot know how such associations arise. It may be, for instance, that there is partner selection bias for similarity in RF levels; that is, that adults seek similarly reflective partners when forming romantic relationships, which is consistent with studies finding that adults higher in attachment security seek secure partners (see Holmes & Johnson, 2009, for a review). It could also be that co-mentalizing develops over time as the result of couple interactions (cf., Anderson et al., 2003). That is, Partner RF ought to be influenced by dyadic interactional quality—a partner who discloses more about their mental states to their partner should have a partner who can more easily mentalize for them since they have made the contents of their mind known to the other. This is a ripe area for future study as understanding why partners' Partner RF is positively associated may reveal important insights regarding couple relationships.

While this is the first study to explore associations between romantic partners in their mentalizing capacities, previous studies have documented associations between parents' RF and their *children's* emotion understanding (Steele et al., 1999; but see Borelli et al., 2017), providing some evidence of dyadic similarity in RF. And yet, mentalizing for one's partner is inherently different than mentalizing for one's child (Holmes & Slade, 2018). Whereas parents must work hard to identify their children's mental states (since children do not have experience or language to be able to identify or express their own states), romantic relationships are more symmetrical in nature than parent—child relationships; that is, each partner bears the responsibility for both communicating their own mental states and trying to make sense of those of the other. Thus, we would expect Partner RF to be influenced by dyadic-level factors, such as the degree of emotional disclosure of one's partner. This explanation could also help contextualize how Partner RF, but not parental RF, was positively correlated between partners.

We also found within-person RF associations; that is, Partner RF and parental RF were correlated, suggesting within-person stability of RF across different mentalizing contexts (partner relationship versus parent—child relationship). The strength of this association was greater than the cross-person stability of RF within the same relationship (mothers' RF for partner relationship compared to fathers' RF for partner relationship).

# Partner RF, attachment, relationship satisfaction, and coparenting

Our expectation that Partner RF would be linked with romantic attachment style was only partially supported. Only in mothers did attachment avoidance—but not anxiety—prospectively predict lower Partner RF. There were no significant relationships between attachment style and Partner RF in fathers. The link between avoidance and lower RF in mothers is consistent with the argument that children develop sophisticated mentalizing

capacities in the context of secure relationships (Fonagy & Target, 1997). It is also consistent with other documented associations between RF and avoidance (but not anxiety) in children and adults (Bizzi et al., 2018; Borelli et al., 2016, 2017, 2018). The lack of an association between attachment anxiety and RF, although unexpected, may be explained by the fact that anxiety is associated with a hyperfocus on negative emotion and attachment need. This may have resulted in some people with attachment anxiety receiving higher scores on RF (although importantly, these scores could actually constitute hypermentalizing) (Fonagy & Target, 1997; Slade, 2005), while others may be unable to focus on their partners and their partner relationship, perhaps because they are preoccupied with concerns related to the parenting role.

Partner RF was also linked to relationship satisfaction for mothers, but in an unexpected direction: lower levels of postnatal relationship satisfaction at 3 months predicted higher levels of Partner RF at 6 months. Likewise, higher levels of Partner RF assessed at 6 months were associated with *lower* levels of coparenting satisfaction at 18 months. This is in contrast to our finding that greater prenatal positive communication (during a coparenting task) in women was linked to higher Partner RF. Taken together, these findings suggest that once the baby arrives, higher levels of Partner RF are associated with lower levels of both relationship and coparenting satisfaction. Thus, for new mothers, mentalizing for one's partner may come at a cost. Similar to the cost of empathy (Manczak et al., 2016; Righetti et al., 2016), more often carried by women (Mestre et al., 2009), being sensitive to the feelings of others opens people up to experiencing others' distress (Rasmussen et al., 2017). Perhaps mothers who are more aware of their partners' mental states are also more cognizant of the challenges of this transition to parenthood and thus perceive their relationships or their own plight more accurately. That is, awareness of their partner's mental states may in fact leave them feeling less satisfied and more alone both in the relationship and with respect to parenting.

At the same time, being able to get inside their partners' head may enable mothers to perspective-take and build empathy for their partners. Given that these are first-time parents, we wonder whether this might follow a different sequence of events for these parents the second-time around. For instance, perhaps mothers higher in Partner RF will use the knowledge they glean during this first round of coparenting to improve the way they communicate with their partners. This may enable these mothers to communicate better regarding what they need from their partners during Round 2, which ultimately could mean a rebound in terms of their relationship and coparenting satisfaction. This is yet another topic that could prove fruitful for future research.

Interestingly, none of the relations between Partner RF on the one hand, and attachment, relationship satisfaction, or coparenting held for fathers. Partner RF was not associated with anything in fathers besides their wives' Partner RF and their own parental RF. This makes us wonder whether Partner RF is a meaningful and relevant index of fathers' mentalizing capacities. We also wonder whether fathers' Partner RF captures a construct that has important predictive value, even if not in terms of coparenting relationship quality or relationship satisfaction. Although no other studies have explored Partner RF, the lack of associations in fathers is consistent with prior work that has examined RF in fathers and failed to find associations with theoretically predicted constructs (Stover & Kiselica, 2014; but see Buttitta et al., 2019). We wonder whether

the absence of associations here is explained by differences in gender socialization of emotion expression: Men are socialized to be less expressive regarding emotional states (Barbee et al., 1993). This could result in lower levels of RF or in different means of expressing emotion knowledge, such as through embodied mentalizing (Shai & Belsky, 2011), a nonverbal way of demonstrating an implicit understanding of the other as a being with intentions. Although we did not find that fathers showed lower levels of RF compared to mothers, it is possible that gender-related socialization of emotion expression exerts an impact on RF that is separate from attachment history, resulting in more nuanced associations between attachment avoidance and RF for men.

Alternatively, perhaps Partner RF has different sequelae in men—the first year of the infant's life marks a unique time of life for couples, one characterized by gender differences in psychological needs (Davé et al., 2010). Mothers and fathers may be looking to one another for different levels or types of support during this time. In future studies, it will be important to further investigate these questions for fathers and for men in general.

The construct of RF has contributed significantly to the literature on parent–child attachment; our hope is that the introduction of the construct of Partner RF will encourage researchers to utilize this concept within their research on romantic relationships. We can envision future studies in which researchers build on this work and explore, for example, whether Partner RF changes over the course of romantic relationships, whether Partner RF better equips couples to deal with relationship challenges (e.g., medical illness of a spouse, death of a family member), and whether Partner RF is associated with sensitive responsiveness. We hope that researchers will explore research questions regarding the links with Partner RF using longitudinal and dyadic designs that will enable the examination of partner effects.

# Limitations, strengths, and integration

In terms of limitations, we note that we examined only a handful of relevant constructs for their association with Partner RF; in future research, it will be important to more thoroughly explore the links between Partner RF and other constructs, such as empathy for partners, attachment representations, and interactions during conflict. In a sense, one might consider this an initial validation study regarding the use of the PartnerDI, underscoring the need for replication of our findings. Further, the timing of the prenatal visits ranged from 22 weeks to 37 weeks of pregnancy (mean visit timing = 29 weeks), which could have introduced measurement error into our design—for instance, couples assessed closer to delivery could have lower coparenting satisfaction, which in turn could influence its association with Partner RF. In addition, as several of our measures were administered as part of the same survey, common method variance could account for associations between attachment and coparenting satisfaction. Further, our sample was relatively high in attachment security (low in avoidance and anxiety), limiting the generalizability of our findings. Finally, we studied Partner RF during a critical developmental phase for couples. Further research is needed to determine whether the pattern of associations between Partner RF and study constructs would be similar at other points in the life cycle of the couple.

Despite these qualifications, based on these findings, we believe that this study provides a rationale for further exploration of the concept of Partner RF. We tentatively conclude that women's Partner RF may be more strongly related to indicators of relationship quality and coparenting than men's Partner RF. Further, Partner RF is positively associated within couples, and each individual's Partner RF is positively associated with their parental RF. We provide cross-sectional and longitudinal evidence of the links between Partner RF and relevant psychological constructs, paving a path for future research on the potentially important construct of Partner RF. We believe our findings constitute preliminary evidence that Partner RF may be associated with clinically relevant couple and coparenting relationship constructs, and we are hopeful that future investigations will continue to bridge the gap between theory and practice.

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#### Open research statement

As part of IARR's encouragement of open research practices, the author(s) have provided the following information: This research was not pre-registered.

The data used in the research are available. The data can be obtained by emailing jessica. borelli@uci.edu. The materials used in the research are available. The materials can be obtained by emailing jessica.borelli@uci.edu.

#### Supplemental material

Supplemental material for this article is available online.

#### Note

1. A Fisher's r-to-z transformations revealed that within-person associations were significantly greater than between-person RF associations when examined from the vantage point of both within-father and within-mother RF associations (father: z = 2.31, p = .01, mother, z = 2.67, p = .001).

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