DISSERTATION

PREDICTING AND PROTECTING POSTPARTUM RELATIONSHIP FUNCTIONING AMONG HETEROSEXUAL PARENTS: RESULTS FROM A CONFLICT COMMUNICATION INTERVENTION

Submitted by

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ABSTRACT

PREDICTING AND PROTECTING POSTPARTUM RELATIONSHIP FUNCTIONING AMONG HETEROSEXUAL PARENTS: RESULTS FROM A CONFLICT COMMUNICATION INTERVENTION

Postpartum parenting is a critically vulnerable period for parents. Adjusting to life with a new baby often comes with a variety of added stressors, for both new and experienced parents. This family turbulence with which parents must continue to maintain their romantic relationship commonly results in relationship decline. Despite these challenges, parent relationship functioning serves as the bedrock to a healthy family system. Understanding antecedents of the interparental relationship, such as parenting experience (new versus experienced parenthood), parent mental health, and initial relationship functioning, was the preliminary goal for this dissertation. Previous studies have highlighted several factors related to parents' postpartum relationship behavior and satisfaction often from mothers' perspectives; however, gaps remain in our knowledge of fathers' relationship experiences over this life transition. This study fills this gap by specifically investigating predictors of relationship appraisals and behaviors in terms of romantic attachment and constructive conflict behavior for both mothers and fathers. A dynamic change score modeling approach was used to address the secondary goal of the current study: to evaluate whether one parent is driving relationship trajectories for both parents. The third goal of this study was to examine the degree to which a conflict communication intervention, involving mothers and fathers, impacts relationship functioning postpartum. Results suggest an important divergence of the effects of the transition to parenthood for mothers compared to fathers,

wherein having additional children may have a more negative impact on mothers' relationship experiences compared to fathers'. Furthermore, these results validate previous research linking parents' mental health to their relationship appraisals (romantic attachment), but not relationship behaviors (constructiveness), and highlight the need to further explore how each parent's mental health influences the other parent's relationship experience over time. In addition, mothers' and fathers' racial profiles played a unique role in their postpartum relationship appraisals and behavior in unexpected ways. Dynamic change score modeling further revealed that changes in mothers' and fathers' romantic attachment over time were co-driven by both parents, while changes in constructive conflict behavior occurred independently. Lastly, the conflict communication intervention appeared to alleviate problematic effects of certain variables for parents' relationship functioning, such as fathers' depressive symptoms on the trajectory of mothers' attachment security. Moreover, mothers may have been particularly benefited by the conflict intervention if they reported more depressive symptoms at the beginning of the study. Overall, the intervention had important protective effects on mothers' and fathers' postpartum behavioral constructiveness but had a limited impact on romantic attachment security. Implications for future interparental relationship and intervention research are discussed.

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TABLE OF CONTENTS

CHAPTER 1: STUDY OVERVIEW AND REVIEW OF LITERATURE

The primary aim of this dissertation was to identify antecedents of the heterosexual, interparental relationship experience over 18 months postpartum. The secondary aim of this study was to evaluate whether one parent's relationship experience is driving the change in both parents' perspectives of the relationship over time using a dynamic change score modeling approach. The third and final aim of this study was to highlight the effects of an intervention from the Notre Dame Families and Babies Study on the trajectory of mothers' and fathers' relationship functioning while parenting an infant. I used a multi-group analysis to model the effects of the intervention and specify whether the intervention moderates the effects of other notable predictors of the interparental relationship, especially parenting experience, parents' mental health, and initial relationship functioning.

Statement of the Problem

Parenthood is often considered one of the most exciting and fulfilling experiences in life; however, most parents would likely also agree that parenting, especially postpartum, is immensely challenging. Whether parenting for the first time with a new baby or adding children to a growing family, parents are tasked with adapting to this growth and the unique characteristics of their newest family member. This adjustment period commonly involves increased family chaos (Shapiro et al., 2000), conflict (Doss et al., 2017), and depression (Cameron et al., 2016).

Over years of research and across many measures, studies show that romantic relationship quality between parents tends to deteriorate after the transition to parenthood (TTP; Cowan & Cowan, 1992; Mitnick et al., 2009; Doss & Rhoades, 2017). Additional evidence indicates

having more children is negatively correlated with relationship functioning (Twenge et al., 2003). In other words, parents who choose to have more children often experience even lower marital satisfaction.

These challenges of early parenthood are concomitantly associated with children's outcomes: poor relationship functioning between parents undermines children's emotional security and related socioemotional development (e.g., Cummings & Davies, 2010; Cummings et al., 2012). Before acquiring verbal language, children's earliest approach to learning is through their observation of social others (McLeod, 2011) and family dynamics within an infant's primary living environment exemplify the expectations of operating as a social person. Therefore, supporting the proficiency of interparental relationship functioning during infancy, a high-risk period for relationship deterioration, is critical to supporting children's later social development.

Defining the complex construct of "relationship functioning" requires a multifaceted approach. Every relationship is unique, materializing with distinct characteristics and behaviors; researchers of love and romance have thus appropriately conceptualized the functioning of romantic partnerships in many ways. This dissertation focuses on romantic attachment security, as extrapolated by Hazan and Shaver (1987) from Bowlby's attachment theory (Bretherton, 1992), to represent relationship intimacy or closeness between heterosexual parents (mothers and fathers). Additionally, effective conflict communication in an interparental-romantic context will be conceptualized by *constructiveness*, which is illustrated by conflict behaviors evidenced to lead to conflict resolution, while *destructiveness* refers to behaviors which obstruct progress toward resolution (Cummings & Davies, 1994). Together, romantic attachment and communication behavior during conflict embody overall "relationship functioning" in this study.

In these heterosexual couples, mother and father relationship behaviors will be evaluated as independent and inter-related variables, as opposed to being evaluated at the dyadic level, in order to elucidate the unique experiences between parents. Furthermore, maintaining each parent's perspective of and behaviors in their relationship across time allows the assessment of whether one parent's change in relationship experience is happening first.

Understanding relationship functioning between parents requires an inclusion of multiple perspectives. Traditionally, developmental psychologists have focused on mothers' experiences of parenthood; however, as contemporary fathers are becoming increasingly involved in childcare (e.g., Lee et al., 2020), more parenting researchers are including fathers. Studies have highlighted the predictive effect of father involvement and parenting quality on children's development (see Volker et al., 2014 for a review). Interestingly, researchers have found fathers' parenting behaviors may be more vulnerable to contentious interparental relationship functioning as compared to mothers (Cummings et al., 2004b). Given this potential divergence in parents' reactions to their relationship, this dissertation tests whether mothers and fathers may similarly experience distinct relationship trajectories during infancy in the presence of a conflict intervention.

The current study conceptualizes relationship *trajectories* by pulling from the Relationship Trajectories Framework (Eastwick et al., 2019). This framework illustrates relationship behaviors as fluid, transitioning from passion-oriented behavior to primarily intimacy-oriented behavior over time and often after meaningful life transitions. The trajectory of these behaviors commonly presents as an arc shape with an ascent, peak, and descent. I evaluate the shape of the arc of postpartum relationship experiences for each parent and test partner effects. Because this study does not include early stages of romantic relationships, and existing research suggests the

transition to parenthood is a common demarcation of relationship decline, the current study is focused on the "descent" of parents' relationship arc in terms of romantic attachment and constructive communication behavior. See Figure 1 for a visual representation of the anticipated arc. Notably, some researchers have observed an increase in relationship quality for some couples over the transition to parenthood (Kluwer, 2010). Although the relationship trajectories framework anticipates a descent of relationship satisfaction, as this is the case for most couples, the framework allows for the possibility that some couple relationships may not decline significantly or even improve after having a baby.

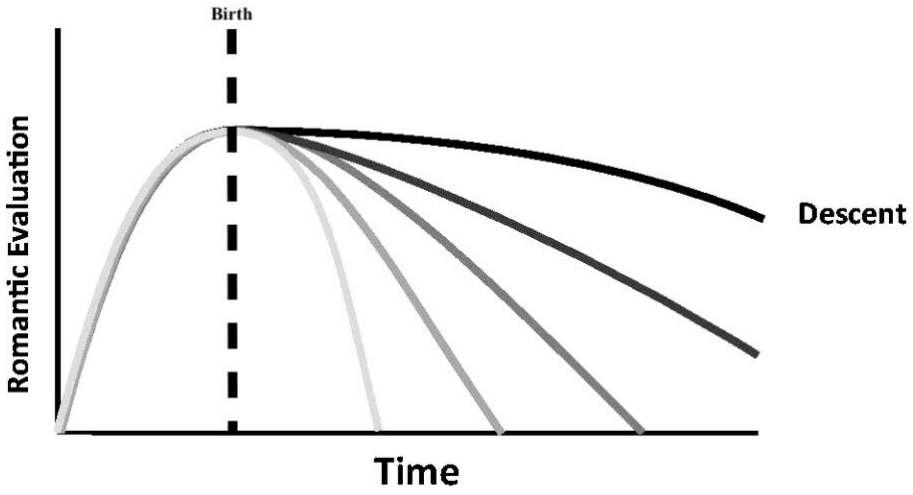

Figure 1. Illustration of Relationship Trajectory Descent Shape Postpartum

Note. Image adapted from Eastwick et al. (2019). Each line represents an example trajectory of reported relationship intimacy over time. The dotted line indicates the birth of the child. This dissertation focuses on the descent shape of reported attachment security and constructiveness.

Literature Review

The following review delineates existing literature of parents' relationship functioning while raising an infant and significant factors associated with relationship functioning after the transition to parenthood. I review theories and further evaluate the divergence in relationship trajectories postpartum between mothers and fathers and explore whether one parent's

relationship experience after having a child is driving the change in their partner's relationship experience. I then describe existing interventions, which highlight the effectiveness of intervening at the interparental relationship level for family system functioning, as well as methods for studying these variables. I introduce the Notre Dame Families and Babies Study (FABS) parenting intervention and outline hypotheses and analyses to anticipate relationship trajectories postpartum. Results are then discussed, and future directions are considered.

Why Does the Interparental Relationship Matter?

The interparental relationship has a notable impact on parenting behaviors and is linked to parents' mental health. Ktistaki and colleagues (2019), for example, recently demonstrated this impact by highlighting how mothers with more attachment anxiety tend to parent with a more authoritarian style, or with less warmth. Beyond attachment orientations, parents' (destructive) conflict behavior has been linked to intrusiveness and hostile parenting (e.g., Dijk et al., 2020).

Proulx and colleagues (2007) further provide results from a meta-analysis including 93 studies highlighting the moderate association between marital intimacy and personal well-being, especially when personal well-being is treated as the dependent variable (although bidirectional effects are likely). Other studies add specifically that parents' depressive symptomology often leads to reduced parenting quality (for a review, see Dix & Moed, 2019) and postpartum depression tends to have a significant, negative effect on parenting for both mothers and fathers (Paulson et al., 2006).

These effects of parents' relationship functioning and related internal functioning on parenting behavior are further actualized in their children's socioemotional outcomes, such as increased risk of children's internalizing and externalizing (Dijk et al., 2020), depression (Ktisaki et al., 2019), and poor parent-child relationships (Roelofs et al., 2008). Applying lessons from

broader theories of development (the bioecological model and family systems theory), we can better understand the interparental relationship as a significant foundation from which parents operate as facilitators of the family system.

Bronfenbrenner's Bioecological Model

The earliest catalysts and exogenous influences of development are multilayered in an infant's life. Bronfenbrenner's bioecological model (1979) remains the field's prominent framework for understanding how layered-social others interact to collaboratively shape development. In essence, Bronfenbrenner proposed a series of these social systems: the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The microsystem encompasses proximal influences in a child's life, including their parents, teachers, friends, and other consistent, nearby others. The "proximal processes" which occur in this system are bidirectional; the child influences these members of their microsystem and therefore contributes to the shaping of their immediate environment. The mesosystem highlights the effects of the interactions between members of the microsystem. The relationship between the child's parents or between their parents and schoolteachers are examples of mesosystem influences. The exosystem encompasses secondary, "distal" influences in a child's life, such as school administration or local government. Although the child does not interact directly with these influences, the effects of the exosystem are palpable in their influence on their community and education, as well as their parents' behavior. The macrosystem identifies broader, societal level influences, including cultural norms which guide social expectations of behavior (e.g., social discomfort with public breastfeeding may lead a mother to delay feeding her child; perceptions of spanking may lead a parent to choose to spank their child at home rather than in public). Finally, the chronosystem encompasses the effects of the historical context in which we live. For

example, children today are surviving the COVID-19 Pandemic, a historical influence of their interactions with others nonexistent in children's lives in 1995.

In sum, the bioecological model represents the interwoven proximal and distal influences in a developing child's life. Parents, as core members of the microsystem, have a significant, proximal influence on children's perceptions of the social world. The mesosystem-level influence of the interparental relationship may be further understood through a family systems lens.

Family Systems Theory

Bowen's Family Systems theory (FST; Bowen, 1978; Haefner, 2014) further specifies influences within the microsystem. FST conceptualizes the family as made up of "subsystems," or specific relationships within families such as between parents, parents and children, and siblings. FST is further founded on three assumptions: wholeness, interdependence, and circular causality. Wholeness suggests family functioning encompasses all members and subsystems simultaneously; "the whole is greater than the sum of its parts." Interdependence implies each member and subsystem within the family is influenced by the other members and subsystems within the family. For example, if parents choose to have another child, this family structure change impacts older children in the family in a variety of ways, perhaps disrupting their development (for a review, see Volling, 2012). Lastly, circular causality is the principal in which interactions between members and subsystems reinforce behaviors such to create a cycle or feedback loop. For example, if a mother regularly changes a baby's diaper, the other parent (or other members of the household) may start to habitually ignore this childcare need because they assume the diaper will be changed by the mother. The mother then continues to change the baby's diaper as otherwise the diaper will go unchanged. These feedback loops in the family

system are designed to maintain "homeostasis" or a balance for effective family functioning (Bowen, 1978); however, this pattern may have implications of emotional distress for the mother (i.e., those mothers who unexpectedly take on "the lion's share" of childcare despite having a career; Craig, 2006).

The interparental subsystem within the family system is the focus of this study as this relationship plays a central role in family functioning. Furthermore, this paper further explores how mothers and fathers are cooperating in their relationship, yet perhaps experiencing their relationship differently.

Relationship Functioning: Key Theoretical Perspectives

The bioecological model and family systems theory demonstrate the influence of broader social systems on family dynamics as well as the effect of internal family relationships on children's development. The following section describes specific theories which conceptualize relationship functioning broadly as well as for parents specifically. I further explain how the interparental relationship might manifest differently in mothers' and fathers' parenting experiences and how different aspects of relationship functioning might interact.

Attachment Theory

Bowlby's attachment theory (1973) initiated an unprecedented and unparalleled thread of child development research which sparked a decades-long, on-going investigation to understand predictors and consequences of the parent-infant relationship. Although Bowlby initially described attachment as an infant's evolved, survival-based connection to his or her caregiver (or "attachment figure"; Bretherton, 1992), with Mary Ainsworth's help, attachment theory became the basis of hundreds of studies of a wide variety of developmental topics: pursuing goals and happiness (Ryan and Deci, 2001), emotion regulation (Fonagy, 2001), self-control (Tangny, et

al., 2004) and endless others. The behavioral measure of infant attachment behaviors, "The Strange Situation" (Ainsworth et al., 1978), has been validated and utilized as a strategy for categorizing attachment styles by countless researchers, making attachment theory and the patterns of attachment virtually standard practice in the study of child development (Sroufe, 1983).

Importantly, these categories of attachment (broadly named secure, anxious-ambivalent, anxious-avoidant, and disorganized; Main & Solomon, 1990) are further built on the infant's "internal working model" of themselves and their caregivers. This means that an infant is internally, continuously appraising their relationship with their caregiver such to determine whether the caregiver is reliably responsive and whether the infant can expect to receive needed care. This appraisal leads to the infant's internal working model of self as worthy or unworthy of being supported by their caregiver (Hazan & Shaver, 1994).

Most traditional attachment researchers are focused on its presence in the parent-child relationship; however, Hazan and Shaver (1987) conceptualized attachment as an adult-adult relationship process: romantic attachment. This perspective started a new era of understanding couple relationships among social and personality psychologists (e.g., Bartholomew & Shaver, 1998; Fraley & Shaver, 2021). Though they are related through the primary goal of establishing a *secure base* (Hazan & Shaver, 1987), there are some differences between parent-child attachment and adult-adult attachment. For example, the parent-child relationship is more complementary (as parents typically provide care while infants exclusively receive care) and the adult-adult relationship is more reciprocal (adults care for each other). An infant may seek proximity differently from an adult: crying, expressing a need to be physically near his or her caregiver, as opposed to an adult's initiation of sexual intimacy or display of sexual attraction;

but, as demonstrated, these relationships have parallel behaviors which are each motivated by a desire for a sense of security. Like the healthy developmental outcomes of securely attached infants, long-term quality of romantic relationships is predicted by adult partners' reports of emotional security, or sense of a "safe-haven" in their partner (Hazan and Shaver, 1994).

Although, as noted, much of the research on romantic attachment is housed in social and personality psychology to understand relationship functioning between adults, a growing body of work on this topic is studied from a developmental psychology perspective. Multiple studies have identified a link between parents' romantic attachment and their parenting behaviors. Insecure attachment has been associated with less optimal parenting styles such as authoritarianism (harsh/punitive parenting which lacks warmth), permissiveness (unstructured and parenting which lacks boundaries; Ktistaki et al., 2019; Millings et al., 2013), and lower parent responsiveness (Ponnet et al. 2013).

The recent literature surely demonstrates the importance of interparental attachment security for parenting quality; however, few studies have investigated romantic attachment from a family systems perspective (Cowan, 1997). The current study focuses on parents' romantic attachment as a dynamic process of the interparental subsystem, which theoretically interacts with other family subsystems. Studying co-occurring interparental relationship functioning behaviors postpartum, such as conflict strategies, further illuminates this lived experience for parents.

Satisfaction vs. Attachment: A Life Course Perspective

Much of the discussion of relationship trajectories in the context of interparental relationship research is focused on "marital satisfaction". However, an individual's relationship satisfaction is related to their attachment orientation to their partner. Kohn and colleagues

(2012), for example, find that parents' attachment orientations significantly impact their susceptibility to relationship satisfaction decline. More specifically, highly anxious and avoidant individuals both experienced lower or declining satisfaction – in the context of certain partner-behaviors – over the transition to parenthood compared to more secure or less anxious/avoidant individuals. Rholes et al. (2001) reported similar results, finding individuals who are highly anxious may be at particular risk for satisfaction decline if they perceive a lack of support from their partners.

Perhaps the "state-like" nature of satisfaction leads researchers to consider this variable as representative of the dynamic nature of relationships more broadly. In contrast, personality psychologists may consider romantic attachment to be "trait-like", or a relatively stable feature of personality (Fraley, 2019). According to romantic attachment theory, an individual experiences a level of "security" with their partner, perceiving their partner as a "safe-haven" in a secure relationship (Bretherton, 1992; Hazan & Shaver, 1994). Although attachment may be generally persistent over the life course, similar to a trait (Hazan et al., 2006), attachment style is likely adaptive for dealing with threatening contexts and thus is likely malleable (like a "state") when threats appear (Feeney et al., 2003). Indeed, existing studies show the potential instability of romantic security, especially during stressful periods in life such as having a baby (Kirkpatrick & Hazan, 1994). For example, Stern and colleagues (2018) found while mothers reported an underlying relatively stable attachment orientation, those who reported higher levels of depressive symptoms and psychological distress over the transition to parenthood experienced greater variability in their romantic attachment over the two years following birth. Thus, romantic attachment is best considered both a "state" and a "trait".

Life transitions, such as becoming a parent or otherwise experiencing discrete changes to family structure, encompass a vulnerable time for individual life trajectories; the circumstances of transitions, and individual reactions to transitions, lead to divergence in the life course (Elder Jr., 1998; Karney & Bradbury, 1995). Parents' coping with infant parenthood, both during the TTP and when having additional children, likely undergo a variety of socioemotional uncertainty and instability which may result in changes to their trait-like characteristics, including personality and attachment orientation. Therefore, evaluating parents' previously stable relationship experiences beyond marital satisfaction, such as their attachment relationship, is important for fully understanding parenting relationships during infancy.

Emotional Security Theory

Elsewhere in the parenting relationships literature, researchers emphasize the significant impact of interparental conflict behavior on children's development. Emotional security theory (Davies & Cummings, 1994) is one perspective focused on mechanisms by which conflict within the parent subsystem influences a child's sense of security in their home environment. More specifically, Davies and Cummings highlight the importance of evaluating interparental conflict behavior with a "process-oriented" framework and consideration of the complexity of the association between conflict and child development; solely focusing on negative socioemotional development directly associated with conflict fails to paint a complete picture of the effects of conflict behavior for the parenting experience and for children's development. Alternatively, interparental conflict behavior likely encompasses both "destructive" and "constructive" conflict strategies which children interpret and respond to differently as indicative of environmental security. Constructiveness involves individual behaviors during a conflict discussion which typically lead to or support eventual resolution of the conflict (Cummings, 1998). Constructive

conflict techniques might include displaying optimism, validation, and physical affection during the conversation. Perhaps more importantly, greater constructiveness between parents is related to improved emotional security and more adaptive child socioemotional outcomes, such as less aggressive behavior (Cummings et al., 2004), prosocial behavior (McCoy et al., 2009), and social competence (Murray et al., under review). In contrast, destructiveness includes behaviors which are more likely to obstruct conversational progress toward resolution. Common destructive behaviors include defensiveness, insults, or withdrawing from the conversation (Cummings, 1998). Destructiveness is commonly associated with less emotional security for children and relatedly less adaptive child socioemotional outcomes, such as behavioral dysregulation (Warmuth et al., 2018) and worse adolescent adjustment (Cummings et al., 2012). Kopystaynska et al. (2020) describe further how constructive and destructive conflict strategies differentially relate to parenting behavior and coparenting. Specifically, fathers who were more destructive demonstrated harsher parenting behavior; for both mothers and fathers, destructiveness was related to a worse co-parenting alliance.

Emotional security theory underscores the complexity of the effects of conflict behavior on parenting behavior and children's development. Existing evidence grounding this theory frames the necessity of supporting parents' constructive communication skills in order to promote their own relationship functioning and facilitate a positive environment for their children. This study thus investigates whether a communication intervention for postpartum parents can lay a foundation of constructiveness for parents amid a significant family structure change and life transition.

Linking Romantic Attachment and Conflict Behavior

Developmental psychologists are understandably concerned with protecting children from the negative effects of destructive conflict and divorce; yet there is limited discussion of parents' romantic intimacy or security as a component of family functioning. However, investigating the broader romantic relationship can inform our knowledge of parents' conflict behavior. For example, some evidence suggests parent attachment style may influence the trajectory of conflict behavior for parents of infants: Rholes and colleagues (2014) describe a nonlinear relationship between attachment anxiety and avoidance and parent conflict behavior over the course of infancy. Specifically, parents with low attachment anxiety and avoidance tend to experience an initial increase in destructive conflict behaviors (such as stalemating and avoidance) and a later decrease in destructiveness when the child is about 14 months old. Results from Laurent et al. (2008) indicate the impact of conflict behaviors on the parent-child relationship may be moderated by parents' (especially fathers') attachment orientation, whereas attachment incongruent behaviors (e.g., conflict withdrawal among securely attached individuals) were predictive of less secure parent-child relationships compared to attachment congruent behaviors (e.g., conflict withdrawal among avoidant parents) did not significantly affect child security. Importantly, this interaction has also been found in the reverse, whereby interparental conflict moderates the association between fathers' romantic attachment and emotionality (positive/negative affect), which was related to children's attachment to their father (Bi et al., 2018).

The literature is mixed regarding the nature and directionality of the association between conflict behavior and relationship quality; however, important evidence suggests conflict behavior, as opposed to romantic attachment, may be the driving force in relationships for

parents. Kluwer & Johnson (2007) compared two models, allowing each of these variables to predict the other, and concluded conflict frequency was more likely to be the determinant of relationship quality in their sample. Furthermore, Cowan and colleagues (2019) published significant results from an intervention focused on conflict and father involvement in which both mothers' and fathers' romantic attachment security was significantly improved by the conflict intervention. Overall, these results highlight the interactive effects of romantic attachment and couples' conflict, demonstrating how improving conflict behavior is likely impactful for relationship intimacy more broadly.

Predictors of Parents' Relationship Trajectories for Mothers and Fathers

Several predictors of relationship trajectories have previously been identified in the literature (for an early review, see Karney & Bradbury, 1995). Notably, the bulk of published research on parent relationship trajectories is focused on heterosexual relationship satisfaction across the transition to parenthood (TTP). This stage is notoriously stressful and epitomized by an unmatched change in lifestyle, for better or worse. The nature of relationship satisfaction during this time is often characterized by descents in satisfaction for heterosexual parents (with small to medium composite effect sizes; Doss et al., 2017) as well as gay and lesbian parents (Goldberg & Sayer, 2006; Huebner et al., 2012). Furthermore, while navigating new roles and responsibilities associated with parenting an infant, mothers and fathers often experience an increase in conflict (Cowan & Cowan, 2000; Doss et al., 2009). Notably, transgender, gay, and lesbian parents navigate a range of family experiences associated with establishing unique roles and identities traditionally embedded in gender performance (Goldberg, 2005). Thus, the current study is only focused on and intended to identify predictors of relationship functioning for heterosexual, monogamous parents.

Although the TTP is a staggering life transition, many parents encounter the infancy stage more than once and may experience similar emotional effects when having additional children; each child creates a change in family structure and carries unique characteristics to which parents must adapt. Thus, in this study I investigate both new and experienced heterosexual parents and evaluate whether differences exist between these groups in the present sample. Furthermore, I consider additional predictors of relationship trajectories by testing the effects of several variables previously noted by relationship researchers. Perhaps most importantly, I investigate whether these factors are differentially impactful for mothers and fathers.

Many researchers have tested whether heterosexual mothers and fathers experience distinct relationship trajectories. Some studies evaluating interparental relationships over the transition to parenthood suggest mothers experience a *steeper* descent in marital satisfaction while fathers' descent is more gradual (e.g., Belsky et al., 1998; Cowan et al., 1985). Don & Mickelson (2014), however, more recently observed the opposite: fathers experienced a steeper descent in relationship satisfaction compared to mothers in their sample. These researchers more specifically found 20 percent of mothers and 50 percent of fathers experienced this steep descent, while the remainder of mothers and fathers experienced only a "moderate" descent. Alternative evidence supports a similar decline in marital satisfaction for mothers and fathers, but mothers may experience a larger sudden increase in problem intensity and poor conflict management, compared to fathers (Doss & Rhoades, 2017).

Beyond the context of TTP, similar patterns have emerged for both new and experienced parents. For example, Bower et al. (2013) evaluated relationship satisfaction trajectories among expecting parents using hierarchical linear modeling and found that mothers experienced a greater decline in relationship satisfaction than fathers. Volling and colleagues (2015) similarly

observed among parents transitioning from one to two children that most women experienced linear decreases in positivity or increases in negativity and men showed declining positivity or temporary decreases in negativity, returning to baseline at 4 months.

With these findings in mind, researchers must critically evaluate predictors and moderators of relationship trajectories for both parents across the TTP and with multiple children to better understand relationship functioning for parents with different family structures (e.g., Volling et al., 2015). Not all parents experience relationship declines after having a baby (see Kluwer, 2010); identifying risk as well as protective factors specific to mothers and fathers can enable researchers to create more targeted interventions and support families in facilitating constructive home environments.

Parent Mental Health

Mental health and relationship functioning are commonly linked for parents and nonparents (Emran et al., 2022; Feeney et al., 2003; Proulx et al., 2007; Schudlich, 2019). Because reviews of the literature suggest approximately 17 percent of mothers and eight percent of fathers experience postpartum depression, or depression within 12 months of birth (e.g. Cameron et al., 2016; Shorey et al., 2018), the effect of this mental health hurdle for new parents and their relationships is an important issue for parenting researchers. Bower and colleagues (2013) show depressive symptoms as a catalyst of relationship satisfaction decline for both mothers and fathers. In another study, Pinto et al. (2020) find depressive symptomology among fathers during pregnancy may lead to decreases in positive attitudes about sex, relationship satisfaction, and positive attitudes about the baby over the transition to fatherhood. Don & Mickelson (2014) also observed declines in marital satisfaction were primarily apparent in “high-

risk" sub-groups of couples in which parents reported low self-esteem, high anxiety, and/or depressive symptomology.

Importantly, Feeney and colleagues (2003) also found that, among new parents, relationship anxiety during pregnancy was related to later depressive symptoms (among individuals who did not experience high levels of initial depressive symptoms), while maternal depression during pregnancy was related to fathers' later relationship anxiety. Similarly, Figueiredo et al. (2018) demonstrate a predictive effect of relationship interactions for mothers' and fathers' depressive symptoms from 3 to 30 months postpartum, such that parents with high negative interactions experienced a steeper increase in depressive symptoms over time; the reverse effect was not significant.

These internal and relational factors are commonly linked in the literature. The current study includes postpartum depressive symptoms as a predictor of the trajectory of relationship functioning for parents to determine whether depressive symptoms exacerbate relationship decline in this sample. Although this study does not test trajectories of postpartum mental health, I expect due to the typical bidirectional nature of the association between these variables that the shape of parents' relational trajectories are very similar to that of their postpartum mental health.

Initial Relationship Functioning

Researchers have also tested the predictive value of baseline relationship intimacy, satisfaction, and functioning on parents' relationship trajectory after the birth of a child. For example, Kluwer & Johnson (2007) found that higher conflict frequency during pregnancy was related to lower relationship quality over the TTP. Doss et al. (2009) interestingly found that higher levels of initial relationship satisfaction (at birth) predicted larger decreases in satisfaction after the birth of their child; furthermore, mothers tended to experience an increase in poor

conflict management if they had high levels of poor conflict management during pregnancy. Further considering the relationship functioning of the family system, Lindblom and colleagues (2014) identified seven divergent paths of parents' relationships, highlighting the variability among parents' experiences. These researchers concluded baseline family functioning (cohesion, intimacy, independence etc.) was the most important predictor of "family cohesion" after the birth of a child. Overall, parents' ability to cope with a stressful life transition such as having a baby (or having another baby) and maintain an intimate partnership likely partly depends on their relationship functioning before or at the time of the event.

Parent Age

Researchers of divorce offer consistent evidence which suggests couples who marry young are more likely to divorce (e.g., Kennedy & Ruggles, 2014). Perhaps as a result, couples are increasingly choosing to marry later or not at all (U.S. Census Bureau, 2021). Furthermore, many young adults are choosing to have children later (Mathews, 2009), many citing reasons such as working toward financial stability and pursuing other life experiences. Age may play a significant role in parents' ability to navigate the turbulence of early parenthood and is thus considered in the current study.

Partner Effects

Dyadic relationships are bidirectional (Kenny, 1994). With this in mind, the relationship trajectories framework posits that partner relationship trajectories may be similar or different across dimensions, such as fluctuation and rates of ascent or descent of reported attachment (Eastwick et al., 2019). Moreover, researchers have demonstrated that partner evaluations of their relationship influence the other partner's evaluations over time (e.g. Kenny, 1994; Le et al., 2016). For example, Partner A's evaluation of their relationship at Time X is likely related to

their own evaluation and Partner B's evaluation at Time X+1. However, no studies to my knowledge have explored whether the change in Partner A's relationship evaluation from Time X to Time X+1 impacts Partner B's relationship evaluation from Time X to Time X+1 or later. This consideration is important particularly in the context of life transitions, such as having a baby, when parent-couples are likely to experience relationship turbulence (Eastwick et al., 2019). As previously discussed, relationship evaluations during the postpartum period are likely to change, and often decline, for mothers and fathers (e.g. Doss et al., 2014), but researchers have yet to determine whether one parent is driving this change despite evidence that relationship evaluations tend to be related longitudinally. Thus, to accurately predict relationship change during the postpartum period, I tested specifically whether the change in each partner's reported attachment security is predictive of the change in their partner's reported attachment security.

Similarly, I tested whether each partner's change in observed conflict constructiveness is predictive of their partner's change in observed constructiveness. Existing evidence suggests mothers and fathers may report similar use of conflict strategies (e.g. Kopystynska et al., 2020; McCoy et al., 2013). Furthermore, observations of conflict constructiveness between mothers and fathers have also been significantly related in previous studies (Cummings et al., 2008). Although researchers have highlighted the decline in parents' conflict communication effectiveness after having a baby (e.g. Doss & Rhoades, 2017), investigations of the change in relationship functioning postpartum have not revealed whether one parent's descending constructiveness may be driving both parents' decline. Identifying whether mothers or fathers are typically driving the change in relationship evaluation and behavior is important for indicating targets of future interventions.

State of Interventions

Several programs have been designed to support healthy family systems; however, many interventions for relationship health have limited effects, are not empirically evaluated, or only include one parent (usually the mother). Pinquart & Teubert (2010) provide one meta-analytic study of couple interventions, specifically during the TTP, and found small effects on communication (d = .28) and even smaller effects on relationship satisfaction (d = .09). These authors concluded parent-relationship interventionists have a long way to go to effectively supporting these families. Similarly, Trillingsgaard et al. (2012) found no significant effects of a widely used psycho-educational prevention program (*Prevention and Relationship Enhancement Program*, PREP), focused on communication skills and conflict management, designed for prenatal parents before the TTP. These researchers conclude by emphasizing the importance of empirically evaluating the effectiveness of relationship and parenting programs, as these programs are expensive and may not be achieving their intended impact. This sentiment may be particularly important in the context of high-conflict or divorced families (for a review of studies of divorced family interventions, see Goodman et al., 2004).

Some researchers have found that targeting TTP interventions to high-risk individuals/couples may be more effective. In addition to the factors described previously, researchers have highlighted a variety of variables which may indicate risk levels for couple relationship decline. These include education (Petch et al., 2012), planned vs. unplanned pregnancy (Cox et al., 1999), parent divorce (Doss et al., 2009), and ability to cope with stress as a dyad (Bradbury & Karney, 2004). Although effects of existing interventions for high-risk couples are still primarily small to medium and inconsistent between mothers and fathers (e.g., Petch et al., 2012), Doss and colleagues (2014) see greater effects (medium to large) for a

coparenting intervention which reduced relationship satisfaction decline for both men and women and had a particularly positive impact on relationship trajectory for high-risk men. These authors conclude that focusing on strengthening coparenting strategies may be more interesting to parents and thus more effective for protecting parents' relationships compared to addressing other elements of relationship functioning (e.g., attachment, conflict behavior). Conversely, Cowen et al. (2019) investigated the effects of a conflict intervention in a primarily low-income sample, finding that the intervention condition significantly reduced parents' conflict, supported their romantic attachment security, and ultimately improved parenting quality. These studies together suggest parents may be receptive to multiple intervention targets.

Many existing parenting interventions fail to include or thoroughly consider fathers. Panter-Brick and colleagues (2014) provide a large review (199 studies) of parenting interventions which include fathers. Several of the reviewed interventions included elements of communication and relationship functioning for fathers (e.g., United Kingdon: *Family Nurse Partnership*, FNP, Department of Health, 2009; *Supporting Father Involvement*, Cowan et al., 2009). However, these authors emphasize the presence of a significant focus on the mother-child relationship and lack of inclusion of specific father effects. Furthermore, Panter-Brick and colleagues note there are virtually no randomized control trials focused on supporting healthy family systems which include both mothers and fathers. Without data from randomized control trials, specific mechanisms of change for relationship functioning and parenting behavior over time are limited. The authors conclude with examples of effective facilitation of engagement of fathers in interventions (e.g., *Family Foundations*, Brown et al., 2012), and applying lessons from these limited examples, suggest an "overhaul" of study designs to address bias, delivery, and reach of programming. These lessons are geared toward preventing the marginalization of

fathers; programs should endeavor to include fathers at all stages of the intervention, attending to biased content and accessibility of information such to support fathers' needs as well as mothers'.

The Current Study

The extensive literature demonstrates the significance of the interparental relationship for individual and family functioning. The postpartum period, conceptualized here as 0 to 18 months after having a baby, is a notably vulnerable time for parent romance; relationship functioning tends to decline. The current study endeavors to identify antecedents of the trajectories of relationship functioning, in terms of romantic attachment and conflict behavior, for mothers and fathers. Furthermore, I investigate whether one parent is driving the interparental relationship trajectory among heterosexual couples using a dynamic change score modeling approach. Lastly, I evaluate the moderating effects of a new, conflict communication intervention on protecting parents' typically declining relationship trajectories after having a baby.

The *Notre Dame Families and Babies Study* (FABS) is a NIH-funded, randomized-control trial evaluating the effect of a two-by-two intervention focused on improving parent sensitivity and parent communication. Using a psychoeducational approach, the conflict intervention includes four in-home meetings during which trained coaches provide information about strategies for having more constructive conversations about topics of disagreement to reach resolution (Cummings et al., 2012). Furthermore, parents are engaged by practicing these strategies with guidance from a coach. Examples of behaviors included in these meetings are: pacing yourself (addressing one problem at a time), speaking only about yourself, paying attention to what your partner is saying, and paraphrasing. These educational meetings further outline current research on the association between the interparental relationship and children's

socioemotional outcomes (e.g., Cummings & Davies, 2010). In essence, the intervention is designed to support parents' communication by sharing evidence-based skills, guiding them through practice, and providing context for the importance of demonstrating constructiveness for their children. Although the present study focuses on this conflict communication intervention, the second element of the FABS study was a parenting sensitivity intervention focused on each parent's behaviors with their infants (e.g. reading infants' signals, responding appropriately).

Hypotheses: Main Effects

Interparental relationship functioning is vulnerable during the postpartum period for both new and experienced parents (e.g. Bower et al., 2013). I investigated the predictive effects of several variables commonly associated with relationship trajectories in adults, including parenting experience (transitioning to parenthood vs. experienced parents), parent mental health, initial levels of relationship functioning, as well as other demographic variables including parent age, income, race, and education. I explored:

1. Whether mothers and fathers who are new to parenthood and those who are experienced parents have significantly different trajectories of relationship functioning in either romantic attachment or constructiveness over time.
2. Whether mothers and fathers who have higher initial levels of depressive symptoms experience steeper or flatter descents in romantic attachment and constructiveness over time.
3. Whether mothers and fathers who have higher initial levels of relationship functioning experience steeper or flatter descents in romantic attachment and constructiveness over time.

4. Whether mothers and fathers who are older at the beginning of the study experience steeper or flatter descents in romantic attachment or constructiveness over time.
5. Whether mothers' or fathers' change in romantic attachment drives the change in romantic attachment for the other parent.
6. Whether mothers' or fathers' change in observed constructiveness drives the change in the other parent's observed constructiveness.

Moreover, I hypothesized that mothers and fathers with more sociodemographic privilege (those who report more financial security in terms of household income, more education, and identify with a majority race) experience a flatter descent in romantic attachment and constructiveness over time (aligned with results from Don & Mickelson, 2014).

Hypotheses: Intervention Effects

Existing intervention efforts inform the development of FABS, and the current study aims to evaluate the effectiveness of this intervention for protecting parents' relationship functioning in terms of their relationship intimacy and conflict strategies, conceptualized by romantic attachment and constructiveness respectively. Consistent with research from Cowan and colleagues (2019), I hypothesized:

1) Supporting mothers' and fathers' conflict communication protects against decreases in attachment security and constructiveness during the highly stressful transitional period of infant-parenting. In other words, I expected couples who received the intervention to experience flatter descent in romantic attachment and constructiveness.
2) Due to the consistent association between parent mental health and relationship functioning (Rholes et al., 2011), I expected the intervention to protect the interparental

relationship from the effects of poor mental health; I expected the intervention to moderate the effect of depressive symptoms on the parent relationship trajectory.

Effect of the communication intervention on the couples' demographic characteristics are exploratory; I also explored whether the conflict intervention supports parents at increased risk of relationship declines due to these variables by alleviating their effect on relationship trajectory. Dynamic change score modeling was used to test these effects in a combined model, and multigroup analyses were used to evaluate the moderating effect of the intervention. See Figure 2 for a conceptual representation of the hypothesized model.

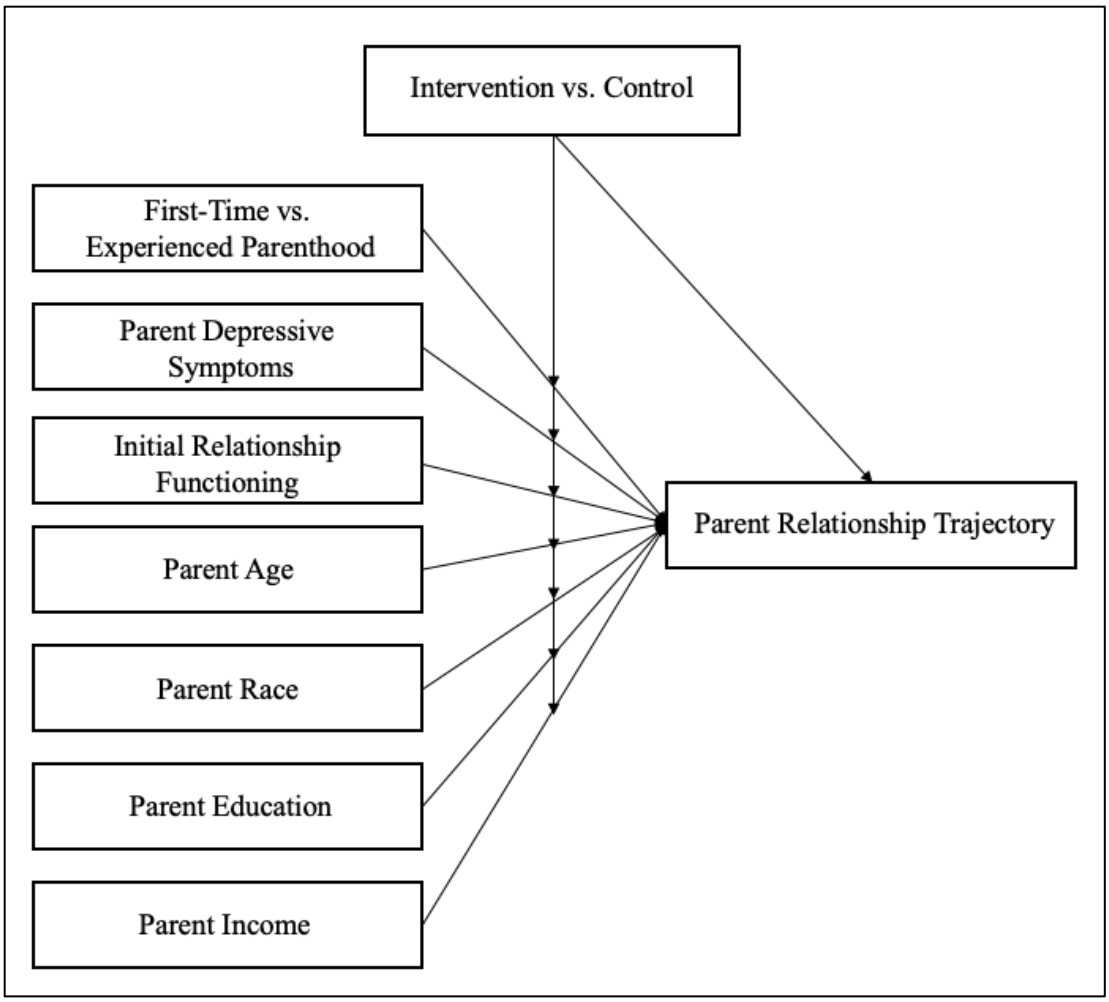

Figure 2. Conceptual Model of Hypothesized and Exploratory Associations

Note. All study variables were be measured for each parent; both parents' experience of the relationship trajectory is included in the statistical model. The investigation of whether and how mother/father experiences of their relationship are co-changing over time is not represented in this model for the sake of visual clarity. Moreover, directional arrows are not included as these associations are primarily exploratory in nature; however, I expected participants with more demographic privilege to experience a steeper (more negative) decline in relationship functioning over time.

CHAPTER 2: METHOD

Researchers have employed a variety of data collection and analytical methods for studying relationship trajectories among parents of infants. Some studies utilize cross-sectional designs (see Twenge, et al., 2003), but many others have provided information from longitudinal designs beyond infancy (e.g., Bower et al., 2013). Furthermore, some researchers have reported results from studies beginning prenatally (e.g., Deave et al., 2008); others included data from parents who already had children (e.g., Meyer et al., 2016). Although virtually all of these studies are based on parent-reported relationship functioning when it comes to romantic attachment and marital satisfaction, some interventions have utilized observational measures for studying conflict behavior (e.g., Cummings et al. 2008). The current study employed a mixed-method approach, using survey-based psychometrics as well as observational measures, to get at parent relationship functioning postpartum. Although this study supported participation both in-person and virtually due to unanticipated pandemic-related restrictions, the observational measures were only fully completed if participants were in-person. Therefore, this study only includes participants who completed the study in-person to ensure consistency of data collection and measurement.

Participants

Two-hundred and two mother-father-infant triads participated in this study fully in-person. Families with infants younger than seven months were recruited from two medium-sized, Midwestern cities using flyers, social-media posts, community events, and word of mouth. Families were included if the couple was heterosexual and living together, and the infant was born full-term (37 weeks of gestation and at least 5.5 pounds) and healthy with no known

developmental delays. Approximately half of the couples had at least one older child and half indicated the study child was their first child. Fifty-five percent of the study children were males at birth.

Parents' ages ranged from 19 to 56 years with mothers' mean age of 31 years and fathers' mean age of 33 years at the start of the study. Most couples were married (87%) at the time of assessment. In addition to its focus on heterosexual couples, the sample has limited racial-cultural diversity: eighty-three percent of mothers and 78% of fathers were White, six percent of mothers and seven percent of fathers were Multi-racial, four percent of mothers and six percent of fathers were White or Black Hispanic, three percent of mothers and one percent of fathers were Asian, two percent of mothers and six percent of fathers were Black, and less than one percent of mothers and fathers were American Indian/Alaska Native.

With respect to education, 2% of mothers and fathers reported no education (i.e., reported not having any degree/certification); 32% of mothers and 42% of fathers had some education such as a GED, high school diploma, or other certification; 39% of mothers and 33% of fathers had a bachelor's degree; 27% of mothers and 24% of fathers in this sample had more education beyond their bachelor's degree. Furthermore, the participants reported an annual household income range of less than $5,000 to more than $199,000, with a mean range of $50,000 to $60,000.

Procedure

The study included at-home self- and parent-reported questionnaires and observational lab visits when infants were 6, 12, 16, and 18 months; the present study focuses on assessments for participants when infants were 6, 12, and 18 months old. Data from the 16-month visit were not included to create even time intervals (6 months) for reliable tests of longitudinal processes

and remove error in measurement due to inconsistent spacing of visits. The parenting intervention occurred between 6 and 12 months. Informed consent was obtained at the start of each visit and survey and families were compensated a total of $230 for their participation. Procedures relevant to our study are detailed below.

Independently before each visit, parents completed surveys to provide demographic information and report on their attachment security. After questionnaires were completed, couples attended a lab visit where they participated in a video-recorded Problem Solving Task (PST; adapted from Du Rocher Schudlich et al., 2003) which was used to assess their conflict communication techniques. Each couple wrote down three prevalent conflict topics and then chose two topics from their combined lists to discuss; the first topic would be discussed without the infant in the room and the second topic would be discussed with the infant in the room. The assessor then instructed the couple to discuss the first topic privately for seven minutes and try to come to a resolution within that time. The task was repeated with the infant in the room for another seven minutes; however, this second conversation is not included in the current study.

Measures

Romantic Attachment

The Spousal Attachment Styles Questionnaire (SASQ; Becker et al., 1997) is a 26-item self-report measure used to assess parents' romantic attachment styles. I included the secure attachment subscale (7 items; Cronbach's $\alpha = .82$ for mothers, .75 for fathers) in our study. A securely attached partner would indicate, for example, they "do not worry that [their] partner will accept [them]" and "do not often worry about [their] partner letting [them] down." Each item is rated on a seven-point Likert-type scale, from 1 ("strongly disagree") to 7 ("strongly agree"), such that higher scores indicate greater security. The item scores were summed, and higher

overall scores reflected more secure attachment. The score from one participating father was removed from these analyses due to the father's extremely low romantic security, scoring below the first quartile minus three-times the interquartile range (Tukey, 1977).

Constructive Conflict Behavior

Mothers' and fathers' constructive conflict behavior was assessed during the PST with a systematic, observational coding system, adapted from Cummings and Davies (2008). Twenty percent of the videos were double-coded to establish interrater reliability using a gold-standard coder, with intraclass correlations ranging from .84 to .88.

Specific constructive behaviors are evaluated based on two categories: mild constructive behaviors and strong constructive behaviors. Basic, low-skill level communication strategies such as cooperation, engagement in the conversation, and problem-solving encompass mild constructive behaviors. Complex strategies involving sophisticated communication, including validation of partner's feelings, emotional support, and paraphrasing, encompass strong constructive behaviors. Presence of mild and strong constructive behaviors are taken into account to assign each parent a global score for constructiveness on a scale from 1 ("low or no constructiveness") to 5 ("high constructiveness"). For an individual to receive a score of 3 or more, they must employ both mild and strong constructive techniques, with multiple instances of strong constructive behaviors indicating greater global constructiveness (a score of 4 or 5). Importantly, participants were allowed to discuss any topic of their choosing. Most participants (approximately 80%) changed their conflict topic from visit to visit; thus, the measured constructive conflict techniques were not considered bound to one conflict type or intensity.

Parent Depressive Symptoms

The Inventory of Depression and Anxiety Symptoms was used to measure mothers' and fathers' depressive symptoms at 6 months postpartum (IDAS; Watson et al., 2007). The IDAS is composed of 10 subscales, each designed to indicate specific symptoms (e.g. suicidality, lassitude) and two broader scales: general depression and dysphoria. The current study focuses on the general depression subscale, which has strong convergent validity with similar depression measures (e.g. Beck Depression Inventory—II; Beck et al., 1996) and was internally reliable in the study sample (Cronbach's $\alpha = .91$ for mothers, .90 for fathers). This scale has 19 items of experiences, on a scale from 1 ("not at all") to 5 ("extremely"), to which participants responded with how much they have felt or experienced each within the past two weeks. Example items include "I felt inadequate" and "I felt discouraged about things." Higher scores indicated more depressive symptoms.

Covariates

Several additional factors likely influence the interparental relationship trajectory for postpartum parents and were be considered in analyses. As discussed previously, parent age reported at 6 months postpartum were be assessed in the model. An important factor in coping with this life stage perhaps related to parent age is financial stability. Adding a child to the family is accompanied by increases in financial responsibilities largely related to the child's well-being. Financial stress is a common cause of relationship dissolution or divorce in married couples and therefore must be considered analyses (Dew et al., 2012). Some researchers have also found differences in relationship functioning between families of distinct racial profiles and educational attainment (Aughinbaugh et al., 2013); the current study tested whether these factors are influential over and above other study variables. Household income was provided by both

mothers and fathers, and averaged to account for differences within households. Racial profiles and educational attainment were also reported by both mothers and fathers. To protect against large group differences, these characteristics were dummy coded. For participant race, "0" indicated a participant identified with a minoritized race and "1" indicated the participant identified as White; for educational attainment, "0" indicated the participant may have some education, but does not have a bachelor's degree and "1" indicated the participant has a bachelor's degree or more education. Finally, because this study sample includes participants who completed the project before, during, and after the COVID-19 pandemic, I controlled for whether participants started the study before (scored as "0") or after (scored as "1") March 6th, 2020 (when COVID-19 was declared a public health emergency by the state in which the study occurred; Exec. Order No. 20-02, 2020) as part of my analyses to account for the extensive and varied effects of the pandemic on family life.

CHAPTER 3: ANALYSES

The complex, transitional life stage of parenting an infant has been studied using a variety of analytical approaches. When assessing both mother and father reports on their relationship experience (or "multiple informants" on a given variable), many of the strategies used for analysis are based on an *actor-partner interdependence model* framework (APIM; Kashy & Kenny, 2002). APIM evaluates the effect of each member of a dyad's experience on their own reports (actor effects) and on their partner's reports (partner effects). In other words, APIM tests the predictive value of each partner's reported experience on each partner's outcome of those experiences. This approach is common in datasets with dyadic data because participant reports are "non-independent;" each parent's data likely correlates with their partner's. Mothers' and fathers' attachment security within a dyad are likely non-independent, which violates a core assumption of regression (Ernst & Albers, 2017).

When applying APIM to longitudinal data, some analyses utilize *dyadic growth curve modeling* (Kashy & Donnellan, 2011). This approach combines APIM and longitudinal analysis, gaining information about the intercept (starting point) and slope (trajectory) of each member of a dyad's experience. Rholes and colleagues (2014), for example, assessed whether actor and partner attachment orientations were related to each parent's trajectory of conflict strategies use over the first two years of their child's life. Results from this study suggest that actor and partner effects are significantly predictive of each partner's conflict tactics over time.

Other researchers have focused on changes within individuals over time primarily using *latent growth curve modeling* (e.g., Howard & Brookes-Gunn, 2009) or *hierarchical linear modeling/multilevel modeling* (HLM; MLM; e.g., Laurent et al., 2008). HLM (Raudenbush &

Bryk, 2002) is best understood as a more complex form of ordinary least squares regression, in which participant behaviors are measured and compared at varied hierarchical levels, such as a mother's attachment security versus a father's attachment security within a parent-dyad (level 1) and attachment security between parent-dyads (level 2).

These common analytical methods used to study the trajectory of interparental relationships after the birth of a child are informative but lack evidence for understanding the influence of one parents' relationship on the other *longitudinally*. In other words, is one member of the dyad driving the relationship trajectory over time; is one partner's slope more/less predictive of the other?

Dynamic change score modeling (DCSM; McArdle & Grimm, 2010) opens the door for addressing this gap. DCSM can evaluate model fit for each parents' report as predictive of the other, and identifies the most likely direction of influence. Model fit is examined for a baseline model, in which the two reports are not interrelated; a model in which mothers' experiences are driving fathers' experiences; a model in which fathers' experiences drive mothers'; and finally, a model in which they are co-driving the romantic experience over time. This approach further allows for the inclusion of predictor variables in the same model (between-dyad variables) as well as multiple groups for moderation. Although DCSM overlaps with APIM and dynamic growth curve modeling, this more advanced, mixed-modeling strategy is unique, assessing the influence of each dyad member's trajectory on their partner's trajectory as well as comparing dyads. Applying DCSM in this context could help interventionists identify whether one member of a partnership should be the primary target for supporting the couple as a unit.

Thus, the current study applied DCSM to determine whether and how mothers and fathers co-change in their reported attachment security and behavioral constructiveness over 18 months

postpartum. I also evaluated a series of independent variables to determine significant factors protecting parents from relationship decline after this life transition. Using a DCSM modeling approach, I tested whether one parent's relationship experience precedes the other in change over time. Finally, I used a multi-group analysis to test whether exposure to the conflict intervention protects parents' relationship experience. All analyses were conducted with Mplus (Muthén & Muthén, 1998-2017).

Preliminary Analyses

I first examined data missingness. Across study variables, missingness ranged from 0% (most demographic variables) to 46% (mother and father observed constructiveness at 18 months). This increase in missingness for the observed variables at 18 months was likely due to a combination of overall participant dropout, online data collection (i.e., some participants completed the PST over Zoom for the 18-month visit), and technical issues with video recordings of the PST. Importantly, because this study is geared toward couples' relationship functioning during a highly stressful period, we could expect that some couples would drop from the study if their relationship functioning was lower at the beginning of the study. Ultimately, an attrition rate of 12% emerged. To validate whether the remaining data was missing at random, I used Little's MCAR test, which revealed significant missingness not at random ($\chi^2(663) = 855.895$, $p = .00$; Little, 1998). Thus, multiple imputation was used to address this missingness and support validity of results (McKnight, et al., 2007; Rubin, 1987); maximum likelihood estimation (ML) was used to estimate the model (van Buuren, 2007). All variables were included in the imputation phase to ensure unknown missingness patterns were addressed. The Mplus "IMPUTATION" command, which uses Bayesian analysis (Muthén & Muthén, 1998-2017;

Rubin 1987), successfully converged 5 imputed datasets, as aligned with recommendations from van Buuren (2018).

Primary Analyses

As described above, a DCSM approach combined with a multi-group analysis was used to assess mothers' and fathers' relationship trajectories over 18 months postpartum in terms of romantic attachment and constructiveness. First steps were to evaluate models which include all study participants to acquire the best fitting representation of how mothers' and fathers' relationships are co-changing over time. In other words, I completed the DCSM modeling steps before implementing a multi-group analysis to evaluate the effects of the FABS intervention. Four models each were be tested for romantic attachment and constructiveness (eight models total). A series of indices were used to determine the best fit model using criteria suggested by Hu & Bentler (1999), including both absolute (relative to perfect model) and incremental (relative to baseline model) fit indices: Root Mean Square Error of Approximation (RMSEA, <.06), comparative fit index (CFI, >.95), Tucker-Lewis index (TLI, >.95), and standardized root mean square residual (SRMR, < .08).

The DCSM approach requires several constraints because it utilizes several latent variables. The observed score of the relationship variables at each time point serves as a single-indicator (with a regression path constrained to 1) of a latent variable which represents the "true score," or the relationship score if there were no measurement error. These latent variables are then regressed onto the true score at the next timepoint (constrained to 1) and onto a latent difference score variable which holds the change from the previous timepoint to the next consecutive time point. These change variables are further estimated in the DCSM using the latent variable from the previous timepoint. For example, the observed score of romantic

attachment at 6-months (directly reported by the parent), indicates a latent true score of romantic attachment (without measurement error); this true score changes from 6 months to 12 months, and this change is held in the model as the latent difference score between the first two timepoints. This process occurs again between 12 and 18 months. The slope, or statistical trajectory, is then created by regressing these change variables onto another latent variable representing the change between these change variables; this slope variable thus indicates how parents' relationships change across the three timepoints. Finally, the slopes were used as independent and dependent variables across DCSM models to determine which direction best represents the influence of relationship change between mothers and fathers. This process was the same for romantic attachment security and constructiveness, thus the four general steps of DCSM are represented by the following models:

Model 1 (Figure 3): *independent trajectories*

Model 2 (Figure 4): *mothers' trajectory driving fathers' trajectory*

Model 3 (Figure 5): *fathers' trajectory driving mothers' trajectory*

Model 4 (Figure 6): *co-driving of the relationship trajectory*

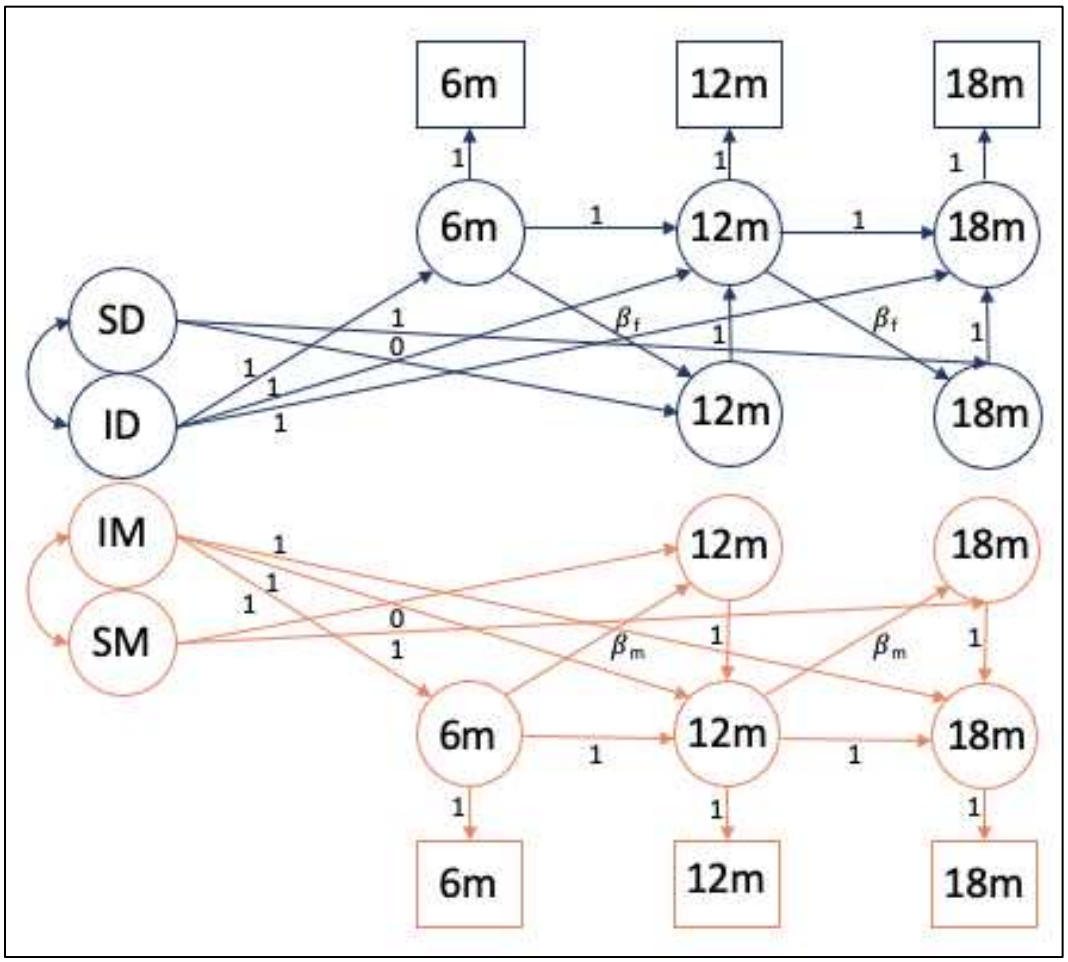

Figure 3. **DCSM Model 1: Independent Trajectories – Intercepts/Slopes Not Associated**

Note. Blue items represent father variables/paths; orange items represent mother variables/paths. β_f and β_m represent the estimated regression coefficient between the latent variable of, respectively, fathers' and mothers' previous score (t-1) and the latent change score (between t and t-1) for the same parent. SD = Slope for Father; SM = Slope for Mother; ID = Intercept for Father; IM = Intercept for Mother. 6m = scores at 6 months postpartum; 12m = scores at 12 months postpartum; 18m = scores at 18 months postpartum.

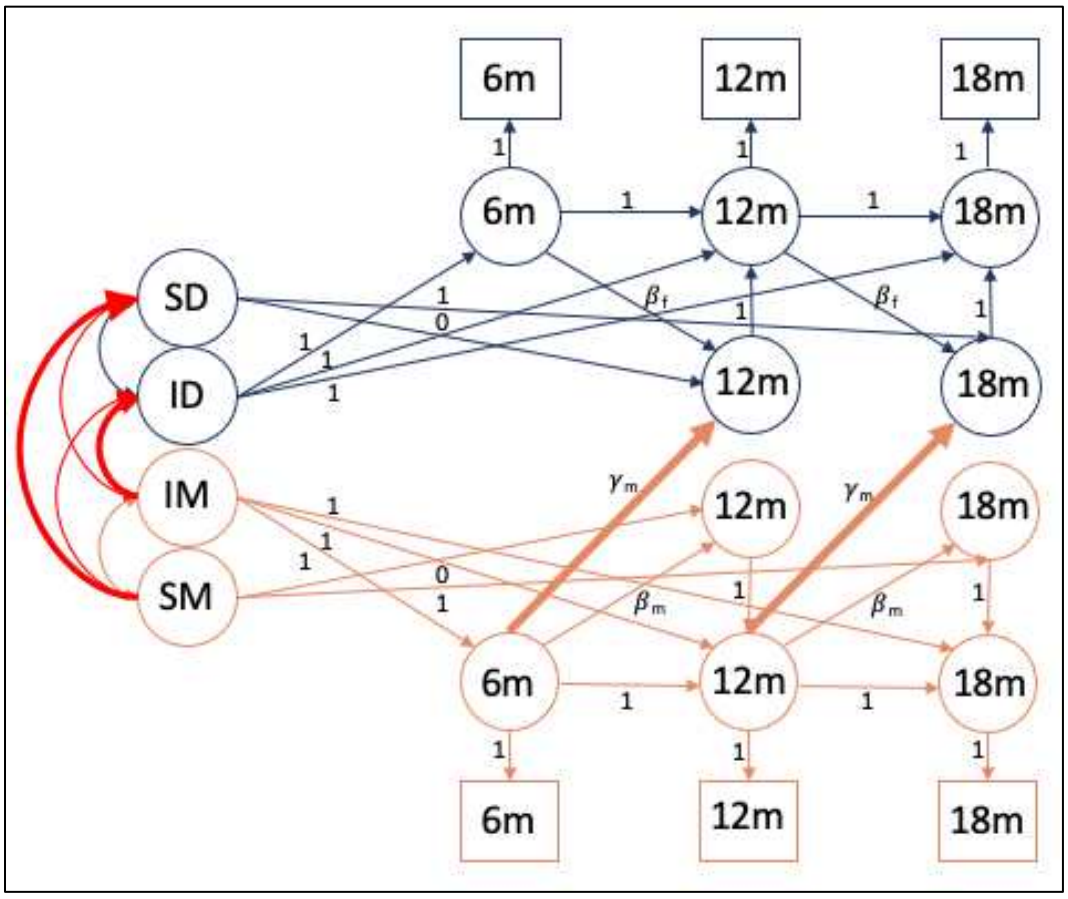

Figure 4. DCSM Model 2: Mothers' Trajectory Driving Fathers' Trajectory

Note. Blue items represent father variables/paths; orange items represent mother variables/paths; red items highlight the mother-to-father regression paths between intercepts and slopes, such that mothers' intercept and slope are predicting fathers' intercept and slope, respectively. β_f and β_m represent the estimated regression coefficient between the latent variable of, respectively, fathers' and mothers' previous score (t-1) and the latent change score (between t and t-1) for the same parent. γ_m represents the estimated coupling coefficient, or the regression path from mothers' t-1 latent score and fathers' latent change score at time t. SD = Slope for Father; SM = Slope for Mother; ID = Intercept for Father; IM = Intercept for Mother. 6m = scores at 6 months postpartum; 12m = scores at 12 months postpartum; 18m = scores at 18 months postpartum.

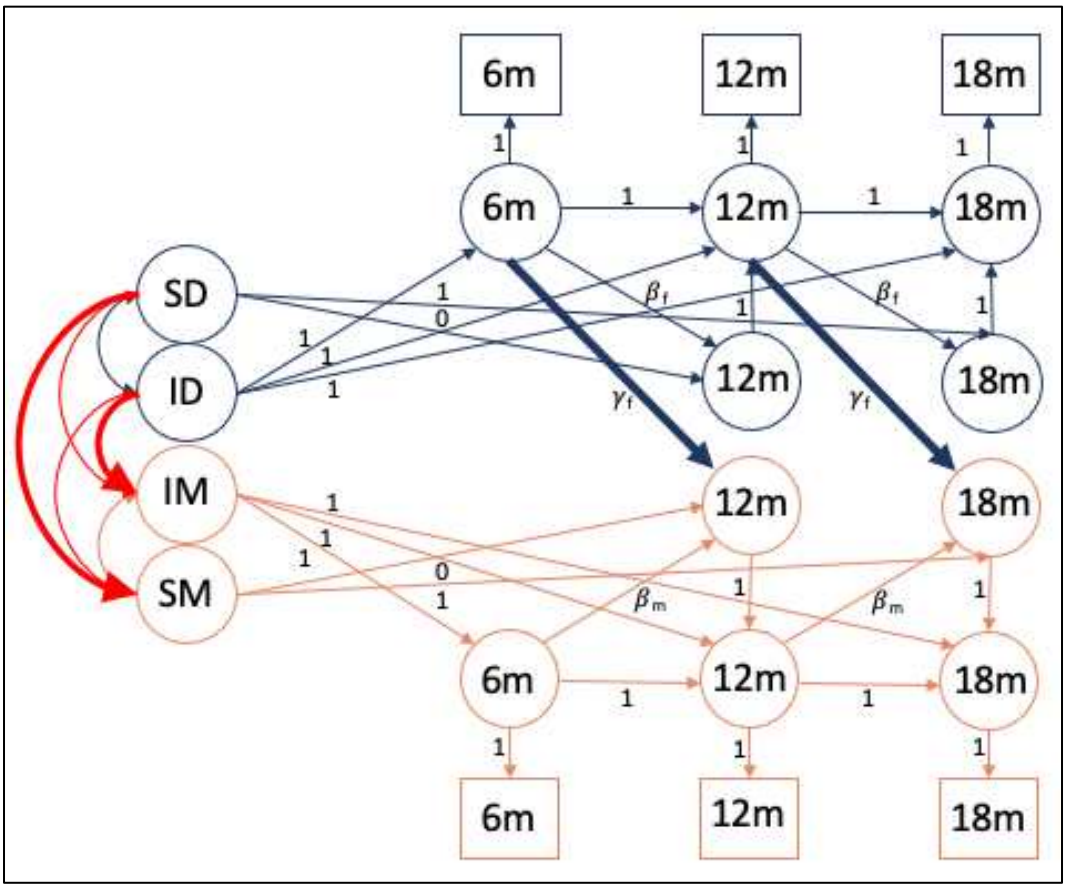

Figure 5. DCSM Model 3: Fathers' Trajectory Driving Mothers' Trajectory

Note. Blue items represent father variables/paths; orange items represent mother variables/paths; red items highlight the mother-to-father regression paths between intercepts and slopes, such that fathers' intercept and slope are predicting mothers' intercept and slope, respectively. β_f and β_m represent the estimated regression coefficient between the latent variable of, respectively, fathers' and mothers' previous score (t-1) and the latent change score (between t and t-1) for the same parent. γ_f represents the estimated coupling coefficient, or the regression path from fathers' t-1 latent score and mothers' latent change score at time t. SD = Slope for Father; SM = Slope for Mother; ID = Intercept for Father; IM = Intercept for Mother. 6m = scores at 6 months postpartum; 12m = scores at 12 months postpartum; 18m = scores at 18 months postpartum

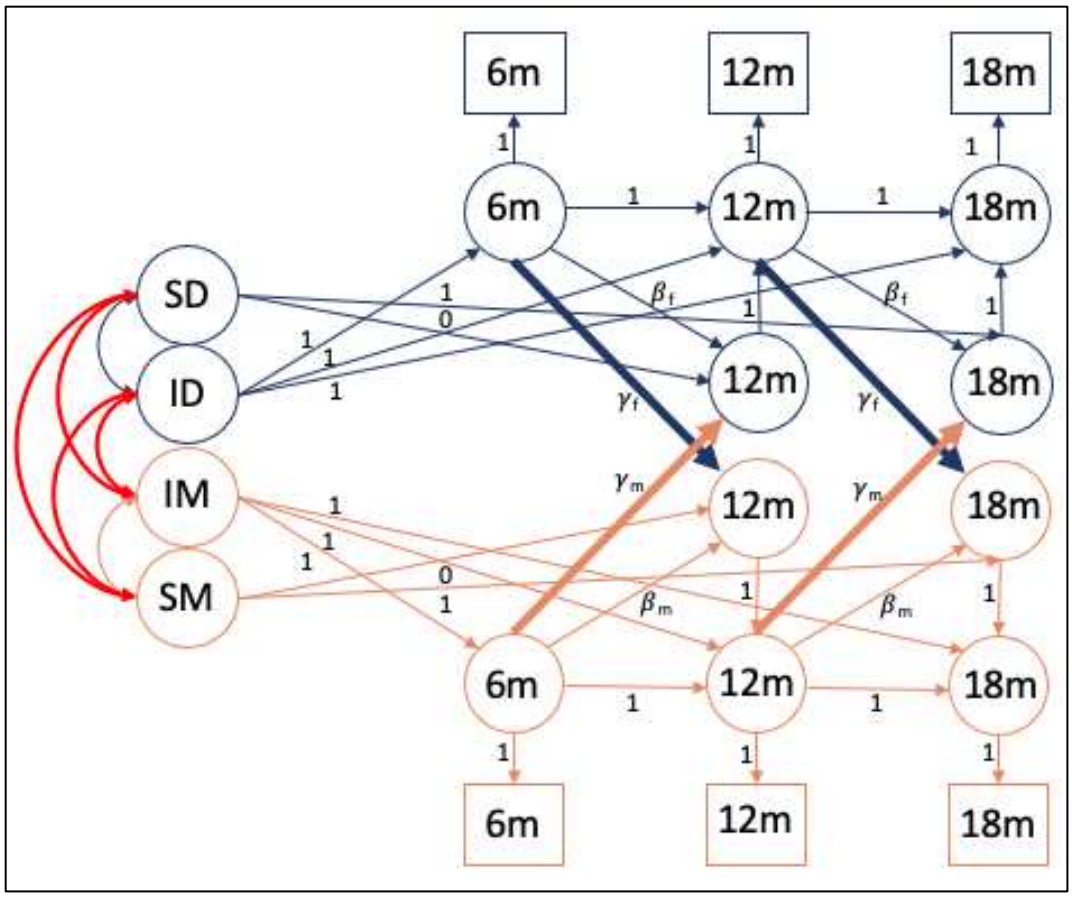

Figure 6. DCSM Model 4: Mothers and Fathers Co-Driving Trajectory

Note. Blue items represent father variables/paths; orange items represent mother variable/paths; red items highlight mother/father covariance of intercepts and slopes. β_f and β_m represent the estimated regression coefficient between the latent variable of, respectively, fathers' and mothers' previous score (t-1) and the latent change score (between t and t-1) for the same parent. γ_f and γ_m represent the estimated coupling coefficient, or the regression path between each parent's partner's t-1 score and the parent's latent change score. SD = Slope for Father; SM = Slope for Mother; ID = Intercept for Father; IM = Intercept for Mother. 6m = scores at 6 months postpartum; 12m = scores at 12 months postpartum; 18m = scores at 18 months postpartum.

A multi-group analysis was then implemented to parse out the effects of the FABS intervention on the trajectories of both relationship functioning variables (Hair et al., 2021). In order to include as many participants as possible, and maintain enough power for the complexity of the model, I separated participants into two groups: Group 1 included participants who either received the conflict intervention only or received the conflict intervention in conjunction with

the parenting intervention (n = 94); Group 2 included control participants and participants who received only the parenting intervention (all participants in the study who had no exposure to the conflict intervention; n = 108). The best fit DCSM model for each romantic attachment and constructiveness was tested within each group, comparing the combined intervention groups to the control group and parenting intervention only group to evaluate whether exposure to the conflict intervention influences the couples' relationship trajectories and/or alleviates the influence of the highlighted predictor variables. Although measurement invariance testing is limited with this type of model, given that almost all of the structural parameters are constrained to 0 or 1 by mathematical design, I compared model fit indices from a fully unconstrained model to a fully constrained model where parameter estimates were available in each of the final models.

CHAPTER 4: RESULTS

The following chapter outlines the results of a series of analyses intended to 1) identify predictors of mothers' and fathers' romantic attachment security and constructive conflict behavior over 18 months postpartum; 2) discover whether one parent is driving the relationship trajectory for both parents; 3) reveal the effects of the conflict intervention of the Notre Dame Families and Babies Study (FABS) on couple relationship functioning over time and as a moderator of the effects of other independent variables on interparental relationship functioning. This chapter includes descriptive statistics, such as means, standard deviations, and correlational associations among study variables. I also describe mean-level differences between mothers' and fathers and within-parent changes over time using paired-samples t-tests. I then describe results from the dynamic change score modeling (DCSM) approach to understanding each parent's role in changes of relationship functioning over time. Lastly, I describe the results of a pseudo-multi-group analysis, wherein the best-fitting DCSM model is tested within the intervention group and within the control group to reveal differences in model results between participants who did and did not receive the FABS conflict intervention.

Descriptive Results

Descriptive statistics and correlations among the primary study variables can be found in (Table 1). Although few associations were significant within the independent variables, mothers' and fathers' ages were each significantly related to their household income, such that older parents reported higher income ($r = .363$, $p < .001$ for mothers; $r = .275$, $p < .001$ for fathers). Independent samples t-tests revealed that mothers who were transitioning to parenthood were significantly younger (by approximately two years, on average) than mothers who had older

children ($t(200) = -3.943$, $p = <.001$). Similarly, fathers who were transitioning to parenthood were younger (by about three years) than fathers who had older children ($t(198) = -3.250$, $p = <.001$). Lastly, mothers and fathers who identified as White displayed significantly more constructiveness at 12 months postpartum, compared to mothers and fathers who identified with a minoritized race ($t(131) = -2.324$, $p = .022$ for fathers; $t(131) = -2.139$, $p = .034$ for mothers).

Notably, three independent variables were highly correlated ($r > .50$). Importantly, mothers' and fathers' reported parenting experience were highly, but not perfectly, correlated ($r = .869$, $p < .001$), as some partners had children from previous partnerships. Mother' and fathers' age ($r = .753$, $p < .001$) and mothers' and fathers' education ($r = .532$, $p < .001$) were also highly correlated. To ensure these demographic characteristics were accounted for in the models but did not create issues of multicollinearity, I regressed each parent's report of these factors only on their own latent intercept and slope. The remaining independent variables were all regressed on both mothers' and fathers' intercepts and slopes. Correlations between the continuous independent variables and parents' romantic attachment and constructiveness can be seen in Table 2 and Table 3 respectively.

Table 1

Descriptive Statistics and Raw Correlations Between Primary Study Variables

Note. **p<.01; *p<.05

Measure		1	2	3	4	5	6	7	8	9	10	11	12
Father													
1.	Attachment-6mo	1											
2.	Attachment-12mo	.49**	1										
3.	Attachment-18mo	.51**	.67**	1									
4.	Constructiveness-6mo	.15*	.09	.20*	1								
5.	Constructiveness-12mo	.11	.20*	.23**	.27**	1							
6.	Constructiveness-18mo	.06	.18	.24*	.30**	.43**	1						
Mother													
7.	Attachment-6mo	.31**	.28**	.29**	.19**	.11	.13	1					
8.	Attachment-12mo	.23**	.33**	.26**	.06	.03	.10	.62**	1				
9.	Attachment-18mo	.30**	.38**	.35**	.17	.09	.15	.57**	.72**	1			
10.	Constructiveness-6mo	.13	.12	.20*	.57**	.13	.24*	.15*	.13	.17*	1		
11.	Constructiveness-12mo	-.01	.21**	.25**	.27**	.45**	.29**	.13	.04	.18*	.27**	1	
12.	Constructiveness-18mo	.09	.26**	.25*	.16	.40**	.44**	.23*	.23*	.32**	.42**	.46**	1
M		43.58	42.93	41.83	2.48	2.52	2.28	42.94	42.44	41.74	2.52	2.53	2.33
SE		.35	.43	.51	.06	.07	.08	.39	.43	.52	.05	.07	.07

Table 2

Correlations between Mothers' and Fathers' Romantic Attachment and (Continuous) Independent Variables

Note. Independent variables were measured at 6 months postpartum. The mean of household income is not included because these reports were based on scaled ranges and seven couples indicated they make more than $150,000, which would likely impact the mean. **p<.01; *p<.05.

	Mother Attachment			Father Attachment			
	6mo	12mo	18mo	6mo	12mo	18mo	Mean (SD)
Mother Depressive Symptoms	-.32**	-.30**	-.24**	-.10	-.12	-.04	39.57 (10.7)
Father Depressive Symptoms	-.13	-.05	-.21*	-.26**	-.17*	-.23*	35.93 (9.4)
Mother Age	.06	.03	-.03	.05	.04	.02	30.42 (6.15)
Father Age	.03	-.04	-.09	.09	.02	.10	32.7 (6.15)
Household Income	.11	.22**	.23**	.09	.19*	.05	

Table 3

Correlations between Mothers' and Fathers' Constructiveness and (Continuous) Independent Variables

Note. Independent variables were measured at 6 months postpartum. The mean of household income is not included because these reports were based on scaled ranges and seven couples indicated they make more than $150,000, which would likely impact the mean. **p<.01; *p<.05.

	Mother Constructiveness			Father Constructiveness			
	6mo	12mo	18mo	6mo	12mo	18mo	Mean (SD)
Mother Depressive Symptoms	-.07	.07	.16	-.12	.02	.04	39.57 (10.7)
Father Depressive Symptoms	.07	-.01	.01	-.02	-.13	-.04	35.93 (9.4)
Mother Age	.12	.12	.08	.17*	.04	.00	30.42 (6.15)
Father Age	.11	-.07	.01	.17*	-.07	-.06	32.7 (6.15)
Household Income	.02	.04	.04	.04	.05	.00	

Then, I assessed mean-level changes of mothers' and fathers' romantic security (Figure 7), as well as mothers' and fathers' constructiveness over the three timepoints (Figure 8). For mothers, the mean change in reported attachment security from 6 to 12 months postpartum was significant (Paired-Samples T-test; $t(156) = 2.10$, $p = .04$), wherein mothers reported decreased levels of security over time. Although there was also a slight decrease in security scores from 12 months to 18 months postpartum, the difference was nonsignificant. Mothers' observed constructiveness did not significantly change from 6 to 12 months, but there was a significant decrease in constructiveness between 12 and 18 months ($t(89) = 2.88$, $p = .01$). For fathers, there were significant decreases in reported attachment security from 6 to 12 months ($t(151) = 2.48$; $p = .01$) and from 12 to 18 months ($t(117) = 1.99$; $p = .05$). Furthermore, fathers did not display significantly different levels of constructiveness between 6 and 12 months postpartum, but their constructiveness did significantly decrease between 12 and 18 months ($t(89) = 2.00$, $p = 05$). Notably, scores between mothers and fathers on the same factors were very similar; however, attachment security reports from fathers were marginally higher than mothers at 6 and 12 months ($p = .07$ and .06, respectively).

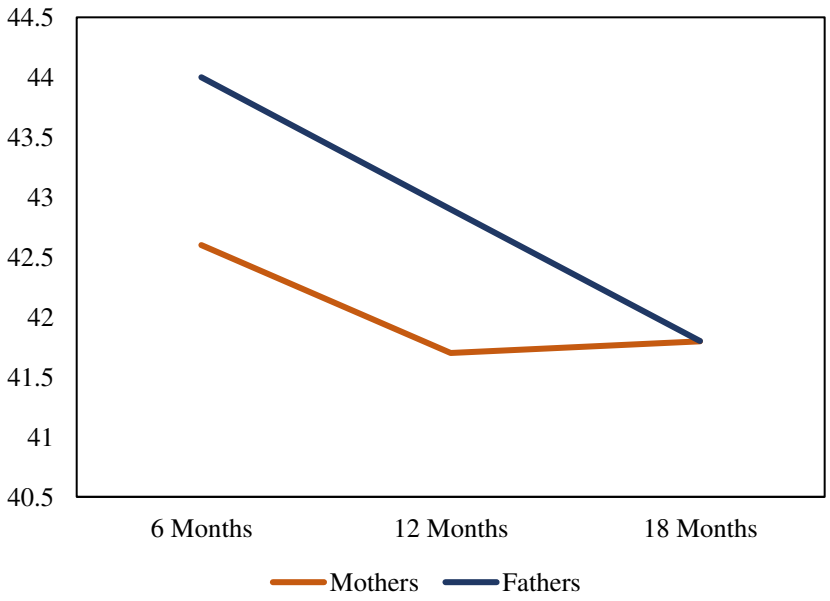

Figure 7. Overall Means of Mothers vs. Fathers Romantic Security Over Time

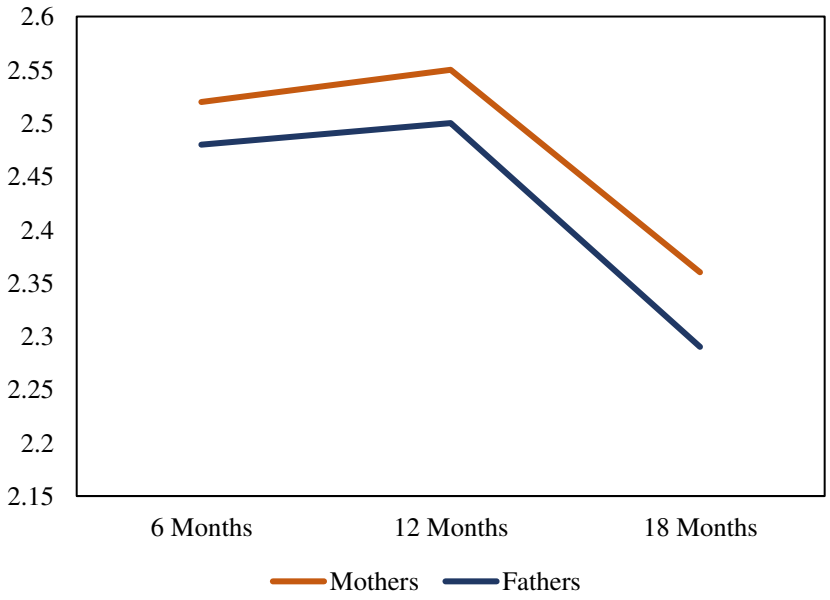

Figure 8. Overall Means of Mothers vs. Fathers Constructiveness Over Time

I then evaluated mean-level differences between mothers' and fathers' romantic attachment security and constructiveness across intervention groups using independent samples t-tests. Mothers who received only the conflict intervention (CI) reported significantly less

romantic attachment at 12 months postpartum than mothers who were in the control group ($t(73.1) = 2.628$, $p = .01$). Fathers' romantic attachment reports did not differ between the CI and control group at any timepoint; however, fathers who received the CI displayed significantly more constructiveness at 12 months than fathers who were in the control condition ($t(60.1) = -3.166$, $p = .002$). Notably, these results were replicated when comparing parents who received either the CI or SICI to the control group: mothers who received either or both interventions reported lower attachment security at 12 months ($t(111.2) = 2.351$, $p = .02$); fathers who received either or both interventions displayed significantly more constructiveness at 12 months ($t(102.257) = -3.039$, $p = .003$)). Furthermore, mothers in either or both interventions similarly displayed more constructive behavior at 18 months ($t(75.2) = -2.138$, $p = .018$), but this difference was not significant when comparing mothers in each of the intervention groups (independently) to those in the control group. Lastly, mothers and fathers who received the combined intervention (SICI) did not report significant differences in romantic attachment or display significantly more constructiveness at any timepoint.

Dynamic Change Score Model: Romantic Attachment Security

Consistent with recommendations from McArdle (2001), each model was first tested without covariates to evaluate whether mothers' and fathers' trajectories were associated without the additional influence of external factors. Model 1R, which estimated mothers' and fathers' reported romantic attachment security as independent of one another (i.e., parameters involving cross-parent associations were fixed to 0) successfully converged, but with poor model fit (RMSEA = 0.132, CFI = .854). The remaining dynamic models, Models 2R through 4R did not converge without additional parameter estimates, likely as a result of too few degrees of freedom. Subsequently, in order to identify the best fitting model within the context of the

proposed independent variables, covariates were added to each model individually (or two at a time, if mothers and fathers both reported on the same variable). I then removed covariates which were not related to either parent's relationship functioning in any of the proposed models (mothers' and fathers' ages and timing of study participation relative to the start of COVID-19). The following DCSM results on mothers' and fathers' romantic attachment security thus include all other covariates: mothers' and fathers' transition to parenthood/parenting experience, depressive symptoms, reported educational attainment, race, and household income.

Model fit results from Models 1R through 4R can be seen in Table 4. After adding the covariates, the fit of Model 1R (the independent trajectories model) improved only moderately. Model 2R estimated mothers' romantic attachment security as predictive of fathers' romantic attachment security (the parameters from fathers' reports predicting mothers' reports were fixed to zero). Based on a X^2 difference test, this model was significantly better fit to the data than Model 1R ($p < .001$), resulting in overall reasonable fit. Model 3R estimated fathers' romantic attachment security as predictive of mothers' romantic attachment security (the parameters from mothers' predicting fathers were fixed to zero). This model failed to converge with or without covariates. Lastly, Model 4R estimated mothers and fathers as codriving romantic attachment security over time (the parameters of mothers' predicting fathers' romantic attachment security, and vice versa, were estimated simultaneously). This model resulted in significantly better fit than Model 1R, again based on a X^2 difference test, ($p < .001$), and very similar fit to Model 2R (not significantly different). Although Model 2R had strong model fit, the paths indicating mothers' reports are predictive of fathers' change in romantic attachment security between 6 and 12 months and between 12 and 18 months were non-significant when accounting for the effect of fathers' reports, suggesting that the theory underpinning this model is not supported by the data;

thus, the remaining results were based on Model 4R, such that mothers and fathers are codriving the change in romantic attachment security over time.

Table 4

Model Fit Results of DCSM for Mothers' and Fathers' Romantic Attachment Security

Fit Index	Model 1R: No Association	Model 2R: Mom Driving Dad	Model 3R: Dad Driving Mom	Model 4R: Co-driving
RMSEA (CI)	.084 (0.063, 0.106)	.06 (0.032, 0.086)	*No Convergence*	.059 (0.031, 0.087)
CFI	.863	.939		.942
TLI	.751	.873		.876
SRMR	.099	.061		.082

Within Model 4R, the mean intercept of romantic attachment across imputed datasets was 42.605 for mothers and 43.708 for fathers, indicating that on average, mothers reported more attachment security at the beginning of the study than fathers. However, the variances of the intercepts were significant (p = .024 for mothers and < .001 for fathers), which suggests that when informed by the context of the relationship dynamic over time, the baseline romantic attachment reports for both parents vary greatly from person to person. The mean slope of romantic attachment security across the three time points was -0.710 for mothers and -0.962 for fathers. However, these mean slopes were not significant.

Exploratory hypotheses

Mothers' and fathers' transition to parenthood status were not significant predictors of either mothers' or fathers' romantic attachment intercept. However, the transition to parenthood for mothers was related their slope, such that mothers who were transitioning to parenthood had a flatter, or more positive, trajectory of their reported romantic attachment security compared to experienced mothers (b = -1.965, p = .016). This effect was not significant for fathers.

For mothers and fathers, depressive symptoms at 6 months postpartum related to a lower romantic attachment security intercept (b = -0.222, p < .001 for mothers; b = -0.153, p < .001). Their reported depressive symptoms were not significantly related to their romantic attachment trajectories; however, fathers' depressive symptoms were related to mothers' slope, such that when fathers reported more depressive symptoms, mothers experienced a steeper, or more negative, slope (b = -0.100, p = .049).

Furthermore, mothers' and fathers' attachment security intercepts were strongly related (p < .001); fathers', but not mothers', initial romantic attachment security related to their own attachment security over time. Specifically, higher initial attachment security related to a more positive, or flatter, slope (p =.015). Mothers' intercept of romantic attachment security was not related to either parent's slope and mothers' and fathers' slopes only marginally covaried (p = .052).

Neither parent's age nor education, or their household income, was a significant predictor of either parent's intercept or slope when accounting for the other covariates in Model 4R. However, the intercept of romantic attachment security for fathers was significantly predicted by fathers' race, wherein fathers who identified as White reported higher initial attachment security, compared to fathers who identified with a minoritized race (b = 3.695, p = .004). Furthermore, when mothers identified as White, fathers but not mothers experienced a more negative romantic attachment slope (b = -4.668, p = .001).

Dynamic Change Score Model: Constructiveness

To determine the best fit model for the association between mothers' and fathers' observed constructiveness, I followed the same DCSM process as with their reported romantic attachment security. First, I tested the models without covariates. Models 1C (independent

trajectories), Model 3C (fathers' driving mothers' trajectory), and Model 4C (co-driving trajectories) all converged successfully; however, Model 2C did not converge without covariates.

I again gradually added covariates to each model to evaluate model fit in the context of the highlighted independent variables. However, the dynamic models failed to converge without including all of the covariates (including mothers' and fathers' age and timing of study participation relative to COVID-19). So, I did not remove any covariates from these analyses. Notably, Model 4C, in which mothers' and fathers' constructiveness trajectories were estimated to be co-driven by both parents, did not converge with or without all of the covariates. When comparing model fit among Models 1C, 2C and 3C, X^2 difference tests reveal no significant differences. However, because Model 2C and Model 3C did not converge without covariates and because, similar to results from the romantic attachment DCSM, the Υ paths in both models were not significant in the presence of the β paths, Model 1C is the most appropriate model to evaluate moving forward. Overall fit indices for all four models can be seen in

Table *5*.

Within this model, the average intercept across the imputed datasets was 2.383 for mothers and 2.414 for fathers, suggesting mothers and fathers displayed similar levels of constructiveness at the beginning of the study, with fathers on average displaying slightly more constructiveness. Change over the three timepoints was estimated at -0.275 for mothers and -0.417 for fathers, however these slopes were not significant. Furthermore, variances for mothers' and fathers' slopes/intercepts were not significant, suggesting that mothers and fathers in this sample did not significantly vary on behavioral constructiveness at baseline or longitudinally.

Table 5

Model Fit Results of DCSM for Mothers' and Fathers' Constructiveness

Fit Index	Model 1C: No Association	Model 2C: Mom Driving Dad	Model 3C: Dad Driving Mom	Model 4C: Co-driving
RMSEA (CI)	.000 (.000, .022)	.000 (.000, .041)	.000 (0.000, 0.034)	*No Convergence*
CFI	1.000	1.000	1.000	
TLI	1.801	1.300	1.537	
SRMR	0.102	0.107	0.105	

Exploratory hypotheses

Mothers' transition to parenthood status was a significant predictor of mothers' constructiveness intercept; transitioning to parenthood related to more constructiveness for mothers at 6 months postpartum compared to mothers who had older children (b = -0.210, p = .025). Fathers parenting experience was not related to either parents' constructiveness intercept or trajectory over 18 months postpartum.

Neither parent's depressive symptoms were related to their intercept or slope of constructiveness. Initial constructiveness between parents was strongly related (p <.001), but neither parent's intercept was related to either parent's change in constructiveness over time. Furthermore, neither parent's age was a significant predictor of either parent's intercept or slope when accounting for the other covariates. However, the intercept of constructiveness for both mothers and fathers was significantly predicted by their own educational attainment, such that when parents had at least a bachelor's degree, they displayed more constructiveness at baseline (b = 0.222, p = .044 for mothers; b = 0.249, p = .029 for fathers). Lastly, when mothers' identified as White, they experienced a slightly more negative slope, compared to mothers who identified with a minoritized race (b = -0.383, p = .037).

Intervention Effects on Romantic Attachment Security and Constructiveness

Romantic Attachment

Table 6 presents model fit results from a multi-group analysis of mothers' and fathers' romantic attachment trajectories between intervention groups (exposure to the conflict intervention vs. no exposure to the conflict intervention). Model fit was tested first for a fully constrained model and compared to models with gradually more freed parameters. This approach allowed me to evaluate whether particular parameters of interest were directly impacted by the presence of the conflict intervention. Across all tests of model fit, mothers' and fathers' intercepts were constrained to be equal between groups because the value of the intercept cannot be causally linked to the intervention; these scores were acquired at baseline, before the implementation of the intervention.

The fully constrained model, in which all parameter estimates were constrained to be equal between groups, resulted in poor model fit. I then constrained mothers' and fathers' slopes, β (within-parent predictions of change over time) and Υ (between-parent predictions of change over time) to be equal across groups and freed the remaining estimates. This resulted in significantly improved model fit, based on a X^2 difference test ($p < .001$). To further evaluate whether mothers' and fathers' changes over time were distinct between the intervention and control groups, I then freed the slope for each parent, which also resulted in slightly improved model fit which was not significantly different from the previous, more constrained model. Lastly, I tested a fully unconstrained model to allow for unique estimates of all parameters between groups, which did not improve model fit. Importantly, X^2 difference tests revealed that all three models in which additional parameters were freed were significant improvements on the fully constrained model ($p < .001$); however, these models were not significantly different from

one another. Thus, the following results are based on the partially constrained model in which mothers' and fathers' β and Υ were constrained between groups but estimates of the slopes were free to vary between groups, as this model had the best overall fit when considering other fit indices (e.g. RMSEA = .035, CFI = .979).

Table 6

Multi-Group Analysis Model Fit Results for Romantic Attachment

Note. In all models, intercepts were constrained to be equal across groups, as the intervention occurred after the 6-month data collection.

Fit Index	Fully Constrained	Constrained Betas/Gammas/Slopes	Constrained Betas/Gammas	Fully Unconstrained
X^2(df)	273.374 (113)	82.571 (72)	78.749 (70)	77.654 (66)
RMSEA (CI)	.119 (0.101, 0.137)	.036 (0.000, 0.070)	.035 (0.000, 0.070)	.042 (0.000, 0.075)
CFI	0.608	.977	.979	0.972
TLI	0.522	.956	.958	0.940
SRMR	.673	.073	.070	0.075

Within the control group, mothers' and fathers' parenting experience did not significantly predict the intercept for either mothers or fathers. However, when mothers had older children, they experienced a more negative, or steeper, slope of romantic attachment (b = -2.388, p = .043). This association was not significant within the intervention group. In addition, associations between the transition to parenthood and mothers' and fathers' intercepts, and fathers' slope, of romantic attachment were not significant in either group.

Mothers' depressive symptoms significantly predicted both mothers' and fathers' romantic attachment intercepts in the control group, such that more depressive symptoms for mothers' related to lower romantic attachment for both parents at the beginning of the study (b = -0.257, p = .000 for mothers; b = -0.100, p = .043 for fathers). Furthermore, fathers' depressive

symptoms were related to their own romantic attachment intercept in the same direction (b = -0.123, p = .025). Fathers' depressive symptoms were further related to mothers' romantic attachment slope, such that more depressive symptoms reported by the father was related to a more negative attachment slope for the mother (b = -0.144, p = .015).

Within the intervention group, mothers' and fathers' depressive symptoms were still related to their own intercepts in the same direction as this association in the control group (b = -0.190, p = .001 for mothers; b = -0.165, p = .002 for fathers). The association between fathers' depressive symptoms and mothers' slope was not significant in the intervention group.

Within both the control and intervention group, mothers' and fathers' initial romantic attachment security were still strongly related (control: p = .004; intervention: p < .001); however, mothers' and fathers' intercepts were not related to either parent's slope.

Mothers' and fathers' demographic factors were overall not significant predictors of either parent's intercept or slope when accounting for the other covariates within the control group. However, fathers' intercept was significantly associated with fathers' race, such that fathers who identified as White reported a higher intercept of romantic attachment security (b = 3.292, p =.043). Furthermore, fathers' slope was significantly predicted by mothers' race, such that when mothers identified as White, fathers but not mothers experienced a more negative romantic attachment slope (b = -6.368, p < .001). Within the intervention group, fathers' race significantly associated with both mothers' and fathers' attachment security intercept in the same direction, such that fathers who identified as White reported higher initial attachment security and had partners who also reported higher initial attachment security (b = 4.301, p = .018 for fathers; b = 3.927, p = .05 for mothers). However, the association between mothers' race and fathers' slope was no longer significant within the intervention group.

Constructiveness

Model fit indices from the multi-group analysis of mothers' and fathers' observed constructiveness over time indicated nearly perfect fit, with the fully constrained, partially constrained, and fully unconstrained models all reaching saturation (RMSEA = .000, CFI = 1.000). However, similar to the results from the attachment models, X^2 difference testing revealed that the fully constrained model ($X^2(147) = 106.535$, $p = .995$) fit significantly worse than each of the partially or fully unconstrained models ($p < .001$). Thus, as was the case with the romantic attachment models, the partially constrained model in which mothers' and fathers' β were constrained and slopes were free to vary between groups was used to evaluate the effects of the conflict intervention to enable testing of the effects of the intervention on mothers' and fathers' trajectory of conflict constructiveness.

Within the control group, the primary independent variables were not predictive of either intercept or slope for mothers or fathers. However, within the intervention group, mothers', but not fathers', parenting experience was significantly predictive of the intercept of constructiveness for mothers. Specifically, mothers' who were transitioning to parenthood displayed more constructiveness at baseline than mothers with older children in the intervention group ($b = -0.283$, $p = .042$). Furthermore, mothers' depressive symptoms at 6 months postpartum significantly predicted mothers' slope of constructiveness, such that mothers in the intervention group who reported higher levels of depressive symptoms experienced a slightly flatter slope in constructiveness from 6 to 18 months postpartum ($b = .018$, $p = .025$). The remaining independent variables were not predictive of either parent's intercepts or slopes in the intervention group.

Overall Intervention Effects

Table 7 shows mean-level changes for mothers and fathers within groups, as well as the mean slope for each parent and each variable from 6 to 18 months postpartum. Importantly, the slopes of both romantic attachment and constructiveness for mothers and fathers were not significant, which suggests the latent changes from 6 to 12 months and 12 to 18 months were not consistent within mothers or fathers. Furthermore, between the intervention and control groups, fathers' romantic attachment slopes were only marginally different (p = .071), such that fathers who received the conflict intervention trended to have a slightly less negative slope than fathers in the control group. There were no notable differences in slopes of constructiveness between participants who received the conflict intervention and the control group.

Table 7

Raw Mean Scores and Latent Slope Means by Intervention Status

Note. Slope scores represent mean slope between the change from 6 to 12 months and 12 to 18 months for each variable. ^{T} < .10

	Conflict Intervention (or Combined Group, n = 108)				Control/Parenting Intervention Only (n = 94)			
	6mo	12mo	18mo	Slope	6mo	12mo	18mo	Slope
Mother Attachment	42.15	40.43	40.01	-0.632	42.99	42.06	41.65	-0.260
Father Attachment	43.66	42.32	41.49	-1.015^{T}	43.88	42.97	41.69	-1.247^{T}
Mother Constructiveness	2.47	2.35	2.26	-0.307	2.44	2.38	2.20	-0.345
Father Constructiveness	2.53	2.56	2.20	-0.429	2.44	2.29	2.03	-0.394

While there were no significant differences of parents' reports of their romantic attachment between the intervention and control groups, fathers in the intervention group displayed significantly more constructiveness at 12 months compared to fathers in the control group (p = .022); mothers in the intervention group displayed significantly more constructiveness

at 18 months (p = .016). Figures 9 through 12 further present mothers' and fathers' change in relationship functioning over time by intervention group.

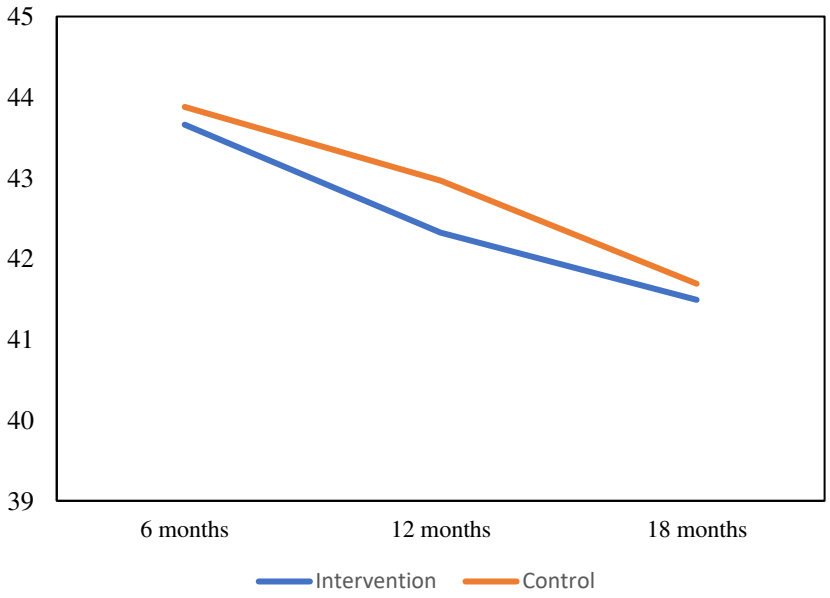

Figure 9. Fathers' Mean Romantic Attachment Over Time by Group

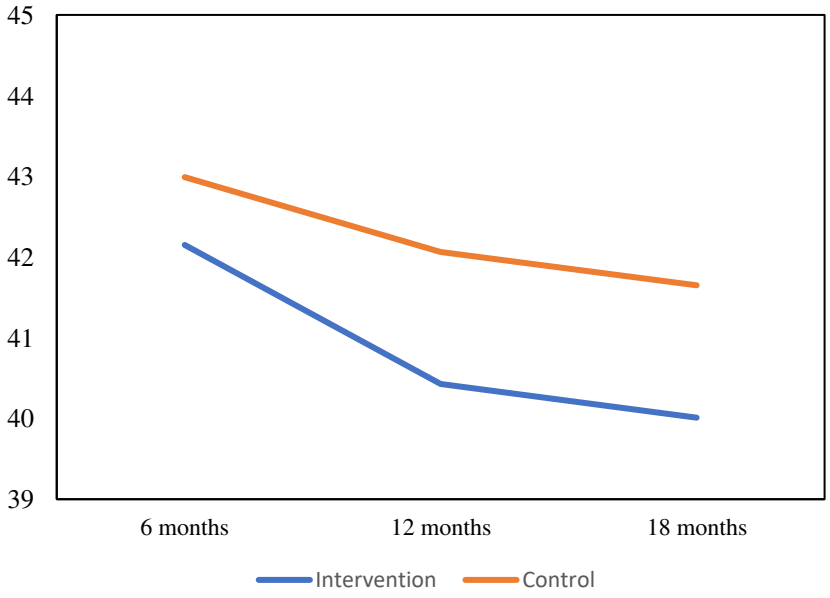

Figure 10. Mothers' Mean Romantic Attachment Over Time by Group

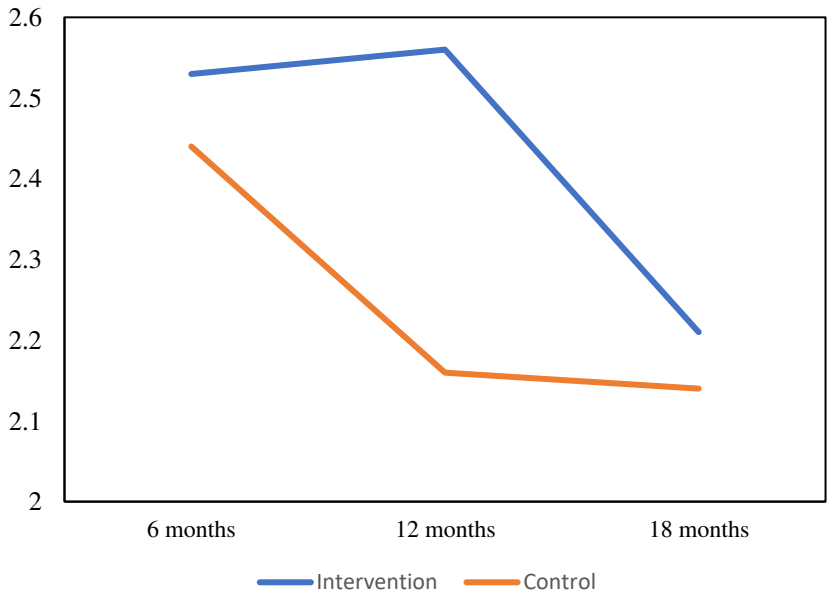

Figure 11. Fathers' Mean Constructiveness Over Time by Group

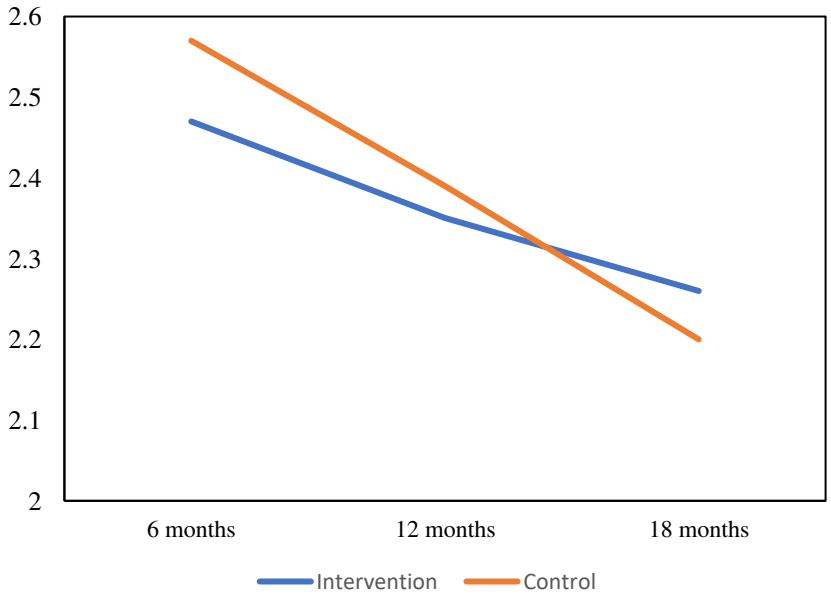

Figure 12. Mothers' Mean Constructiveness Over Time by Group

CHAPTER 5: DISCUSSION

This study evaluated predictors of the interparental relationship trajectory over 18 months postpartum in terms of romantic attachment and constructive conflict behavior. Specifically, I explored the impact of parenting experience (whether parents had previous children or were transitioning to parenthood), depressive symptoms at the beginning of the study, initial relationship functioning, and parental age on each parent's relationship trajectory. Based on existing evidence, I expected parents with more sociodemographic privilege would experience flatter descents in attachment and constructiveness. Using a dynamic change score modeling approach, I further explored whether one parent drives the trajectory for the other parent. Lastly, I evaluated whether a conflict communication intervention, the Notre Dame Families and Babies Study, could protect parents from the potential negative effects of certain individual and relationship characteristics and overall relationship decline after having a baby. I expected the intervention to support parents during this life stage. The results partly supported my hypotheses and lessons learned from exploratory associations should be used to motivate future studies and intervention designs.

Predicting Relationship Functioning

Transition to Parenthood

Parenting experience, in terms of whether parents were new to parenthood or had older children, had a notable influence for mothers' relationship functioning postpartum, but not fathers'. Neither mothers' nor fathers' transition to parenthood was related to their baseline romantic attachment security, but new mothers experienced a flatter (less negative) trajectory of attachment security, compared to mothers who had older children. Furthermore, mothers who

were transitioning to parenthood displayed more constructiveness at the beginning of the study than mothers with older children, but the same association was not observed in fathers.

These results further shed important light on the distinctive experiences of new and experienced mothers. While some existing studies indicate no difference between these groups (e.g. Bower et al., 2013), these results validate those of the cross-sectional study from Twenge and colleagues (2003), which highlights the potential for increasingly poor relationship functioning for parents with multiple children. In this case, mothers especially may experience added strain on their relationship when having more children. Perhaps this difference between mothers' and fathers' relationship experiences, as well as between the experience of first-time mothers vs. those with older children can be explained by the gender gap in parenting responsibilities. Traditional gender norms still operate within many marriages, as mothers likely become the primary caregiver regardless of work status (e.g., Craig, 2006), which often significantly affects their relationship satisfaction (e.g., Dew & Wilcox, 2011). Thus, mothers who have older children may have experienced more household labor after the transition to parenthood than fathers and anticipate even more labor with more children.

Depressive Symptoms

Depressive symptoms reported by mothers and fathers were each notably associated with parents' reported attachment security, but not behavioral constructiveness, at the beginning of the study. These results are consistent with previous literature highlighting a strong connection between parents' mental health and relationship appraisals broadly (e.g. Rholes et al, 2011), and between depressive symptoms and romantic attachment specifically (Stern et al., 2018); however, results from the present study extend previous findings by revealing the influence of fathers' depressive symptoms on mothers' relationship appraisal over time. Specifically, when

fathers reported more depressive symptoms at the beginning of the study, mothers experienced a steeper attachment security descent from 6 to 18 months postpartum. Interestingly, Feeney and colleagues (2003) reported similar findings within TTP couples only, but in the opposite direction, such that maternal depression was predictive of fathers' attachment insecurity and marital dissatisfaction over time. The current study adds perspective from a combined sample of new and experienced parents. Notably, I did not include time-varying covariates so as not to overcomplicate the DCSM, which is a limitation; however, when Bower et al. (2013) incorporated time-variant depression as predictive of relationship satisfaction, significant partner effects were not found. Future study designs should continue to incorporate actor and partner effects of depression on parents' relationship appraisals longitudinally to verify the nature of this association.

Furthermore, the lack of association between depressive symptoms and constructive conflict behavior is curious. Previous research highlights a longitudinal association between parents' observed destructive conflict behaviors and depression (e.g. Keller et al., 2009), and fathers' constructive conflict and depression (Du Rocher Schudlich et al., 2015). However, there is overall much less published evidence linking depressive symptoms with behavioral constructiveness. The current study found no association in this population of heterosexual mothers and fathers within 18 months of having a baby. The evidence of the connection between relationship appraisals and mental health is clear, but more research is needed to understand the association between mental health and *behavioral* relationship functioning, particularly when assessing positive or constructive conflict behaviors.

Initial Relationship Functioning

While mothers' and fathers' initial relationship appraisals were very similar, only fathers' appraisals at 6 months were significantly associated with their own relationship appraisal trajectories. In fathers, higher initial attachment security related to a less negative, or flatter, descent in relationship appraisal. Interestingly, this association contradicts previous evidence; Doss et al. (2009) observed a steeper descent in relationship satisfaction if parents were more satisfied at birth.

There are two key differences between this study and that of Doss and colleagues. First, the initial appraisals in the current study were conducted at 6 months postpartum, whereas Doss and colleagues measured relationship satisfaction pre-birth. This is a crucial distinction, as interparental relationship quality has likely already declined the time of baseline assessment in the current study (Doss & Rhoades, 2017), whereas Doss's team may have collected this information before the anticipated decline. Perhaps by 6 months postpartum, fathers' coping with the stressful event of birth has already begun and the trajectory of parents' relationship appraisals is in the stage of recovering, or flattening (as suggested by Volling et al., 2015). In other words, results from the current study may suggest that fathers who perceived their relationship to be recovering to a higher degree at 6 months postpartum may be continuing an already in-motion, less negative trajectory, compared to fathers who arrived at 6 months postpartum with lower attachment security; perhaps these fathers are continuing a steeper, more negative trajectory due to a lack of perceived recovery.

Second, while the study from Doss and colleagues focused on relationship satisfaction (Marital Adjustment Test (MAT); Locke & Wallace, 1959), the current study utilized a measure of attachment security, which may be more robust to postpartum stress. The measure of

satisfaction employed by Doss's team involved one item geared toward the "degree of happiness" the respondent experiences in their relationship. The measure of attachment security in this study (the SASQ; Bowlby et al., 1997) involved several items designed to assess intimacy or closeness, or more specifically each parent's sense of safety in their relationship and trust in their mutual commitment with their partner. While happiness and intimacy are likely related, these constructs are foundationally different. Assessments of relationship happiness capture the respondent's appraisal of their internal experience within the context of the relationship. In contrast, intimacy is inherently relational; thus, to report on intimacy requires the respondent to reflect both on their own experience as well as their perception of their partner's experience. In other words, the measurement of attachment security for each parent in this context provides a perspective that incorporates an appraisal of the other parent's experience. For example, when responding to the SASQ item "I know that my partner will be there when I need [them]," Partner A must consider whether they (internally) trust Partner B's commitment and whether Parent B appraises Partner A as worthy of being supported (Hazan & Shaver, 1994). This distinction between happiness and intimacy becomes more pronounced during times of vulnerability. When couples navigate vulnerability or adversity in life transitions, "happiness" will naturally be impacted negatively; however, attachment security may be less negatively impacted as this quality within a relationship is protective (Bowlby, 1973). While parents may sense vulnerability in their relationship, and their attachment security may decline, the maintenance of attachment may be more adaptive than the maintenance of relationship happiness; attachment provides a sense of safety, dependability, and support in times of need. However, if parents' do not perceive their partner as a safe haven, their sense of vulnerability may be exacerbated during a stressful period like early parenthood.

Furthermore, initial levels of constructiveness were not related to trajectories of constructiveness over time in this study. These results also contradict those from Doss et al., (2009), in which mothers' reported conflict intensity and poor conflict management increased after birth if mothers experienced high levels of these variables pre-birth. Importantly, the observed measure of conflict in this sample focused on positive conflict strategies (constructiveness). As noted, reports of the longitudinal study of behavioral constructiveness alongside other elements of relationship functioning is extremely limited in the extant literature. The current study thus supplements the existing conversation even with some null results; however, relationship and parenting scientists should continue to evaluate how constructive communication between parents evolves over time (e.g. Cummings et al., 2008).

Demographic Characteristics

Parents' sociodemographic characteristics and identities played a complex role in predicting their relationship functioning. Parents' age, though correlated with behavioral constructiveness for fathers at baseline, did not predict either parent's reported or observed relationship functioning when accounting for the other independent variables. This was surprising, given that age was strongly associated with financial stability in this sample, which is a common predictor of relationship quality (Dew, 2016). These results suggest that although adults may be more financially stable with age, this factor may only have indirect associations with parent relational well-being; age may not necessarily lead to improvement or worsening in relationship behaviors without other mechanisms.

Parents' educational attainment, specifically of a bachelor's degree, was related to mothers' and fathers' initial levels of constructiveness, but not their attachment security. Although existing evidence supports the association between education and marital outcomes

(e.g. divorce, Cherlin, 2010), results from the present study add potential specification of mechanisms behind higher divorce rates among those with less educational attainment. Specifically, interparental attachment security may not necessarily be impacted by education (even infants can establish intimate, reliable relationships; Bowlby, 1973); however, communication effectiveness may increase with additional education. Therefore, perhaps couple's communication is a more pertinent mechanism between parents' education and relationship outcomes than attachment. This potential mediation should be considered in future studies in which a direct test of the influence of education on communication effectiveness is included.

Parents' racial profiles similarly played an inconsistent role in their relationship functioning. Fathers' race predicted their initial attachment security, such that fathers who identified with a minoritized race started the study with lower attachment security compared to fathers who identified as White. Moreover, fathers experienced a more negative descent in their romantic attachment if their partners identified as White. In addition, mothers experienced a more negative descent in their behavioral constructiveness if they identified as White. These results together, with the additional context that fathers' romantic attachment was significantly correlated with mothers' constructiveness, may offer insight to the lived experience of these couples. If White mothers experience a particularly negative decline in their conflict communication effectiveness, this decline may be manifesting for their partners in a gradually declining sense of safety in their relationship. Fathers likely feel more threatened by the vulnerability of infancy parenting if they feel like their partnership is more contentious. With these results in mind, we must also consider that because White-identifying participants displayed significantly more constructiveness compared to those who identified with a

minoritized race at 12 months, effects of participants' racial profiles may be a function of White participants having a more room for descent.

Interestingly, results from the dynamic change score models indicated that mothers' and fathers' attachment relationships are interactive in nature, but one parent does not significantly drive change over time for both parents. In contrast, mothers' and fathers' longitudinal use of constructiveness seems to be independent, wherein their behavioral conflict communication was not necessarily dependent upon their partner's constructiveness over time.

One critical limitation of using this approach to understand change processes is that dynamic change score modeling assumes change over time is constant (McArdle, 2001). Existing longitudinal studies of relationship functioning suggest that individual appraisals of their relationship after having a baby may be nonlinear in nature; their appraisals may descend more steeply at first and then flatten over time (e.g. Volling et al., 2015). In the context of a relationship intervention, we might assume (or hope) that the intervention would buffer participants against declines in relationship functioning due to their participation. Many participants who receive these interventions might experience stronger effects at first and then may experience "fadeout" of effects over time (for examples of fadeout effects, see Van Aar et al., 2017). This phenomenon also implies that relationship functioning for these participants over time would be nonlinear (perhaps flatter at first and steeper later). Thus, readers should interpret the statistical results, particularly involving the slope, with caution, as other analyses which more freely estimate the latent slope (e.g. latent growth curve modeling) may reveal alternative associations with the change over time of relationship functioning. Despite this limitation, the use of DCSM in this context still resulted in reasonable model fit. Future studies should consider

a comparison of more freely estimated trajectories with a DCSM approach, such to still allow the investigation of how individuals influence each other over time.

Intervention Effects

While keeping in mind the effects of using a DCSM approach, I then implemented a multigroup analysis to evaluate the moderating effect of the FABS intervention. To maintain power, participants who received either the conflict intervention alone or the conflict intervention combined with the parenting sensitivity intervention were treated as one group, compared to participants who did not receive the conflict intervention. The comparison group thus included participants who were in the control group or received only the parenting sensitivity intervention.

When comparing participants' attachment experience in the intervention and control groups, a few key differences emerge. Firstly, mothers in the control group who had older children experienced steeper descents in relationship attachment security, compared to first-time mothers. This association was no longer significant in the intervention group. Furthermore, for those mothers in the control group, attachment trajectory was predicted by fathers' depressive symptoms, such that when fathers reported more depressive symptoms, mothers experienced a more negative attachment trajectory. However, mothers in the intervention group did not experience this effect. In addition, within the control group mothers' race was related to fathers' romantic attachment trajectory, wherein when mothers identified as White, fathers experienced a more negative trajectory; however, this association was not significant among participants in the intervention group. Importantly, these parameters were not significantly different between the control and intervention groups and thus should be interpreted with caution. Nevertheless, these results are encouraging. The intervention may be reducing the impact of certain factors on

parents' relationship appraisals overtime, but additional studies are needed to verify these moderating effects.

Although the trajectories of mothers' and fathers' romantic attachment were not significantly predicted by the conflict intervention, the trending results suggesting fathers may have experienced a flatter attachment descent due to their participation in the conflict intervention are also promising. As noted, these results may be tempered by the lack of freely estimated slopes in the DCSM approach. Alongside the report from Cowan et al. (2019), future research is warranted to delineate the true nature of the effects of conflict interventions for couple's relationship attachment. Overall, these results support the beginning of an important conversation about employing communication interventions to protect parents' relationship functioning beyond conflict behavior, particularly for fathers.

Differences in participant constructiveness between the intervention and control groups were limited. Namely, in the intervention group, mothers who reported more depressive symptoms at 6 months postpartum had a flatter (or less negative) trajectory of conflict constructiveness over time compared to participants in the control group. In other words, mothers who may be at greater risk of relationship decline due to lower mental health (e.g. Don & Mickelson, 2014) may have particularly benefited from participation in the conflict intervention. Moreover, while fathers' trajectories of constructiveness were not significantly different between the control group and intervention group in this study, fathers appeared to benefit from participation in the intervention, wherein their behavioral constructiveness was sustained through 12 months postpartum. Mothers may have experienced a delayed benefit, such that their descent of constructiveness was somewhat improved (or flattened) at 18 months compared to the control group. These results add to those from Cummings and colleagues

(2008), who report significant improvements in behavioral constructiveness for both mothers and fathers. Together, these results demonstrate the potential for a positive impact of a psychoeducational intervention program for couple's conflict.

Limitations

The complexity of the DCSM demands a large sample size to determine the most accurate model. Therefore, splitting the sample into two groups to conduct a multi-group analysis limits the interpretability of the results. For example, significant effects in the complete sample which were no longer significant within the intervention group may have become invisible due to a lack of power rather than the effect of the intervention. Moreover, the lack of statistically significant differences between parameters in the control and intervention groups may be attributable to the smaller sample sizes between groups, and particularly low power in the intervention group. Because this study was partly conducted during COVID-19, methods were limited to self-administered surveys for several months. This drastically reduced access to behavioral data (observed constructiveness) which was intended to supplement this dataset and these analyses.

Despite these limitations, this study boasted several strengths that contribute greatly to our understanding of heterosexual parent relationships. Firstly, this study utilized both parent-reported and observed relationship measures. This multi-method approach opens more doors to the understanding of relationship functioning by differentiating parents' appraisals of their relationship from their behavioral relationship functioning. Secondly, access to longitudinal data supported understanding of how relationship factors change over time. Longitudinal data also supports the testing of causal mechanisms, such as those described from exposure to the FABS conflict intervention. Thirdly, this study of intervention effects successfully involved both mothers and fathers in all steps of the process, gaining multiple perspectives of the interparental

relationship dynamic as well as the behavioral dynamic with both parents' participation. The inclusion of fathers further informs how these variables differentially impact fathers' early parenting experience and how communication interventions may uniquely affect their development over the first 18 months postpartum.

Future Directions

This project emphasizes the importance of understanding the complex relational experiences of parenting during infancy. As discussed, researchers have identified several potential predictors of parents' relationship trajectory during this vulnerable period, but there are several directions remaining for future research. For example, few studies have investigated whether differences exist between adoptive and biological parents. Perhaps the decision to adopt a child plays a unique role in parents' relationship, as this decision may be related to financial stability, age, and fertility (e.g., Ceballo et al., 2004). Ceballo and colleagues noted that, in their sample, choosing to adopt appeared to add less strain on the interparental relationship compared to having biological children; however more research is needed to determine whether this is a consistent phenomenon. Relatedly, divergence may exist between parent experiences when having a planned versus unplanned pregnancy. Lawrence et al. (2008) offer preliminary results which suggest planning for pregnancy slowed fathers' relationship satisfaction decline but not mothers. Consistent with the bioecological model, researchers should further consider the influence of the macrosystem. Perhaps culture-specific norms, such as the expectation for parents to have children only after marriage, alters the experiential impact of planned versus unplanned pregnancy.

The bioecological model further highlights that within the microsystem, the influences of parent and child behavior are bidirectional; therefore, researchers should also consider the effect

of child temperament on parents' relationship functioning during infancy (e.g., Greving, 2007). In addition, although several studies have evaluated queer couples' transition to parenthood (e.g., Goldberg, 2006) and some have further considered relationship quality (e.g., Tornello et al., 2015), research examining same sex versus opposite sex couples within the same study is exceptionally limited. Parenthood likely has a distinct effect on these couples as they operate within a society with gender-specific roles; therefore, role expectations are likely unique to each couple. Comparing this variability to opposite-sex couples simultaneously – similar to Lavner et al. (2014) – would inform the impact of these relationship social norms on couple relationship functioning.

This project is focused on predicting parents' relationship trajectories. However, very few studies are dedicated to the predictive effect of the *slope* of relationship functioning on parenting or early child socioemotional outcomes. In other words, evidence of whether the trajectory or *steepness* of parent relationship descent or growth matters for early child development is lacking. Perhaps parents' awareness of their change or descent in relationship functioning over time impacts their parenting or family system. This prospect should be considered further in future studies of the parent relationship to estimate the urgency of understanding relationship trajectories more accurately.

Conclusion

The common deterioration of the interparental relationship is well-documented in the literature. Surely, not all relationships decline and many parent relationships recover as infants grow into toddlers and children. Researchers have learned that relationships change as the family grows; parents must manage an unpredictable new family environment which leaves limited time and energy for interparental relationship maintenance. Parent relationships are particularly

vulnerable during this transition if one or both parents struggle with poor mental health or initial (pre-birth) relationship functioning is poor. However, efforts to develop effective relationship interventions are on-going and improving over time. The Notre Dame Families and Babies Study presents a valuable approach for supporting the interparental relationship during this turbulent period.

Notably, much of the research on this topic was published more than a decade ago and the relationship landscape has likely changed over time. Although the COVID-19 Pandemic alone has likely impacted relationship trends, with more couples working from home and navigating challenges associated with increased daycare responsibilities at home (Feng & Savani, 2020), parents in the United States are also better recognizing depression as a mental illness which reduces its stigmatization (Pescosolido et al., 2021). Perhaps this decreasing stigma encourages parents at increased risk for relationship decline due to mental health to pursue mental healthcare resources. These chronosystem-level factors are further coupled with a general trend of individuals choosing to get married later and have children later.

Children's development is largely determined by systems of social others within and outside of the home. Central to children's microsystem is the interparental relationship, but researchers are still deciphering the dynamic nature of this relationship during this highly vulnerable period of postpartum parenthood. Although much of the existing conversation on this topic is focused on preventing negative fallout after divorce and the stressful transition to parenthood, the current study adds perspective of the impact of postpartum parenting on parents' ability to maintain a constructive and intimate relationship.

Overall, the interparental relationship is critical for facilitating secure environments in which children can developmentally thrive. The FABS intervention fills important gaps in the

parenting intervention literature by utilizing empirically-supported strategies for engaging fathers and using advanced methodology to support parent relationship functioning. While future studies are needed to better understand how mothers' and fathers' relationships change over time, the current study adds evidence supporting the predictive effects of parenting experience, parents' depressive symptoms, initial relationship appraisals, and individual identities on longitudinal relationship functioning after having a baby. Moreover, this study highlights notably positive contributions to parents' relational well-being from the Notre Dame Families and Babies Study.

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