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Cross-Day Influences between Couple Closeness and Coparenting Support among New Parents

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Abstract

The couple and coparenting relationships are demonstrated to be prospectively and bidirectionally associated over months to years during the early parenting years. However, little is known about these associations at the daily level within the first year of parenthood, when coparenting first emerges. The goal of the current study was to examine the association between couples' daily feelings of relationship closeness and coparenting support in first-time parents and determine directionality of these effects using a dyadic daily diary design. At 10 months postpartum, heterosexual couples (N = 141 dyads) completed daily diaries for eight consecutive days. An autoregressive cross-lagged model was incorporated within an Actor Partner Interdependence Modeling framework to examine at the daily level: (a) within-person cross-day associations between relationship closeness and coparenting support, (b) cross-partner cross-day associations within relationship closeness and coparenting support, (c) cross-partner cross-day associations between relationship closeness and coparenting support, and (d) gender differences in these associations. Results revealed a prospective, within person bidirectional link between daily relationship closeness and perceived coparenting support for both mothers and fathers. Additionally, an indirect effect from mothers' experiences of coparenting support to fathers' relationship closeness through fathers' experiences of coparenting support was found at the daily level. Findings highlight the interdependent nature of the couple and coparenting relationship at the daily level during the first year of parenthood and suggest that mothers' feeling supported by their coparenting partners may facilitate a "virtuous cycle" between coparenting support and relationship closeness early in the coparenting relationship.

Keywords: First-time Parents; Coparenting; Couple Closeness; Dyadic Daily Diary; Family Foundations

Cross-Day Influences between Couple Closeness and Coparenting Support among New Parents

Coparenting is defined as the extent to which parents work together in rearing their children and support each other in fulfilling their roles as parents (Feinberg, 2003). Among twoparent families, coparenting quality is associated with parent mental health and adjustment, parenting quality, and child adjustment even after taking into account couple romantic relationship functioning (e.g., Bonds & Gondoli, 2007; Morrill, Hines, Mahmood, & Córdova, 2010; Pedro, Ribeiro, & Shelton, 2012; Teubert & Pinquart, 2010). Both conceptually and empirically, coparenting quality is associated with, but distinct from, other aspects of couples' romantic relationships (Feinberg, 2003; Van Egeren, 2004). Although a body of emerging work has begun to delineate the links among couple functioning, coparenting, and parent and child outcomes, much remains unknown about how coparenting emerges and develops during the first year of parenthood, a period of rapidly shifting roles and identities for partners in a co-parental dyad. Specifically, most research to date has investigated these constructs on the macro time scale of months and years. However, with couple relations and coparenting dynamics emerging in the context of specific daily experiences, relationships develop and unfold on micro time scales. It is likely the patterning of these dynamics over time that gives rise to global (and more stable) macro factors such as expectations, attitudes, parental mental health, and ongoing or repeated family behaviors.

Prior theory and research suggest a bidirectional association between coparenting and couple functioning across the parenting years (e.g., Bonds & Gondoli, 2007; Feinberg, 2003; Minuchin, 1988; Van Egeren, 2004). Two studies have directly examined this theorized bidirectional link during the early years of parenthood and in a dyadic context, both of which were conducted on macro time scales (i.e., months to years; Le, McDaniel, Leavitt, & Feinberg,

2016; Schoppe-Sullivan, Mangelsdorf, Frosch, & McHale, 2004). Investigating these associations on shorter time scales, McDaniel and colleagues (McDaniel, Teti, & Feinberg, 2017, 2018) demonstrated same-day associations between couple relationship functioning and coparenting among parents with at least one child under five in a daily diary study. However, the extent to which the relation between these two constructs persists into the next day (i.e., daily lagged effects), and specifically during the first year of parenthood, has not been addressed. Better understanding of how these constructs relate from one day to the next would inform both our understanding of patterns observed on macro time scales and ways to intervene to encourage positive changes at the more micro level. The current study utilized a dyadic daily diary design to examine the bidirectional associations between couples' daily feelings about their romantic relationships and coparenting support for first-time parents. We focused on daily patterns during the first year of parenthood, as these factors may be most malleable during this early family stage. **Bidirectional Associations between the Couple Relationship and Coparenting**

According to family systems theory, which posits that all parts of the family system are interconnected (Minuchin, 1988), parents' romantic relationship and the coparenting relationship are related. Moreover, this relation is expected to be bidirectional and recursive as suggested in the ecological model of coparenting (Feinberg, 2003). That is, parents' prenatal relationship quality sets the stage for the emergent coparenting process such that couples who are well-adjusted prenatally are more likely to function as an effective coparental unit after the birth of the child (e.g., Le et al., 2016; McHale et al., 2004); as time passes, the ups and downs of the parents' relationship as a couple are then continuously reflected in the way they interact as coparents (e.g., Schoppe-Sullivan et al., 2004). As the coparenting relationship emerges and takes on a somewhat stable pattern, couples' experiences as coparents influence other domains of the

parents' relationship. As early parenting is highly time-consuming and of enormous psychological importance to new parents' identities and life goals, it is not surprising that coparenting relations serve as a central foundation of the parenting experience and come to influence other aspects of parents' adjustment and relationships. Empirical research is consistent with this theoretical perspective, as coparenting and couple functioning are significantly associated both concurrently and prospectively (e.g., Bonds & Gondoli, 2007; Le et al., 2016; Margolin, Gordis, & John, 2001; McDaniel et al., 2017, 2018; McHale et al., 2004; Morrill et al., 2010; Schoppe-Sullivan et al., 2004; Van Egeren, 2004). For example, couples' prenatal relationship quality and interactions predict their coparenting quality and experiences in early parenthood (e.g., Le et al., 2016; McHale et al., 2004; Van Egeren, 2004). In turn, coparenting predicts couples' subsequent relationship quality and marital behaviors (e.g, Durtschi, Soloski, & Kimmes, 2017; Fagan & Lee, 2014; Le et al., 2016; Schoppe-Sullivan et al., 2004) as well as parent adjustment and parenting quality (e.g., Pedro et al., 2012; Solmeyer & Feinberg, 2011).

Nonetheless, there are significant gaps in the empirical literature on the relation between couple functioning and coparenting. For example, in prior longitudinal studies, autoregressive paths (i.e., prior levels of the dependent variable) were typically not included when modeling the prospective associations between coparenting and couple functioning, making it difficult to fully discern the directionality and magnitude of those effects. Only two studies in the literature have directly examined the bidirectional association between the two constructs while controlling for earlier levels of the dependent variables, and findings are inconsistent. Le et al. (2016) found mixed evidence supporting a bidirectional association between these constructs across the transition to parenthood with a sample of 164 primiparous married or cohabiting couples with self-report data. In that study, prenatal relationship quality predicted 6-month postpartum

coparenting quality, and 6-month postpartum relationship quality predicted 36-month postpartum coparenting quality for both mothers and fathers. However, coparenting quality at 6 months predicted relationship quality at 3 years for mothers but not for fathers. In Schoppe-Sullivan et al. (2004), with coparenting and marital behaviors observationally coded at the dyadic level based on laboratory tasks in a sample of 46 families at 6 months and 3 years postpartum, the bidirectional association was not supported. Specifically, coparenting at 6 months predicted marital behaviors at 3 years but not vice versa. The inconsistency in findings across studies could be due to the use of different methods, sample differences, and/or reduced power to detect effects due to relatively small sample size in the Schoppe-Sullivan et al. (2004) study.

Daily Diary Designs

In addition to inconsistent findings across investigations, most longitudinal studies investigate these associations across macro time intervals such as months or years (e.g., Le et al., 2016; Schoppe-Sullivan et al., 2004). However, relational processes may operate differently across different time scales. For example, relational processes assessed at the daily level or on other short time scales may reflect the ebbs and flows in couples' daily interactions and behavior exchanges, whereas relational processes assessed over months or years may be a representation of the cumulative effects of day-to-day experiences that create more stable internal (e.g., expectations, attitudes) and external (e.g., repeated relationship behaviors) processes. Researchers have generally examined across the more stable macro time scale because of the availability of conceptual frameworks, measures, psychometric theory, and analytic methods that supported macro level inquiry. However, daily experiences can be highly salient and subsequently affect same-day or subsequent-day processes. Not only do daily experiences accumulate into more stable global factors, but, even when stable global relations are established, a great deal of daily fluctuation in emotion, mood, behavior, and relationships has been found in investigations of daily stress processes (Liu, Bangerter, Rovine, Zarit, & Almeida, 2016; Mroczek & Almeida, 2004; Qian, Yarnal, & Almeida, 2014; Totenhagen, Butler, & Ridley, 2012). This presents opportunities for intervention to enhance functioning on days that are relatively more challenging. For example, encouraging partners to engage in self-care behaviors (e.g., exercise) or share positive events with each other may benefit both partners at the daily level (Feinberg, Jones, McDaniel, Liu, & Almeida, 2018; Peters, Reis, & Gable, 2018). Thus, a more nuanced understanding of the day-to-day family relational processes may offer insights that can then inform prevention and intervention by including more targeted strategies that couples can use in everyday life during this period of the family life cycle.

One way to better understand these micro processes is to employ daily diary methods. As discussed in Bolger, Davis, and Rafaeli (2003), a diary design is ideal because, with appropriate assessment intervals, it provides reliable person-level information by reducing retrospection bias and allowing for direct examinations of within-person change over time as well as causal processes in within-person changes. Daily diary designs have been employed in prior studies of relational processes and demonstrated daily fluctuations in couples' feelings about their romantic relationships (e.g., Totenhagen, Butler, Curran, & Serido, 2015). Moreover, among couples with at least one child age five or younger, daily fluctuations in coparenting as well as contemporaneous (i.e., same-day) associations between couples' daily fluctuations in relationship feelings and coparenting have been observed (McDaniel et al., 2017, 2018). However, it is not known whether these observed covariations would persist into the next day during the first year of parenthood, specifically.

A Dyadic Daily Approach

Relational processes are inherently dyadic; thus, experiences of daily couple interactions may not only predict next-day experiences of the individual (actor effects) but also those of the partner (partner effects). For example, on days when one parent perceives more spousal support in coparenting, he or she may reciprocate the positive behaviors the following day, resulting in the other parent's perceiving more coparenting support (within-construct partner effects). Indeed, *reciprocity* in couples' relationship quality has been demonstrated longitudinally on a macro time scale (e.g., Le et al., 2016). Recently, McDaniel et al. (2018) have shown same-day associations between partners' daily perceptions of coparenting quality among parents with young children. In that study, daily partner effects were also observed between one's feelings about the couple relationship and the partner's feelings about coparenting quality on the same day. However, no prior study has investigated these partner effects from one day to the next.

Current Study

In the present investigation, we combined the dyadic approach with the daily diary design to examine bidirectional lagged (i.e., next-day) effects between daily feelings of closeness and perceived coparenting support in a sample of first time parents during the first year after birth among primiparous couples. We focus on positive dimensions of the couple relationship, specifically feelings of closeness and coparenting support, for the following reasons: (1) this virtuous cycle exists on a macro time scale during the early parenting years (Le et al., 2016); (2) there are within-person fluctuations in both daily relationship feelings and coparenting as well as within-person same-day associations between the two (McDaniel et al., 2017; Totenhagen et al., 2015); and (3) there is emerging evidence of same-day cross-partner associations between daily relationship feelings and daily coparenting among parents of young children (McDaniel et al., 2018).

We proposed three sets of hypotheses. First, we hypothesized within-person bidirectional lagged effects between daily feelings of closeness and perceived coparenting support (i.e., crossconstruct actor effects). Hypothesis 1a: Specifically, for both mothers and fathers, we anticipated that one parent's prior-day feelings of closeness would predict the same parent's next-day perceived coparenting support (e.g., mother's closeness_(t-1) \rightarrow mother's coparenting_t). Hypothesis 1b: We also anticipated that, for both mothers and fathers, one parent's prior-day perceived coparenting support would predict the same parent's next-day feelings of closeness (e.g., mother's coparenting_(t-1) \rightarrow mother's closeness_t). Our second set of hypotheses concerned cross-day reciprocity within each construct (i.e., within-construct partner effects). Hypothesis 2a: For both mothers and fathers, we expected that one parent's prior-day feelings of closeness would predict the other parent's next-day feelings of closeness (e.g., mother's closeness_(t-1) \rightarrow father's closeness,). Hypothesis 2b: We also expected that one parent's prior-day perceived coparenting support would predict the other parent's next-day perceived coparenting support $(e.g., mother's coparenting_{(t-1)} \rightarrow father's coparenting_t)$. Our third set of hypotheses concerned the cross-partner lagged effects between closeness and coparenting support (i.e., cross-construct partner effects). Hypothesis 3a: For both mothers and fathers, we expected that one parent's prior-day feelings of closeness would predict the other parent's next-day perceived coparenting support (e.g., mother's closeness_(t-1) \rightarrow father's coparenting_t). Hypothesis 3b: We also expected that one parent's prior-day perceived coparenting support would predict the other parent's nextday feelings of closeness (e.g., mother's coparenting_(t-1) \rightarrow father's closeness_t).

Exploratory analyses were also conducted to examine potential gender differences for all lagged effects. On one hand, one might expect daily experiences in coparenting to be more salient for mothers because they often devote more time than do fathers in parenting (Yavorsky,

Kamp Dush, & Schoppe-Sullivan, 2015). On the other hand, daily coparenting experiences may actually be more salient for fathers because their roles as parents are typically less prescribed. The existing research did not strongly support one over the other, thus, we did not have a priori hypotheses.

Method

Participants and Procedure

Participants for the current study were a subsample (N = 141 dyads) of co-resident heterosexual couples who participated in a randomized controlled trial (RCT) of Family Foundations recruited in three Mid-Atlantic states and one southern state (Feinberg et al., 2016). FF is a universal, couple-based psychoeducational transition to parenthood program that helps couples maintain a healthy and strong coparenting relationship after the birth of their first child and consists of five prenatal and four postnatal sessions. Couples were assessed for eight consecutive days at 10 months postpartum, as sufficient time would have elapsed for the coparenting relationship to become established and for the relational dynamics of coparenting and couple closeness to become more stable. Mothers and fathers were interviewed separately over the phone every evening at times that were convenient for them in a room by themselves. In total, mothers and fathers provided 1,114 and 1,110 days of diary data on daily coparenting support, and 1,115 and 1,111 days of diary data on daily relationship closeness, respectively. Thus, for mothers and fathers, respectively, 1.2% and 1.6% of data were missing for daily coparenting support, and 1.2% and 1.5% of data were missing for daily relationship closeness. Within the subsample, 76 couples had been assigned to the intervention condition and 65 to the control condition (which consisted of antenatal services as usual, plus the provision of information about how to choose quality child care). At the time of the current investigation (10 months postpartum), participants were 18 years old or older with an average age of 30.30 years (SD = 4.18) for mothers and 32.16 years (SD = 5.22) for fathers. On average, participants completed 15.55 years (SD = 1.59) of education, and the median family income was \$87,500. Ninety-one percent of couples were married, and 88% of participants self-identified as non-Hispanic White. The study was approved by the Institutional Review Board at The Pennsylvania State University (protocol # PRAMS00041839, "Family Foundations 2 continued beyond year 5"), and informed consent was obtained from all participants.

Measures

Closeness. Partners' daily feelings of closeness were assessed with two items for eight consecutive days (i.e., "*How intimate or connected did you feel to your partner today?*" and "*How emotionally close did you feel to your partner today?*"). Each item was rated on a five-point Likert-type scale ($1 = Not \ at \ All$, 5 = Extremely), with higher scores indicating higher levels of daily feelings of relationship closeness. Daily feelings of closeness assessed by single items have been demonstrated to be valid in the context of daily diary studies (e.g., Laurenceau, Feldman Barrett, & Rovine, 2005). Repeated measures correlations (rmcorr; Bakdash & Marusich, 2017) were used to assess intra-individual associations between the two items and indicated that these two items were highly correlated within individuals at the daily level for both mothers and fathers ($r_{mother} = .76$; $r_{father} = .70$). Thus, these two items were averaged to create a composite daily closeness score for mothers and fathers, respectively.

Coparenting support. Daily perceived coparenting support from the partner was assessed with the item "*In the past 24 hours, how much did your partner support you as a parent?*" every day for eight consecutive days. Because there was no extant measure of daily coparenting experiences, this item was created specifically for the current study. The item was

rated on a four-point Likert-type scale (1 = Not at All, 4 = A Lot), with higher scores indicating higher levels of perceived coparenting support.

Statistical Analyses

Multilevel modeling for dyadic longitudinal data (Laurenceau & Bolger, 2012) was conducted using Mplus 8 (Muthen & Muthen, 1998-2017). Robust maximum likelihood (MLR) estimation was used, as this generates standard maximum likelihood estimates and standard errors that are robust to missing data (Yuan & Bentler, 2000). To examine the bidirectional lagged associations between couples' daily feelings of closeness and perceived coparenting support at 10 months postpartum, an autoregressive cross-lagged model was incorporated within an Actor Partner Interdependence Modeling framework (APIM; Kenny, Kashy, & Cook, 2006). Modeling both members of a couple in the same model also allows for direct examination of gender differences in this relational process.

Two separate models were examined, with daily feelings of closeness and perceived coparenting support as the respective outcome variables. In each model, there were four primary components: 1) *within-construct actor effects* (e.g., fathers' daily feelings of closeness on Day 1 predicting fathers' daily feelings of closeness on Day 2, etc.) to control for construct stability within individuals (i.e., autoregressive effects), 2) *cross-construct actor effects* (H1; e.g., fathers' perceived coparenting support on Day 1 predicting fathers' daily feelings of closeness on Day 2, etc.), 3) *within-construct partner effects/reciprocity* (H2; e.g., fathers' daily feelings of closeness on Day 2, etc.), and 4) *cross-construct partner effects* (e.g., fathers' daily perceived coparenting mothers' daily perceived coparenting support on Day 2, etc.). Residuals were allowed to correlate between partners to account for the interdependent nature of the dyadic data at the daily level. Following Barr,

Levy, Scheepers, and Tily's (2013) recommendation, a maximal random effects structure was specified, and model convergence was achieved with random intercepts and slopes for crossconstruct actor effects, within-construct partner effects, and cross-construct partner effects for both mothers and fathers. To conserve power and enhance parsimony, models were subsequently simplified by setting the covariances between the random effects to zero and constraining the fixed and random effects to be the same across mothers and fathers when deviance tests (adjusted for the use of MLR) suggested that the more parsimonious model did not result in a significant degradation of model fit. Thus, in the final models, the variance and covariance of mothers' and fathers' intercepts were included at both levels, and the random effects were modeled for the three hypothesized effects (i.e., cross-construct actor effects, within-construct partner effects, and cross-construct partner effects) and constrained to be the same across mothers and fathers, with the covariances among these random effects set to zero (statistics available upon request). Intervention status (0 = control, 1 = intervention) was explored as a moderator but was not significant, nor was it a significant predictor of daily fluctuations in perceived coparenting support and couple closeness. Nevertheless, it was retained in the final models as a control given that the data used in the current study were collected in the context of an intervention study. Lastly, day was also included to account for any linear effects of time.

Results

The intraclass correlations (proportion of between-person variance) for daily feelings of closeness was .50 for mothers and .48 for fathers and was .44 for mothers and .52 for fathers for daily perceived coparenting support. Intra- and inter-individual associations among study variables were assessed with repeated measures correlations and are presented in Table 1 (rmcorr;

Bakdash & Marusich, 2017). Specifically, mothers' and fathers' daily feelings of closeness were positively and significantly correlated. Daily feelings of closeness and perceived coparenting support were positively and significantly correlated within each individual for both mothers and fathers. Mothers' and fathers' daily perceived coparenting support were positively and marginally correlated within dyad.

H1: Within-Person Lagged Effects between Couple Closeness and Coparenting Support

As predicted, after controlling for the stability in feelings of closeness and perceived coparenting support from the prior day to the next day (i.e., autoregressive effects), there were significant cross-construct actor effects for both mothers and fathers. That is, prior day feelings of closeness significantly predicted next-day perceived coparenting support (Hypothesis 1a), and prior day perceived coparenting support significantly predicted next-day feelings of closeness (Hypothesis 1b). As displayed in Figure 1, a 1-unit increase in prior day feelings of closeness predicted a .04-unit (p = .04, 95% CI = .002, .080) increase in a parent's own perceived coparenting support the next day, which is equal to a .11 SD and .12 SD increase for mothers and fathers, respectively (calculated using the within-couple SDs reported in Table 1). A 1-unit increase in prior day perceived coparenting support predicted a .09-unit (p = .04, 95% CI = .006, .174) increase in a parent's own feelings of closeness the next day, which is equal to a .13 SD and .14 SD increase for mothers and fathers, respectively. No gender differences were found in these lagged effects ($\Delta \chi^2_{\text{Closeness}}(1) = 1.17$, p = .28; $\Delta \chi^2_{\text{Coparenting}}(1) = .35$, p = .55) or the autoregressive effects of daily closeness and perceived coparenting support ($\Delta \chi^2_{\text{Closeness}}(1) = .05$, $p = .82; \Delta \chi^2_{\text{Coparenting}} (1) = .33, p = .56).$

H2: Cross-Partner Lagged Effects within Couple Closeness and Coparenting Support

We did not find evidence of reciprocity in daily couple closeness (Hypothesis 2a) but did find evidence of reciprocity in coparenting from mothers to fathers (Hypothesis 2b). That is, mothers' prior-day perceived coparenting support significantly predicted fathers' next-day perceived coparenting support but not vice versa, and a significant chi-square difference test confirmed this gender difference ($\Delta \chi^2$ (1) = 6.90, *p* = .01). As displayed in Figure 1, a 1-unit increase in mothers' prior-day perceived coparenting support predicted a .13-unit (*p* = .02, 95% CI = .018, .249) increase in fathers' next-day perceived coparenting support, which is equal to a .38 *SD* increase for fathers.

H3: Cross-Partner Lagged Effects between Closeness and Coparenting Support

There were no significant direct partner effects from one parent's feelings of closeness to the other parent's next-day perceived coparenting support or vice-versa. However, in light of the reciprocity found in coparenting support from mothers to fathers and the cross-construct actor effects for fathers from coparenting support to couple closeness, post hoc analyses were conducted to formally test the indirect partner effect from mothers' coparenting support at time *t*. *I* to fathers' relationship closeness at time t+1 through fathers' coparenting support at time *t*. The joint significance test confirmed the significance of this indirect effect (Cole & Maxwell, 2003; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Specifically, mothers' and fathers' perceived coparenting support and relationship closeness at time t-1 and t, respectively, were modeled to predict fathers' relationship closeness at time t+1, while simultaneously controlling for all the within- and cross-construct actor and partner effects modeled in the two separate models reported above, as well as intervention status and day. Consistent with findings reported above, the effect from mothers' perceived coparenting support at time t-1 to fathers' perceived coparenting support at time t (p = .04) and the effect from fathers' perceived coparenting support at time *t* to fathers' relationship closeness at t+1 (p = .03) were both significant.

Discussion

The current investigation is the first to examine the daily bidirectional associations between first-time parents' relationship closeness and perceived coparenting support from one day to the next in a dyadic context during the first year of parenting. Results confirmed our hypotheses concerning the prospective and bidirectional link between daily couple closeness and perceived coparenting support within person and provided evidence for reciprocity in daily perceived coparenting support from mothers to fathers. Findings also provided support for an indirect partner effect from mothers' perceived coparenting support to fathers' couple closeness through fathers' perceived coparenting support in first-time parents' day-to-day lives.

Daily Bidirectional Link between Couple Closeness and Coparenting Support

Prior work demonstrated a contemporaneous association between fluctuations in daily relationship feelings and coparenting among couples with at least one child age five or younger (McDaniel et al., 2018). The current study extends previous findings by demonstrating the prospective and bidirectional nature of these associations for first time parents during the first year of parenthood, when the coparenting relationship first emerges. Specifically, for both mothers and fathers, on days when they perceive their partners to be more supportive of them in their role as a parent, they tend to feel closer to their partners the next day; similarly, on days when they feel closer to their partners, they are more likely to experience more coparenting support the following day, suggesting a virtuous cycle operating from one day to the next early in the coparenting relationship.

However, when examined over the first three years of parenting with longer time

intervals, this bidirectional association between couple relations and coparenting was found for mothers only (Le et al., 2016). The concept of identity salience in the identity theory (Stryker & Serpe, 1982) may help in interpreting the difference in findings across micro and macro time scales. Identity theory posits that an individual holds a variety of roles or social identities (e.g., spouse, parent, friend, or worker) that differ from each other in their salience or importance. It may be that the experience of coparenting is highly salient early on for both first-time mothers and fathers given the newness of the parenting roles. However, because the parenting role is typically more central to women's identities than to men's and parents tend to become more traditional in their gender-role attitudes and behaviors across the transition to parenthood (Katz-Wise, Priess, & Hyde, 2010), men's identities as coparents may become less salient to them over time compared with their other roles (e.g., worker, spouse), such that this impact persists over time for mothers only.

Reciprocity in Daily Couple Closeness and Coparenting Support

Prior work assessing first time parents across the first three years of parenthood has demonstrated reciprocity in couple relationship quality for both mothers and fathers (Le et al., 2016), though we did not observe this reciprocity at the daily level. In contrast, we did find reciprocity in perceived coparenting support from mothers to fathers, which was not observed in the prior macro level work. The absence of reciprocity in daily relationship closeness during the first year of parenthood suggests that parents' identities as romantic partners may be relatively less salient at the daily level than their roles as coparents when they are still adapting to their new roles as parent and coparent. During the early parenting period, couples' daily interactions may thus be more rapidly shaped by their daily experience in coparenting than their first design (e.g., Ram et al., 2014) over the first

several years of new parenthood may help to clarify the daily versus accumulative effects of each partner's feeling about the relationship on the other one.

With respect to reciprocity of perceived coparenting support, we found evidence of a gender difference: mothers' prior-day perceived coparenting support positively predicted fathers' next-day perceived coparenting support but not vice versa. It may be that, on days when mothers feel their partners are being more supportive of them in their parenting role, mothers engage in more "gate-opening" behaviors that encourage and support father involvement in parenting the next day. Prior studies conducted over macro time intervals have found evidence of an association between coparenting quality and maternal gate-opening, as well as between maternal gate-opening/closing and fathers' perceived coparenting support (Olsavsky, 2017; Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, & Sokolowski, 2008). During the first year of parenthood, in particular, mothers are more involved in childcare responsibilities and assume the primary caregiver role in most families despite an ongoing trend towards greater father involvement in parenting (e.g., Kotila, Schoppe-Sullivan, & Kamp Dush, 2013). Thus, "opening the gate" may occur naturally when mothers find their partners to be a supportive coparent as a way to reciprocate the support. However, it is not likely that fathers will be able to do the same for mothers given that fathers' involvement tends to depend on mothers' gate-opening when children are young. For example, during 25-minute triadic family interactions when children were 24 months old, mothers' coparenting support was found to be positively associated with fathers' involvement in parenting decisions but not vice versa (Murphy, Gallegos, Jacobvitz, & Hazen, 2017). Moreover, although fathers may be more involved in parenting following mothers' gate-opening, there is some evidence suggesting that, depending on the type of father

involvement, it does not necessarily result in mothers feeling more supported (Jia & Schoppe-Sullivan, 2011).

Cross-Partner Lagged Effects between Couple Closeness and Coparenting Support

In contrast to the prospective and bidirectional associations observed between daily feelings of closeness and perceived coparenting support within person, we did not find evidence of direct cross-construct associations across partners. This finding is consistent with prior work examining partner effects of coparenting on marital conflict and relationship quality across longer time intervals, which also failed to observe associations in relational processes that are theorized to operate across partners across relationship domains (Christopher, Umemura, Mann, Jacobvitz, & Hazen, 2015; Le et al., 2016). Additionally, although prior daily diary work has shown partner effects between daily relationship quality and coparenting quality on the same day (McDaniel et al., 2018), the current work suggests that these direct partner effects may not be strong enough to persist into the next day. However, given the indirect pathway observed from mothers' perceived coparenting support to fathers' feelings of closeness through fathers' perceived coparenting support across days, there do seem to be partner influences at the daily level from one parent to the other across relationship domains that take somewhat longer to unfold. Future studies that include more couples and more observations may help to clarify the extent to which these domains are related across partners across days among new parents.

Key Role of Mothers' Daily Perception of Coparenting Support

Taken together, the findings from the current study, interpreted in the context of the existing literature, help to construct a picture of the daily relational processes that first-time parents experience during the infancy period. It appears that, in the early development of the coparenting relationship, it is critical for mothers to feel supported in coparenting on a daily basis

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because mothers' daily experience of coparenting is directly reflected in the way they feel about their relationship the next day and indirectly affects fathers' feelings about the relationship through fathers' coparenting experiences. Over the long run, it is likely that the accumulative effect of mothers' everyday experience in coparenting then contribute directly to mothers' and indirectly to fathers' global perception of the quality of their couple relationship. These findings suggest that if mothers feel supported in coparenting on a daily basis in the early stage of coparenting, a virtuous cycle may unfold over the course of the first few years of parenthood.

Implications for Intervention

As noted by others (e.g., Doss & Rhoades, 2017), the transition to parenthood is a unique window of opportunity for prevention efforts designed to enhance the coparenting relationship and/or prevent relationship declines. Indeed, prior work has demonstrated positive intervention effects of coparenting-focused psychoeducational programs on couple dynamics during the transition to parenthood (e.g., Feinberg & Kan, 2008; McHale, Salman-Engin, & Coovert, 2015). Specifically, in the randomized controlled trial from which data for the current study were drawn, positive intervention effects were found for both coparenting and couple functioning at 10 months postpartum (Feinberg et al., 2016). However, intervention status was not a significant predictor of daily perceived coparenting support or couple closeness in the current study, suggesting that the positive intervention effects were not reflected in couples' everyday experiences. Given that the current study demonstrated a cross-day bidirectional link between closeness and coparenting within individual, reciprocity in coparenting from mothers to fathers, and an indirect partner effect from mothers' coparenting to fathers' closeness, providing ways to enhance couples' daily experiences in one or both of these two relational domains within the first year of parenthood is likely to be beneficial. For instance, it may be valuable to educate couples

about individual differences in preferences for giving and receiving support in coparenting in the context of couple-based psychoeducational transition to parenthood programs. Providing couples with skills that facilitate their having explicit and more regular sharing and decision-making conversations before and after birth about how both parents would like to be supported and ways each will be able to support one another as a coparent in the first year of parenthood may be helpful. Additionally, providing couples with strategies to implement on a daily basis that facilitate positive interactions may directly boost couples' daily experiences in the coparenting domain, the romantic relationship domain, or both. One example of a potentially low cost, high yield strategy is encouraging couples to implement capitalization on a daily basis – that is, sharing with partners any good things that have happened to them during the day (Peters et al., 2018). Prior work has demonstrated benefits of capitalization on daily relationship intimacy during high stress contexts (e.g., Otto, Laurenceau, Siegel, & Belcher, 2015), as well as on coparenting when the positive events being shared concerned the child (Le, Fredman, & Feinberg, 2018).

Limitations and Future Directions

There are several limitations associated with the current study. First, our sample was relatively homogeneous with respect to ethnicity and education in that most of the sample was non-Hispanic white and relatively well-educated. Moreover, although our sample demonstrated variability with respect to socioeconomic status and risk characteristics, it was overall relatively high functioning in terms of coparenting quality. Future studies that include a sample more diverse with respect to demographic characteristics and family functioning are needed to determine whether the pattern of findings observed in this sample generalizes to samples that consist of first time parents that are higher risk and/or more ethnically diverse. Second, in the

current study, the assessment scale used to measure daily coparenting utilized a single item on a 1 - 4 scale, which likely resulted in a restricted range. Additionally, the use of a single item did not allow us to examine the reliability of our coparenting measurement. Future studies should employ multiple item measures of daily coparenting with a wider scale range (e.g., 1 - 7); one such measure that has recently been developed and tested in daily diary work with couples with young children is the *Daily Coparenting Scale* (McDaniel et al., 2017).

Findings from the current study suggest that helping mothers feel supported in coparenting on a daily basis may help fathers feel supported in their coparenting role and both parents to experience greater couple closeness. Future studies that replicate the indirect partner effect from mothers' daily perceived coparenting support to fathers' closeness would further substantiate these findings given that this indirect association was not hypothesized a priori in the present study. The theorized mediation chain of mothers' perceived coparenting support to maternal gate-opening to fathers' perception of coparenting support should also be formally tested at the daily level to add additional nuance to the current findings. Future studies should also clarify which aspects of couples' interactions contribute to mothers' feeling supported by their partners early in the development of the coparenting relationship by expanding assessment to other aspects of daily coparenting and parenting, such as division of labor, and father involvement. In addition, future studies should take into account whether it is the mother or father who assumes the primary versus secondary caretaking role and responsibility in the family to see if the pattern of findings differs. Finally, the current study and two previous studies examining the bidirectional link between couple relationship and coparenting focused on the early parenting years. Future investigations of the association between couple closeness and perceived coparenting should be conducted during other developmental stages of the family life

cycle, such as when the first child transitions to adolescence, to determine if the same or different pattern of findings is observed.

The current study adds to the couple and transition to parenthood literature by demonstrating, at the daily level, a within-person prospective and bidirectional association between couple closeness and perceived coparenting support for both mothers and fathers, a prospective association between mothers' prior-day perceived coparenting support and fathers' next-day perceived coparenting support, and an indirect effect from mothers' experiences of coparenting support to fathers' feelings of couple closeness through fathers' experiences of coparenting support among first-time parents during the first year of parenthood. These findings highlight the interdependent nature of the couple and coparenting relationship for both partners at the daily level during the first year of parenthood. Potentiating both parents' feeling supported in their everyday co-parenting experiences may help to prevent or mitigate relationship declines across the transition to parenthood and help to sustain couples' successful adaptation to the coparenting and parenting roles across the family life cycle.

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