An Ecological Perspective on Coparenting During Infancy: Exploring Associations among Social Support, Mental Health, and Parental Burnout

by

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A thesis submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Master of Science

Auburn, Alabama
August 6, 2022

Keywords: coparenting, infants, parental burnout, parental adjustment, mental health

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Abstract

The months following the birth of a new child can be a stressful time for parents. The way in which partners work together to share parenting responsibilities (i.e., coparent) is especially important for navigating the challenges of parenting during infancy. However, less is known about how coparenting relationship quality relates to parents' psychological adjustment, including parental burnout. Grounded in Feinberg's (2003) ecological model of coparenting, this study explored the associations among perceived social support, anxiety/depressive symptoms, coparenting relationship quality, and parental burnout in a sample of U.S. mothers and fathers with 3- to 12-month-old infants. Participants (n = 128; 69 mothers, 59 fathers) were recruited online from Amazon Mechanical Turk (i.e., MTurk). Participants were predominately White, college-educated, married parents. Results from a path analysis revealed that anxiety/depressive symptoms were tied strongly to burnout, suggesting that these mental health symptoms explain the link between perceived social support and burnout among this sample of parents with infants. In addition, there were no significant differences in study variables, including self-reported parental burnout, between mothers and fathers. Findings from this study contribute to the growing literature on coparenting and burnout among U.S. parents with infants and help to inform prevention-based practices for families, researchers, therapists, and family life educators.

Acknowledgements

I would first like to thank my advisor, Dr. Cynthia A. Frosch, for the countless hours and great deal of support she has invested in me throughout the entire thesis process. Dr. Frosch, I appreciate how generous you have been with your time as you've helped me develop and execute this project. It has been an honor to work with you throughout this experience. I would also like to thank my committee members, Dr. Katrina Akande and Dr. Mallory Lucier-Greer, for their feedback, encouragement, and involvement with my thesis. I am grateful for your advice and support, especially when I had to pivot directions. Special thanks to Darcy Corbitt-Hall for her wonderful stats consulting. I cannot describe how much I appreciate your help with running and interpreting the analyses for this project. I would also like to acknowledge my fellow graduate students in the EARLY lab: Kim, Tatum, and Sheila – I am grateful for your support as we tracked together along the process of collecting data for our master's theses. I would also like to thank Dr. Adrienne Duke who has been an encourager and advocate for me throughout my experience at Auburn. Thank you to my dear friends and family members who have encouraged me and supported me along this thesis journey. Graduate school is not an easy feat, but I have learned so much along the way. War Eagle!

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Chapter 1: Introduction

The first year following the birth of a child is an especially vulnerable time for parents. Mothers and fathers report heightened levels of stress (Knoester & Petts, 2017; Vismara et al., 2016), increases in anxiety and depressive symptoms (Bronte-Tinkew et al., 2007; Vismara et al., 2016), and declines in relationship satisfaction (Cox et al., 1999; Doss et al., 2009). These experiences are not unique to first-time parents; mothers and fathers continue to adapt to new roles and intensive caregiving demands after the birth of each child (Volling, 2012). Perhaps not surprisingly, the relationship between parenting partners is often strained during infancy (Feinberg et al., 2009). To navigate this stressful time, research suggests focusing specifically on the coparenting relationship as a subsystem of the overall couple relationship (Feinberg, 2009). Coparenting refers to overlapping or shared responsibilities in childrearing (Feinberg, 2003). Previous research has long examined coparenting as a predictor of child-related outcomes including children's internalizing and externalizing behaviors (Belsky et al., 1996; Doss et al., 2020; Feinberg et al., 2009; McHale et al., 2004). However, fewer studies have examined how coparenting relationship quality relates to parents' adjustment during infancy.

Given the intense caregiving demands and likely strains in the coparenting relationship following the birth of a child, parents with chronic stress related to parenting may experience a specific syndrome known as parental burnout (Mikolajczak & Roskam, 2018). Originally conceptualized as a work-related condition, burnout refers to activities that cause frequent and intense stress responses (Bianchi et al., 2014). Although the phenomenon of burnout is not new, researchers have recently begun applying it to the context of parenting (Mikolajczak & Roskam, 2018). Unique from other forms of stress, parental burnout is characterized by three hallmark features: "overwhelming exhaustion related to one's parental role, an emotional distancing from

one's children, and a sense of parental ineffectiveness" (Mikolajczak et al., 2019; p. 1319). Parental burnout is a serious condition that, when unaddressed, has been linked to increased parental violence, child neglect, and escape ideation (Mikolajczak et al., 2019). Conservative estimates suggest that over 3.5 million U.S. parents experience parental burnout (Mikolajczak & Roskam, 2018). However, unlike job burnout, parents are not able to simply remove themselves from their situations, but instead are forced to cope with their enduring stress (Hubert & Aujoulat, 2018). Therefore, social scientists must take into consideration how coparenting relationship quality relates to outcomes of parental adjustment, including burnout (Mikolajczak & Roskam, 2020). Preliminary research has begun to explore the relationship between coparenting and burnout, but only among European samples of parents with older children (Mikolajczak et al., 2018; Favez et al., 2022). Thus far, lower coparenting quality, specifically related to conflict in the coparenting relationship (Favez et al., 2022), has been linked to higher levels of parental burnout (Mikolajczak et al., 2018). However, no studies, to my knowledge, have examined the relationship between coparenting quality and parental burnout among U.S. parents with infants.

Therefore, the present study applies Feinberg's (2003) ecological model of coparenting as the conceptual framework for understanding both mothers' and fathers' experiences of psychological adjustment within the first year after the birth of a child. Specifically, the model highlights constructs of environmental support (i.e., social support), individual parent characteristics (i.e., anxiety and depressive symptoms), and coparenting relationship quality as contributors to parental adjustment (i.e., burnout). The aim of this study was to explore associations among these constructs within an ecological model to better inform practices for preventing parental burnout among U.S. parents of infants.

Chapter 2: Literature Review

Coparenting During Infancy

Parents often experience changes in relationship functioning after the birth of a child. Both mothers and fathers have reported immediate declines in relationship satisfaction, poor conflict management, and increases in problem intensity (Doss et al., 2009). Relationship dissatisfaction, including poor problem-solving interactions, has been shown to impact both men and women similarly within the first year after the birth of a child (Cox et al., 1999). In addition to relationship functioning, stress is a key factor in parents' postpartum adjustment. Both mothers and fathers report increased levels of parenting stress, most notably in the first three months after birth (Vismara et al., 2016). Although mothers generally report higher levels of stress (Vismara et al., 2016), fathers of infants also experience notable increases in parenting stress following the birth of a child (Knoester & Petts, 2017). Support from mothers has been shown to reduce fathers' levels of parenting stress one year after birth (Knoester & Petts, 2017). These findings suggest that support between parenting partners (i.e., coparents) may serve as an important protective factor for parenting stress and therefore, parental burnout.

The experiences of coparenting during infancy are particularly well-documented among first-time parents. Often referred to as the "transition to parenthood," many studies have examined couples' coparenting dynamics across this critical period of adjustment (Doss et al., 2009; Doss et al., 2014; Feinberg, 2002; Halford et al., 2010). First-time parents report greater levels of distress and relationship dysfunction across the transition to parenthood (Cowan & Cowan, 1995). To better understand the risk and protective factors for first-time parents, researchers have identified several prebirth characteristics that may shape early coparenting experiences (McHale et al., 2004; Van Egeren 2003). Parents' socioeconomic status, mothers'

perceived maternal acceptance in childhood, and fathers' negative emotionality have been considered important determinants of observed coparenting behavior at 3.5 months postpartum (Schoppe-Sullivan & Mangelsdorf, 2013). Regarding parental role, Van Egeren (2003) examined differences in first-time mothers' and fathers' coparenting experiences across the transition to parenthood (i.e., during the third trimester and then at 1-, 3-, and 6-months follow-up) based on certain prebirth predictors. Mothers' early coparenting experiences were associated with age and concerns about childrearing. For fathers, factors such as occupation, coparenting in the family of origin, and the couple's motivation to raise children were associated with early coparenting experiences. Overall, Van Egeren (2003) found that maternal characteristics may directly affect fathers' experiences, and thus, be particularly important in understanding first-time coparenting dynamics during early infancy (Van Egeren, 2003).

While the transition to becoming a new parent can be a critical period of adjustment, the demands of parenting are not unique to first-time mothers and fathers. The birth of each subsequent child is still considered a significant transition within a family, especially as children adapt to siblinghood (Volling, 2012). In a study examining coparenting across the transition to second-time parenthood, couples from 241 families self-reported coparenting relationship quality before the birth of their second child and again at 4-months postpartum (Kuo et al., 2017). Results revealed an increase in coparenting conflict and a decrease in coparenting cooperation 4 months after the birth of the second child. As found in other research (Lindsey et al., 2005; McHale et al., 2004), infant temperament played a key role in influencing the coparenting relationship, suggesting that difficult temperament among firstborn infants is related to less cooperative coparenting by both mothers and fathers (Kuo et al., 2017). Although parents experience many new changes across the transition to parenthood, the challenges of coparenting

an infant are not limited to first-time parents (Volling, 2012). Therefore, the current study highlights the experiences of parents with infants more broadly, not just among first-time mothers and fathers.

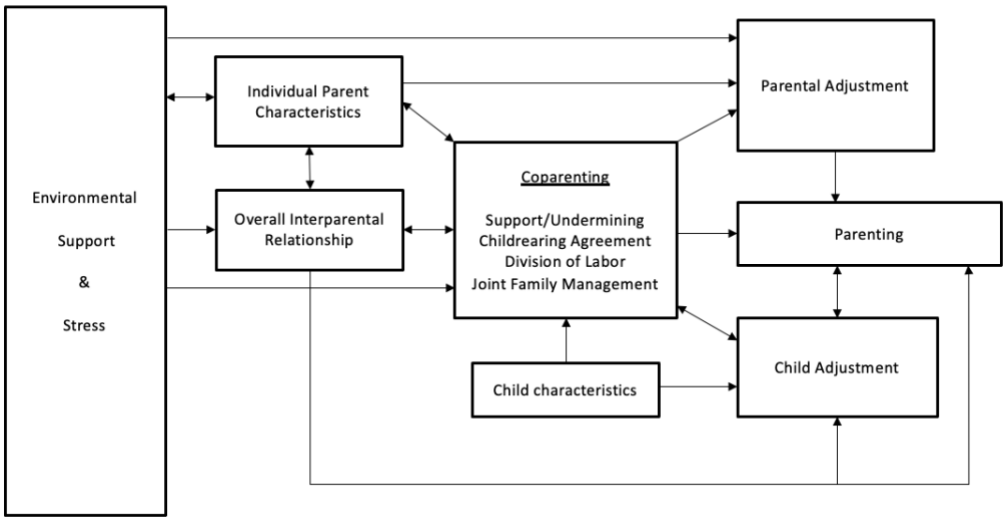
Given that the first year following the birth of a child is an especially difficult time for parents, existing interventions have targeted the coparenting relationship as a framework for prevention (Feinberg, 2009). More specifically, existing interventions have targeted coparenting for preventing declines in couple relationship functioning after birth (Doss et al., 2014) and child adjustment problems (Feinberg et al., 2009). In a randomized control trial with 90 heterosexual couples (180 first-time parents), four 90-minute coparenting intervention sessions were administered across the transition to parenthood. Results indicate that coparenting-focused interventions were particularly helpful in promoting relationship functioning and reducing stress among mothers and fathers who were at higher risk for post-birth relationship deterioration (Doss et al., 2014). In a different study assessing the Family Foundations coparenting intervention, Feinberg and colleagues (2009) randomly assigned 168 couples to either the intervention or control group. Couples were observed during pregnancy and then at 1 year postpartum to code parenting, coparenting, couple relationship, and child self-regulatory behaviors. Findings indicated that those in the intervention group demonstrated better coparenting relationship quality which, as Feinberg (2009) suggests, may ultimately benefit the overall couple relationship.

Given that parents may be at risk for developing burnout, the current literature lacks an understanding of how parents' perceptions of coparenting during infancy relate to their overall well-being (e.g., social support, mental health) and thus, their psychological adjustment (e.g., parental burnout). Although both men and women experience similar patterns in relationship

functioning after the birth of a child (Cox et al., 1999), research suggests that mothers may experience more deterioration in overall relationship functioning than fathers (Doss et al., 2009). Therefore, there is a need to continue incorporating both mothers' and fathers' perceptions of coparenting with infants to better inform parental adjustment over time (Mickelson & Biehle, 2017).

Figure 1

Feinberg's (2003) ecological model of coparenting



Foundational to the coparenting literature is Feinberg's (2003) ecological model of coparenting (Figure 1). Feinberg's model is influential within the coparenting literature and represents a holistic approach to supporting families as well as treatment and prevention efforts (Feinberg, 2003). Central to this framework is the coparenting relationship. Coparenting influences are explained in terms of extrafamilial, individual, and family-level influences. Coparenting is then linked to various outcomes including parental adjustment, parenting, and child adjustment. Feinberg (2002) notes that coparenting relationships are not limited to just one

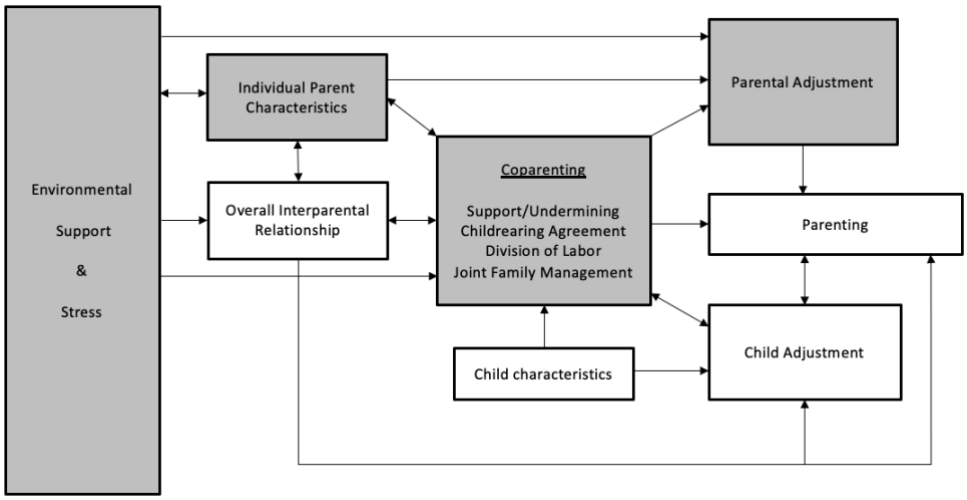
type of family structure. Instead, coparenting relationships can be integrated into a range of diverse family systems, including caregivers who may not be a child's biological parent. Overall, the reviewed literature indicates that parents are particularly vulnerable postpartum; however, coparenting may hold promise for preventing burnout, especially in among parents with infants.

Application of Feinberg's (2003) Ecological Model of Coparenting

As a necessary first step in expanding the literature on coparenting and parental burnout among U.S. parents, the current study applies Feinberg's (2003) ecological model to a sample of mothers and fathers with 3- to 12-month-old infants. The sections below detail four specific constructs from the original model that are examined in the present study (Figure 2): environmental support (i.e., social support), individual parent characteristics (i.e., anxiety and depressive symptoms), coparenting relationship quality, and parental adjustment (i.e., parental burnout). Associations between these constructs were examined to better understand parental burnout among parents who are coparenting during infancy.

Figure 2

Application of Feinberg's (2003) ecological model



Note. Constructs shaded in gray indicate those investigated in the present study.

Environmental Support: Social Support

Feinberg (2003) first highlights the role of environmental support (henceforth referred to as social support) as both a direct and indirect contributor to parental adjustment. Social support can improve parenting satisfaction (Bornstein, 2019) and is especially critical for parents during the postpartum period (De Sousa Machado et al., 2020). Feinberg posits that extrafamilial support may serve as a protective factor for maladjustment among parents with infants. In particular, social support has been linked to parental mental health (Corrigan et al., 2015; Cutrona & Troutman, 1986). In a sample of 61 first-time mothers, higher levels of perceived social support were significantly associated with lower levels of depression (Corrigan et al., 2015). A majority (83.6%) of these mothers identified their spouse or partner as their primary support person. This is not surprising given that the relationship between parenting partners (i.e., coparenting) may be viewed as a specific form of social support (Feinberg, 2003). However, independent from coparenting, extrafamilial social support has also been linked to enhanced parental adjustment (Feinberg, 2003). In a study observing parents with 11- to 15-month-old infants, extrafamilial social support was found to be a significant correlate of mothers' coparenting behaviors (Lindsey et al., 2005). Lower levels of perceived social support have also been linked to higher levels of mothers' self-reported parental burnout (Séjourné et al., 2018). In summary, few studies have considered the impact of social support on both coparenting and parental adjustment outcomes. Therefore, this study extends the existing literature by assessing the role of perceived social support as it relates to the experience of burnout among coparents with infants.

Individual Parent Characteristics: Parental Mental Health

In the current study, the second construct of interest is what Feinberg (2003) defines as individual parent characteristics. Individual parent characteristics refer to parents' attitudes as well as their mental and emotional health (Feinberg, 2003). Mental health is a key feature in parents' adjustment over time. For example, depression has been considered a risk factor during the stressful period following the birth of a child (Cox et al., 1999). Moreover, evidence indicates that mothers of infants generally report greater mental health symptoms than fathers (Vismara et al., 2016). However, empirical reviews of prenatal and postpartum depression among fathers reveal that rates of paternal depression are highest between 3 and 6 months postpartum and moderately correlated with maternal depression (Paulson & Bazemore, 2010). The role of parental depression in the family system has been documented previously. For example, mothers reporting higher levels of depression also reported lower levels of perceived social support (Corrigan et al., 2015; Cutrona & Troutman, 1986). In addition, parent mental health has also been linked to coparenting relationship quality. In a study of first-time parents across the transition to parenthood (84 couples), perceived coparenting agreement was shown to predict lower levels of depression among both mothers and fathers 4 months postpartum (Don et al., 2013). In another sample of fathers with infants, coparenting supportiveness was negatively associated with fathers' depressive symptoms (Bronte-Tinkew et al., 2007). Together, these findings highlight the role of parental depression on parents' individual and relational well-being.

Beyond reports of depression, anxiety is another key component of parental mental health, particularly among parents of infants (Matthey et al., 2013; Vismara et al., 2016). Higher rates of anxiety are common among mothers who have recently given birth (Matthey et al.,

2013), especially at 3 and 6 months postpartum (Vismara et al., 2016). Although anxiety symptoms are studied most frequently among mothers, fathers also report greater levels of anxiety after the birth of a child (Vismara et al., 2016). In fact, high levels of anxiety have been considered one of the strongest predictors of depressive symptoms among fathers with infants (Vismara et al., 2016). Moreover, comorbidity of anxiety and depressive symptoms is common in the postpartum period (Ramakrishna et al., 2019). Emerging research has examined the relationships between mental health and parental burnout (Séjourné et al., 2018). In an exploratory study of French mothers, postnatal anxiety and depression were both considered significant predictors of parental burnout (Séjourné et al., 2018). Mikolajczak et al. (2020) states that while depression and burnout co-occur, the two are distinct from one another. Thus, although there has been more research linking depressive symptoms to parental burnout, this study also assessed anxiety symptoms as an indicator of parental mental health.

Coparenting Relationship Quality

The coparenting relationship is central to Feinberg's (2003) ecological model. Healthy collaboration is a hallmark of strong coparenting relationships, yet Feinberg notes that not all coparents have the same or equal amounts of authority in their parenting roles. Instead, it is most important that coparents operate within a mutually agreed upon relationship (Feinberg, 2002). The sections below describe Feinberg's (2003) four key domains of coparenting: childrearing agreement, degree of support versus undermining, division of child-related labor, and joint family management of interactions.

The first domain, childrearing agreement, refers to topics such as behavioral expectations, discipline, and daily routines (Feinberg, 2003). Research on the intergenerational transmission of parenting (e.g., Serbin & Karp, 2003) suggests that parents are influenced by the type of

parenting behavior they experienced in their own childhood. Parents may then choose to carry those behaviors into their own parenting styles or not. Therefore, there is a degree of childrearing disagreement that may be expected in any coparenting relationship. However, disagreement among coparents becomes detrimental when there is a lack of respect or compromise (Feinberg, 2003). Therefore, the agreement between coparents has been studied as an important domain of coparenting. For example, Don et al. (2013) found that perceived coparenting agreement was associated with better mental health and greater maternal relationship satisfaction among parents with infants.

The second domain, division of labor, refers to daily routines and tasks involving childrearing and household responsibilities (Feinberg, 2003). There are shifts in daily responsibilities following the birth of a child, including the division of labor among partners (Cowan & Cowan, 1995). Feinberg (2002) notes that even parents who subscribe to gender-neutral roles are likely impacted by the intense demands following the birth of a child. In a study examining coparenting quality after the birth of a second child, more egalitarian gender roles among both mothers and fathers predicted fewer coparenting conflict (Kuo et al., 2017). A study by Goldberg and Perry-Jenkins (2004) reported that violated expectations regarding the division of labor were associated with greater maternal distress across the transition to parenthood. Coparents' division of labor can also be related to parental involvement. This includes how mothers influence fathers' involvement with their children, a process often referred to as "maternal gatekeeping" (Schoppe-Sullivan et al., 2008). These gatekeeping behaviors have been shown to moderate the relationship between coparenting quality and fathers' behaviors with their infants, suggesting that mothers have a strong influence on shaping fathers' involvement with their children (Schoppe-Sullivan et al., 2008).

The third domain, degree of support versus undermining, is of particular focus in the literature on coparenting during infancy (Schoppe-Sullivan et al., 2022). Coparenting support refers to affirmation, collaboration, and appreciation between childrearing partners (Feinberg, 2003). As previously mentioned, the support between coparents may be seen as a particular type of social support. Conversely, undermining refers to criticism and blame among coparenting partners. Undermining may lead a coparent to feel overwhelmed or consumed by negative emotions which can damage a coparenting relationship (Feinberg, 2003). In a recent study by Schoppe-Sullivan and colleagues (2022), mothers' reports of prenatal marital conflict were related to fathers' increased perceptions of undermining at 3 to 9 months postpartum. These findings suggest that both support and undermining within a coparenting relationship can have a strong influence on both parents' relationship functioning over time.

The final domain, joint family management refers to how parents interact and treat one another, particularly in front of their children (Feinberg, 2003). This includes the degree to which children are exposed to parents' conflict or hostile behavior. Conversely, children may witness coparenting closeness when they see parents celebrating their work together as a team (Feinberg, 2003). Greater prenatal marital conflict has been associated with greater perceived exposure to conflict postpartum among couples with infants (Schoppe-Sullivan et al., 2022). Taken together, the current study contributes to foundational coparenting literature by testing an ecological model of coparenting as it relates to burnout among U.S. parents with infants.

Parental Adjustment: Burnout

The final construct of interest in the current study is parental adjustment, which Feinberg defines as: "constructs such as parental efficacy…and depression specifically related to the strains of parenthood" (Feinberg, 2003; p. 11). In previous coparenting research, parental

adjustment has most often been measured in terms of parenting stress (e.g., Doss et al., 2014). However, parents with chronic stress related to parenting may be experiencing parental burnout syndrome (Mikolajczak & Roskam, 2018). Stemming from the research on job-related burnout, parental burnout has a distinct impact on everyday parenting experiences (Mikolajczak et al., 2020). Higher levels of burnout have been associated with greater anxiety and depressive symptoms (Séjourné et al., 2018) as well as increases in parental violence and child neglect (Mikolajczak et al., 2019). Therefore, Mikolajczak et al. (2018) proposed a preliminary model of risk factors of parental burnout. Results indicated that risks and resources associated with parenting, including coparenting, are likely to influence parental burnout. Therefore, external support and positive coparenting relationships may be considered protective factors of parental burnout (Mikolajczak et al., 2018). Thus, not surprisingly, a lack of support from one's social network as well as a coparenting partner can be considered risks for parents, especially for those coparenting during infancy.

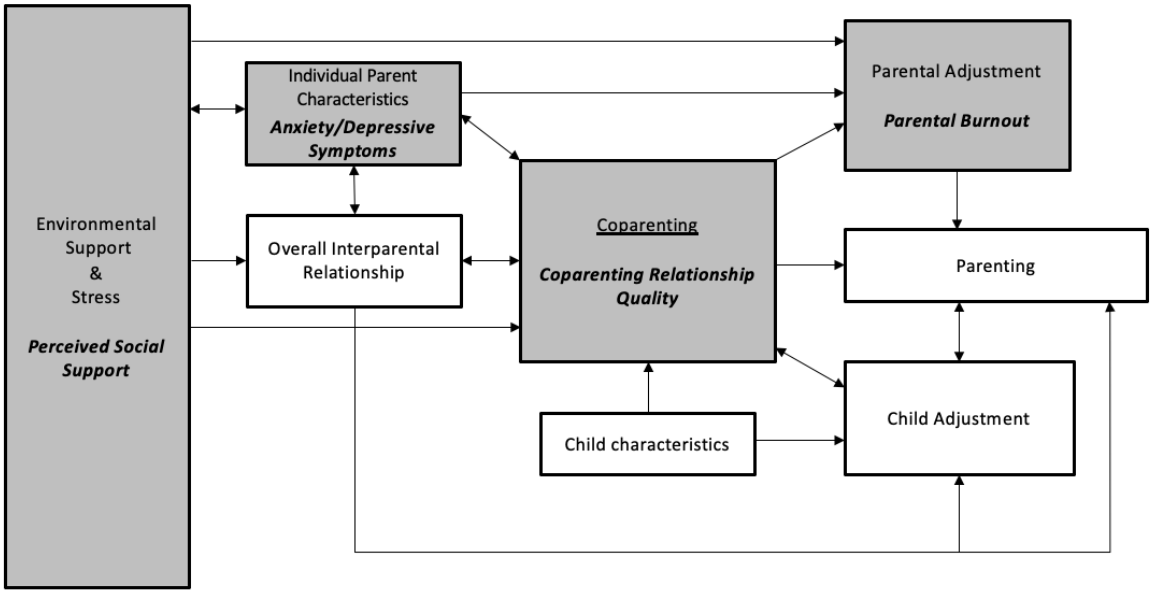
Research assessing the link between coparenting and burnout is still in its initial stages. In a sample of 861 French-speaking parents, preliminary findings indicated that low coparenting quality was linked to higher levels of parental burnout (Mikolajczak et al., 2018). More specifically, exposure to conflict (i.e., a component within the domain of joint family management) was considered a significant predictor of exhaustion in one's parental role. However, French-speaking parents in this study ranged from 22 to 75 (M_{age} = 39.50, SD = 8.26) with children ranging from 0 to 20 years old. In a different study of 306 Swiss parents (120 fathers, 186 mothers), exposure to conflict was also related to higher levels of burnout (Favez et al., 2022). Conversely, parents who reported greater levels of endorsement of their partner's parenting showed lower levels of burnout. Parents in this study were between 25 and 57 years

old (M_{age} = 39.71, *SD* = 6.56) with children aged 1 to 23 years old. Preliminary findings suggest that having more children and having children of younger ages predicts higher levels of parental burnout (Favez et al., 2022). While these findings contribute to the growing literature on coparenting and burnout, what remains understudied is how these constructs apply specifically to parents with infants, including those in the U.S.

Given that parental burnout results from an imbalance of risks over resources (Mikolajczak & Roskam, 2018), it is important to explore the relationship between coparenting and burnout from an ecological perspective. Based on preliminary research, exposure to conflict and endorsement of partner's parenting are specific dimensions of coparenting that may be linked to burnout (Favez et al., 2022). Qualitative studies have also highlighted that fear of not being a good enough parent is a key factor for mothers experiencing burnout (Hubert & Aujoulat, 2018). However, far less research related to burnout has been conducted with fathers (see notable exception: Sorkkila & Aunola, 2021). Preliminary, qualitative research suggests that inadequate finances, a lack of societal support, challenges combining work-life with family experiences, and difficulties tied to daily caregiving demands are key stressors for fathers experiencing burnout (Sorkkila & Aunola, 2021). Taken together, the reviewed literature indicates that the first year following the birth of a child is a particularly vulnerable time for parents, especially when coparenting during infancy. However, existing research suggests that the coparenting relationship may hold promise for prevention and intervention efforts related to parental adjustment, including burnout (Favez et al., 2022; Feinberg, 2002; Mikolajczak et al., 2018).

Figure 3

Conceptual model



Current Study

Based on foundational coparenting literature (Feinberg, 2003), this study explored associations among perceived social support, anxiety/depressive symptoms, coparenting relationship quality, and parental burnout in a sample of mothers and fathers with 3- to 12-month-old infants (Figure 3). The current study was not limited to first-time parents and therefore contained a mix of parents with various numbers of children. Given that no studies, to my knowledge, have assessed the link between coparenting and burnout among U.S. parents with infants, this study contributes to the literature by exploring associations within an established theoretical framework (Feinberg, 2003). The following research questions guided the current study:

Research Question 1a (RQ1a): What is the association between social support and parental burnout?

It was hypothesized (H1a) that parents who report higher levels of perceived social support would report lower levels of parental burnout (i.e., path c').

Research Question 1b (RQ1b): What is the association between social support and anxiety/depressive symptoms?

It was hypothesized (H1b) that parents who report higher levels of perceived social support would report lower levels of anxiety/depressive symptoms (i.e., path a_1).

Research Question 1c (RQ1c): What is the association between social support and coparenting relationship quality?

It was hypothesized (H1c) that parents who report higher levels of perceived social support would report higher levels of coparenting relationship quality (i.e., path a_2).

Research Question 1d (RQ1d): What is the association between anxiety/depressive symptoms and parental burnout?

It was hypothesized (H1d) that parents who report higher levels of anxiety/depressive symptoms would report higher levels of parent burnout (i.e., path b_1).

Research Question 1e (RQ1e): What is the association between coparenting relationship quality and parental burnout?

It was hypothesized (H1e) that parents who report higher levels of coparenting relationship quality would report lower levels of parental burnout (i.e., path b_2).

Research Question 1f (RQ1f): What is the association between anxiety/depressive symptoms and coparenting relationship quality?

It was hypothesized (H1f) that parents who report higher levels of anxiety/depressive symptoms would report lower levels of coparenting relationship quality (i.e., path d).

Research Question 2a (RQ2a): Is the direct effect of social support on parental burnout explained by anxiety/depressive symptoms?

It was hypothesized that the link between higher levels of social support and lower levels of parental burnout will be explained by lower levels of anxiety/depressive symptoms (i.e., indirect effect 1).

Research Question 2b (RQ2b): Is the direct effect of social support on parental burnout explained by coparenting relationship quality?

It was hypothesized that the link between high levels of social support and low levels of parental burnout will be explained by higher levels of coparenting relationship quality (i.e., indirect effect 2).

Chapter 3: Methods

Participants

Participants were part of the larger Learning About Parents and Infants Study (LAPIS). The original sample was comprised of 220 respondents who identified as parents of a 3- to 12-month-old infant and were currently coparenting with their romantic/intimate partner. A thorough data cleaning process was conducted to remove duplicate responses, participants who did not meet the inclusion criteria (see criteria below in the Procedures section), participants who did not provide a valid MTurk ID code or participants who failed attention checks within the online survey. The final analytic sample was comprised of 128 individual parents (69 mothers, 59 fathers). Approximately 52.3% of the sample were first-time parents. A majority of the sample (93%) were biological parents; 6.3% were adoptive and 0.8% were foster parents. Most of the participants (87.5%) reported being married; 9.4% were in committed relationships (but not engaged/married) and 2.3% were engaged to be married. Overall, couples reported being in their current romantic/intimate relationship for an average of 2.6 years (*SD* = .93). A vast majority of the sample (97.7%) were in different-gender relationships; 2.3% of parents were in same-gender relationships. Mothers' ages ranged from 24 to 52 years with a mean age of 31.71 years (*SD* = 6.28). Fathers' ages ranged from 24 to 59 years with a mean age of 32.14 years (*SD* = 7.74). The average age of infants was 7.63 months (*SD* = 2.32). Parents reported their infants' sex (70 males, 58 females).

The current sample was predominately White (94.4%); 3.2% identified as Black/African American, 1.6% as American Indian or Alaskan Native, 1.6% as mixed race, and 0.8% Asian. The median annual household income was between $50,001-$75,000 a year. A majority of mothers (76.8%) and fathers (83.1%) had completed a college degree. Regarding participants'

employment, 91.4% of parents reported working full-time (4.7% worked part-time and 3.1% were not currently working). Regarding partners' employment, 90.6% of parents reported that their partner worked full-time (4.7% worked part-time and 3.1% of partners were not working at the time of survey completion).

Procedures

Participants were recruited through Amazon Mechanical Turk (i.e., MTurk), an experienced crowdsourcing platform for online research. MTurk offers researchers an efficient route for online data collection. Researchers (i.e., Requesters) post virtual Human Intelligence Tasks (i.e., HITs) including surveys for Workers to complete. Requesters can then review and approve HITs so that Workers receive compensation through MTurk for their participation. The use of MTurk data collection continues to expand and be validated within social science research (Adamsons, 2022; Beckmeyer et al., 2021; Russell et al., 2022; Sager et al., 2021).

Recruitment was limited to U.S., English-speaking Workers who had completed a minimum of 100 tasks and had a HIT Approval Rate of 95% or above. To qualify for the study, participants had to be a) a mother or father of an infant aged 3-12 months, b) in a romantic or intimate partner relationship (could be married or in a partnered relationship), and c) coparenting their 3- to 12-month-old infant with their intimate/romantic partner. Recruitment for the current study was not limited to first-time parents. In addition, parents were recruited individually and not together as coparents. Parents who met the eligibility criteria and consented to participate in the study on MTurk were then directed to a Qualtrics survey link. The entire survey was estimated to take approximately 30 minutes to complete. Upon completing the survey and entering a valid confirmation code, approved participants were compensated $4.00. This amount was calculated based on current practices for compensating U.S. MTurk Workers and was

equivalent to minimum wage (Aguinis et al., 2021; Cobanoglu et al., 2021). To ensure validity, several attention checks were embedded into the survey. Measures from the LAPIS survey that were used in the current study included demographics, perceived social support, parental mental health symptoms, coparenting, and parental burnout. The Learning About Parents of Infants Study received IRB human subjects' approval from the Office of Research Compliance (ORC) at Auburn University.

Measures

Social Support

An abbreviated version of the Social Provisions Scale (SPS-5; Orpana et al., 2019) was used to assess parents' perceptions of general social support. Originally developed by Cutrona and Russell (1987), this 24-item assessment has been shorted to both a 10- and 5-item version. The SPS-5 was developed using national Canadian survey data and was shown to be a valid alternative to the SPS-10 (Caron, 2013) demonstrating internal consistency with an original alpha of .88 (Orpana et al., 2019). The SPS-5 reduces response burden by measuring each of the five forms of social provisions (i.e., attachment, guidance, social integration, reliable alliance, and reassurance of worth; Cutrona & Russell, 1987). Sample items from the SPS-5 include: "I have close relationships that provide me a sense of emotional security and well-being" and "There is someone I could talk to about important decisions in my life". Parents responded to each question on a four-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (4). A total score was computed by summing the individual items (min: 5, max: 20). Higher scores were interpreted as having higher levels of perceived social support. The internal consistency of this sample was adequate (Cronbach's $\alpha = .59$) and results from an exploratory

factor analysis indicated that all items loaded on one factor. Item-level review indicated that the alpha could not be improved in this sample by deleting one or more of the SPS-5 items.

Anxiety and Depressive Symptoms

The Patient Health Questionnaire for Anxiety and Depression (PHQ-4; Kroenke et al., 2009) was used to assess symptoms of both anxiety and depression. This ultra-brief, valid screening scale included two items assessing anxiety and two items assessing depression and has demonstrated good reliability with an original alpha of .88 (Kroenke et al., 2009). Given that the measure contained only four items, parents' reports of anxiety and depressive symptoms were combined into a single mental health symptom variable in this initial exploration. A total PHQ-4 score (i.e., anxiety/depressive symptoms) was computed by summing the items from each subscale (min: 0, max: 12). Parents were asked to report their frequency of psychological distress within the last two weeks. Sample items included: "feeling nervous, anxious, or on edge" (anxiety) and "little interest or pleasure in doing things" (depression). Parents responded to each question on a four-point Likert scale ranging from *not at all* (0) to *nearly every day* (3). The internal consistency of this sample was good (Cronbach's $\alpha = .78$).

Coparenting Relationship Quality

The 14-item brief Coparenting Relationship Scale (CRS-B; Feinberg et al., 2012) was used to measure parents' perceptions of coparenting relationship quality with their romantic/intimate partner. The CRS-B reduces response burden and is considered an excellent approximation for the full 35-item measure and has demonstrated good reliability with alphas ranging from .81 to .89 (Feinberg et al., 2012). The CRS-B assesses four domains of coparenting (i.e., agreement, division of labor, support versus undermining, joint family management) along with an additional feature related to coparenting closeness. Sample items include "My partner

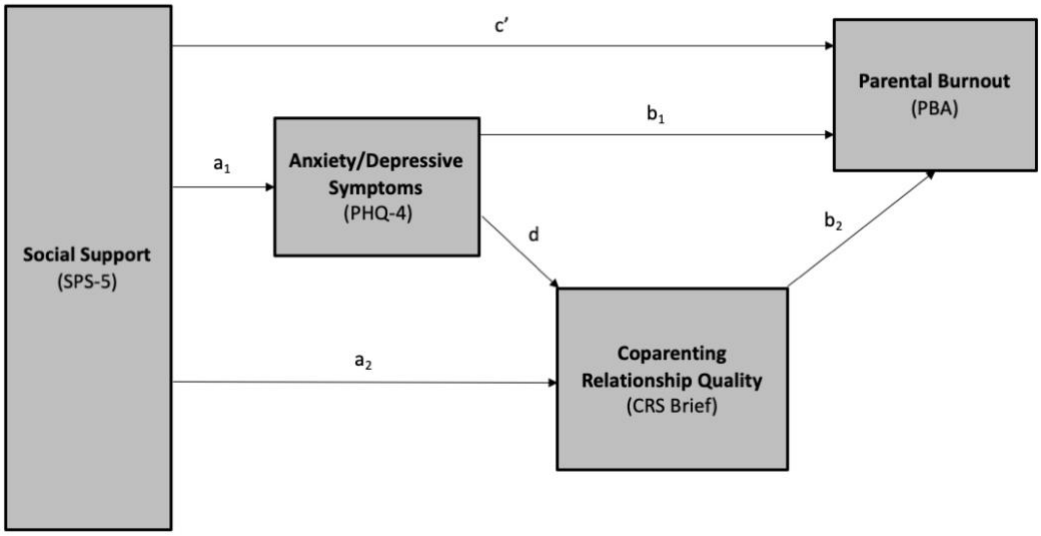
and I have the same goals for our child", "We are growing and maturing together through experiences as parents", "My partner appreciates how hard I work at being a good parent", and "My partner tries to show that she or he is better than me at caring for our child". Parents responded to each item of the CRS-B using a seven-point Likert scale ranging from *not true of us* (0) to *very true of us* (6). A total score was computed by summing each of the individual items (min: 0, max: 84). Higher scores (accounting for 7 reverse-scored items) represent greater coparenting relationship quality. The internal consistency of this sample was good (Cronbach's $\alpha = .78$).

Parental Burnout

The Parental Burnout Assessment (PBA; Roskam et al., 2018) was used to measure four specific dimensions of parental burnout syndrome: exhaustion in one's parental role, contrast in parental self, feelings of being fed up, and emotional distancing from children. This 23-item self-report questionnaire demonstrates good reliability and validity with original alphas ranging from .77 to .94 (Roskam et al., 2018). Sample items include: "I'm so tired out by my role as a parent that sleeping doesn't seem like enough", "I have the impression that I'm not myself any more when I'm interacting with my child(ren)", "I feel like I can't take any more as a parent", and "I do what I'm supposed to for my child(ren), but nothing more". Parents responded to each item on a seven-point Likert scale ranging from *never* (0) to *every day* (6). Following recommended procedure by Roskam et al. (2018), a total burnout score was computed by summing each item score together (min: 0, max: 138). The internal consistency of this sample was strong (Cronbach's $\alpha = .97$).

Figure 4

Analytic model



Analytic Plan

The central focus of this study was to understand the associations among perceived social support, anxiety/depressive symptoms, coparenting relationship quality, and parental burnout for mothers and fathers with 3- to 12-month-old infants. Prior to examining the research questions, preliminary analyses (i.e., descriptives, bivariate correlations, independent samples *t*-tests) were conducted using SPSS version 27 (IBM Corp., 2020). Two independent samples *t*-tests were conducted to compare means and identify any significant differences in study variables based on parental role (i.e., mothers or fathers) and infant sex (i.e., male or female).

Eleven participants had limited missing data (i.e., one missing item from one of the primary measures). Nine participants did not respond to one item on the PBA. One additional participant left one item on the CRS-B unanswered and another participant left one item on the PHQ-4 blank. In order to address these missing items, sum scoring with mean replacement was used for each of the eleven participants. This method allowed us to retain as much data as

possible while also providing the closest estimate to these eleven participants' missing responses (rather than omitting entire cases) (e.g., Saunders et al., 2006).

To test all the research questions simultaneously, a path analysis (Figure 4) was conducted with Mplus version 8.4 (Muthén & Muthén, 2019) using a syntax written by Stride et al. (2015). First, parental burnout was regressed onto social support (i.e., path c'), anxiety/depressive symptoms (i.e., path b_1), and coparenting relationship quality (i.e., path b_2). Second, both anxiety/depressive symptoms (i.e., path a_1) and coparenting relationship quality (i.e., path a_2) were regressed onto social support. Third, coparenting relationship quality was regressed onto anxiety/depressive symptoms (i.e., path d). Lastly, indirect effects were estimated for the effect of social support on parental burnout through anxiety/depressive symptoms, and the effect of social support on parental burnout through coparenting relationship quality.

Table 1

Correlation table

Variable	1	2	3	4	*M*	*SD*
1. Social Support	-				15.10	2.37
2. Anxiety/Depressive Symptoms	-.224*	-			5.36	2.86
3. Coparenting Relationship Quality	.270**	-.426**	-		49.49	11.11
4. Parental Burnout	-.131	.619**	-.532**	-	60.11	34.29

Note: * $p < .05$, ** $p < 0.01$; $n = 128$

Chapter 4: Results

Preliminary Analyses

Descriptive statistics (i.e., measures of central tendency, histograms) were examined to evaluate normality and skewness across all variables. Following Hair et al. (2010), study variables were not considered to be highly skewed and therefore, did not warrant any transforms: social support (M = 15.10, SD = 2.37, $Skew$ = -.37), anxiety/depressive symptoms (M = 5.36, SD = 2.86, $Skew$ = -.45), coparenting relationship quality (M = 49.49, SD = 11.11, $Skew$ = 1.18), and parental burnout (M = 60.11, SD = 34.29, $Skew$ = -.44). Other studies using the PBA have shown similar results (i.e., slight negative skew) which is to be expected as indicators of mental health, including burnout, often deviate from normality (Roskam et al., 2018; Manrique-Millones et al., 2022).

Bivariate correlations (see Table 1) were analyzed to better understand the independent relationships between study variables. Social support was negatively correlated with anxiety/depressive symptoms (r = -.22, p < .05), but positively correlated with coparenting relationship quality (r = .27, p < .01). Anxiety/depressive symptoms were negatively correlated with coparenting relationship quality (r = -.43, p < .01), but positively correlated with parental burnout (r = .62, p < .01). Finally, coparenting relationship quality was negatively correlated with parental burnout (r = -.53, p < .01).

To examine any significant differences in parental burnout based on parent role (i.e., mothers versus fathers) or infant sex (i.e., males versus females), two independent samples t-tests were used to compare means. No significant differences in study variables between mothers and fathers, $t(126)$ = -1.18, p = .24, were found. Moreover, there were no significant differences in

study variables for parents of males and females, $t(126) = 1.39$, $p = .17$. Therefore, all analyses were conducted for the full sample ($n = 128$).

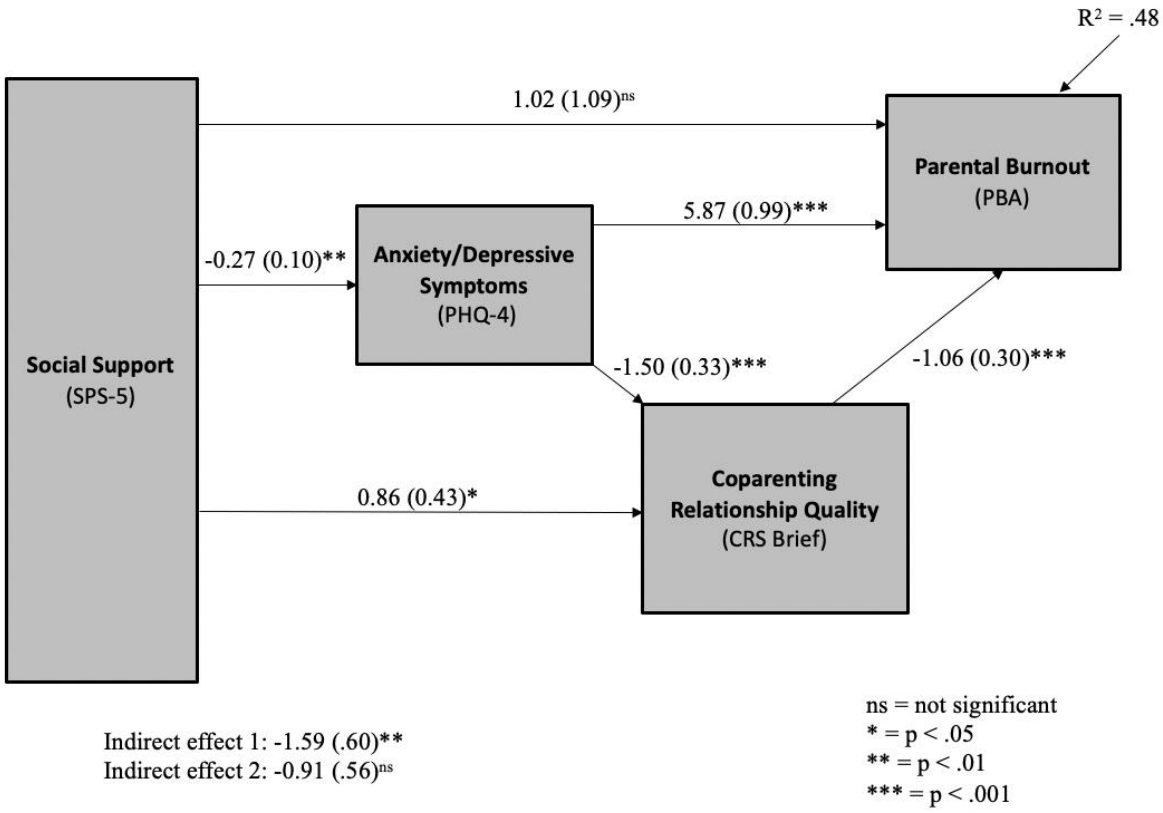
Primary Analysis

Results of the path analysis are presented in Figure 5. The model fit indices indicate that the model was saturated, RMSEA ≥ 0, CFI = 1.0, $\chi 2(0) = 0.00$, $p < .001$, SRMR = 0. However, the model still accounted for 48% of the variance in parental burnout. Consistent with the hypotheses, social support was negatively associated with anxiety/depressive symptoms (H1b, path a_1), $b = -0.27$, $p < .01$, and anxiety/depressive symptoms were negatively associated with parental burnout (H1d, path b_1), $b = 5.87$, $p < .001$. There was a significant indirect effect between social support and parental burnout via anxiety/depressive symptoms (H2a, indirect effect 1), $b = -1.59$, $p < .01$, indicating that lower levels of anxiety/depressive symptoms explained the link between social support and burnout. Inconsistent with H1a, the direct effect (path c') was not significant, $b = 1.02$, $p = 0.38$, in the model.

Consistent with my hypotheses, social support was positively associated with coparenting relationship quality (H1c, path a_2), $b = 0.86$, $p < .05$, and coparenting relationship quality was negatively associated with parental burnout (H1e, path b_2), $b = -1.06$, $p < .001$. As expected, anxiety/depressive symptoms and coparenting relationship quality were negatively associated (H1f, path d), $b = -1.50$, $p < .001$. Finally, inconsistent with my expectations (H2b, indirect effect 2), there was not a significant indirect effect between social support and parental burnout via coparenting relationship quality, $b = -0.91$, p = .11.

Figure 5

Results from path analysis



Chapter 5: Discussion

Considering that parents experience heightened levels of stress (Vismara et al., 2016) and declines in relationship satisfaction within the first year after the birth of a child (Cox et al., 1999), investigating potential influences of parental adjustment during infancy is critical for helping families thrive. Although research has long examined coparenting experiences during early infancy (e.g., Kuo et al., 2017; Lindsey et al., 2005; Schoppe-Sullivan et al., 2022; Schoppe-Sullivan & Mangelsdorf, 2013; Van Egeren, 2003), investigation of the link between coparenting relationship quality and parental burnout is just beginning. Parental burnout is a serious condition and has been linked with increases in parental violence, child neglect, and escape ideation (Mikolajczak et al., 2019). Given that an estimated 3.5 million U.S. parents experience burnout (Mikolajczak & Roskam, 2018), social scientists must continue to identify what factors contribute to and prevent the likelihood of parental burnout. This study advances the literature by exploring associations among perceived social support, parental mental health, coparenting, and parental burnout using Feinberg's (2003) ecological model of coparenting. The research questions were examined using path analysis among a sample of 128 U.S. parents (69 mothers, 59 fathers) with 3- to 12-month-old infants. This study makes two primary contributions to the literature. First, is the focus on parents' mental health symptoms; findings are suggestive that anxiety/depressive symptoms are tied strongly to burnout, and that these mental health symptoms explain the link between perceived social support and burnout. Second, my findings suggest that there are no significant differences in burnout based on parent role (i.e., mother or father) or infant sex. This suggests that perhaps parental burnout may operate similarly, at least during early infancy. Overall, findings from this study provide key insights into the likelihood of parental burnout among U.S. parents with infants.

Social Support, Mental Health, and Parental Burnout

As expected, results from this study indicated a significant relationship between parents' perceptions of social support and mental health. This suggests that parents with higher levels of perceived social support may experience lower levels of anxiety/depressive symptoms. This replicates previous work showing that greater social support is negatively associated with depression among new parents, specifically mothers (Corrigan et al., 2015; Cutrona & Troutman, 1986).

Mental health is key for parental adjustment, especially as it relates to burnout (Mikolajczak et al., 2020), and my findings are indicative that parents with significant anxiety/depressive symptoms will also report higher levels of parental burnout. Similar to Séjourné et al. (2018), postnatal anxiety and depression were related to parental burnout; however, unlike Séjourné et al. (2018), who studied French mothers with children under the age of 18, I found this association among U.S. parents of infants. Although lower levels of perceived social support have been previously linked to greater levels of burnout (Séjourné et al., 2018), I did not find this to be the case in this sample. Indeed, although parents with higher levels of social support generally reported lower levels of parental burnout, the direct path between social support and burnout was not significant in the present study. Thus, it cannot be assumed that social support alone explains parental burnout among parents with infants. Instead, my findings suggest, among this parent population, that mental health symptoms account for the previously identified link between social support and burnout among parents with older children.

Understanding Coparenting Perceptions

Results from the present study also revealed a significant relationship between social support and coparenting relationship quality. As expected, parents who reported higher levels of

social support also reported higher levels of coparenting relationship quality. This aligns with previous research demonstrating that extrafamilial social support is a significant correlate of observed early coparenting behaviors among mothers (Lindsey et al., 2005). This also confirms that the coparenting relationship may be seen as a specific form of social support (Feinberg, 2003).

Equally important is that these findings are suggestive that the coparenting relationship may be protective against parental burnout. Similar to emerging research (Mikolajczak et al., 2018; Favez et al., 2022), lower coparenting quality was linked to higher parental burnout when applied to a sample of U.S. parents of infants in the present study. Moreover, results indicated that parents with fewer anxiety/depressive symptoms reported higher levels of coparenting relationship quality, in support of existing research linking parent mental health and coparenting among parents with infants (Bronte-Tinkew et al., 2007; Don et al., 2013). Despite my predictions, coparenting quality did not explain the link between social support and burnout. Thus, additional research is needed to understand what specific domains of coparenting are likely to explain this link.

Strengths, Limitations, and Future Directions

This study advances the literature through an investigation of coparenting and burnout among parents with infants. Notable strengths include recruitment of both mothers and fathers from across the U.S., a specific focus on parental burnout during infancy, and testing of a strong conceptual model of coparenting (Feinberg, 2003). I intentionally chose not to restrict recruitment to first-time parents but instead recruited mothers and fathers with a 3- to 12-month-old infant more broadly. By examining coparents with infants, the present study focused on understanding both mothers' and fathers' experiences during a time of heightened stress. Finally,

this study extended foundational coparenting literature and utilized a strong theoretical framework (Feinberg, 2003).

Despite these strengths, there are several limitations that may reduce the generalizability of these findings. First, parents in this sample were predominately White, college-educated, and married. Given that families' socioeconomic status has been identified as a significant predictor of coparenting behaviors (Schoppe-Sullivan & Mangelsdorf, 2013) and as an influential determinate of parenting (e.g., Taraban & Shaw, 2018), future studies with larger samples are needed to examine how the larger socioeconomic context contributes to parents' experiences of burnout. Future research should also include more diversity among parents to better understand unique characteristics and cultural perspectives that highlight the totality of parenting. Second, although recruitment for the larger Learning About Parents with Infants Study (LAPIS) was not limited to parents who were married, one inclusion criterion for the study was that participants must be coparenting their infant with their romantic/intimate partner. Thus, the homogenous nature of the sample does not provide insight into the experiences of single parents and/or parents who are separated but continue coparenting across different households. While the aim of recruitment was to highlight more diverse family systems (McHale & Siroktin, 2019), the analytic sample limits the external validity of these findings. Future research should consider how the associations among parents' perceptions of social support, mental health symptoms, coparenting, and burnout may differ by family structures and at different points in the family life cycle (i.e., coparenting after separation, divorce, or repartnering).

In addition, it is important to recognize that the present study relied solely on self-report measures. Although not feasible in the current study, prior research has utilized observation-based measures of early coparenting behaviors among parents (Feinberg et al., 2009, Lindsey et

al., 2005; Schoppe-Sullivan & Mangelsdorf; 2013). By incorporating a multi-method assessment, researchers can observe coparenting behaviors during triadic and family interactions. A combination of parent self-reports and observational measures would help to inform future research from a process-oriented approach. Furthermore, while the CRS-B reduces response burden and is considered an excellent approximation for the full 34-item measure (Feinberg, 2012), future studies should consider using a comprehensive measure to identify which specific domains of coparenting (e.g., agreement, support versus undermining, division of labor, and joint family management; Feinberg, 2003) relate to parental burnout. Although not done in the current study, previous investigations have also recruited coparents together to understand the perceptions of both partners within the relationship (Doss et al., 2014; Doss et al., 2020; Feinberg et al., 2009). This would be another important avenue for future research.

Because the present study was cross-sectional, findings cannot imply causality nor identify which parents may be at risk for burnout over time. For the purpose of analyzing indirect effects, the pathways to and from parents' anxiety and depressive symptoms were modified to represent unidirectional paths, allowing for a recursive model to be tested. Therefore, these results do not explain any bidirectional paths between constructs in the model. Existing studies have assessed coparenting longitudinally from the prenatal through postpartum period (Doss et al., 2014; Feinberg et al., 2009). This allows researchers to better understand how the stressors of parenting an infant change over time to best predict burnout. Future studies, especially those focused on parents of infants, can recruit parents prior to their infant's birth and continue following both coparents over time. In addition, it would also be interesting to apply this conceptual model to different types of families (e.g., first-time versus primiparous parents) and

assess their prenatal expectations of burnout compared to their self-reported experiences of burnout over time.

While perceived social support was significantly related to anxiety/depressive symptoms and coparenting relationship quality in the tested model, the SPS-5 demonstrated relatively low reliability. Future studies should include additional measures beyond the Social Provisions Scale (SPS-5; Orpana et al., 2019) to support researchers in identifying elements of extrafamilial support (e.g., quantity, continuity, or satisfaction with support) that may buffer parents from experiencing burnout. Furthermore, exploration of if/how various types of social support may be important for mothers, compared to fathers, of infants would be an important next step. These questions may also be of particular interest when assessing key aspects of social support among older versus younger parents.

Although parental mental health was found to be a significant mediating variable in the relationship between social support and burnout, the present study only used a brief validated measure of parents' anxiety and depressive symptoms and relied on a single total mental health symptom score for this initial exploration. Given this study's findings, future studies should include a more detailed examination of parents' mental health symptoms to distinguish between parents who experience predominately anxiety symptoms, predominately depressive symptoms, or co-occurring symptoms. In addition, it is possible that parents' reports of depressive symptoms in the current study may be influenced by postpartum depression. The small sample size precluded examination of parents with clinical versus non-clinical levels of mental health symptoms. Moreover, because the measure of mental health symptoms used in the present investigation asked only about symptoms in the past two weeks, I was unable to distinguish between chronic versus acute anxiety and depression symptoms. Longitudinal investigations are

clearly needed to understand how variability in parents' mental health experiences contributes to burnout across the transition to parenthood.

Finally, the present study focused specifically on four constructs within Feinberg's (2003) ecological model of coparenting. Although the sample was limited to parents of 3- to 12-month-old infants, adding the construct of child age would be an important contributor to future research by examining levels of burnout among U.S. parents with older children. In addition, future studies should include a measure of parental involvement to better understand the quality and quantity of caregiving activities as it relates to the overall coparenting relationship and burnout.

Conclusion

The value of studying coparenting within an ecological context has long been recognized in the literature (Feinberg, 2003). Results from the present study lend further support for use of an ecological framework to understand parents' experiences during a time of heightened stress. Although burnout is not a new phenomenon, researchers have only recently begun applying it to the context of parenting (Mikolajczak & Roskam, 2018). The importance of parental mental health within the family has been documented (Cox et al., 1999; Paulson & Bazemore, 2010; Séjourné, et al., 2018; Vismara et al., 2016), and findings from the current study extend the literature by highlighting the role of parents' anxiety/depressive symptoms for understanding burnout among parents of infants. Although only an initial application of Feinberg's (2003) model to the study of burnout within U.S. families, results from this study begin to suggest that prevention-based programming for parents with infants should focus on understanding a range of parents' perceptions of self and others. Future studies which consider diverse family structures and incorporate a mixed-methods approach may help to further elucidate the processes

underlying the development and implications of burnout within the family system. In this way, parents, family life educators, therapists, and researchers may be better positioned to identify and support families who are at risk of experiencing high levels of burnout**.**

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Appendices

Appendix A – The Social Provisions Scale (SPS-5; Orpana et al., 2019)

Item	Strongly disagree	Disagree	Agree	Strongly Agree
1. I have close relationships that provide me with a sense of emotional security and well-being.	1	2	3	4
2. There is someone I could talk to about important decisions in my life.	1	2	3	4
3. I have relationships where my competence and skill are recognized.	1	2	3	4
4. I feel part of a group of people who share my attitudes and beliefs.	1	2	3	4
5. There are people I can count on in an emergency.	1	2	3	4

Appendix B – The Patient Health Questionnaire (PHQ-4; Kroenke et al., 2009)

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Little interest or pleasure in doing things	0	1	2	3
4. Feeling down, depressed, or hopeless	0	1	2	3

Appendix C – The Coparenting Relationship Scale Brief (CRS-B; Feinberg et al., 2012)

Item	Not true of us		A little bit true of us		Somewhat true of us		Very true of us
1. I believe my partner is a good parent.	0	1	2	3	4	5	6
2. My relationship with my partner is stronger now than before we had a child.	0	1	2	3	4	5	6
3. My partner pays a great deal of attention to our child.	0	1	2	3	4	5	6
4. My partner likes to play with our child and then leave dirty work to me.	0	1	2	3	4	5	6
5. My partner and I have the same goals for our child.	0	1	2	3	4	5	6
6. My partner and I have different ideas about how to raise our child.	0	1	2	3	4	5	6
7. My partner tries to show that they are better than me at caring for our child.	0	1	2	3	4	5	6
8. My partner does not carry their fair share of the parenting work.	0	1	2	3	4	5	6

9. My partner undermines my parenting.	0	1	2	3	4	5	6
10. We are growing and maturing together through experiences as parents.	0	1	2	3	4	5	6
11. My partner makes me feel like I'm the best possible parent for our child.	0	1	2	3	4	5	6

How often in a typical week, when all 3 of you are together, do you:

Item	Never		Sometimes (once or twice per week)		Often (once a day)		Very often (several times a day)
12. Argue about your relationship or marital issues unrelated to your child, in the child's presence?	0	1	2	3	4	5	6
13. One or both of you say cruel or hurtful things to each other in front of the child?	0	1	2	3	4	5	6

Appendix D – The Parental Burnout Assessment (PBA; Roskam et al., 2018)

Item	Never	A few times a year	Once a month or less	A few times a week	Once a week	A few times a week	Every day
1. I'm so tired out by my role as a parent that sleeping doesn't seem like enough.	0	1	2	3	4	5	6
2. I feel as though I've lost my direction as a parent.	0	1	2	3	4	5	6
3. I feel completely run down by my role as a parent.	0	1	2	3	4	5	6
4. I have zero energy for looking after my child(ren).	0	1	2	3	4	5	6
5. I don't think I'm the good parent that I used to be to my child(ren).	0	1	2	3	4	5	6
6. I can't stand my role as a parent any more.	0	1	2	3	4	5	6
7. I feel like I can't take any more as a parent.	0	1	2	3	4	5	6
8. I have the impression that I'm looking after my child(ren) on autopilot.	0	1	2	3	4	5	6
9. I have the sense that I'm really worn out as a parent.	0	1	2	3	4	5	6
10. When I get up in the morning and have to face another day with my child(ren), I feel	0	1	2	3	4	5	6

exhausted before I've even started.							
11. I don't enjoy being with my child(ren).	0	1	2	3	4	5	6
12. I feel like I can't cope as a parent.	0	1	2	3	4	5	6
13. I tell myself that I'm no longer the parent I used to be.	0	1	2	3	4	5	6
14. I do what I'm supposed to do for my child(ren), but nothing more.	0	1	2	3	4	5	6
15. My role as a parent uses up all my resources.	0	1	2	3	4	5	6
16. I can't take being a parent anymore.	0	1	2	3	4	5	6
17. I'm ashamed of the parent I've become.	0	1	2	3	4	5	6
18. I'm no longer proud of myself as a parent.	0	1	2	3	4	5	6
19. I have the impression that I'm not myself anymore when I'm interacting with my child(ren).	0	1	2	3	4	5	6
20. I'm no longer able to show my child(ren) how much I love them.	0	1	2	3	4	5	6
21. I find it exhausting just thinking of everything I have to do for my child(ren).	0	1	2	3	4	5	6
22. Outside the usual routines (lifts in the	0	1	2	3	4	5	6

car, bedtime, meals), I'm no longer able to make an effort for my child(ren).							
23. I'm in survival mode in my role as a parent.	0	1	2	3	4	5	6