Who should do what? Gender Roles and the Transitions to First- and Second-Time Parenthood: Lessons from Television and Consequences in Coparenting
by

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## DEDICATION

To all the women who came before me and to my great-grandmother whose parents raised her, yet never named her.

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#### Abstract

This dissertation examined the influence of television on gender role beliefs during the transition to first-time parenthood and investigated whether gender role beliefs shape coparenting dynamics in second-time parents. Study 1 examined whether regular levels of television use were associated with beliefs about fathers and gender roles among first-time expectant parents via an online survey. First-time expectant fathers were more likely to say that fathers were unimportant when they watched more television featuring dads, even if the expectant fathers also thought that television was unrealistic. Study 2 examined whether exposure to media representations of fathers influence beliefs about fathers. Participants were randomly assigned to one of two experimental conditions ( 1 : incompetent father, 2 : competent father), or the control condition, which portrayed these same characters in non-paternal roles. Participants who viewed clips of men in fathering roles said they believed that dads were important and should be actively involved in parenting. Participants who viewed incompetent fathers generated more incompetent and cold and distant words to describe fathers.

Study 3 tested 1) who has more influence in the coparenting relationship (mothers, fathers or both), and 2) what predicts coparenting (i.e., gender role beliefs, marital satisfaction, and children's difficult temperament) using longitudinal survey data from a study about family


adjustment after the birth of a second child. Although both parents were important in shaping coparenting conflict, fathers' marital satisfaction strongly predicted coparenting cooperation. Children with difficult temperaments exacerbated coparenting difficulties across the transition from one child to two. Using longitudinal couple-interview data from a study of second-time parents, Study 4 compared father involvement with two children in dual- and single-earner families to examine whether fathers' childcare involvement with firstborns predicted fathers' involvement with the infant over time and whether gender role beliefs predicted fathers’ involvement. Findings revealed that dual-earner fathers were more involved with both children than single-earner fathers. Dual-earner fathers who were more egalitarian increased their involvement with firstborns immediately after the birth of their second child. The overall dissertation evinces that television images impact beliefs about fathers' roles and that children's characteristics shape coparenting dynamics during the transition to second-time parenthood.

## CHAPTER 1: General Introduction

The gender revolution has reshaped family and parenting roles for women and men in the United States (Wilcox \& Dew, 2013). In response to mothers' increased participation in the labor force, fathers have faced growing expectations to become active caregivers and co-parents with mothers (Habib, 2012; Lamb, 2000; Pleck \& Pleck, 1997). Father involvement and equality in parenting roles have become central points in modern feminist movements (e.g., HeforShe). Despite broad societal desires for more active father involvement, parenting roles remain deeply gendered. Women consistently outperform men in childcare, despite their equal participation in the workforce (Craig \& Mullan, 2011; Liss \& Erchull, 2013). Some have argued that the persistent inequality in childcare at home between mothers and fathers reflects a stall in the gender revolution (Hoschschild \& Machung, 1989). The birth of a new baby is a period when gender roles are likely to be amplified and tend to shift toward more gender-traditional beliefs (Katz-Wise, Priess, \& Hyde, 2010). The transition to parenthood is also likely to be coupled with more gender-traditional childcare arrangements: mothers do more childcare than fathers, and this pattern continues with the birth of additional children (Sanchez \& Thomson, 1997). Thus, gender roles appear to be intertwined with the experience of parenting and coparenting in families with infants. The overall purpose of this dissertation was to examine media contributions to gender role beliefs during the transition to first-time parenthood and to investigate whether gender role beliefs shape division of childcare and coparenting relationships in second-time parents.

## Theoretical Framework: Ecological Model of Coparenting

The overarching theoretical framework of this dissertation is based on Feinberg's (2003) Ecological Model of Coparenting which argues for multiple individual (parent and child) and psychosocial and contextual predictors of the coparenting relationship. Very broadly defined, coparenting is how parents do or do not work together in their childrearing roles. Coparenting encompasses both qualitative dimensions that describe the nature of coparenting interactions (i.e., cooperation and conflict), and quantitative dimensions (i.e., division of labor) that capture the extent of child care involvement. Proximal to the prediction of coparenting dynamics are individual parent characteristics (e.g., gender role beliefs), the overall quality of the interparental relationship (e.g., relationship satisfaction), and child characteristics, such as the difficulty of the child's temperament (Feinberg, 2003). Feinberg also posits that individual parent characteristics can be shaped by environmental factors such as social support and economic stress. Although Feinberg describes each of these elements as predictors of coparenting, he argues that the most important factor that influences coparenting is relationship quality between parents, but individual parent characteristics (e.g., gender role beliefs) influence both coparenting and relationship quality between parents. Because individual parent characteristics could influence coparenting directly and indirectly via relationship quality, I chose to focus on individual parent characteristics (i.e., gender role beliefs) as the central thread of this dissertation. I planned to examine tenets of Feinberg's model by conducting several studies to address (1) the role of television as an environmental factor that contributed to parental gender role beliefs about women's and men's roles in the family, and, in turn, (2) whether these gender beliefs predicted the nature of coparenting, and the division of childcare after the birth of an infant. See Figure 1.1. for the process model guiding this research that underscores gender role beliefs as the
mechanism linking parental viewing of fathers as competent or incompetent in television portrayals and men's and women's coparenting and division of child care labor.

## The development of gender role beliefs: Television as a socialization source?

Gender role beliefs are constructed early in life and continue to be shaped by multiple forces throughout the lifespan. One pervasive, but understudied, socializing force are the mainstream media. Televised media, in particular, are a great socializer of cultural messages, including those about parenting. Although television programs do show images of ideal fathers who are sensitive and competent (Troilo, in press), the widely held opinion by scholars (Parke \& Brott, 1999) and the public (Netmums, 2013) is that fathers are consistently shown as incompetent on television. There is a concern that images of bumbling fathers may be contributing to a negative view of fathers' roles within families among both women and men, which in turn, contributes to inequality at home (Parke \& Brott, 1999). Chapters two and three address the question of whether media play a role in gendered beliefs about fathers in first-time expectant parents.

## Gender role beliefs in action: Contributions to coparenting

Beliefs about the roles of women and men in families have dramatically changed within the last 50 years (Lamb, 2000; Wilcox \& Dew, 2013). For example, data from the General Social Survey revealed that in the 1970 's, more than 60 percent of married couples believed that it was better for men to work outside the home while women care for the home and family. By the 2000's, couples who held traditional gender role beliefs fell to 35 percent (Wilcox \& Dew, 2013). These shifts in beliefs about roles have corresponded to changes in dynamics within families. According to data taken from time-diary research (i.e., the American Time Use Survey, the Time Use in Economic and Social Accounts Study, and the Family Interaction, Social Capital
and Trends in Time Use Survey), mothers and fathers appeared to occupy completely separate roles in 1975, but fathers have dramatically increased their levels of involvement. Mothers spent more than 300 minutes per day in childcare compared to fathers' 73 minutes per day in 19751976, but by 2003, fathers' involvement more than tripled to 248 minutes per day (Wilcox \& Dew, 2013). Parallel changes in father involvement with shifts in broader societal beliefs about gender roles provide evidence for the potential connection between individual gender role beliefs and coparenting dynamics between parents within families.

In this dissertation, I focus on coparenting cooperation/conflict and division of labor. Whereas division of labor appears to be more obviously tied to gender role beliefs (Davis \& Greenstein, 2009; Evertsson, 2014), the contribution of gender role beliefs to interpersonal dynamics in coparenting (i.e., cooperation and conflict) is less clear. Could egalitarian gender role beliefs, such as endorsing shared roles, lead to more cooperation between parents, or more conflict, because both parents have their own opinions about childrearing? Chapters four and five address whether gender role beliefs shape coparenting dynamics and address how childcare responsibilities are divided after the birth of a second child.

Finally, although gender role beliefs appear to contribute to parents' decisions about shared childrearing, the construction of the coparenting relationship is multiply determined (Feinberg, 2003) not just by a parent's own personal beliefs but by the characteristics of their spouse, their child, and family at the same time. Therefore, gender role beliefs need to be examined along with other factors (e.g., the marital relationship, child characteristics, family structure) that may contribute to coparenting dynamics and division of childcare.

## Description of dissertation studies

This set of dissertation studies examined how gendered values about parenting are transmitted through media, and how gender role beliefs contribute to coparenting dynamics and the division of childcare. The interrelations between media, gender role beliefs, and coparenting are explored through the context of the transitions to first- and second-time parenthood.

Studies 1 and 2 focused on media influences on beliefs about fathers and gendered family roles in first time expectant parents. These two chapters test a long-held, but never tested hypothesis that negative portrayals of fathers on television contribute to negative beliefs about fathers in families (Parke \& Brott, 1999).

Although men are less likely than women to be represented as parents in television (Gunter, 1986; Lauzen, Dozier, \& Horan, 2008), father characters appear in genres beyond the family sitcom. Notable father characters in recent non-sitcom television include the chemistry teacher-turned drug lord Walter White from Breaking Bad, alcoholic playboy Hank Moody of Californication, and devoted family man Adam Braverman from the intergenerational family drama, Parenthood. Given the wide availability and choice of programming, Chapter 3 used a correlational approach to examine whether regular watching of father characters on television in a range of genres was related to beliefs about fathers and gendered family roles. Because television fathers are portrayed as incompetent or less involved in family roles than mothers (Lauzen et al., 2008; Scharrer, 2001), I hypothesized that more exposure to fathers on television would reflect weaker beliefs that fathers were important to child development and more traditional gender beliefs about family roles. Media-based beliefs about parenting roles may also be gendered, as men receive far less socialization into parenting roles than women do (Parke \& Brott, 1999). Thus, I also hypothesized that these associations would be stronger for men than women because men have fewer parenting socialization opportunities than women. Results were
expected to provide evidence for associations between exposure to fathers on television and beliefs about fathers' roles in families.

Although there is broad societal desire for greater father involvement, attitudes towards fathers' capabilities as caregivers focus on their incompetence and underinvolvement (Doherty, 1991), resulting in ambivalence towards fathers' roles. I explored the contribution of television to this ambivalence through study 2 by examining how exposure to television fathers affects explicit and implicit beliefs about fathers. Most attention to portrayals of fathers has been within the sitcom genre; thus, this study used stimuli from sitcoms featuring fathers. Content analyses of recent family sitcoms from 2000-2013 revealed both incompetent and competent portrayals of fathers (Troilo, in press), but it was unknown whether portrayals of fathers in families actually affected beliefs about fathers. The second study built directly upon the first study and used an experimental approach to examine whether the nature of father portrayals (competent or incompetent; in father role vs. not father role) in family sitcoms affected explicit (i.e., consciously-held) and implicit (i.e., unconsciously-held) beliefs about fathers. I formulated two competing hypotheses. The first hypothesis was the father presence hypothesis, whereby exposure to men in fathering roles would increase endorsement in explicit beliefs about fathers: egalitarian gender role beliefs and beliefs about fathers' importance to children. It was also expected that father presence would affect implicit beliefs about fathers, whereby participants would describe fathers as more devoted and less distant. The second hypothesis was the incompetent father hypothesis, which argued that exposure to incompetent fathers would decrease endorsement of explicit beliefs about egalitarian gender roles and fathers' importance to children. It was also expected that portrayals of incompetent fathers would affect implicit beliefs about fathers, such that participants exposed to incompetent fathers would describe fathers as
more distant and incompetent. Findings were expected to shed light on how television portrayals of fathers may be contributing to existing ambivalence towards fathers' roles in families.

Studies 3 and 4 focused on gender role beliefs and their contributions to coparenting and the division of child care after the birth of a second child. Gender role beliefs are especially pertinent to coparenting because mothers and fathers in two-parent families do not exist in a vacuum, rather their relationship as coparents is considered the epicenter of the family (Weissman \& Cohen, 1985). Coparenting subsists of the division of childcare, as well as cooperation and conflict between coparents (Feinberg, 2003). Coparenting dynamics are particularly influential on firstborn adjustment to the birth of a sibling. Firstborns engaged in fewer behavior problems and complied more with their mothers if parents engaged in more cooperative and less conflictual coparenting prior to the birth of their second child (Kolak \& Volling, 2013). The foundation of a solid coparenting relationship benefits the firstborn's adjustment, but it was unknown whether the challenges of a new infant with the changing demands of a toddler create difficulty in the coparenting relationship. The third chapter examined early changes in the coparenting relationship and investigated how parents' gender role beliefs, marital relationship, and child characteristics predicted coparenting after the birth of the second child.

Based on earlier studies with small samples, the transition to second-time parenthood was considered a catalyst for increased active father involvement in the family (Kreppner, Paulsen, \& Schuetze, 1982; Stewart, 1990). It was unclear whether today's families also experience a surge of paternal involvement, and which ecological factors facilitate or constrain father involvement after the birth of a second child. The fourth chapter primarily explored whether there were increases in father involvement for firstborns and infants in families after the
birth of a second child. I also explored whether fathers' childcare involvement with one child predicted change over time with the other child, whether patterns of change in father involvement differed between dual- and single-earner families, and finally, whether gender role beliefs shaped father involvement over time. Findings were expected to provide insight into how parents divide childcare responsibilities not only between each other but also between children in dual- and single-earner families.

Overall, findings from this dissertation were expected to contribute to our understanding of how gendered beliefs about family roles arise prior to the transition to first-time parenthood and whether gender role beliefs shape family dynamics after the birth of a second child.

Figure 1.1. Process Model of Coparenting


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## CHAPTER 2: (Study 1) Contributions of television use to gendered family role beliefs among first-time expectant parents

The transition to parenthood is a period during which individuals consolidate their expectations for impending roles as mothers and fathers. However, violated expectations with respect to parenting roles contribute to a significant portion of role strain and marital dissatisfaction after childbirth (Goldberg \& Perry-Jenkins, 2004; Holmes, Sasaki, \& Hazen, 2013). Women and men develop their expectations of parenthood via multiple sources, such as through their own family experiences, talking with friends, and via media (Parke, 2002). Indeed, televised media are a powerful purveyor of cultural messages and may be contributing to our society's beliefs both about gender roles within families and about the importance of fathers to child development. Some scholars have argued that narrow media portrayals of fathers as incompetent caregivers may be perpetuating myths about fathers that impede father involvement in families (Parke \& Brott, 1999). However, these claims have yet to be empirically tested. The purpose of the current study was to investigate whether regular exposure to televised portrayals of fathers is related to first-time expectant parents' beliefs about fathers in families in the United States.

## Socialization of Parenting in the United States

Parenting roles are deeply tied to gender roles in our society, whereby women, instead of men, are expected to be primary caregivers. Thus, women are directly socialized into caregiving
roles from early in life. Differential caregiving socialization can be seen in toy choices for girls (e.g., dolls) compared to boys (e.g., trucks) (Idle, Wood, \& Desmarais, 1993), and in the chores assigned to children such as girls' babysitting, compared to taking out the trash for boys (Parke, 2002). When individuals face the transition to parenthood, the resources and support available are heavily biased towards mothers compared to fathers (Parke \& Brott, 1999), which leads to a greater gap in childcare preparation between women and men. This socialization over the lifetime leads to an assumption that women are better suited for rearing infants compared to men (Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, \& Sokolowski, 2008), and as such, many women assume the primary caregiver role. However, expectations for fathers' active involvement with their children have increased over the past 50 years (Habib, 2012; Lamb, 2000; Pleck \& Pleck, 1997). Previously, men's general lack of caregiving socialization was unproblematic when men's roles in families were clearly defined as family provider and head, not as caregiver (Bernard, 1981; Genesoni \& Tallandini, 2009; Kelly, 2009). But how do men learn to be competent, nurturing parents if they have not had the same lifetime training as women and girls? How do women develop expectations for fathers' roles within these changing gender role norms?

One probable source of parenting information is portrayals of parenting in mainstream media, such as television. Media serve as powerful sculptors and perpetuators of gendered cultural messages (Barner, 1999; Signorielli, 1989), including messages about parenting practices (Parke \& Brott, 1999). Although little is known about television's influence on fathering in the United States, we can look to a few studies conducted in other English-speaking countries. A qualitative study of expectant fathers in South Africa indicated that these men perceived a dearth of information on fatherhood and childcare skills and suggested that television would be the best avenue to provide guidance (Hinckley, Ferreira, \& Maree, 2007). If men feel
neglected by the traditional support and resources afforded to women's transition to parenthood (Parke \& Brott, 1999; Wente \& Crockenberg, 1976), and want to learn about fatherhood expectations from television (Hinckley et al., 2007), then television messages about fatherhood could be critical sites of socialization. Finally, televised media have even been used as effective broad-scale parenting intervention programs in Australia (Calam, Sanders, Miller, Sadhnani, \& Carmont, 2008; Sanders \& Turner, 2002). These interventions found that media showing effective parenting skills reduced dysfunctional parenting. Therefore it is possible that media portrayals of dysfunctional or incompetent parenting can negatively influence real-life parenting.

## Portrayals of Men and Fathers on Television in the United States

Although television's representations of men have varied over time, ranging from the playboys Sam Malone of Cheers or Joey of Friends to brilliant misanthrope Dr. House and vengeful serial killer Dexter Morgan from Dexter, these portrayals have been relatively narrow in their depictions of masculinity (Lotz, 2014). Analyses indicate that men on TV are frequently portrayed as sex-obsessed, unfaithful, aggressive, and dominant (Gunter, 1986; Lotz, 2014; Scharrer, 2001, 2013). Men are also typically portrayed in work-related roles, which is in contrast to general depictions of women as wives and mothers (Gunter, 1986; Lauzen, Dozier, \& Horan, 2008).

Findings also indicate that men are represented differently in male-oriented media than in female-oriented media (Feasey, 2008; Furnham \& Li, 2008; Gentry \& Harrison, 2010). For example, male characters in adventure shows, which are targeted more to men, are more hostile and violent than men in situation comedies (Cantor, 1990), which are targeted more toward women. Within family contexts, women are more commonly represented as parents than are men (Dail \& Way, 1985), a pattern that may reinforce conventional beliefs that women are more
suitable parents than men, even in female-targeted programming. Together, these portrayals of men seem to be incompatible with a societal call for sensitive, involved fatherhood.

How are men portrayed as fathers, more specifically? Content analyses of family sitcoms (e.g., Everybody Loves Raymond, Still Standing) indicate that fathers are often portrayed as clueless and incompetent, but a father character's fidelity to his family and his family's happiness supersede any incompetence (Fogel, 2012). Although father characters may be ridiculed for being incompetent, they are never forced to change, implying that the love for their family is enough (Fogel, 2012). Thus, contemporary television may be painting a picture of fatherhood in which fathers can be portrayed as "good" family men as long as they love their family, despite their incompetence and misgivings. In a content analysis of domestic comedies that aired during the 2012-2013 season, father-centered sitcoms (e.g., Baby Daddy, Raising Hope, Modern Family) portrayed ideal fatherhood as encompassing physical care, emotional support, moral guidance, and advice (Hentrich, 2014). When fathers failed at care or nurturance, they were frequently ridiculed, mirroring previous uses of incompetent fathers as a comedic point in television. In another content analysis of 12 sitcoms from the 2000's featuring fathers, most father-child interactions (56\%) were portrayed as being emotionally available (warm, supportive, but also a disciplinarian), whereas remaining interactions were nearly evenly split between friendly or critical/caustic interchanges between fathers and children (Troilo, in press). Taken together, portrayals of fathers in sitcoms are fairly ambivalent: ideal fathers are emotionally available, but fathers also tend to be incompetent in their parenting duties.

Because men may not watch these family comedy programs and may not be exposed to these father messages, evaluation of father images in other genres that are more male-oriented (e.g., dramas) should be investigated. For example, the conflicted and homicidal Tony Soprano of The Sopranos and deeply flawed Walter White of Breaking Bad are prominent father
characters, but no content analyses have been conducted on these types of father portrayals. Accommodating research on father portrayals in multiple genres is especially pertinent now that viewers have many more choices in a variety of programming (Webster, 2005).

## Shaping of Family Beliefs through Television

Television families may offer implicit lessons about family life that may affect the way people think about families (Douglas \& Olson, 1995; Wilson, 2004). Survey data indicate that both general television exposure and viewing of specific genre types (e.g., domestic comedies) are associated with children's and adults' beliefs about family behavior, such as conflict and support (Alexander, 2009; Buerkel-Rothfuss, Greenberg, Atkin, \& Neuendorf, 1982; Signorielli, 1989; Wilson, 2004). In a study of adolescent girls' and undergraduate women's exposure to sitcoms and soap operas, greater consumption of television series that depicted traditional mothers was associated with a more traditional view of motherhood (Ex, Janssens, \& Korzilius, 2002). This study also examined viewing motivations and found that women and girls who watched television out of habit rather than for learning purposes endorsed more traditional views of motherhood. The authors explained that because habitual viewing was associated with more hours of viewing, more television viewing was ultimately responsible for women's greater endorsement of traditional motherhood. However, because these participants were not mothers or expectant mothers, the results may be conflated by a distancing between the participant and the maternal role. Young adult women may not try to actively learn about mother roles because they are distanced from becoming a mother. Previous research showed that married individuals used television as models for their own marital behavior (Robinson, Skill, Nussbaum, \& Moreland, 1985), thus, television portrayals are impactful when there is role congruence between television and the viewer.

According to the Differential Susceptibility to Media Effects Model (Valkenburg \& Peter, 2013), some individuals are more susceptible to media effects than others based on dispositional dimensions (e.g., gender, motivations, beliefs), developmental stage (e.g., transition to parenthood), and social context (e.g. cultural norms, such as the primacy of motherhood). Although it has not been previously studied, we speculated that portrayals of television families could particularly influence individuals transitioning to parenthood who may be readily looking for models to imitate, as they begin a new life stage. Because men are less socialized into parenting roles than women, we contend that men's beliefs would be more susceptible to television use variables than would women's beliefs. Men may not only rely on television images more than women to form their beliefs about parenting roles, but may also perceive television to be more realistic and be more motivated to learn from television to form their beliefs about fatherhood and parenting roles.

Furthermore, Bandura's Social Cognitive Theory (2002) proposes that viewers' scripts, schemas, and normative beliefs are shaped by their engagement with media content and that these beliefs and values lead to behaviors. In this way, expectant parents could learn about family roles through exposure to these roles on television. However, exposure, alone, does not guarantee the imitation of behaviors depicted or adoption of values conveyed. Instead, the likelihood of these responses also depends on viewers' cognitions about the content. Here, perceived characteristics of the actors observed are influential. It is believed that if the model is perceived as realistic, as similar to the perceiver, or as having admirable qualities (e.g., physical attractiveness, popularity), there is a greater likelihood that his or her behavior will be modeled. Across several studies and across multiple types of belief outcomes, findings indicate that the more realistic a person perceives TV content to be, regardless of how much TV he or she watches, the more likely his or her behaviors and cognitions are to be shaped by TV portrayals
(Perse, 1986; Potter, 1986; Rubin, 1984; Taylor, 2005; Ward \& Carlson, 2013). Thus, fitting assumptions of Social Cognitive Theory (Bandura, 2002), expectant fathers reporting greater levels of exposure to television fathers, or attributing greater realism to television content would each be expected to be more accepting of some of the dominant content and themes conveyed.

## Viewing Motivations

A second dimension on which individual viewers may differ is in their motives for viewing television. Uses and gratifications theory (Rubin, 1994) argues that individuals use media for different purposes, and that the particular motives viewers bring to the screen play a critical role in determining how open they may be to the content or to potential influence. Whereas some viewers use TV intentionally to learn about the world, others use it for entertainment, for companionship, or not intently at all. In this sense, it is expected that individuals who try to learn about behavior through television may be more likely to engage in the behavior depicted than might individuals who watch television for fun. Support for the role of learning motives on television effects has been mixed, with some studies finding significant contributions (Kim \& Rubin, 1997; Lee \& Taylor, 2014), and others finding null or conditional results (Ex et al., 2002; Ward, 2002). It is unknown whether television portrayals of fathers influence expectant parents' beliefs about fathers in real life, and whether this association extends to learning motives.

## Current Study

Television portrayals of fathers are increasing in number and in scope, and fathers are being represented in both positive and negative ways. On sitcoms, fathers are often emotionally available, but also bumbling and incompetent. Little is known about the nature of father portrayals on other genres such as dramas, nor about the influence of exposure to these mixed portrayals on viewers' beliefs about father roles. Viewers may expect men to be more
emotionally involved parents based on these images. On the other hand, humorous depictions of incompetent fathers may be more memorable, and therefore viewers may rely on these images more when developing expectations about fathers' roles. In this sense, the portrayal of fathers on television may help shape beliefs about fathers' roles within families and the importance of fathers to child development. These beliefs may guide individuals' own expectations, behaviors, and interactions within family relationships. We do not claim that family role beliefs are solely guided by media, as there may also be sociostructural determinants of family beliefs, such as income, education level, religiosity, or age.

To explore whether television use is associated with expectant parents' beliefs about fathers in families, we used a correlational approach to assess whether regular viewing patterns (frequency, motivation, and perceived realism of televised content) were associated with beliefs about fathers' roles. Given that television typically portrays men's roles to be incompatible with sensitive and competent fatherhood, we hypothesized that heavier viewing, attributing more realism to the content, and viewing with a stronger learning motive would each be associated with a weaker belief that fathers are important to child development and with less egalitarian family gender role beliefs in zero-order correlations. Via multiple regressions with moderation analyses, we also explored the unique contributions to family role beliefs of each media variable, and tested whether these contributions would differ based on gender. Finally, because the contribution of exposure to television fathers on family role beliefs may be moderated by perceived realism, as well, we tested two-way interactions between exposure and perceived realism and three-way interactions between exposure, perceived realism, and gender.

## Method

## Participants and Procedure

Participants were 201 individuals ( 122 women, 79 men) expecting their first biological child in a co-habiting heterosexual relationship with the other expectant parent. All participants were living in the United States. Only one member of the couple was eligible to participate in the study to maintain independence of data. Participants were recruited from online advertisements posted on Craigslist's volunteers section, e-mails sent to family research list-servs, Amazon's Mechanical Turk, flyers in local doctor's offices in Southeast Michigan, and word of mouth. Interested participants were directed to an online survey where they were shown a consent form. After consenting, participants completed a prescreening questionnaire to determine eligibility. Individuals who were not eligible were redirected to the end of the survey. Participants were told in the consent form that they may withdraw from the study at any time by closing out of their browser window. Therefore, data from individuals who did not complete the survey were deleted from the dataset ( $N=27$ out of 228 eligible). Participants who completed the survey were then redirected to an online form that was not connected to their survey responses. Participants were then given the opportunity to enter their e-mail address into a drawing of ten $\$ 100$ gift cards. Amazon Mechanical Turk participants were compensated $\$ .01$ for completion of the survey and eligible to enter into the drawing, as well. Ten participants were randomly selected to receive one of ten $\$ 100$ gift cards. It took approximately 20-30 minutes to complete the survey.

A majority of participants were White/European-American (70.6\%), with 29.4\% spanning other racial and ethnic groups: $1.5 \%$ identified as American Indian/Alaska Native, $14.9 \%$ as Asian/Asian-American, 8\% as Black/African American, and 10\% as Hispanic/Latino. Eleven participants indicated more than one race/ethnicity. Most participants were married ( $73.1 \%$ ). The majority of participants were employed full-time (79.1\%), as were their partners (84.1\%), and did not plan on changing their or their partner's employment status once the baby was born $(54.2 \%)$. Household income ranged from less than $\$ 20,000$ to more than $\$ 100,001$;
$48.2 \%$ of participants earned at least $\$ 80,001$. A majority of participants reported living in an urban area (53.2\%), but participants resided across the United States. The majority of participants had earned at least a Bachelor's degree (71.9\%). Participants' ages ranged from 1846 years ( $M=27.93, S D=4.36$ ). Participants also reported on their religiosity, which was measured using three items ( $M=2.98, S D=1.32$, Range $=1-5, \mathrm{a}=.92$, e.g., "How religious are you?"). For a full description of the demographics in the sample, see Table 1.1.

## Measures

See Table 1.2 for means and standard deviations of all main study variables.
Amount of television use. Participants were asked about their general consumption of television programming by indicating the number of hours they watch television on a typical weekday, Saturday, and Sunday. Response options ranged from 0 to more than 10 hours. A weekly sum of television hours was computed by multiplying the reported weekday usage by five and then adding the Saturday and Sunday hours (Ward, 2002). Although participants watched a substantial amount of television per week, more than 30 hours on average, there was considerable variability across participants $M=30.81, S D=19.32$. Twenty-five percent of the sample reported watching TV 14 hours or less per week, and $25 \%$ reported watching 49 hours or more per week.

Father programming selection \& exposure to selected programs. Programs were initially selected from TV Guide's list of programs $(N=243)$ airing with new episodes in 20132014. Independent ratings were then gathered to identify which television programs featured fathers as a main character. Raters only rated programs that they were familiar with; if they were not familiar with a program, they skipped that program. Raters were 50 individuals consisting of a multi-ethnic sample of 39 women and 11 men aged 20-48 $(M=27.58, S D=5.06)$ solicited from Facebook and laboratory colleagues. All ratings were conducted anonymously on Qualtrics.

Frequencies of whether or not there was a main character as father in a program (yes/no) were calculated for programs that were rated by at least 4 individuals ( $N=157$ ). Programs that were at least $50 \%$ yes were included in the pool of father programming $(N=76)$. One month after the ratings were obtained, one program began airing that prominently featured fathers (Surviving $J a c k)$, and we included this program in the list of selected father programming ( $N=77$ ).

Selected father programming ( $N=77$ ) was then rated by a multiethnic sample of 58 independent raters (40 women, 18 men; aged 21-66 years old $M=29.13, S D=9.80$ ) who were solicited from Facebook and laboratory colleagues. Raters rated programs for the prominence of the father role on each program. Each program and each attribute was rated on a 7-point Likert scale. Specifically, raters were asked if the fathers portrayed on the program are $1=$ Not at all Prominent to 7 = Extremely Prominent. Independent raters were given a "not familiar" option if they have not seen the program. Of the initial 77 programs, 30 were rated above 5.5 in the father character's prominence, and these 30 were designated as "father prominent" programs.

Participants were given the list of 30 programs that prominently portrayed fathers as a recurring character drawn from new programming that aired during the 2013-2014 television season. Ten programs were dramas (e.g. The Walking Dead, Parenthood), 13 programs were sitcoms (e.g., Modern Family, Raising Hope), two programs were comedy-dramas (i.e., Louie, Shameless), four were animated (e.g., Family Guy, The Simpsons), and 1 was reality (Teen Mom). Participants were asked how frequently they viewed each program on a $0-3$ scale, with 0 $=$ Never, $1=$ Sometimes ( $1-10$ episodes), $2=$ Often (10-20 episodes), $3=$ All the time (most or all episodes). To determine the total amount of father exposure, participants' responses to frequency of viewing each program was summed across the prominent father programs (Aubrey, 2006). Participants did not have a lot of exposure to programs prominently featuring fathers, whose mean fell at 23.5 of a possible $90(M=23.25, S D=22.15)$.

Perceived realism. Beliefs about the level of realism of television portrayals were assessed by a 6-item, modified version of the Perceived Realism scale (Rubin, 1981). Each item was rated on a 7-point Likert scale from $1=$ Strongly disagree to $7=$ Strongly agree. Example statements included "People on TV handle their problems just like real people do" and "TV lets me really see how other people live." A mean across items was used as a composite ( $a=.75$ ). Perceived realism was present to a moderate degree $M=3.59, S D=1.14$.

Learning motivation. The 11-item learning motivation scale (Ward \& Rivadeneyra, 1999) measured the extent to which individuals watch television to learn about the world (e.g., "I like to watch TV because it helps me learn about myself and others"). Each item was rated on a 6-point Likert scale from $1=$ Strongly disagree to $6=$ Strongly agree. A composite was created using the sum across items based on previous uses of the scale ( $a=.94$ ). Learning motives were present to a moderate degree $M=41.76, S D=11.85$.

Family gender role beliefs. Beliefs concerning the roles of women and men with regard to family, work, and children were measured by the 20 -item Gender Role Attitudes scale (Bird, Bird, \& Scruggs, 1984). Higher scores on the questionnaire indicated more egalitarian gender beliefs, whereas lower scores indicated more traditional gender beliefs. Higher scores reflected beliefs that husbands and wives should have equal decision making power and shared responsibility within the family and home. Lower scores reflected traditional beliefs that fathers should be breadwinners and mothers should be caregivers. Each item was rated on a 7-point Likert scale from 1 = Strongly disagree to 7 = Strongly agree. Example items included "A married man's chief responsibility should be his job" (reverse coded) and "A husband should be just as willing as a wife to stay home from work and care for a sick child." A composite was created using the mean of all items $(a=.91)$. The mean scores reflecting beliefs about egalitarian
family roles were moderate, indicating that there was a spectrum of gender-traditional to genderegalitarian beliefs within the sample $M=4.89, S D=.90$.

Role of fathers. Beliefs about the importance of the fathers' role to child development were measured using the 15 -item Role of the Father Questionnaire (Palkovitz, 1984). Each item was rated on a 5 -point Likert scale, from $1=$ Disagree strongly to $5=$ Agree strongly. Higher scores indicated that fathers are capable of and should be involved and sensitive with their infants. Example items included "Fathers play a central role in the child's personality development" and "Mothers are naturally more sensitive caregivers than fathers are (reverse coded $). "$ A composite was created using the sum of all items $(a=.79)$. The mean scores reflecting beliefs about fathers' importance to child development were moderate, indicating that there was a spectrum of father-unimportant to father-important and gender-traditional beliefs within the sample $M=57.69, S D=7.04$.

## Results

## Preliminary Analyses

To test potential differences in study variables between women and men, we conducted a series of $t$-tests; results are listed in the final column of Table 1.2. Overall, men engaged with television more than women, and women held more egalitarian gender and father-positive beliefs than men. Men watched more weekly hours of television and more television programs that prominently featured fathers than did women. Men perceived television to be more realistic and reported stronger learning motives than did women. Women believed fathers were more important to child development and endorsed stronger egalitarian gender beliefs than did men. These results indicated that, as suspected, gender could be a potential moderator of television use variables on beliefs about family roles.

The second set of preliminary analyses tested whether each of the following demographic factors was significantly related to the gender and father role beliefs: age, educational attainment, income, race, religiosity, relationship length, pregnancy length, and plans to change employment after the birth. Correlations were conducted only between the continuous demographic variables (age, religiosity, relationship length, pregnancy length). Significant differences in categorical demographic variables (race, educational attainment, income, plans to change employment) were tested using one-way ANOVAs. A median split was conducted on income (less than $\$ 80,000$, more than $\$ 80,001$ ), and education was recoded to three levels (some college or less, bachelor's degree, master's degree or higher) prior to analysis. Race, relationship length, and plans to change employment after birth did not emerge as significant covariates.

Participants who endorsed stronger egalitarian gender beliefs were less religious $r(201)=$ $-.42, p<.001$ and older $r(187)=.14, p<.05$. Participants who earned a Master's Degree or higher endorsed stronger gender egalitarianism $F(2,196)=28.12, p<.001$ and stronger endorsement of fathers' importance to child development $F(2,196)=10.33, p<.001$. Participants who endorsed weaker gender egalitarianism earned a household income of more than $\$ 80,001$, compared to those who earned less than $\$ 80,000 F(1,199)=4.13, p<.05$. All significant covariates (religiosity, age, education, income) were entered into each regression analysis.

## Correlational Analyses

To test whether expectant parents' TV use correlated with their gendered family beliefs, we conducted zero-order correlations between the four media variables (exposure to fathers on television, weekly television exposure, perceived realism of television, and learning motives) and the two family belief variables. Results are provided in Table 1.3 and 1.4. Analyses were conducted for the full sample, and then separately for men and women.

Among all participants, television use variables were linked with less egalitarian gender beliefs and weaker endorsement that fathers were important to child development, providing support for our hypothesis that heavier viewing, stronger perceived realism, and stronger learning motives would each be associated with weaker beliefs that fathers are important to child development and less egalitarian gender role beliefs.

Among men, more frequent exposure to programs featuring fathers, greater weekly TV exposure, higher perceived realism, and a stronger learning motive each correlated with expressing less egalitarian beliefs about family gender roles. Men who perceived television to be less realistic also endorsed stronger beliefs that fathers were important to child development. Among women, more frequent exposure to programs featuring fathers, greater weekly television exposure, higher perceived realism, and a stronger learning motive each correlated with expressing less egalitarian family role beliefs and weaker beliefs that fathers were important to child development.

Fewer television use variables were significantly correlated with men's beliefs about the role of fathers than women's. The differences in correlation results between women and men further indicated that gender was potentially a moderator of television variables on family beliefs.

## Multiple Regression Analyses

To further test the hypotheses that television use variables contribute differently to expectant parents' beliefs about gender and father roles for women and men, we conducted multiple regressions. The dependent variables were gender role beliefs and belief of fathers' importance to child development. All significant covariates (religiosity, age, income, education) were entered into each equation. To test for gender differences, gender was entered as a standalone predictor, and interaction terms between gender and television variables were entered
as separate predictors. All continuous variables were centered prior to creating interaction terms and were entered as centered predictors into the regression analyses. See Table 1.5 for regression coefficients.

Beliefs about the importance of fathers to child development were tested first. This model accounted for a sizeable $37.6 \%$ (Adj. $\mathrm{R}^{2}=.32$ ) of the variance in expectant parents' beliefs about the importance of fathers to child development, $F(15,153)=6.15, p<.001$. Participants who earned a Master's Degree or higher endorsed stronger beliefs that fathers were important to child development, as did women. Expectant parents who perceived television to be more realistic endorsed weaker beliefs that fathers were important. A significant two-way interaction emerged between gender and exposure to television featuring fathers. A significant three-way interaction emerged between gender, exposure to television featuring fathers, and perceived realism. Significant interactions were probed in post hoc simple slopes analyses (Preacher, Curran, \& Bauer, 2006).

Simple slopes analyses for the two-way interaction between gender and exposure to television featuring fathers revealed that neither slope was significantly different from zero, meaning that within gender, high or low exposure did not predict beliefs about fathers. But the patterns of exposure to fathers on television on beliefs about fathers were moderated by gender (See Figure 2.1). Put another way, high exposure to television fathers reflected more negative beliefs about fathers in men, but not women.

See Figure 2.2 for graphical presentation for the three-way interaction between gender, exposure to television featuring fathers, and perceived realism. Simple slopes analyses revealed that when men have low perceived realism, they endorse more negative beliefs about fathers only when they also have high exposure to television fathers $b=.37, t=-2.99, p<.01$. No other slopes were significantly different from zero, meaning that level of exposure to television fathers
did not matter within women with high or low perceived realism and men with high perceived realism.

The second model predicted egalitarian gender beliefs. This model accounted for a substantial $55 \% ~\left(A d j R^{2}=.51\right)$ of the variance in expectant parents' egalitarian gender role beliefs $F(15,153)=12.68, p<.001$. Participants who earned a Master's Degree or higher endorsed stronger egalitarian beliefs, as did less religious participants, and women. Expectant parents who perceived television to be more realistic endorsed less egalitarian beliefs. There were no significant interactions.

## Discussion

In the current study we explored whether media use and exposure to television programs featuring fathers were related to expectant parents' beliefs about fathers and beliefs about roles within families. Although we found bivariate associations between participants' exposure to television fathers and beliefs about fathers, our regression analyses indicated that perceived realism of television was a stronger predictor of expectant parents' beliefs when controlling for television exposure, learning motives, and demographic covariates. The pattern of results differed between regressions predicting beliefs about egalitarian gender roles and about the importance of fathers. Whereas the only television variable to uniquely predict egalitarian gender role beliefs was perceived realism, results for beliefs about fathers were more nuanced. Gender and perceived realism moderated associations between exposure to television fathers and beliefs about fathers' importance to child development. High exposure to television fathers reflected weaker beliefs that fathers were important in men, but not women. Further, men endorsed weaker beliefs that fathers were important when they had greater exposure to television fathers and perceived television to be less realistic. The remainder of the discussion will contextualize and evaluate our findings.

Previous research found that young women's heavy exposure to programs featuring traditional mothers was linked with more gender traditional beliefs about motherhood (Ex et al., 2002). Similarly, we found that more exposure to programs featuring fathers was linked with less egalitarian family gender role beliefs in both women and men. However, when we examined all media use constructs together (exposure, perceived realism, and learning motives), only perceived realism of television content was uniquely predictive of beliefs about gendered roles within families. Specifically, individuals who perceived television to be more realistic also endorsed more traditional gender beliefs and believed that fathers were less important to child development. Family gender role beliefs tend to become more traditional during the transition to parenthood (Katz-Wise, Priess, \& Hyde, 2010), and these findings represent a first insight into how media may be shaping beliefs about family roles in women and men as they transition to parenthood.

We explored whether contributions of television exposure and perceived realism to family beliefs would differ by gender. Although patterns concerning egalitarian gender beliefs did not differ between women and men, we did find that gender qualified associations between exposure to television fathers and expectant parents' beliefs about fathers' importance. Whereas men who had high exposure to television fathers offered less endorsement that fathers were important to child development, there were no effects of exposure on beliefs about fathers in women. It is possible that unattractive (bumbling or unfaithful) portrayals of fathers are counter to expectant mothers' desires for an involved and equal partner, and therefore women may not rely as much on these images for forming their beliefs about fathers' roles in families.

First time expectant fathers held a particularly negative view of fathers' importance to child development when they had high exposure to television fathers, despite perceiving television to be less realistic. These results provide some support for our hypothesis that first
time expectant men's beliefs about family roles and fathers would be more strongly influenced by media use than women's, given that women's roles as mothers are more clearly prescribed in American society than are men's roles as fathers. Previous qualitative research in South Africa found that fathers wanted to learn about fathers' roles through television (Hinckley et al., 2007), and we found that the more exposure men have to fathers on television, the less importance they place on fathers' roles.

Our findings seem counter to existing media influence theories that posit that values conveyed on television need to have a positive or attractive outcome in order to be adopted as one's own beliefs (Bandura, 2002). Why would expectant fathers be affected by images of bumbling, disinterested, or insensitive fathers if it is a negative portrayal of their group? We offer a few explanations. First, there may be elements of men's portrayals as fathers that are attractive. For example, Walter White of Breaking Bad and Tony Soprano may not be sensitive fathers, but they are formidable and powerful men. Phil Dunphy and Jay Pritchett from Modern Family may not be the most competent fathers, but they are married to beautiful wives and are adored by their families. Although the portrayals of these men as fathers are negative, the overall portrayals of these fathers as men are attractive because they portray these men as powerful, dominant, or sexually virile. Yet these attractive portrayals of men are still incompatible with beliefs about men as important in children's lives. Thus, expectant fathers may be encoding messages about masculinity that are discordant with sensitive, involved fatherhood.

A second explanation is that messages may still be encoded even if they are negative. According to stereotype threat theories and research, negative stereotypes that are widely circulated through culture can impact groups that are at risk for being negatively stereotyped (Steele, 1997). Thus, negative portrayals of fathers may be influential on expectant fathers due to stereotype threat processes. Because men are already less socialized into parenting roles than
women, even negative media portrayals may be especially influential on men's beliefs about fatherhood.

Our three-way interaction findings provide some support for the stereotype threat perspective. Men appear to be more susceptible to media messages about fathers, regardless of their perceived realism. Even men who perceived television to be less realistic expressed weaker beliefs that fathers were important for children when men who had more exposure to fathers on television. Given that men have not been as socialized into father roles as women into mother roles, men's beliefs about fathers may be more easily shaped by television portrayals. A third explanation for our interaction findings may also be partly a function of the types of programs women and men watch on a regular basis. Women tend to watch more soap operas, drama, and romance, whereas men tend to watch more horror and action-adventure programs (Valkenburg, Peter, \& Walther, 2016). Our measure of exposure to television fathers had a broad range of portrayals across genre types. Whereas the fathers in the female-oriented drama Parenthood tend to be loving and competent, the father in the more male-oriented Two and a Half Men tends to be bumbling and incompetent. Other male-oriented programs (Sons of Anarchy, Breaking Bad) tend to portray fathers as men who inevitably hurt their family through their criminal activity. Although content analyses have only focused on how fathers are portrayed in sitcoms (Pehlke II, Hennon, Radina, \& Kuvalanka, 2009; Scharrer, 2001; Troilo, in press), an analysis of father roles in more male-oriented programs is sorely warranted because men's beliefs may be affected by these negative portrayals.

Whereas our multiple regressions predicting beliefs about fathers' importance suggested that the contribution of exposure to television fathers was moderated by both gender and perceived realism, our results for gender role beliefs suggested a potentially mediating role of perceived realism on television viewing. Given that the zero-order correlations suggested that
there were individual contributions of television exposure on family gender role beliefs but once entered into the multiple regression with perceived realism, television exposure was no longer significant, it could be possible that perceived realism actually mediates the relationship between television exposure and gender role beliefs. Previous work has found perceived realism to be a moderator or mediator of television exposure on beliefs and attitudes (Peter \& Valkenburg, 2010; Ward \& Carlson, 2013). Because our data are cross-sectional and correlational, we cannot adequately test a mediation hypothesis. Future research could employ an experimental or longitudinal design to test the mediating role of perceived realism between television exposure and gender role beliefs.

Similar to previous literature reporting null results concerning learning motives and beliefs about parenting (Ex et al., 2002), we did not find that learning motives were uniquely predictive of gender and family role beliefs. Learning motives may vary by genre or by program, which may explain our results. Viewers may have different levels of learning motives with certain programs compared to others. For example, viewers may watch the heartfelt drama Parenthood with more intentions of learning about parenting roles than the dysfunctional reality program Teen Mom or animated sitcom Family Guy. Our measure of learning motives did not capture this sensitivity across programs. Similarly, our measure of perceived realism did not assess realism per program. Future research could ask participants learning motives or perceived realism specific to certain programs, but this would require constraints on the number of programs assessed. Given the immense variety of programming available across platforms, only using a limited number of programs to assess learning motives or perceived realism could pose challenges for reflecting actual television use.

Our study had several strengths. We were able to obtain a fairly diverse sample from across the United States using our data collection and recruitment strategies, which increases the
generalizability of our results to other first-time expectant parents. It should be noted, however, that we used a convenience sample, and not a nationally representative one. Additional strengths of our study included a systematic identification of television programs featuring fathers across genres and networks. Previous studies on father portrayals on television have only examined domestic comedies. We were able to create a measure that reflected the broad variety of programming available that was not constrained by the segmentation of televised media.

Despite the significant findings reported here, we acknowledge limitations in our approach that future studies will want to address. First, we acknowledge that media habits and gender beliefs are not likely to be fully independent within couples. Between-couple variation may be greater than the variation between men and women, but we cannot test this notion using our data. Future replications can include examinations of family beliefs and television viewing habits within and across couples. Because we designed the study to maintain independence of data by collecting responses from only one member of the couple, we can be confident that our results are due to gender differences between women and men and not differences between couples. Second, our data are cross-sectional and correlational, so we cannot determine whether expectant parents seek out programming consistent with their beliefs about parenting or whether their beliefs are being shaped by how realistic they perceive television. Nevertheless, our findings represented an initial insight into what facet of media consumption might be most important for the development of family role-related beliefs. Because television exposure was correlated but not uniquely predictive of family role beliefs, future research can explore perceived realism as the potential mechanism by which television use is related to family role beliefs in either a longitudinal or experimental design. Third, we may have excluded programs featuring fathers that expectant parents in our sample watched. Future research could ask
participants to fill in their most recently watched programs to obtain an individualized measure of television exposure.

In conclusion, this study represented a first attempt to use a quantitative approach to test a long-held hypothesis that negative portrayals of fathers on television are influencing beliefs about fathers within families. We explored whether exposure to fathers on television was relevant for first-time expectant parents' beliefs about fathers and gendered family roles because family role beliefs during the transition to parenthood contribute to well-being after the birth of a child. From our results, perceived realism of television was consistently predictive of beliefs about family and father roles, rather than exposure to television featuring fathers. Therefore, expectant parents who believe television to be more realistic may be actively applying the gendered messages of television to their own expectations of parenthood and family roles. Expectant fathers' beliefs about the importance of fathers to child development appeared to be especially vulnerable to television portrayals of fathers.


Figure 2.1. Gender moderates the association between exposure to television fathers and beliefs about fathers' importance to child development. Low values plotted at -1 SD, high values at +1 SD. Neither slope was significantly different from zero.


Figure 2.2. Gender, exposure to television fathers, and perceived realism interact to predict beliefs about fathers' importance to child development. Low values plotted at -1 SD , high values at +1 SD. n.s. $=$ nonsignificant.

Table 1.1 Participant Characteristics

|  | Mean | SD |
| :---: | :---: | :---: |
| Age (in years) | 27.93 | 4.36 |
| Years in current relationship | 5.66 | 4.05 |
| Months Pregnant | 5.40 | 2.16 |
|  | $N$ | \% |
| Highest level of education |  |  |
| Some College/Associate's Degree or less | 55 | 27.6\% |
| Bachelor's Degree | 90 | 44.8\% |
| Master's Degree or higher | 54 | 27.1\% |
| Race/ethnicity |  |  |
| American Indian/Alaska Native | 3 | 1.5\% |
| Asian/Asian-American | 30 | 14.9\% |
| Black/African-American | 16 | 8.0\% |
| Hispanic/Latino | 20 | 10.0\% |
| White/European-American | 142 | 70.6\% |
| Other | 1 | 0.5\% |
| Region of United States |  |  |
| Northeast | 22 | 10.9\% |
| Midwest | 48 | 23.9\% |
| South | 44 | 21.9\% |
| West | 86 | 42.8\% |
| Living Area |  |  |
| Rural | 21 | 10.4\% |
| Suburban | 73 | 36.3\% |
| Urban | 107 | 53.2\% |
| Employment Status |  |  |
| Full-time | 159 | 79.1\% |
| Part-time | 27 | 13.4\% |
| Unemployed | 15 | 7.5\% |
| Partner's Employment status |  |  |


| Full-time | 169 | $84.1 \%$ |
| :--- | :---: | :---: |
| Part-time | 22 | $10.9 \%$ |
| Unemployed | 10 | $5.0 \%$ |

## Household income

| $<\$ 20,000$ | 20 | $10.0 \%$ |
| :--- | :--- | :--- |
| $\$ 20,001-\$ 40,000$ | 27 | $13.4 \%$ |
| $\$ 40,001-\$ 60,000$ | 26 | $12.9 \%$ |
| $\$ 60,001-\$ 80,000$ | 31 | $15.4 \%$ |
| $\$ 80,001-\$ 100,000$ | 26 | $12.9 \%$ |
| $>100,001$ | 71 | $35.3 \%$ |

Table 1.2.
Descriptive Statistics and Gender Differences Among Study Variables

| Variable | Sample Range | Overall | Men | Women | df | $t$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | M (SD) | M (SD) | M (SD) |  |  |
| Exposure to TV Father Programming | 0.00-79.00 | 23.25 (22.15) | 30.69 (24.21) | 18.53 (19.42) | 126 | $3.57 * *$ |
| Weekly TV Exposure | $4.00-70.00$ | 30.81 (19.32) | 34.39 (20.96) | 28.51 (17.91) | 140 | 2.01 * |
| Perceived Realism | $1.00-6.17$ | 3.59 (1.14) | 3.88 (1.07) | 3.39 (1.15) | 199 | $2.99 * *$ |
| Learning Motive | $11.00-66.00$ | 41.78 (11.85) | 44.96 (11.20) | 39.71 (11.84) | 199 | $3.14 * *$ |
| Beliefs in Role of Father in Child Development | $37.00-73.00$ | 57.69 (7.04) | 55.76 (6.25) | 58.94 (7.27) | 199 | -3.20 ** |
| Egalitarian Gender Role Beliefs | $3.60-6.90$ | 4.89 (.90) | 4.61 (.77) | 5.06 (.94) | 188 | $-3.73 * * *$ |

Note. *p<.05, ** $p<.01$, *** $p<.001$
TV father programming based on of shows with 5.5 or higher rating in father prominence $(\mathrm{N}=30)$.

Table 1.3.
Zero-Order Correlations between Media Use and Family Role Variables in All Participants ( $N=174-201$ )

|  | 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Beliefs in Role of Father in Child Development | - |  |  |  |  |  |
| 2. Egalitarian Gender Role Beliefs | . $58 * * *$ | - |  |  |  |  |
| 3. Exposure to TV Father Programming | $-.28 * * *$ | $-.47 * * *$ | - |  |  |  |
| 4. Weekly TV Exposure | $-.29 * * *$ | $-.47 * * *$ | . $69 * * *$ | - |  |  |
| 5. Perceived Realism | $-.44 * * *$ | $-.62 * * *$ | . $61 * * *$ | . $62 * * *$ | - |  |
| 6. Learning Motive | $-.27 * * *$ | $-.48 * * *$ | . $59 * * *$ | . $56 * * *$ | . $73 * * *$ | - |

Note. *** $p<.001$.

Table 1.4.
Zero-Order Correlations between Media Use and Family Role Variables for Men and Women

|  | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Beliefs in Role of Father in Child Development | - | $.59^{* * *}$ | $-.40^{* * *}$ | $-.48^{* * *}$ | $-.49^{* * *}$ | $-.35^{* * *}$ |
| 2. Egalitarian Gender Role Beliefs | $.48^{* * *}$ | - | $-.45^{* * *}$ | $-.47^{* * *}$ | $-.57^{* * *}$ | $-.48^{* * *}$ |
| 3. Exposure to TV Father Programming | .01 | $-.42^{* * *}$ | - | $.62^{* * *}$ | $.61^{* * *}$ | $.52^{* * *}$ |
| 4. Weekly TV Exposure | .05 | $-.45^{* * *}$ | $.75^{* * *}$ | - | $.67^{* * *}$ | $.56^{* * *}$ |
| 5. Perceived Realism | $-.24^{*}$ | $-.67^{* * *}$ | $.56^{* * *}$ | $.54^{* * *}$ | - | $.73^{* * *}$ |
| 6. Learning Motive | -.03 | $-.41^{* * *}$ | $.63^{* * *}$ | $.55^{* * *}$ | $.70^{* * *}$ | - |

Note. *p<.05, ** $p<.01$, *** $p<.001$.
Correlations for men are presented below the diagonal ( $N=71-79$ ); correlations for women are presented above the diagonal ( $N=107$ 122).

Table 1.5. Multiple Regressions Predicting Beliefs about Fathers' Importance to Child Development and Family Gender Role Beliefs

|  | Importance of Dads to Child Development |  |  | Egalitarian Gender Beliefs |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | B | SE | $\beta$ | B | SE | $\beta$ |
| Education ${ }^{1}$ | 3.78** | 1.15 | . 24 | .68*** | . 13 | . 34 |
| Religiosity | . 55 | .41 | . 10 | $-.12 * *$ | . 04 | -. 18 |
| Income ${ }^{2}$ | . 32 | . 29 | . 08 | . 04 | . 03 | . 08 |
| Age | -. 12 | . 11 | -. 07 | -. 00 | . 01 | -. 02 |
| Gender ${ }^{3}$ | $-5.92 * * *$ | 1.41 | -. 41 | -.37* | . 15 | -. 20 |
| Exposure to Dad TV | . 05 | . 06 | . 16 | -. 01 | . 01 | -. 18 |
| Weekly TV Exposure | -. 09 | . 05 | -. 24 | . 01 | . 01 | . 12 |
| Perceived Realism | $-3.59 * *$ | 1.02 | -. 58 | $-.31^{* *}$ | . 11 | -. 39 |
| Learning Motive | . 04 | . 07 | . 07 | -. 01 | . 01 | -. 06 |
| Gender x Exposure to Dad TV | -.22* | . 10 | -. 46 | . 00 | . 01 | . 00 |
| Gender x Weekly TV | . 15 | . 08 | . 27 | -. 01 | . 01 | -. 10 |
| Gender x Perceived Realism | 2.33 | 1.50 | . 23 | -. 06 | . 16 | -. 05 |
| Gender x Learning Motive | . 17 | . 13 | . 17 | . 02 | . 01 | . 17 |
| Dad TV x Realism | -. 08 | . 04 | -. 23 | -. 00 | . 01 | -. 09 |
| Gender x Dad TV x Realism | . $26 * *$ | . 07 | . 55 | . 01 | . 01 | . 19 |

Note. ${ }^{1} 1=$ Masters' Degree or higher, $0=$ Bachelor's or lower; ${ }^{2} 1=\$ 80,001$ per year or more, $0=$ less than $\$ 80,000 ;{ }^{3} 1=$ Men, $0=$ Women. * $p<.05$, ** $p<.01$ *** $p<.001$

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# CHAPTER 3: (Study 2) Dimwit dads? Effects of exposure to television fathers on expectant parents' beliefs about fathers 

From goofy Phil Dunphy of Modern Family to dimwit Homer Simpson, television commonly portrays fathers as inept at childcare (Scharrer, 2001; Troilo, in press). Some have argued that television's negative portrayals of fathers contribute to beliefs that fathers are incompetent caregivers, which, in turn, inhibits father involvement (Parke, 2013). Others have claimed that portrayals of fathers being involved with children could cultivate greater father involvement in families by generating increased expectations for father involvement (Troilo, in press). First-time expectant parents may be especially vulnerable to these images as they may be looking for models to imitate as they transition to parenthood. A recent study showed that greater regular exposure to television fathers was related to expressing more negative beliefs about fathers' importance to children in first-time expectant parents (Kuo \& Ward, 2016). Why did this association emerge? From these results, it is unclear whether the nature of the portrayal (i.e., competent or incompetent in parenting) influenced viewers' beliefs about fathers. Accordingly, we tested, here, whether exposure to competent or incompetent father portrayals affects implicit and explicit beliefs about fathers.

## Cultural Beliefs about Fathers

Although expectations for fathers' active involvement in families have increased over the past 50 years (Lamb, 2000), attitudes towards fathers' capacities as active caregivers tend to
focus on their deficiencies (Allen \& Hawkins, 1999). Thus, fathers are often seen as incapable and their contributions inadequate (Doherty, 1991). Therefore, societal desires for greater paternal involvement co-exist with negative attitudes towards fathers' capabilities, resulting in ambivalence towards fathers' roles. This ambivalence has been argued to be a source of perpetual inequality in child care - that mothers need to do more childcare because fathers are believed to be incompetent or apathetic (Allen \& Hawkins, 1999). Why might this ambivalence exist?

According to dual process models of cognition, there are explicit and implicit processing structures (Evans, 2008). Explicit beliefs are considered to be consciously controlled and are expressed through greater deliberation, whereas implicit beliefs are more automatic reactions and are considered to be unconscious, impulsive, and are developed through associative reasoning (Evans, 2008). Thus, although parents may explicitly endorse egalitarianism, they could hold negative implicit beliefs about fathers' competence, and these implicit beliefs could be inhibiting father involvement in parenting. Data also indicate that implicit beliefs about gender are more sensitive to priming (Dasgupta \& Asgari, 2004; Rudman \& Phelan, 2010), and may therefore be more readily shaped by external models and images, such as those supplied by television.

## Contributions of Television Portrayals to Beliefs about Fathers

Portrayals of fathers in sitcoms from the 2000's and beyond tend to showcase a range of competent and incompetent parenting behaviors, even within programs (Troilo, in press). Dads are shown as caring, funny, but also arrogant, hurtful, or immature. However, both scholars (Parke, 2013) and the general public (Netmums, 2013) tend to characterize portrayals of television fathers as mainly negative, incompetent, and bumbling. It appears that scholarly and public outcry against the bumbling images of dads may not fairly represent the breadth of television portrayals. This preoccupation with negative portrayals suggests that there may be
another underlying process shaping viewers' perceptions of father portrayals. Negative, incompetent images of fathers may actually be more salient due to a negativity bias. Across a range of psychological phenomena, negative information is stronger than positive information (Baumeister, Bratslavsky, Finkenauer, \& Vohs, 2001; Vaish, Grossmann, \& Woodward, 2008). Thus, we do not expect portrayals of television fathers to be any different.

Some have claimed that if fathers are consistently portrayed as being actively involved with children, then viewers will expect active father involvement and adopt this behavior in real life (Troilo, in press). Indeed, the nature of television portrayals has been shown to affect reallife parenting. Evidence from Australia showed that exposure to portrayals of effective parenting skills reduced dysfunctional parenting (Calam, Sanders, Miller, Sadhnani, \& Carmont, 2008; Sanders \& Turner, 2002). These studies, however, used programming that was specifically developed as a parenting intervention. It is unknown how ambivalent portrayals of fathers as both competent and incompetent appearing in mainstream, entertainment media would affect viewers. Despite a wealth of content analyses on portrayals of fathers in sitcoms from the 1950's to the 2010's (Scharrer, 2001; Troilo, in press), only one study (Kuo \& Ward, 2016) has examined whether general exposure to fathers on television is related to beliefs about fathers. Here, higher levels of regular exposure to television fathers across genres was related to beliefs that fathers are less important to child development, and to traditional gender role beliefs that fathers should be less involved in childcare and more involved in work.

But what is the mechanism behind this finding? Men are less commonly portrayed in their roles as fathers compared to women as mothers (Gunter, 1986; Lauzen, Dozier, \& Horan, 2008), so are viewers responding to the relative lack of portrayal of men in fathering roles even when the character is a father? Or could it be that viewers develop negative beliefs about fathers by focusing more on incompetent portrayals above other portrayals? Data indicate that mass
media are capable of priming thoughts and behaviors that are related to the images portrayed (Roskos-Ewoldsen, Klinger, \& Roskos-Ewoldsen, 2007). For example, seeing depictions of stereotyped groups primes negative stereotypes about those groups (Arendt \& Marquart, 2015; Brown Givens \& Monahan, 2005). Importantly, priming processes act by bringing already-held associations to consciousness (Roskos-Ewoldsen et al., 2007). Thus, given that dominant societal beliefs about fathers are that they should be involved but also tend to be incompetent, viewing images of fathers may prime these beliefs. The present study explored whether beliefs about fathers could be primed through an experiment that used video clips from existing sitcoms featuring fathers.

## Present Study

Because first-time parents are formulating their beliefs and expectations about impending parenthood, we studied whether exposure to specific types of portrayals of fathers could differentially affect implicit and explicit beliefs about fathers' roles in families. We formulated two hypotheses. The first hypothesis (Father Presence) centered on the potential positive effects of exposure to active father involvement with children, following claims from Troilo, in press. Specifically, we expected that exposure to men in father roles, regardless of whether they appear competent or incompetent, compared to the same men without children would increase endorsement of egalitarian family beliefs and beliefs about fathers' importance to children.

Based on negativity bias processes, we expected that incompetent images would be more likely to prime implicit beliefs about fathers, and formulated the second hypothesis (Incompetent Father). Specifically, we proposed that exposure to incompetent fathers would prime implicit beliefs about fathers' incompetence and underinvolvement. The Incompetent Father hypothesis also tests the claim that viewers are more affected by negative images in forming their explicit
beliefs about fathers. Thus we hypothesized that exposure to incompetent fathers would reduce endorsement for egalitarian gender roles and importance of fathers to children.

## Method

## Participants

Eligibility, Recruitment and Screening. Individuals were eligible to participate if they were expecting their first biological child and in a cohabitating heterosexual relationship with the other expectant parent. To maintain independence of data, only one member of the couple was eligible to participate. Participants were recruited from online advertisements posted on Craigslist's volunteers section, Reddit, Twitter, Amazon's Mechanical Turk, e-mails sent to family research and parent group list-servs, flyers in local doctor's offices, and word of mouth. Advertisements highlighted that we wanted to understand expectant parents' opinions of families on television and families in real life. Participants who completed the study were eligible to enter their e-mail address on a separate page that was not connected with any of their responses for a drawing of one of ten $\$ 100$ Amazon.com gift cards. Amazon Mechanical Turk participants were compensated $\$ .01$ for their completion and also eligible to enter into the drawing.

Participant Characteristics. Participants were 125 first-time expectant parents $(M$ age $=$ 29.08 years, $S D=4.20$ ). All participants were in a co-habitating heterosexual relationship with the other expectant parent. Relationship length ranged from 1 to 18 years, $M=5.55, S D=3.34$. Most participants were married $(72 \%, N=90)$. Most participants were expectant mothers ( $72 \%$, $N=90$ ); expectant fathers comprised $24.8 \%$ of the sample ( $N=31$ ). A majority of participants ( $68.8 \%$ ) self-identified as White/Caucasian, were married (72.0\%), and were employed full-time (72.5\%). A majority of participants reported living in a suburban (43.2\%) or urban area (40.0\%), and had earned at least a Bachelor's degree (74.1\%). Participants' household income ranged
from less than $\$ 20,000$ to more than $\$ 100,001$. The two modal groups were $\$ 40,000-\$ 60,001$ (24.8\%), and more than \$100,001 (\$25.7\%).

## Procedure

Interested participants were directed to the online survey and consent form. Participants were told that this study sought their opinions about television families and families in real life. Upon informed consent, participants completed a prescreening questionnaire to determine eligibility. Eligible participants continued with the study, whereas ineligible participants were redirected to the end of the survey. Participants then completed questionnaires assessing demographic characteristics and weekly television use. Participants were then randomized into one of three conditions for the experimental portion (Competent, Incompetent, or Control). Immediately following the experimental portion, participants completed the implicit beliefs about fathers task. Then participants completed the family gender role beliefs and fathers' importance to children measures. It took approximately 30-45 minutes to complete the study (see materials below).

## Video Stimuli

To examine the impact of exposure to incompetent or competent sitcom fathers, we selected multiple 2-minute clips from two sitcoms, Raising Hope and The Middle (see Supplementary Material for more information on the programs and description of clips used in the three conditions). These two programs were chosen because the families featured were of similar socioeconomic status and therefore portrayed in similar ways (Pehlke II, Hennon, Radina, \& Kuvalanka, 2009). Stimuli for each of the conditions were chosen from these two programs to control for character characteristics (e.g., attractiveness, likeability) and humor across conditions. The first author screened multiple episodes across seasons from each program for scenes depicting fathers in paternal roles (i.e., interacting with their child, making parenting
decisions) for the experimental conditions and these same fathers in non-parental interactions with other adults (e.g., at work, or with a partner) for the control condition. Twenty-one clips were then rated by an independent, multiethnic group of graduate students and undergraduate research assistants for father's competence in parenting. Response options ranged from $1=$ Not at all competent to $7=$ Extremely competent. Raters were also given an option of 0 to indicate that a clip did not show a father's competence in parenting. The clips that were rated nearly 0 on average were used for the control condition $(M=.11, S D=.14$, Range $=0-.29)$. Clips that were rated lowest on average for competence were used for the incompetent condition ( $M=2.04, S D$ $=.21$, Range $=1.85-2.33)$, whereas clips rated highest on average for competence were used for the competent condition $(M=4.69, S D=.46$, Range $=4.15-5.14)$.

Conditions included four two-minute clips each, totaling 8 minutes of video for each condition. Each condition included two clips from The Middle and two clips from Raising Hope. After each clip, participants were asked how entertaining the video was and how realistic the video was. Both questions were anchored on a 4 -point scale, $0=$ Not at all to $3=$ Very. Participants were also asked how familiar they were with the videos presented at the end of all the clips on a 4-point scale, $0=$ Not at all to $3=$ Very. At the end of the condition, participants were asked an attention check question, described below in the "participant flow" section.

Participant flow. Given our special population of first-time expectant, cohabitating, heterosexual mothers and fathers, we aimed to recruit $\sim 30$ participants per condition. Of the 125 participants, 27 dropped out of the study prior to participating in the experimental portion. The remaining 98 participants were randomized into one of the two experimental conditions (incompetent father, competent father) or the control. Participants were only included in hypothesis testing if they completed watching each video clip, as evidenced by an accurate response on the final attention check question: "Was there a person riding a horse in any of the
videos presented?" Participants who either answered "yes," indicating inattention ( $N=5$ ), or who provided no response $(N=12)$ were excluded from hypothesis testing analyses. A total of 81 participants were eligible to be included in hypothesis testing analyses: 24 in the competent condition, 30 in the incompetent condition, and 27 in the control condition.

## Measures

Amount of television use. Participants were asked about their overall consumption of television programming by indicating the number of hours they watch television on a typical weekday, Saturday, and Sunday. Response options ranged from 0 to more than 10 hours per day. A weekly sum was computed by multiplying the reported weekday usage by five and then adding the Saturday and Sunday hours, $M=20.99, S D=15.40$.

Family gender role beliefs. Beliefs concerning women's and men's roles with regard to family, work, and children were measured by the 20 -item Gender Role Attitudes Scale (Bird, Bird, \& Scruggs, 1984). Higher scores on the questionnaire reflected more egalitarian gender role beliefs (i.e., husbands and wives should have shared responsibility and equal decision making power), whereas lower scores reflected more traditional gender role beliefs (i.e., fathers should be breadwinners and mothers should be caregivers). Each item was rated on a 7-point Likert scale from $1=$ Strongly disagree to $7=$ Strongly agree. Example items included "A married man's chief responsibility should be his job" (reverse coded) and "A husband should be just as willing as a wife to stay home from work and care for a sick child." A composite was created using the mean of all items $(\alpha=.90), M=5.63 S D=.83$.

Fathers' importance to children. Beliefs about the importance of the fathers' role to child development were measured using the 15-item Role of the Father Questionnaire (Palkovitz, 1984). Each item was rated on a 5-point Likert scale, from $1=$ Disagree strongly to $5=$ Agree strongly. Higher scores reflected that fathers are capable of and should be involved and sensitive
with their children. Example items include "Fathers play a central role in the child's personality development" and "Mothers are naturally more sensitive caregivers than fathers are (reverse coded)." A composite was created using the sum of all items $(\alpha=.75), M=61.33 S D=6.25$.

Implicit beliefs about fathers. Implicit beliefs about fathers were assessed using a word generation task. After the attention check question, participants were asked to "Write down all the words you can think of that describe fathers. Do not think too much, just write down whatever comes to mind first. There are no right or wrong answers." Participants were given 30 seconds before the page automatically moved on to the next set of questionnaires. Number of unique words written ranged from $0-9, M=3.58, S D=2.24$, Mode $=4$.

We developed a data-driven coding scheme from words listed by the first 40 participants. The first author sorted the words alphabetically and then each author identified themes in the words, which yielded 11 separate categories: Competent, Devoted, Incompetent, Take No Crap, Nurturant, Cold and Distant, Stereotypical Male Activities, Role, Provider, Playmate, and Protector. We then trained a research assistant to code words based on a practice dataset. For each individual's set of responses, the coder would identify the number of words that belonged in each category. For example, one participant's responses were: "disengaged," "funny," "uninterested," and "bored". This set of responses was coded 3 for the Cold and Distant category because of the words "disengaged" "uninterested" and "bored", and 1 for the Playmate category for the word "funny." This set of responses was coded 0 for all other categories because there were no words that fit any of the other categories. Two coders independently coded a practice dataset of 98 responses; reliability was above .76 for each category. Intra Class Correlation reliabilities were calculated because the variables are on a ratio scale (Hallgren, 2012). One coder, blinded to condition, then coded all of the responses in the current dataset.

Because we were interested in attitudes concerning competence/incompetence and involvement/apathy, we used the competent, incompetent, devoted, and cold and distant codes in our analyses. The competent code $(\mathrm{ICC}=.89)$ included words that described competence, intelligence, and someone who has it 'together.' Example words included able, calm, resourceful, and smart. The incompetent code $($ ICC $=.96)$ captured words that described being bumbling and awkward as a caregiver. Example words included awkward, bumbling, and careless. The devoted code ( $\mathrm{ICC}=.76$ ) included words that conveyed being devoted and faithful to family. Example words included committed, dependable, loyal, and faithful. The Cold and Distant $($ ICC $=.91)$ code conveyed being uncommitted, absent, and aloof. Example words included aloof, disinterested, and selfish.

## Results

## Preliminary Analyses

Preliminary analyses included checking for potential covariates of condition. Categorical variables (i.e., race, gender, relationship status, income, education level) were tested using chisquares. Continuous variables (i.e., age, length of relationship, months in pregnancy, weekly television exposure, perceived realism of clips, perceived entertainment of clips, familiarity with clips) were tested using multinomial logistic regressions. There were no significant differences across conditions in any of the demographic variables, weekly television use, or perceived clip realism, entertainment, or familiarity.

## Hypothesis Testing

Overall Effects of the Manipulation. For means and standard deviations, see Table 2.1. Results revealed a significant main effect of condition on beliefs about fathers' importance $F$ (2, 70) $=3.29, \eta_{p}{ }^{2}=.09, p<.05$, and a marginally significant effect on egalitarian gender role
beliefs $F(2,72)=2.81, \eta_{p}{ }^{2}=.07, p=.067$. There were no significant main effects of condition on implicit beliefs about fathers.

Hypotheses were tested using contrast coding within a one-way ANOVA. To test the father presence hypothesis, we compared control condition scores (no fathering present) to scores for the father competent and incompetent conditions combined. Participants in the two father conditions expressed more egalitarian gender role beliefs compared to those in the control condition $F(1,72)=4.74, \eta_{p}{ }^{2}=.06, p<.05$. Participants in the two father conditions also endorsed stronger beliefs that fathers were important to child development compared to control participants $F(1,70)=6.59, \eta_{p}{ }^{2}=.09, p<.05$. There were no significant effects of exposure to the experimental father conditions compared to control conditions on implicit beliefs.

To test the incompetent father hypothesis, we compared the incompetent father condition to the other conditions. There were no significant effects of exposure to the incompetent condition compared to the competent and control conditions on explicit beliefs. However, participants in the incompetent condition generated more incompetent words to describe fathers compared to the other conditions $F(1,78)=4.17, \eta_{p}{ }^{2}=.05, p<.05$. Participants in the incompetent condition also generated more cold and distant words to describe fathers compared to the other conditions $F(1,78)=4.69, \eta_{p}{ }^{2}=.06, p<.05$. There were no effects of exposure to the incompetent condition compared to control conditions on competent and devoted words. Overall, results revealed that although exposure to incompetent fathers increased the number of incompetent words written, exposure to sitcom fathers, either competent or incompetent, increased endorsement of egalitarian gender role beliefs and the importance given to fathers.

## Discussion

The purpose of this experiment was to explore mechanisms behind previous findings that linked general exposure to television fathers to more traditional gender role beliefs and weaker
endorsement that fathers were important to child development in first-time expectant parents. Our results provided evidence for both the father presence and incompetent father hypotheses. Viewing fathers in paternal roles interacting with children produced more egalitarian beliefs and stronger endorsement that fathers were important to child development. The nature of the father portrayal (competent or incompetent) did not produce differences in explicit beliefs about fathers (i.e., gender role beliefs, fathers' importance to child development), and images of competent fathers did not activate any implicit beliefs about fathers.

However, expectant parents who viewed the incompetent father condition were more likely than participants in other conditions to describe fathers in incompetent and cold and distant ways; yet exposure to these images did not affect their endorsement of explicit beliefs about fathers' roles. Similar to previous research on stereotyping (e.g., Brown Givens \& Monahan, 2005), we found that priming a negative stereotype-incompetent father-only produced results in implicit, rather than explicit beliefs. Recall that explicit beliefs, such as gender role beliefs and beliefs about fathers' importance, are under a higher degree of cognitive control than implicit beliefs (Evans, 2008). Because participants completed the implicit word association task prior to answering questionnaires about their explicit beliefs about fathers' roles, it may be that participants in the incompetent father condition were actively trying to monitor their responses. Further, the incompetent condition was the only condition to produce differences in implicit beliefs - potentially reflecting a negativity bias (Baumeister et al., 2001).

In contrast to previous findings, which linked general exposure to television fathers to weaker beliefs that fathers are important to child development and to more traditional beliefs about fathers' roles (Kuo \& Ward, 2016), we found that viewing fathers in paternal roles positively affected expectant parents' explicit beliefs about fathers (i.e., gender roles, fathers’ importance). Why might these seemingly contradictory findings arise? According to content
analyses of sitcoms from 2000-2013, more than half of father-child interactions tend to be involved and competent. Thus, it appears that viewers are receiving plenty of exposure to competent, warm, and loving fathers. But why, then, do individuals still endorse beliefs that fathers are less important when they watch more television featuring fathers?

One explanation is that in our study, we chose clips that specifically featured fathers in paternal roles. During regular television viewing, however, images of fathers also accompany images of involved mothers. Further, mothers often make fun of fathers' incompetence in sitcoms more than vice versa (Scharrer, 2001). Thus, within regular viewing, fathers may come across as less competent and involved in comparison to mothers. Another explanation builds upon this comparison perspective. Incompetent father images may be more salient relative to competent fathers. An individual may watch programs featuring fathers and more easily absorb scenes that portray the father as incompetent compared to competent scenes. Images of incompetent fathers may be more salient or memorable because they are negative images and that they fit into larger cultural conceptions about underinvolved, incompetent fathers. Thus, viewers may incorporate these images of incompetent fathers over the competent images into their own existing schemas about fathers. As viewers watch more programming featuring fathers, they more easily remember the negative images while forgetting the positive ones. These negative images facilitate beliefs that fathers are incompetent and distant, further solidifying beliefs that fathers are less important. Future research could examine whether viewers remember incompetent scenes better than competent scenes.

Our study had several strengths: we tested expectant parents, a highly relevant population, and we controlled for the same character in each program, which allows us to be confident that the results are not due to the attractiveness, likeability, or realism of the individual father characters. Although this study presents unique data, perspectives, and a well-controlled
design, we also acknowledge its limitations. One limitation is participant attrition. Future designs could use an in-person protocol instead of an online format to guard against participant dropout or inattention. Another limitation was that clips in the competent condition were not rated as highly competent. This limitation may have arisen because we were trying to control for other characteristics in the clips across conditions (i.e., socioeconomic status). Previous content analyses of fathers on sitcoms have found that working-class fathers tend to be represented more incompetently than middle-class fathers (Pehlke II et al., 2009), and the programs in our study featured working-class fathers. Future replications may need to use stimuli from other programs.

Current societal desires for active, involved fathers are at odds with simultaneous beliefs that dads are incompetent and underinvolved caregivers. Watching fathers on television appears to activate both sets of beliefs, but images of the incompetent father seem to outweigh images of the competent father in viewers' minds. As first-time expectant parents build their expectations for fathers' roles, exposure to incompetent fathers on television may enforce beliefs that fathers should be involved, but are going to be incompetent or distant from their children.

Table 2.1.
Means and Standard Deviations on Explicit and Implicit Beliefs about Fathers across Conditions

|  | Competent |
| :--- | :---: | :---: | :---: |
| $\mathrm{M}(\mathrm{SD})$ |  | | Incompetent |
| :---: |
| $\mathrm{M}(\mathrm{SD})$ | | Control |
| :---: |
| $\mathrm{M}(\mathrm{SD})$ |

## Supplementary Material

## Premise summaries

Raising Hope is a sitcom that aired on FOX about a young man, Jimmy Chance, who becomes a single father after a one-night stand with a convicted felon who gets the death penalty. Jimmy then relies on his odd, but well-intentioned parents (Burt and Virginia) in raising his new baby. The Middle is an $A B C$ sitcom about middle-aged parents (Frankie and Mike) with three children (two teenagers, one elementary school-aged child) living in the Midwest, narrated by the mother, Frankie Heck. The series revolves around the Heck family's day-to-day challenges.

## Descriptions of video clips used per condition

Competent

1. Raising Hope. Jimmy teaches his daughter Hope to crawl, then realizes he needs to babyproof his home.
2. The Middle. Mike takes his teenage son home from school and disciplines him for getting suspended from school.
3. Raising Hope. Jimmy meets another young single dad who is comforting his baby at the grocery store.
4. The Middle. Mike reprimands his teenage son in the car and resolves to teach him the value of hard work.

Incompetent

1. Raising Hope. Jimmy transports his baby in a grocery cart and feeds her from a latex glove filled with milk.
2. The Middle. Frankie resolves that she and Mike should be more involved parents, Mike pretends to not know details about his children to avoid filling out his kids' school forms.
3. Raising Hope. Jimmy straps his baby on his chest while he does lawn work and his father attaches Hope in a car seat to a lawn mower. The police reprimand them both for being irresponsible with the baby's safety.
4. The Middle. Mike is visibly bored and agitated when his youngest son performs a play in the living room.

Control

1. Raising Hope. Jimmy is at a Halloween party with his love interest, Sabrina, when her boyfriend shows up unexpectedly.
2. The Middle. Frankie and Mike disagree about getting rid of old junk and then get into a fight about their marriage.
3. Raising Hope. Jimmy tries to get on his boss's good side at work in the grocery store, Burt tries to flirt with a neighbor.
4. The Middle. Frankie points out Mike's flaws as a husband.

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## CHAPTER 4: (Study 3) His, Hers, or Theirs? Coparenting after the birth of a second child

Many families undergo the transition from one child to two, but most research overlooks this common developmental milestone in the family life-cycle (Volling, 2012). The birth of a second child often creates new stressors for parents as they worry about the firstborn's behavior in response to the birth of their infant sibling and whether they can manage the care of two young children in the family. Although children's externalizing behaviors increased after the birth of an infant sibling, cooperative coparenting before the birth reduced the risk of increased externalizing behavior 1 month after the birth, whereas conflictual coparenting increased that risk (Kolak \& Volling, 2013). Understanding what accounts for these changes in coparenting in the early months is critical for understanding children's adjustment after the birth of a sibling. The main goal of the current report was to examine changes in coparenting cooperation and conflict across the transition period and what accounted for these changes. Accordingly, the first aim was to explore whether coparenting cooperation and conflict changed in the months after the birth of the second child. The second aim was to explore "who" (mothers or fathers) has more influence on coparenting dynamics by examining differential effects of predictors on coparenting by parent gender. The third aim was to determine whether coparenting could be predicted from child, parent, and marital factors as would be expected from an ecological model of coparenting (Feinberg, 2003). Earlier research found that firstborn children's difficult temperament predicted less cooperative coparenting one year after the sibling's birth (Szabó, Dubas, \& van Aken, 2012), but it is less clear whether other parent and family characteristics also predict coparenting after
the birth of a second child. In the current investigation, we examined parental gender roles and marital satisfaction, in addition to firstborn children's and the infants' temperament as predictors of coparenting after the birth of a second child (Feinberg, 2003; McHale, Kazali, et al., 2004).

## Gender, Marriage, and Interpersonal Processes of Coparenting

Coparenting, or the manner in which mothers and fathers support or undermine each other in their parental roles, is an interpersonal process where each parent's behaviors affect and are affected by the other coparent. Parental perceptions of feeling supported by one's partner are just as important in assessing coparenting as are observations of actual behavior (McHale, Kuersten-Hogan, \& Rao, 2004; Van Egeren \& Hawkins, 2004). Despite modest correlations across parent reports (Ippolito Morrill, Hines, Mahmood, \& Córdova, 2010; Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, \& Sokolowski, 2008), many prior studies have composited across mothers' and fathers' reports of coparenting. According to Family Systems Theory (Minuchin, 1985), individuals are interdependent within family subsystems; each member affects other members within the family. Thus, one parent can have an effect on the other parent's coparenting (i.e., partner effects).

Few studies have used an actor-partner framework to study coparenting in in-tact families with young children. Holland \& McElwain (2013) found that mothers' coparenting perceptions predicted both her (actor effect) and her spouse's parenting quality (partner effect) and that fathers' coparenting perceptions predicted both their (actor effect) and their spouses' parenting quality (partner effect). Studies using an actor-partner framework to study marriage and parenting have found significant actor and partner effects. For instance, Tanner Stapleton \& Bradbury (2012) found that both mothers' and fathers' positive pre-birth marital behavior exerted partner effects - if one person was more positive in pre-birth marital interactions, then
their spouse engaged in more supportive parent-child interactions nine years later (Tanner Stapleton \& Bradbury, 2012). Note that these effects did not differ between husbands and wives, which underscores more gender similarities between spouses in the interrelations between marriage and parenting than gender differences. Klausli \& Tresch Owen (2011) also found more gender similarities than differences when examining positive and negative dimensions of parenting. For example, husbands' marital hostility was predictive of mothers' parenting sensitivity and vice versa, which did not differ by parent gender, indicating a common partner effect (Klausli \& Tresch Owen, 2011). Although Klausli \& Tresch Owen (2011) did not test whether the actor effects were significantly different based on parent gender, they did find that mother's marital support predicted her parenting sensitivity, and father's marital support predicted his parenting sensitivity, once again, highlighting more similarities than differences in interpersonal dynamics across parents. Finally, a meta-analysis testing the spillover hypothesis between marriage and parenting found no gender differences (Erel \& Burman, 1995). Together, these studies strongly suggest that interrelations between marriage and coparenting do not differ between husbands and wives, and that there is joint influence or interdependence between spouses. Thus, we expected similar associations to emerge for husbands and wives and strong support for a joint influence hypothesis in our study of coparenting after the birth of a second child.

Other studies, however, have suggested that mothers and fathers have differential effects on determining the quality of the coparenting relationship. Allen \& Hawkins (1999) have suggested that because women traditionally are responsible for child care, mothers are more likely to be gatekeepers in the family and either encourage or discourage their spouse's involvement in the coparenting relationship. Mothers with egalitarian gender role beliefs are
expected to encourage their spouse's involvement and in contrast, mothers with traditional gender role beliefs are expected to discourage their spouse's involvement. Furthermore, if mothers are more satisfied with their marital relationship, they may be more willing to facilitate father involvement (De Luccie, 1995). If this maternal gatekeeping hypothesis is true, and mothers have more influence on men's involvement in the coparenting relationship, then we would expect to find unequal partner effects in our study, with wives' gender role beliefs, reports of marital satisfaction, and prenatal coparenting reports as stronger predictors of fathers' coparenting than husbands' reports' on mothers' coparenting. Evidence supporting the maternal gatekeeping hypothesis appears mixed. For first-time parents, mothers' egalitarian gender role beliefs predicted supportive coparenting behavior during a triadic interaction with their 3.5 month old infants (Schoppe-Sullivan \& Mangelsdorf, 2013), but Buckley and Schoppe-Sullivan (2010) found no association between parents' gender role beliefs and coparenting for parents of preschool-aged children. With respect to marriage and coparenting, mothers' reports of increased marital conflict over the transition to parenthood did not predict their husband's coparenting support, but neither did fathers' reports of marital conflict predict their wives' coparenting support (Christopher, Umemura, Mann, Jacobvitz, \& Hazen, 2015).

In contrast to the maternal gatekeeping hypothesis, others have suggested that fathers, not mothers, have disproportionate influence within the coparenting relationship. Because fathers’ roles as caregivers are less prescribed in society, men have greater decision-making power to be involved or not to be involved in child care (Davies, Sturge-Apple, Woitach, \& Cummings, 2009; Volling \& Belsky, 1991). In this case, if the paternal decision-making hypothesis holds, fathers' coparental involvement is more likely to be influenced by their experiences of marriage and gender role beliefs than the mothers' gender role beliefs and marital satisfaction on
coparental involvement. Here, we would expect to find unequal actor effects with stronger associations between men's gender role beliefs, prenatal coparenting reports, and marital satisfaction on their coparenting after the birth of a second child than women's. There is some evidence for the paternal decision-making hypothesis in studies on first-time parents. For example, husbands' pre-birth marital interactions predicted both husbands' (actor effect) and wives' (partner effect) reports of positive coparenting 3 to 6 months after birth (Van Egeren, 2004). More recently, husbands' reports, but not wives' reports, of marital dissatisfaction predicted undermining coparenting behavior during the transition to parenthood (Christopher et al., 2015). Intriguingly, these studies also suggest that there may be unequal partner effects, where husbands' effects on wives are stronger than wives' effects on husbands.

## Beyond the Parents: Children's Difficult Temperament and Coparenting

Beyond the influence of parents' marital relationship and gender role beliefs on coparenting, children's characteristics are theorized to shape coparenting dynamics (Feinberg, 2003). Children with difficult temperaments are more emotionally reactive and not as easily soothed as other children (Cook, Schoppe-Sullivan, Buckley, \& Davis, 2009); therefore, coparenting may be more demanding with difficult children (Davis, Schoppe-Sullivan, Mangelsdorf, \& Brown, 2009; Feinberg, 2003). In a family with two children, the difficult temperament of one child may spill over to the coparenting relationship with the other child. In the only study on coparenting after the birth of a second child, mothers reported less stability in coparenting cooperation with firstborn children in the year following the birth of the infant sibling if the infants had a difficult temperament (Szabó et al., 2012). Furthermore, observations of coparenting fourteen months after the birth revealed that parents were less cooperative when firstborn children were more temperamentally difficult (Szabó et al., 2012). It appears, then, that
the difficult temperaments of both infants and the older siblings created challenges for the coparenting relationship during the transition to second-time parenthood. Szabó et al. (2012) only measured coparenting cooperation, but we know from previous work that both coparenting cooperation and coparenting conflict predicted children's behavior problems 1 month after their sibling's birth (Kolak \& Volling, 2013) and prosocial behavior towards their 1-month-old infant sibling (Song \& Volling, 2015). Thus, we examined both coparenting cooperation and conflict in the current study.

## The Current Study

The present report fills a gap in our understanding of changes in coparenting after the birth of an infant by examining (1) changes in coparenting cooperation and conflict after the birth of a second child, (2) whether mothers and fathers have equal or unequal influence within the coparenting relationship, and (3) whether parental gender roles, children's temperament, and marital satisfaction predicted coparenting. To explore these interpersonal processes of coparenting and the effects of one spouse on the other, we used an Actor-Partner Interdependence Model (APIM) to examine coparenting after the birth of a second child. We were also interested in whether the gender role beliefs and marital satisfaction of one spouse had stronger relations in predicting coparenting than that of the other. A joint influence hypothesis suggests that there will be no gender differences in effects of parents' gender role beliefs, marital satisfaction and prenatal coparenting on coparenting after the birth of a second child (i.e., equal actor and partner effects between mothers and fathers). In this case, we would conclude that both mothers and fathers are jointly contributing to the quality of the coparenting relationship. A maternal gatekeeping hypothesis would suggest that mothers' reports of gender role beliefs would have stronger partner effects on fathers' reports of coparenting than fathers' gender role
beliefs on mothers' reports of coparenting. Conversely, a paternal decision-making hypothesis would state that fathers' reports of marital satisfaction and gender roles would have stronger actor and partner effects on coparenting than mothers' reports. The current study moves beyond "what" determines coparenting (child, parent, or martial determinants) to also ask "who" drives the coparenting relationship (mothers, fathers or both). In the remainder of this paper, we refer to the firstborns as older siblings and the secondborns as infants.

## Method

## Participants

Participants were 241 families consisting of mothers and fathers, and their two children, participating in a longitudinal study investigating family and firstborn's adjustment after the birth of a second child. Firstborn's ages ranged from $10-67$ months at the prenatal visit, $M=29.92$ months, $S D=10.16$ months at the prenatal visit; $44.9 \%$ were girls. Mothers and fathers were primarily European American ( $85.9 \%$ of mothers; $86.3 \%$ of fathers) with $14.1 \%$ of mothers and $13.7 \%$ of fathers representing other racial and ethnic groups. The sample was well-educated ( $83.9 \%$ of mothers; $79.2 \%$ of fathers earned a Bachelor's degree or higher), and middle- to upper-middle class ( $70.6 \%$ of families' household income was $\$ 60,000$ or higher). The length of marriage ranged from $.58-20$ years $(M=5.77, S D=2.74)$. The majority of fathers was working full time ( $92.1 \%$ ), and most mothers were working at least part time ( $65.6 \%$; > 1 hour per week) at the prenatal time point.

Of the 241 families recruited, 217 participated at four months. Twenty-two families dropped from the study by four months for a variety of reasons (e.g., not enough time, moved away from area). Two families did not return questionnaires at four months. Fathers participating at the four month time point were more highly educated than the recruited sample, $\chi^{2}(3)=10.67$,
$p<.05$. There were no other significant differences between the recruited sample and the families who participated at four months.

## Study Design and Procedures

The longitudinal investigation consisted of five measurement time points: prenatal (third trimester of mother's second pregnancy), and $1,4,8$, and 12 months following the infant's birth. Informed consent was obtained from the families prior to the prenatal visit, and all study procedures were approved by the Institutional Review Board. Data on family and child functioning were obtained through multiple methods using multiple informants (e.g., questionnaires, couple interviews, home and laboratory observations of family interaction). Information from the current report was derived from mothers' and fathers' reports of coparenting cooperation and conflict both prenatally and at four months after the birth, in addition to questionnaires assessing gender role beliefs, firstborn children's difficult temperament, and marital satisfaction at the prenatal time point, and parent reports of the infant's difficult temperament at 1 month. Coparenting information was not available at the 1 month time point because only a brief set of questionnaires was administered at 1 month to reduce the research burden on families in an effort to reduce attrition during a stressful family transition.

## Measures

Gender role beliefs. Husbands and wives completed the 20 -item Gender Role Attitudes Scale (Bird, Bird, \& Scruggs, 1984) at the prenatal visit to assess attitudes concerning men's and women's roles in family and work. Example items included "A married woman's most important task in life should be caring for her husband and child" (reverse coded) and "A husband should be just as willing as a wife to stay home from work and care for a sick child". All items were
rated from $1=$ strongly disagree to $7=$ strongly agree. A mean score across all 20 items was used in our analyses, and higher values indicated stronger endorsement of egalitarian gender role beliefs ( $\mathrm{a}=.88$ for wives and $\mathrm{a}=.85$ for husbands).

Coparenting. Husbands and wives completed the Coparenting Questionnaire (Margolin, Gordis, \& John, 2001) at the prenatal and 4-month time points to assess coparenting cooperation and conflict in caring for the firstborn children. The coparenting questionnaire has good internal consistency and convergent validity (Barzel \& Reid, 2011; Margolin et al., 2001). Parents completed the measure with respect to their partner's coparenting behaviors using a 5 -point Likert scale from $1=$ never to $5=$ always, and composites were created using mean scores across items. Coparenting cooperation was assessed using five items (e.g., "My spouse shares the burden of discipline", a range $=.79-.80$ for wives; $.66-.75$ for husbands) and coparenting conflict was also assessed using five items (e.g., "My spouse and I have different standards for our child's behavior"; a range $=.74-.78$ for mothers; $.74-.78$ for fathers). To note, wives are reporting on their perceptions of their husbands' coparenting, and husbands are reporting on their perceptions of their wives' coparenting.

Older sibling's difficult temperament. Assessment of the older sibling's temperament was obtained at the prenatal time point from mothers' and fathers' reports using three subscales of the Child Behavior Questionnaire (Rothbart, Ahadi, Hershey, \& Fisher, 2001): activity level (13 items, "Seems always in a big hurry to get from one place to another," $\alpha=.76$ for mothers, .73 for fathers), anger/frustration (13 items, "Has temper tantrums when $s /$ he doesn't get what $\mathrm{s} / \mathrm{he}$ wants," $\alpha=.77$ for mothers, .73 for fathers), and soothability ( 13 items, "Calms down quickly after an exciting event," $\alpha=.77$ for mothers, .75 for fathers). Items were rated on a 7point scale from $1=$ Extremely Untrue to $7=$ Extremely True. Based on previous research (Szabó
et al., 2012), we created a composite of difficult temperament (activity level + anger/frustration soothability) for each parent. Mothers' and fathers' reports were significantly correlated ( $r=.59$, $p<.001)$ and averaged to create a robust composite of the firstborn's difficult temperament.

Infant's difficult temperament. The difficult temperament of the infant was assessed during the 1-month time point using mothers' and fathers' reports on the Infant Characteristics Questionnaire ICQ: (Bates, Freeland, \& Lounsbury, 1979). The 24-item ICQ has good convergence with observational temperament measures (Bates et al., 1979), and has four subscales (fussy-difficult, 9 items, "How easy or difficult is it for you to calm or soothe your baby when he/she is upset?"; unadaptable, 5 items, "How does your baby typically respond to a new person?"; dull, 4 items, "How much does your baby smile and make happy sounds"; unpredictable, "How easy or difficult is it for you to predict when your baby will go to sleep and wake up?" 6 items). Items were rated from $1=$ Very Easy to $7=$ Difficult. Based on previous use of the scale (Szabó et al., 2012), mean scores across the four subscales were summed to create composites of difficult temperament based on mothers' $(\alpha=.87)$ and fathers' reports $(\alpha=.91)$. Mothers' and fathers' composite scores were positively correlated ( $r=.52, p<.001$ ) and averaged to create a composite of difficult infant temperament.

Marital satisfaction. At the prenatal time point, husbands and wives completed the wellvalidated 3-item Kansas Marital Satisfaction Scale (Schumm et al., 1986) using a 5-point scale with $1=$ not at all to $5=$ extremely ("How satisfied are you with your marriage?," $\alpha=.94$ for wives, .92 for husbands). Items were summed to create a martial satisfaction score separately for husbands and wives.

## Results

We first present descriptive statistics and then test for demographic covariates to be controlled for in our main analyses. Correlations revealed no associations between coparenting at four months and fathers' age, mothers' age, children's age, years of marriage, or number of hours worked. ANOVAs found no main effects of mothers' employment status (full-time, parttime, stay-at-home, unemployed), older siblings' or infants' gender, household income, mothers' and fathers' education, or family-earner status (dual-earner vs. single-earner) on coparenting at four months. Demographic variables were, therefore, not considered further in subsequent analyses. Descriptive statistics and zero-order correlations between coparenting, gender role beliefs, marital satisfaction, and difficult temperaments of the older sibling and infant can be found in Table 3.1. Overall, mothers' endorsement of egalitarian gender beliefs was positively related to their perceptions of husbands as cooperative coparents, but only at the prenatal time point. Fathers' endorsement of egalitarian gender beliefs was positively associated with both their and their wives' perceptions of cooperative coparenting, and negatively associated with their and their wives' conflictual coparenting at both prenatal and four months. Mothers' and fathers' prenatal reports of marital satisfaction were positively related to their and their spouse's reports of cooperative coparenting, and negatively related to their and their spouse's conflictual coparenting at both prenatal and four months. With the exception of fathers' prenatal perceptions of coparenting cooperation, the older sibling's difficult temperament was related to greater perceived conflict and less cooperation by both parents.

## Does Coparenting Change after the Birth of a Second Child?

To test whether there were changes in coparenting cooperation and conflict from prenatal to 4 months, we conducted two linear mixed models using an unstructured covariance matrix. Time (2), parent (2) and the interaction between time and parent were modeled as fixed effects.

Random effects were modeled for intercept (which accounted for differences between families). Time and parent random effects accounted for longitudinal and dyadic dependence within families.

Significant time effects for coparenting cooperation, $F(1,208.34)=7.47, p<.01, b=-$ $.04, S E=.01$, and conflict, $F(1,213.69)=17.36, p<.001, b=.05, S E=.01$, revealed that cooperation decreased significantly over time $\left(M_{\text {prenatal }}=4.24, \mathrm{SD}=.61 ; M_{4 \text { months }}=4.16, S D=\right.$ .66), whereas conflict increased significantly over time ( $M_{\text {prenatal }}=1.79, S D=.53 ; M_{4 \text { months }}=$ $1.88, S D=.56)$. In addition, a significant main effect of parent, $F(1,234.41)=49.43, p<.001, b$ $=-.16, S E=.02$, indicated that mothers $(M=4.05, S D=.71)$ reported significantly less coparenting cooperation than fathers $(M=4.36, S D=.50)$, but there were no differences by parent for coparenting conflict. There were no significant time by parent interactions.

## Who and What Shapes Coparenting after the Birth of a Second Child?

Figure 3.1 shows the path models tested in the current analyses using an Actor-PartnerInterdependence Model (APIM) framework. This model allowed us to examine whether parent (gender role beliefs), child (temperament), or the marital relationship predicted coparenting cooperation and conflict as reported by husbands and wives, but also allowed us to test directly whether one parent had more influence in determining coparenting than the other by denoting actor and partner paths. APIM allows for interdependence in couple data and the testing of interpersonal influence (Gonzalez \& Griffin, 2012), such as whether fathers' gender role beliefs predict their coparenting perceptions (actor effect) or their wives' coparenting perceptions (partner effect). We used full information maximum likelihood (FIML) and allowed residuals to be correlated to account for both couple-level and longitudinal correlations. As a reminder, the joint influence hypothesis states there are equal actor and partner effects between mothers and
fathers. The maternal gatekeeping hypothesis states that mothers' partner paths on fathers' coparenting are stronger than fathers' partner paths on mothers' coparenting. Finally, the paternal decision-making hypothesis states that fathers' actor paths on fathers' coparenting are stronger than mothers' actor effects on her coparenting and fathers' partner paths on mothers' coparenting are stronger than mothers' partner paths on fathers' coparenting.

Preliminary APIM analyses. Prior to hypothesis testing, a series of preliminary models were estimated to test the standard equal variance assumption between actors and partners in APIM models (Gonzalez \& Griffin, 2012). In these preliminary models, equality constraints were placed on all regression paths between partners, but released on the variances of predictor and outcome variables between spouses. The main tests in these preliminary analyses assessed whether there were equal variances on the predictor and outcome variables across husbands and wives. Significant chi-square difference tests between the model that assumed equal variances and the model that assumed unequal variances would indicate that the model did not meet the equality of variances assumption. Whereas coparenting conflict met the equal variance assumption, $\chi^{2}(12)=22.80, p=.03$, RMSEA $=.06, \mathrm{CFI}=.96$; the assumption was not met for the coparenting cooperation model, $\chi^{2}(12)=59.53, p=.00, \mathrm{RMSEA}=.13, \mathrm{CFI}=.81$, and the model that released the equality constraints on the predictor and outcome variances was better fitting $\chi^{2}(8)=10.94, p=.21$, RMSEA $=.04, \mathrm{CFI}=.99$; chi-square difference test: $\chi^{2}(4)=11.86$, $p<.05$. Thus, for hypothesis testing, we proceeded with the model that released equality constraints on the predictor and outcome variable variances for coparenting cooperation, but used the model with equality constraints on the variable variances for coparenting conflict.

## Hypothesis Testing

In testing our hypotheses about who (mothers or fathers) has more influence in the coparenting relationship, we conducted three models. In each of these models, older siblings' and infants' difficult temperaments were presumed to equally predict mothers' and fathers' coparenting reports. The joint influence hypothesis placed equality constraints on the actor paths between spouses (e.g., mothers' marital satisfaction predicting mothers' coparenting was equal to fathers' marital satisfaction predicting fathers' coparenting reports) and the partner paths between spouses (e.g., mothers' marital satisfaction predicting fathers' coparenting reports was equal to fathers' marital satisfaction predicting mothers' coparenting reports). Because the joint influence model was the most parsimonious model, we compared the fit of the maternal gatekeeping and paternal decision-making models to this model. In cases where model fit was similar, we chose the more parsimonious model (Burnham \& Anderson, 2003; Vandekerckhove, Matzke, \& Wagenmakers, 2015).

To test the maternal gatekeeping hypothesis, we released the equality constraints on the partner paths between spouses and expected that mothers' partner effects on fathers' coparenting would be stronger than the reverse. To test paternal decision-making hypothesis, we released the equality constraints on the actor and partner paths between spouses and expected that fathers' actor effects on his coparenting would be stronger than mothers' actor effects on her coparenting After testing our three hypotheses (i.e., who has more influence in the coparenting relationship), we tested our "what predicts coparenting" hypotheses (i.e., marital satisfaction, gender role beliefs, and/or children's temperament) by interpreting the regression coefficients in our bestfitting APIM path model.

Coparenting cooperation. The model testing joint influence had excellent fit: $\chi^{2}(8)=$ $10.94, p=.21, \mathrm{RMSEA}=.04, \mathrm{CFI}=.99$. The model testing maternal gatekeeping was excellent-
fitting, but did not fit significantly better than the more parsimonious joint influence model $\chi^{2}(3)$ $=3.14, p=.37$, underscoring the similarities between mothers and fathers in partner effects. The model testing paternal decision-making was not significantly different from the joint influence model $\chi^{2}(6)=9.62, p=.14$, but was excellent-fitting $\chi^{2}(2)=1.33, p=.52$, RMSEA $=$ $.00, \mathrm{CFI}=1.00$.

In comparison to the joint influence model, which yielded no significant actor or partner paths of marital satisfaction on cooperation, the paternal decision-making model suggested that fathers' marital satisfaction exerted both an actor and a partner effect, but there was no such significant actor or partner effect of mothers' marital satisfaction. Hence, we tested a post hoc model in which the actor and partner equality constraints were lifted only for the marital satisfaction variable. This post hoc model was significantly better fitting than the more parsimonious joint influence model $\chi^{2}(2)=7.33, p<.05$, and had excellent fit $\chi^{2}(6)=3.61, p=$ $73, \mathrm{RMSEA}=.00, \mathrm{CFI}=1.00$. Thus we chose this post hoc cooperation model for final interpretation. Figure 3.2 shows the standardized betas for the path model predicting coparenting cooperation. Parents' prenatal coparenting reports predicted their four month reports (equal actor effects). Fathers' marital satisfaction predicted his coparenting cooperation (unequal actor effects) and mothers' coparenting cooperation (unequal partner effects), whereas mother's marital satisfaction did not. Older siblings' difficult temperament negatively predicted both mothers' and fathers' reports of coparenting cooperation.

Coparenting conflict. The joint influence model was good-fitting, $\chi^{2}(12)=22.80, p=$ $.03, \operatorname{RMSEA}=.06, \mathrm{CFI}=.96$. The maternal gatekeeping model was adequate-fitting, $\chi^{2}(9)=$ 22.07, $p<.05$, RMSEA $=.08, \mathrm{CFI}=.95$, but the model fit was not significantly different from the more parsimonious joint influence model $\chi^{2}(3)=.74, p=.86$. The paternal decision-making
model was also adequate-fitting, $\chi^{2}(6)=19.33, p<.05$, RMSEA $=.10$, CFI $=.95$, but did not fit significantly better than the joint influence model $\chi^{2}(6)=3.46, p=.75$. Therefore, we chose the joint influence model to determine what predicted coparenting conflict. Note that because the joint influence model assumes equal influence from both mothers and fathers, the regression estimates are pooled estimates between parents. Figure 3.3 shows the standardized beta coefficients in the path analysis predicting coparenting conflict at four months. Mothers' egalitarian beliefs negatively predicted their coparenting conflict and fathers' egalitarian beliefs negatively predicted their coparenting conflict (an equal actor effect of gender role beliefs). The older sibling's difficult temperament positively predicted coparenting conflict. Parents' own prenatal coparenting reports predicted their own four month reports (equal actor effects) and their spouses' coparenting reports at four months (equal partner effects).

## Discussion

The primary purpose of this study was to examine changes in coparenting after the birth of a second child and to determine who (mother or father) and what (child, parent, marriage) had stronger effects on the quality of coparenting. We were interested in determining whether coparenting cooperation and conflict changed after the birth of the second child and observed, on average, that mothers and fathers' perceptions of coparenting cooperation decreased and coparenting conflict increased from before to four months after the birth. Our second aim was to examine who had more influence in the coparenting relationship by testing the joint influence, maternal gatekeeping, and parental decision-making hypotheses. Our results strongly suggested that coparenting conflict after the birth of a second child unfolds via joint influence processes, whereas coparenting cooperation unfolds via paternal decision-making processes. The final aim
was to test what predicted coparenting after the birth of a second child. Our results revealed that coparenting dynamics after the birth are multiply determined by parent, child and marital factors.

## Decreased Cooperation and Increased Conflict during the Transition

On average, coparenting cooperation decreased whereas conflict increased within the first four months after the birth, reflecting the difficult nature of the immediate transition period for parents having their second child. Whereas previous research has focused on changes one year after the birth (i.e., Szabó et al. 2012), we focused on early changes. Szabó et al. (2012) found that even though there was no change in reported cooperation one year after the birth of the second child, there was an increase in observed cooperation one year after the birth. Our results provide a different picture in the earliest months with evidence of increased conflict and decreased cooperation in the coparenting relationship. Similar to recent work on changes in the marital relationship after the birth of a second child (Volling, Oh, Gonzalez, Kuo, \& Yu, 2015), the early months may represent a period of adjustment for the couple as they balance the care of two young children, but eventually they may adapt to the changes and the quality of the coparenting relationship stabilizes or actually improves over time. Further research is needed to determine whether coparenting continues to deteriorate over the year following the birth or whether couples eventually adapt to changes surrounding the birth and coparenting relations improve.

## His, Hers, or Theirs? Joint influence in conflict; paternal decision-making in cooperation

In this study, we explored whether mothers, fathers, or both parents had influence on the coparenting relationship after the birth. Guided by several potential hypotheses comparing the influence of one parent over the other, mothers may have stronger influence on the coparenting relationship because they can control the level of father involvement (maternal gatekeeping
hypothesis: Allen \& Hawkins, 1999), or fathers may have stronger influence because paternal involvement is less prescribed by society and thus provides men with more power to decide whether to be involved or not (paternal decision making hypothesis: Davies et al., 2009). Based on our comparisons of the joint influence, maternal gatekeeping, and paternal decision-making models, we found stronger support for the joint influence hypothesis for conflict with both mothers and fathers contributing relatively equally to coparenting conflict. We found no support for the maternal gatekeeping hypothesis. We found that the longitudinal associations between marital satisfaction and coparenting cooperation followed the paternal decision-making hypothesis. Our findings suggest that the answer for "who" has more influence depends on the nature of the outcome studied (i.e., cooperation or conflict). Previous work has found support for the paternal decision-making hypothesis when predicting cooperative coparenting from positive marital quality and interactions (Van Egeren, 2004). Other work on marriage and parenting has supported the joint influence hypothesis when predicting parenting sensitivity from negative marital interactions (i.e., hostility, withdrawal: Klausli \& Tresch Owen, 2011). Taken together, fathers may have more influence on positive dimensions of coparenting, such as cooperation, but both mothers and fathers are equally important in shaping negative dimensions of coparenting, such as conflict.

## Prediction of Coparenting Cooperation

In addition to the effects of mothers and fathers, we also examined the role of child characteristics, namely, whether the difficult temperament characteristics of children and their infant siblings would predict coparenting dynamics. Previous research indicated that parents of preschool children with difficult temperaments exhibited greater undermining coparenting behavior (Cook et al., 2009). We found similar support for a link between child difficulty and
coparenting difficulties. Given that temperamentally-difficult toddlers pose different types of behavioral problems (e.g, oppositional problems, tantrums) from temperamentally-difficult infants (e.g., difficult to soothe), coparenting with difficult toddlers may be more challenging than coparenting with difficult infants. Difficult firstborn temperament negatively predicted both mothers' and fathers' reports of coparenting cooperation whereas infant difficult temperament did not predict either coparenting cooperation or conflict with the firstborn when the infant was four months old. We offer a few explanations for these findings. First, our measure specifically assessed coparenting with the older sibling. Thus results may have been different if we used a measure that assessed the overall coparenting relationship. But given that previous work has found that infant difficult temperament predicted mothers' reported coparenting cooperation of the older sibling one year after the infant was born (Szabó et al., 2012), we argue that our findings reflect the context of the immediate transition. Specifically, the first months may reflect a period of adjustment so that what matters for coparenting initially after the birth is how temperamentally difficult the older child is, whereas by the end of the year, parents have passed the initial stress of adjustment and coparenting of both children may be influenced mutually by the temperament of both infant and older sibling. The main goal of the current study was to examine coparenting in the early months to address the initial period of adjustment, but future research on the transition from one child to two would benefit from examining coparenting dynamics early and later in the year following the birth.

Husband's marital satisfaction played a key role in both mothers' and fathers' perceptions of coparenting cooperation, indicating that men's marital satisfaction not only shaped the way they perceived their wives' coparenting, but also, how their wives perceived their coparenting. Similar to Van Egeren (2004)'s study on the transition to first-time parenthood, husbands'
positive marital experiences may give him the communicative and relational tools to be a cooperative coparent to their wives, ultimately making them feel supported and leading them to positively appraise their husbands' cooperation in the coparental role after the birth of a second child. We did not find that wives' marital satisfaction was uniquely predictive of coparenting cooperation, which might reflect the fact that women's roles as caregivers are such that they are engaged in coparenting regardless of the quality of their marital relationship and how satisfied they are. Thus, our results do suggest that cooperative coparenting may be more strongly tied to men's satisfaction with the partner relationship than women's satisfaction (Belsky, Youngblade, Rovine \& Volling 1991). Such a conclusion is further supported by the lack of partner effects in predicting coparenting cooperation after the birth, providing little support for the joint influence model for coparenting cooperation. Instead, strong actor effects for coparenting cooperation would suggest that cooperative coparenting my in part be a function of personality characteristics or personal dispositions (Kolak \& Volling, 2007; Talbot \& McHale, 2004). For instance, Kolak and Volling (2007) found that fathers' positive expressiveness was protective against negative coparenting interactions. Relatedly, parental gender role beliefs were not predictive of coparenting cooperation, but did predict coaprenting conflict. Again, parents who believe in sharing roles may expect a degree of negotiation and compromise in their coparenting relationship that has more to do with personal characteristics than beliefs about gender roles. We recommend that future work on coparenting after the birth of a child consider the role of personal characteristics in determining coparenting dynamics (Feinberg, 2003).

## Prediction of Coparenting Conflict

Unlike coparenting cooperation, there was stronger evidence that gender role beliefs played a role in the development of coparenting conflict and stronger evidence of joint influence
of both partners in the quality of coparenting over time. When husbands were more egalitarian in their gender role beliefs, they reported less coparenting conflict, and the same was true for wives, with more egalitarian gender role beliefs negatively predicting wives' reports of coparenting conflict. Couples with more egalitarian gender role beliefs may find it easier to negotiate conflict when both have a firm commitment to shared involvement in parenting versus couples where there are disagreements about childrearing involvement, in general. In other words, couples' arguments may differ with egalitarian couples arguing about how to manage day to day caregiving routines, whereas nonegalitarian couples may be disagreeing on whether or not both parents should be engaged in caregiving.

With respect to predicting coparenting conflict after the birth of a second child, we found common actor and partner effects predicting both mothers' and fathers' reports of coparenting, strongly supporting a joint influence model where both partners contributed to escalating coparenting conflict across the transition. Such findings are consistent with numerous studies examining the escalation of coercive marital and family interaction, wherein couples continuously engage in negative interactions that build over time (Gottman, 1993). Our results are similar to previous work on marriage and parenting that found partner effects on conflict but not cooperation. Specifically, Klausli \& Tresch Owen (2011) found partner effects of marital hostility on parenting sensitivity but only actor effects of marital supportiveness on parenting sensitivity. Thus, partner effects may be stronger when predicting "negative" outcomes (i.e., hostility or conflict) in comparison to "positive" outcomes (i.e., cooperation and support). In addition to the results underscoring the joint influence of both partners' contributing to coparenting conflict over time, our findings also implicated the role of children's difficult temperament in contributing to this escalating conflict between coparents in the months
following the birth of a second child. Again, it was the difficult temperament of the older sibling, not the infant's difficult temperament, that predicted coparenting conflict in the early months after the birth.

By and large, the largest coefficient in our models were the prenatal reports of coparenting, suggesting that the coparenting dynamics with the firstborn that were established prior to the birth of the infant continue after the couple has added another family member. Because we used both pre- and post-birth reports, our findings represent what predicted the leftover variance in coparenting at 4 months once controlling for prenatal reports. If we had taken a similar approach to the transition to first-time parenthood coparenting literature (e.g., Christopher et al., 2015; Schoppe-Sullivan \& Mangelsdorf, 2013; Van Egeren, 2004) and only measured coparenting post-birth, we may have found a different pattern of results. Indeed, our zero-order correlations suggest that coparenting at 4 months is significantly related to prenatal marital satisfaction and fathers' gender role beliefs. Thus, we do not argue that marital satisfaction or gender role beliefs exert very little influence on coparenting after the birth of the second child, rather, these ecological factors may work in an indirect way to shape coparenting prenatally which in turn continues after the birth.

## Study Strengths and Limitations

There were multiple strengths to the current study. First, we used both mother and father reports and examined actor and partner effects in our examination of coparenting. Second, we relied on a prospective longitudinal design that included pre- and post-birth reports of coparenting rather than utilizing only post-birth reports. Finally, this is only the second study to examine coparenting after the birth of a second child and we focused on changes in both coparenting cooperation and coparenting conflict, in contrast to Szabo et al. (2012) who focused
only on coparenting cooperation one year after the birth of a second child. Despite these significant strengths, the study also has several limitations. First, our sample consists primarily of middle-class, primarily white families and our results may not generalize to samples of couples from other ethnic or racial backgrounds. Similarly, couples were not necessarily at high-risk for couple or family dysfunction and results might differ for couples with greater marital difficulties. Also, we were particularly interested in understanding coparenting in the early months immediately following the transition because of the significance of coparenting in predicting children's behavior problems (Kolak \& Volling, 2013), but coparenting no doubt undergoes continuous changes over the course of the year following the birth as couple adapt to their new coparental roles and the care of two young children. Future analyses should take both short-term and long-term approaches to documenting and predicting changes in coparenting in the early and later months following the birth of a second child. Finally, our findings are based on parent reports of coparenting and not measures of observed coparenting. Therefore, future research may need to examine observed coparenting cooperation and conflict during the early transition period, as observational data may provide different results from those obtained from selfreported coparenting.

## Conclusions \& Implications

The transition to second-time parenthood is a common life event for many couples, and the early transition period appears to be marked by decreased cooperation and increased conflict between coparents. From previous research, Kolak \& Volling (2013) found that temperamentally difficult firstborns increased in their externalizing behavior immediately after the birth of their infant sibling when their parents engaged in less coparenting cooperation and more coparenting conflict before the infant sibling's birth. Thus, we explored what might predict coparenting
dynamics soon after the birth. We found that parents appeared to be equal contributors to coparenting conflict, but fathers were particularly influential on coparenting cooperation. Temperamentally difficult firstborns exacerbated coparenting difficulties during the transition. Given the stability in individual differences in coparenting before and after the birth, with those couples high in coparenting cooperation and conflict before the birth also high in cooperation and conflict after the birth, we recommend that parents strengthen their coparental alliance before the birth of the infant in an effort to prepare for the stresses surrounding the birth of their second child. Such interventions may be particularly important in preventing the escalation of coparenting conflict once the infant is born and should include the participation and cooperation of both parents, as they both appear equally important and culpable in coparenting conflict. Existing effective coparenting interventions focus on emotional self-management, conflict management and positive communication strategies, rather than the marital relationship (Feinberg \& Kan, 2008). Given the current evidence that existing sibling preparation classes have little to no effect on family outcomes after the birth of a sibling (Beyers-Carlson \& Volling, 2015), interventions focused on improving the coparenting relationship may be more effective in helping parents and their children with the transition.


Figure 3.1. Hypothesized Actor-Partner Interdependence Model with Actor (a) and Partner (p) paths representing influence of Mothers and Fathers on Coparenting Dynamics. Equal Partner and Actor effects for mothers and fathers would support the Joint influence Hypothesis. Stronger mother to father partner effects than father to mother partner effects would support the Maternal Gatekeeping Hypothesis. Stronger father actor and partner effects compared to mother actor and partner effects would support the Paternal Decision-Making Hypothesis

Table 3.1 Study Variables Correlation Matrix and Descriptive Statistics

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. M Cooperation (Pre) | - |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. M Conflict (Pre) | -. $45 * *$ | - |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. F Cooperation (Pre) | . $35 * *$ | -. $33 * *$ | - |  |  |  |  |  |  |  |  |  |  |  |
| 4. F Conflict (Pre) | $-.31 * *$ | . $53 * *$ | $-.38 * *$ | - |  |  |  |  |  |  |  |  |  |  |
| 5. M Cooperation (4m) | . $72 * *$ | -. 43 ** | .24** | -.27** | - |  |  |  |  |  |  |  |  |  |
| 6. M Conflict (4m) | -. 40 ** | .69** | $-.25 * *$ | .45** | -. 51 ** | - |  |  |  |  |  |  |  |  |
| 7. F Cooperation (4m) | .22** | -.35** | . $62 * *$ | -. 41 ** | . 23 ** | -.28** | - |  |  |  |  |  |  |  |
| 8. F Conflict (4m) | $-.25 * *$ | .45** | -.31** | .62** | -.33** | .52** | -.45** | - |  |  |  |  |  |  |
| 9. M Gender Beliefs (Pre) | .14* | -. 08 | . 07 | . 01 | . 07 | -. 10 | -. 06 | -. 03 | - |  |  |  |  |  |
| 10. F Gender Beliefs (Pre) | .19** | -.18** | .27** | -.17* | .15* | -.14* | .18* | -.20 ** | .56** | - |  |  |  |  |
| 11. M Marital Satisfaction (Pre) | .48** | -. 42 ** | .33** | -.25** | . $37 * *$ | -.34** | . 21 ** | $-.27 * *$ | . 02 | . 12 | - |  |  |  |
| 12. F Marital Satisfaction (Pre) | .28** | -.32** | .28** | -.37** | . $32 * *$ | -.29** | .32** | $-.35 * *$ | -. 06 | . 09 | .56** | - |  |  |
| 13. OS Difficult Temperament (Pre) | -.25** | .30** | -. 04 | .27** | -.30** | .26** | -.16** | .30** | -.13* | -. 07 | -. 07 | -. 07 | - |  |
| 14. Infant Difficult Temperament (1m) | -. 03 | . 01 | -. 00 | . 12 | -. 10 | -. 02 | -. 01 | .15* | -. 08 | -. 04 | -. 01 | -.17* | -. 02 | - |
| Mean | 4.07 | 1.78 | 4.41 | 1.81 | 4.02 | 1.89 | 4.31 | 1.88 | 5.46 | 5.34 | 12.59 | 12.91 | 4.22 | 14.00 |
| Standard Deviation | . 68 | . 51 | . 47 | . 55 | . 74 | . 55 | . 53 | . 57 | . 76 | . 73 | 2.46 | 2.19 | 1.34 | 2.09 |

Note. Pre = prenatal timepoint, $1 \mathrm{~m}=1$ month, $4 \mathrm{~m}=4$ month; $\mathrm{M}=$ Mother-reported, $\mathrm{F}=$ Father-reported. OS = Older sibling. ${ }^{*} p<$

$$
.05, * * p<.01
$$

Figure 3.2. Standardized Regression Coefficients in Final Coparenting Cooperation Model


Note. Gray dashed lines represent nonsignificant paths. ${ }^{*} p<.05, * * p<.01,{ }^{* * *} p<.001$.

Figure 3.3. Standardized Regression Coefficients in Final Coparenting Conflict Model.


Note. Gray dashed lines represent nonsignificant paths. $* p<.05, * * * p<.001$.

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## CHAPTER 5: (Study 4) Ordinary chaos: Division of childcare after the birth of a second child in dual- and single-earner families

Enter the home of a family who has just had their second child. The first child, a toddler, has just dumped all of his toys on the floor, and the second child, an infant, is crying to be fed. It is a scene of ordinary chaos, a familiar situation for many families in the United States. Parents having their second child are experienced with all of the demands of infant care, but now have to balance those sleepless nights with the care of an energetic toddler. Previously, there were two adults to one child, and now the ratio of adults and children within the family has equalized. Perhaps fathers will become more responsible for childcare. The father's role and how active he is within the family is a key component of the mother's adjustment, and whether or not she has to "double her existence" for both children after the transition to second-time parenthood (Kreppner, Paulsen, \& Schuetze, 1982; Stewart, 1990). Father involvement is supposedly protective for the firstborn as the child transitions to siblinghood (Stewart, 1990), but do fathers participate in more hands-on care after the birth of a second child? The major goal of the current study was to investigate whether fathers increased their childcare involvement after the birth of a second child.

In a study published nearly 25 years ago, Stewart (1990) found that fathers increased their childcare involvement with firstborn children from prepartum to 1 year later, such that childcare was more equally divided between spouses at 12 months, but infant care was primarily
the mother's responsibility. Fathers appeared to specialize in the care of their firstborn children after the birth of a second. It is not clear whether a similar situation would describe today's families in which fathers are expected to take a more active caregiving role (Lamb, 2000). More recently, Krieg (2007) compared first- and second-time mothers, and found that second-time mothers perceived their division of labor and childcare to be more gender-stereotyped than firsttime mothers after the birth of their infants (e.g., mother cooked and fed baby, father took out trash and played with baby; Krieg, 2007). Krieg (2007) did not examine the division of childcare separately for children and infants. Because there are two children in the home, it is possible that parents may divide care differently for the two children. Perhaps fathers are equally involved with both children, or they may assume more responsibility for the older child than the infant (Kreppner et al., 1982; Stewart, 1990).

Kreppner and colleagues (1982) described three different family typologies that characterized how parents adapted to the birth of their second child: (1) fathers withdrew from childcare and focused more on housework; (2) fathers specialized in caring for the firstborn to allow the mother to bond with the infant; and (3) both parents juggled care between children. This early work demonstrated that in two-child families, parents potentially juggle childcare responsibilities not only between each other, but between the two children as well. Despite the fact that childcare responsibilities may differ between children within families, most studies looking at the division of childcare often focus on a single child or aggregate childcare across children (e.g., Craig \& Mullan, 2011; Evertsson, 2014; Krieg, 2007). Such approaches overlook the fact that childcare needs change across developmental periods. Fathers are more involved with older children compared to infants (Talmi, 2013). Previous work using data from the National Survey of Families and Households has found that fathers become more involved in
overall childcare tasks averaged across children when the youngest child is older and if there are more children living in the household (Ishii-Kuntz \& Coltrane, 1992). Aldous et al. (1998) also used data from the National Survey of Families and Households but incorporated a focal child approach and found that the number of children is negatively related to fathers' participation in childcare with the focal child (Aldous, Mulligan, \& Bjarnason, 1998). Both studies suggested that parents have to balance childcare responsibilities not only between each other, but also among multiple children (Aldous et al., 1998; Ishii-Kuntz \& Coltrane, 1992). Thus, focal child or aggregate approaches may muddle actual levels of father involvement with individual children. For instance, studies focused on infant care that make no distinction between first- and secondtime parents may underestimate fathers' childcare involvement if fathers are primarily responsible for the care of the older child while mothers care for the infant. No previous study has examined how parents manage childcare between two children during the transition to second-time parenthood. In the current study, we used a prospective longitudinal design to examine trajectories of father involvement in child and infant care within and between families. We also explored whether fathers juggled child care responsibilities such that involvement with one child would predict involvement with the other child over the year following the infant's birth.

## Family Structure and Father Involvement

In today's changing social landscape and in response to economic recession and uncertainty, more U.S. mothers are working through their children's infancy and early childhood years, which may have repercussions for how couples manage childcare responsibilities (Wilcox \& Dew, 2013). Although there are now more dual-earner families (65\%) than single-earner families (30\%) in the U.S. (Payne \& Gibbs, 2013), employment trends paint a different picture
during childbirth and infant care; $39 \%$ of married women who gave birth within a year were not in the labor force, $38 \%$ were working full time, and $17 \%$ were working part-time (Cruz, 2013). Thus, the birth of an infant, along with maternal leave to care for the infant in the early months, may result in greater numbers of single-earner families where mothers are primarily responsible for childcare and fathers assume the traditional breadwinner role. The division of childcare after the birth of a second child is likely to be divided differently in single-earner versus dual-earner families. In dual earner families, both mother and father have to balance childcare with work, whereas in single earner families, roles may be more traditional, with fathers providing financially and mothers assuming primary responsibility for children (Wilcox \& Dew, 2013). Thus, another goal of this study was to investigate father involvement in childcare separately in dual- and single-earner families.

The more hours fathers are working outside the home, the less fathers are involved in the physical care of their children, but the more hours mothers work outside the home, the more fathers are involved with children (Aldous et al., 1998). Thus, fathers in dual-earner families are more likely to be involved in the physical care of children than fathers in single-earner families. Mothers and fathers transitioning to second-time parenthood face increased time demands with two young children and their division of childcare is likely to be shaped by their hours worked outside the home. Yet, even among families with varying levels of outside work involvement, (male breadwinners, dual earners, and female breadwinners) fathers across family types engaged in similar levels of childcare per day (Craig \& Mullan, 2011). Similarly, during the transition to first-time parenthood, dual-earner mothers performed the majority of the childcare (Yavorsky, Kamp Dush, \& Schoppe-Sullivan, 2015), further demonstrating that the division of childcare is not a simple function of balancing hours worked outside the home between partners.

## Gender Role Beliefs and Father Involvement

Family structure may explain between-group differences in father involvement across dual-earner and single-earner families, but what are the processes that underlie father involvement within these families? In a family of four, there may be ideological forces at work that contribute to how parents divide childcare responsibilities. The gender ideology hypothesis argues that individuals who have egalitarian gender role beliefs will tend to share childcare equally. In contrast, individuals who have more traditional gender role beliefs will have a less egalitarian division of labor (Lachance-Grzela \& Bouchard, 2010). Egalitarian gender role beliefs are associated with greater father involvement in child care tasks (Davis \& Greenstein, 2009; Evertsson, 2014).

## The Current Study

The current study examined father involvement in the division of child care in families after the birth of a second child. We examined whether father involvement in the care of older siblings and the infants would differ over time and if the care of one child immediately following the birth might predict the care of the other within the following year. We anticipated that father involvement could take one of several forms, either caring mostly for the older child (i.e. specialization) or juggling the care of both children. We also investigated whether father involvement in child and infant care would differ across dual- and single-earner families. Finally, we examined whether father involvement in the division of child care was predicted by mothers' and fathers' gender role beliefs, hypothesizing that fathers would be more involved in families where parents held more egalitarian gender role beliefs.

## Method

## Study Design and Procedures

This study used data from a longitudinal investigation of changes in firstborn children's adjustment and family relationship functioning following the birth of a second child. Data from the current report included couple-reported division of childcare and couple-reported division of infant care from $1,4,8$, and 12 month time points, and pre-birth reports of gender role beliefs for both mothers and fathers.

## Participants

Participants were 241 families consisting of fathers, mothers and firstborn children ( $M=$ 29.92 months, $S D=10.16$ months at the prenatal visit; $44.9 \%$ were girls). Parents were welleducated, most mothers and fathers had earned a Bachelor's degree or higher ( $83.9 \%$ of mothers; $79.2 \%$ of fathers). Families were predominantly middle to upper-middle class; the mode for annual household income was $\$ 60,000$ - $\$ 99,999$ ( $37.8 \%$ ), and the next most frequent response was $>\$ 100,000(32.8 \%)$. The majority of fathers were employed full-time (92.1\%). Mothers' employment status had greater variability in this sample: $35.7 \%$ were employed full-time, $29.9 \%$ were employed part-time, and $34.5 \%$ were unemployed or stay-at-home parents. Fathers' average weekly work hours surpassed mothers' hours (Fathers $M=44.31, S D=13.48$; Mothers $M=19.75, S D=18.28 ; t(240)=16.01, p<.001)$. Mothers and fathers were primarily European American (85.9\% of mothers; $86.3 \%$ of fathers) with $14.1 \%$ of mothers and $13.7 \%$ of fathers representing other racial and ethnic groups. The length of marriage ranged from $.58-20$ years $(M=5.77, S D=2.74)$.

Of the initial 241 families recruited, we chose families in which fathers were working full-time $(N=222)$ and excluded families in which fathers were not working full time ( $N=19$; $7.9 \%$ of sample; 7 unemployed, 9 employed part-time, 3 stay-at-home fathers) based on information from the prenatal timepoint. This subset of families were used to create the dual- and
single-earner distinction based on work status information from both parents collected at the prenatal timepoint. Dual-earner families were defined as the father working full-time and the mother working at least 20 hours per week $(N=112)$. Single-earner families were defined as the father working full time, and the mother working less than 19.9 hours per week $(N=110)$.

On average, dual-earner mothers worked 35.12 hours per week ( $S D=10.32$ ), whereas mothers in single-earner families worked 2.42 hours per week $(S D=4.84)$. There were no significant differences between dual- and single-earner families on parent age, years of marriage, mothers' education, fathers' education, or fathers' work hours. Dual-earner families had older children $(M=31.78$ months, $S D=10.79)$ than single-earner families $(M=28.34$ months $S D=$ $9.25), t(216)=3.44, p<.05$. There were significant differences in family income between dualearners and single-earners $\chi^{2}(3)=22.67, p<.001$. The modal income range for dual-earners was more than $\$ 100,000$ ( $47.32 \%$ of dual-earners), whereas the modal income for single-earners was \$60,000 - \$99,999 (47.27\% of single-earners). Dual-earner mothers worked significantly fewer hours at the 1 month timepoint ( $M=2.45, S E=.85$ ), than any other timepoint (mean range: $27.91-34.71$ hours) $F(4,177)=239.64, p<.001, \eta_{p}{ }^{2}=.84$. Mothers in single-earner families had mean ranges of 1.43 hours $(S E=.87)$ to 7.02 hours per week $(S E=1.35)$, and worked significantly more at the 8 and 12 month timepoints than the other timepoints $F(4,177)=5.14, p$ $<.01, \eta_{p}^{2}=.10$.

There were no significant changes in fathers' work status between the prenatal time points and $1,4,8,12$ time points (all $p$ 's $>.12$ ). There were a few families whose fathers' work status changed. At the 1 month time point, seven fathers reported that they were unemployed ( N $=2)$ or employed part-time $(\mathrm{N}=5)$. At the 4 month time point, 11 fathers reported that they were unemployed $(\mathrm{N}=3)$ or employed part-time $(\mathrm{N}=8)$. At the 8 month timepoint, seven fathers
reported that they were unemployed, seven reported that they were employed part-time, and one reported that they were staying home with the baby. At the 12 month timepoint, seven fathers reported that they were unemployed, five reported that they were part-time, and one reported that they were staying home with the baby.

Dual-earner mothers' work hours dramatically decreased at 1 month to the point that were no significant differences in mothers' work hours between dual- and single earner families $p=.72$. Of the dual-earner mothers, only $96.1 \%$ reported that they were working less than 20 hours per week. There appeared to be minimal change in mothers' work hours at all other timepoints. At 4 months, $83.2 \%$ of dual-earner mothers were working more than 20 hours per week, whereas $92.8 \%$ of single-earner mothers reported that they were working less than 19.9 hours per week. At 8 months, $89.9 \%$ of dual-earner mothers were working more than 20 hours per week, and $87.9 \%$ of single-earner mothers were working less than 19.9 hours per week. At 12 months, $90.7 \%$ of dual-earner mothers were working more than 20 hours per week, and $84.4 \%$ of single-earner mothers were working less than 19.9 hours per week.

At the 1 month time point, $50.5 \%(N=112)$ of mothers were breastfeeding exclusively, $11.7 \%(N=26)$ families were bottle feeding exclusively, and $30.6 \%(N=68)$ of families were breastfeeding and bottle feeding. There were no significant differences in feeding method between dual- and single-earner families. Thus, feeding status was not included as a covariate in our analyses.

By the 12 month timepoint, 187 of the 222 families in this subsample remained in the study. Thirty-five families dropped from the study at 12 months for a variety of reasons (e.g., moving from area, not enough time). Families who remained were more highly educated (wives: $\chi^{2}(2)=8.94, p<.05$; husbands: $\left.\chi^{2}(3)=11.97, p<.01\right)$ and had higher incomes $\chi^{2}(3)=12.92, p$
<.01. Mothers in the remaining sample were older $t(41.80)=2.12, p<.05$. There were no significant differences between the remaining sample and the initial 222 families on mothers and fathers' race/ethnicity, fathers' age, firstborn age, firstborn or infant gender, or years of marriage.

## Measures

Father involvement in child and infant care. During a joint-couple interview at each timepoint, both spouses were asked to agree on whether each child care task was performed by the wife, the husband, or both equally over the past month, on a scale from $1=$ Always Wife, $2=$ Usually Wife, $3=$ Both Equally, $4=$ Usually Husband, and $5=$ Always Husband. Division of childcare was assessed using 11 items (e.g., 'Making snack for older child', 'taking older child to the doctor') from the Childcare Checklist (Ehrenberg, Gearing-Small, Hunter, \& Small, 2001) at $1,4,8$, and 12 months in a couple interview ( $\alpha$ range $=.68-.77, M=.72$ ). Likewise, Division of infant care was assessed using 9 items (e.g., 'changing poopy diapers', 'feeding baby') from the Childcare Checklist (Belsky, Rovine, \& Fish, 1989) at 1, 4, 8 and 12 months following the infant's birth ( $\alpha$ range $=.77-.84, M=.82$ ). Responses were averaged across each scale for a score from 1-5; higher scores reflected more father involvement in childcare tasks.

Gender Role Beliefs. Husbands and wives' gender role beliefs were assessed individually via the 20 -item gender role attitudes questionnaire (Bird, Bird, \& Scruggs, 1984). The Gender Role Attitudes questionnaire specifically assesses beliefs about women's and men's roles with regard to family and work, Example items included "A wife should have equal authority with her husband in making family decisions," and "The husband should be the head of the family (reverse coded)." Each item was rated on a 7 point Likert scale from $1=$ Strongly Disagree to $7=$ Strongly Agree. Responses were averaged across items such that higher scores
indicated stronger endorsement of egalitarian gender ideology (wives' $\alpha=.88$, husbands' $\alpha=$ .85). A latent variable was created to capture the couple's gender role beliefs.

Table 4.1 provides descriptive statistics (means, standard deviations) and correlations among all study variables for dual-earner and single-earner families.

## Data Analysis Strategy

Analyses preceded in several steps. First, we conducted a 2 (family-earner status: dual/single) x 4 (time: $1,4,8,12$ ) x 2 (child: infant/older sibling) repeated measures ANCOVA, with time and child as repeated measures, earner-status as a between subjects factor and age of the older sibling added as a covariate. These analyses provided descriptive information for the sample as a whole and allowed us to examine mean differences in father involvement in child and infant care as a function of earner-status and whether it differed for children and infants over time. To model trajectories of child care over time, we first modeled individual latent growth curves for infant care and child care before modeling dual child care trajectories for infants and children. Modeling then proceeded by testing directly the juggling process by including the cross paths between fathers' involvement in child care and their involvement in infant care over time, and whether parental gender roles predicted levels and changes in infant and child care over time. Finally, we used a multi-group analysis to determine if the juggling process described dualearner and single-earner families. We used Mplus Version 7.0 (Muthén \& Muthén, 1998-2012) to test a series of linear growth curve models, with full-information likelihood (FIML) estimation for missing data, which allowed us to retain families with missing data, resulting in 214 families for our final analyses.

## Results

Means of Father Involvement as a Function of Child, Time and Family-Earner Status

Results from the 2(child) x 4(time) x 2 (earner-status) repeated measures ANCOVA (child age as covariate) revealed a significant main effects of earner status $F(1,181)=19.53, \eta_{p}{ }^{2}$ $=.10, p<.001$, child (firstborns or infant), $F(1,181)=18.57, \eta_{p}{ }^{2}=.09, p<.001$, and a marginal main effect of time $F(3,179)=2.66, \eta_{p}{ }^{2}=.05, p=.05$. There were significant interactions of time x earner status and child x time that qualified these main effects. There were no significant three-way interactions. Probing the time x earner interaction, $F(3,179)=8.73, p<.001, \eta_{p}{ }^{2}=$ .13, revealed that while there were no significant differences in father involvement between dualand single-earners at 1 month, dual-earner fathers surpassed single-earner fathers at every other timepoint. When comparing father involvement within groups, dual-earner fathers significantly increased their involvement from 1 to 8 months, but there was no significant difference in father involvement between 8 and 12 months. Single-earner fathers displayed a different pattern of involvement. Single earner fathers decreased their involvement from 1 to 4 months. Singleearner fathers were also more involved at 12 months compared to 4 months. See Table 4.2 for means. There was a significant interaction between child and time, $F(3,179)=16.76, p<.001$, $\eta_{p}{ }^{2}=.22$. Means are presented in Table 4.3. Post-hoc comparisons revealed that at all time points, fathers engaged in more childcare for firstborns than infant care. Fathers were significantly more involved with firstborns at 1 month than any other timepoint. Father involvement at 4 months was not significantly less than involvement at 1 month, but significantly more than involvement at 12 months. There were no significant differences in father involvement between 4 and 8 months and 8 and 12 months. Father involvement with infants showed an opposite pattern from involvement with firstborns. Father involvement with infants significantly increased from 1 to 12 months. See Table 4.3 for means.

Modeling Family Process Across Children, Time, and Family-Earner Status

As recommended by Bollen \& Curran (2006), the first step in fitting a dual trajectory model is to fit separate single latent growth curve trajectories for each individual process (i.e., father involvement with children and father involvement with infants). Firstborn age was added as a covariate once optimal-fitting models were estimated at each step (Bollen \& Curran, 2006). In this step we compared two preliminary models for each latent growth curve, one that estimated a linear slope using slope weights that corresponded to the time points of the study (1, $4,8,12$ ) and set error variances to be equal across time points, and a second, where error variances across time points freely varied. The first model that set equality constraints for error variances across time points fit poorly for both firstborns $\left(\right.$ RMSEA $=.23, \mathrm{CFI}=.81, \chi^{2}(8)=$ 94.40, $p<.05)$ and infants $\left(\operatorname{RMSEA}=.13, \mathrm{CFI}=.94, \chi^{2}(8)=36.71, p<.05\right)$, in comparison to the model that allowed variances across timepoints to vary freely for older children (RMSEA $=$ $.12, \mathrm{CFI}=.97, \chi^{2}(5)=20.68, p<.05, \chi^{2}$ diff $\left.(3)=73.72, p<.001\right)$ and infants $($ RMSEA $=.15, \mathrm{CFI}$ $\left.=.95, \chi^{2}(5)=27.81, p<.05, \chi^{2}{ }_{\text {diff }}(3)=8.9, p<.05\right)$. Thus, the optimal models indicated that variances for father involvement varied over time for both infants and children and we used these models for further model building of our dual trajectories.

Once we established the best fitting model for each individual latent growth curve, we then set out to model dual trajectories through two parallel processes by allowing the latent intercepts, slopes, and error variances within time points between the child and infant care trajectories to covary to model the dependence between child and infant care within families. The interrcorrelations within timepoints between firstborn and infant care reflect covariation in reported father involvement within a given time point that was not accounted for by the growth factors. Figure 4.1 presents the two-parallel process model used to test the "juggling process," showing how the initial father involvement with the older child at 1 month (older child intercept)
predicted change in father involvement with the infant over time (infant slope), by regressing the latent slope factor for children onto the latent intercept for infants and the latent slope for infants onto the latent intercept for children. If the juggling process was present, we would see significant paths between intercepts for firstborns to slopes of infants and vice versa.

Because we were interested to determine whether this juggling process differed for dualearner and single-earner families, we estimated a multi-group model that imposed equality constraints on all model parameters between dual- and single-earner families and compared this model with a model that released all equality constraints between dual- and single-earner families, except on the error variances of each time point between groups. The chi-square difference test indicated that the model releasing equality constraints fit better than the one with equality constraints, $\chi^{2}{ }_{\text {diff }}(18)=55.99, p<.001$, and the fit was acceptable: RMSEA $=.10, \mathrm{CFI}$ $=.95, \chi^{2}(44)=92.54, p<.05$, which indicated that there were differing levels and processes in father involvement between dual- and single-earner families. Table 4.4 presents the means and variances of the intercepts and slopes for the latent growth curves of father involvement in child and infant care ${ }^{1}$. The means (fixed effects) of the intercepts reflect the initial mean levels of father involvement at the 1 month time point for children and infants whereas the means of the slopes reflect the average change over time in father involvement for children and infants. The variances (random effects) reflect whether there is significant variability around the intercepts and slopes suggesting there are individual differences in the growth parameters within families. On average, both dual- and single-earner fathers slightly decreased in their involvement with their older children over time (i.e., significant negative slopes), but there was no significant variance in the slopes for fathers' involvement in child care over time for either single-earner or dual-earner families. Table 4.4 also reveals that father involvement in infant care significantly
increased in both dual- and single-earner families involvement over time, with significant variation for both families.

Our final model building step added a latent variable reflecting mothers' and fathers' gender role beliefs as a predictor of fathers' involvement in child and infant care for dual-earner and single-earner families, in addition to adding the age of the older child as a covariate. Because the predicted outcome (division of childcare) was a couple-level joint measure between parents, we chose to create a couple-level latent variable for gender role beliefs that reflected the joint contribution of both parents' beliefs. The model fit the data well, RMSEA $=.07, \mathrm{CFI}=.96$, $\chi^{2}(82)=129.78, p<.05$. Figure 4.2 presents the significant paths from the final model examining the manner in which parental gender roles predicts father involvement across two children in dual-earner and single-earner families. Note that because the means of the firstborn slope were negative for both dual- and single-earner fathers, positive regression coefficients with firstborn slope is interpreted as contributing to flatter decline over time. In contrast, because the means for infant slope were positive, positive regression coefficients are interpreted as contributing to steeper increases over time.

Figure 4.2 shows that there are differences in the paths across dual-earner and singleearner families. First, parental gender roles predicted the intercept of father involvement for the firstborns. Dual-earner fathers were more involved in the care of the firstborns at 1 month when parents held more egalitarian gender roles before the birth. Greater father involvement in the care of older children at 1 month then marginally predicted increased involvement in infant care over the year in dual-earner families $(p=.08)$. For single-earner families, parental gender roles marginally predicted fathers' involvement in infant care ( $p=.08$ ), in which single-earner fathers increased their involvement in infant care over time when couples held more egalitarian gender
role beliefs. In both dual- and single-earner families, the more fathers were involved with infants at 1 month, the more they maintained their care of firstborns over time. There were also some significant effects of firstborn age on father involvement with infants in dual-earner families only. When firstborns were older, dual-earner fathers were more involved with infants at 1 month and maintained their involvement with infants over time.

## Discussion

In this study, we investigated whether father involvement with older siblings and infants increased after the birth of the second child, and found that overall, father involvement with infants increased over time whereas involvement with older siblings decreased slightly. We examined whether fathers juggled their involvement between children within dual- and singleearner families. Finally, we examined whether parents' gender role beliefs contributed to patterns of father involvement over time.

## Father Involvement with Infants and Older Siblings in Single- and Dual-Earner Families

Unlike earlier studies that focused on only one child in the family or combined fathers' involvement across children, one of the unique aspects of this study was a focus on understanding fathers' involvement across children, whether it changed over time and whether involvement with one child affected fathers' involvement with the other. We found that, in general, fathers increased their involvement with infants while they decreased their involvement with the older children slightly over the year following the infant's birth. Although mothers were more involved in childcare than fathers, in general, dual-earner fathers were significantly more involved in the care of their children than were single-earner fathers, which is consistent with findings with several earlier studies (Crouter, Perry-Jenkins, Huston, \& McHale, 1987; Ishii-Kuntz \& Coltrane, 1992).

We also found some support for the juggling process but mostly in dual-earner families. In dual-earner families, those fathers who were more involved with infants at the beginning maintained their involvement with the older children over time. Dual-earner fathers also increased their involvement with the infant in the following year if they had also been more involved in the care of their older children 1 month after the infant's birth. Single-earner fathers also maintained involvement with their older children if they were involved with the infants soon after birth, but their involvement with infants at 1 month did not shape their involvement with older children over time.

## Father Involvement in Dual- and Single-Earner Families: Similar Patterns, Different

## Processes

When comparing levels of father involvement and how they changed for children and infants between dual- and single-earner families, the patterns appeared more similar than different across family structure. Fathers were more involved with children than infants in both types of families. Fathers in both types of families slightly decreased their involvement with children whereas they increased in their involvement with infant care over time, on average. Our growth curve results suggested that the family processes predicting father involvement after the birth of a second child are different between dual- and single-earner families. Whereas dualearner fathers appeared to juggle care across the children and the infants as time progressed, evidenced by increases in infant involvement comparable to their involvement with older children. It seemed that dual-earner fathers were balancing their involvement with the older children as they increased their involvement with infants. Because dual-earner fathers face greater expectations to shoulder more responsibility for childcare and are more involved in childcare than single-earner fathers (Crouter et al., 1987), there may have been greater
expectations for father involvement from dual-earner fathers than single-earner fathers in our sample.

Single-earner families exhibited a different process. When single-earner fathers were more involved with their infants at 1 month, they maintained their involvement with their older children over time. Instead of parents coming together to juggle care as appeared to be the case in dual-earner families, we see that family roles were more likely to diverge over time in singleearner families, with mothers increasingly specializing in the care of both children. Whereas dual-earner couples were increasingly sharing care over the year, single-earner couples were moving more toward greater mother involvement by 12 months after the birth of the infant. These findings are quite consistent with earlier findings revealing that family structure and women's employment play a significant role in how parents divide childcare responsibilities (Aldous et al., 1998; Wilcox \& Dew, 2013). Parents in single-earner families are expected to specialize in their roles (i.e., mother-caregiver, father-breadwinner), but roles are expected to be shared in dual-earner families. Thus, as the infants age in these single-earner families, childcare roles become increasingly specialized. Previous work on the transition to second-time parenthood found three different typologies of adaptation: father withdrawal, specialization, or juggling of childcare tasks (Kreppner et al., 1982), but Kreppner and colleagues did not make distinctions between dual- and single-earner families in their study. Thus, these previously-found patterns may have resulted from differences in family structure.

## Egalitarian Gender Beliefs and Family Process

Even though the patterns of child care specialization and juggling may be linked to family-earner status, we also found evidence that egalitarian gender role beliefs did have some role in determining patterns of child and infant care in both dual- and single-earner families.

Single-earner fathers who were part of more egalitarian couples became slightly more involved with their infants over time, although gender role beliefs did not predict father involvement with the older children, either initially after the birth at 1 month or any change in involvement over time.

For dual-earner families, father involvement was predicted by both gender role beliefs and age of the older children in these families. Dual-earner fathers who were part of more egalitarian couples were more involved with the older children initially at 1 month, yet gender role beliefs did not predict father involvement with infants 1 month after the birth. Gender role beliefs may not have predicted father involvement with infants immediately following birth because mothers in dual-earner couples are transitioning in and out of maternity leave so at 1 month after birth both single-earner and dual-earner mothers are home caring for their children. Indeed, most (83.5\%) dual-earner mothers in our sample were not working at all at 1 month ( 0 hours per week), whereas their husbands were working predominantly full time ( $M=43.31$ hours, $\mathrm{SD}=13.40$ hours). At 4 months, most ( $83.2 \%$ ) dual-earner mothers had returned to work and were working at least 20 hours per week. The context of this maternity leave transition may have been more important for family dynamics in dual-earner families than their beliefs in shaping childcare responsibilities, particularly because maternity leave was intended for mothers to care for their new infants. Family leave policies that are inclusive of fathers could ease couples' transition to second-time parenthood, as fathers would be available at home to care for either older children or assist mothers with infants.

Dual-earner fathers with egalitarian beliefs were more engaged in the care of the older children at 1 month which no doubt helps both parents manage the transition to full-time care of both infants and older children after the birth of a second child. Thus, more egalitarian couples in
dual-earner couples seemed to engage in the specialization process immediately after the birth of the infant described by Kreppner et al. (1982) and Stewart (1990) as part of the initial adjustment period. Beyond the couple's gender role beliefs, the age of the firstborn in dual-earner families appeared to constrain or facilitate father involvement with infants. Dual-earner couples with older firstborns also shared more care between each other with the infant, suggesting that dualearner couples with older firstborns were less likely to engage in specialization immediately after the birth of the infant. Dual-earner fathers with older firstborns were also more likely to maintain involvement with their infants over time, likely because there is already more initial father involvement with infants in dual-earner families that have a larger age difference between firstborns and infants. We speculate that because older children are more autonomous and require less supervision, fathers are freer to provide more hands-on care for infants. Increased father involvement with the infant may help dual-earner couples adjust as they balance both work and childcare responsibilities during the transition. Thus, if greater equity in childcare is a goal for dual-earner couples, one recommendation may be to increase the birth interval between the two children so that fathers can be involved with both children.

## Study limitations

Despite the unique focus in the current study on two children after the birth of a second child, a significant family transition that affects many U.S. families, there are several limitations that must also be noted. First, the sample was mostly white and middle-class, limiting the generalizability of our results to families from other ethnic and racial backgrounds. Further, because of our interest in father involvement after the birth of a second child, we only included heterosexual couples. Given evidence that the division of childcare in same-sex couples is more egalitarian than heterosexual couples (Chan, Brooks, Raboy, \& Patterson, 1998; Patterson,

Sutfin, \& Fulcher, 2004), different dynamics may describe the division of child care responsibilities for same-sex couples. Another limitation is that we measured gender role beliefs at only the prenatal timepoint because beliefs are often very stable over time (Brooks \& Bolzendahl, 2004). It is possible that gender role beliefs may have changed in tandem with changes in childcare responsibilities after the birth of the second child. Previous work has found that gender role beliefs tend to become more traditional after the birth of a second child (KatzWise, Priess, \& Hyde, 2010), thus measuring gender role beliefs at only one time point may not have fully captured the impact of parents' beliefs on childcare responsibilities across this transition. Some of the results from the statistical modeling were only marginal, particularly when it involved gender role beliefs. Thus, future research will need to take into consideration other personal and family-level factors such as marital satisfaction or work-family conflict that might explain the division of child care in dual- and single-earner families after the birth of their second child. Finally, a few of the families changed in their work status over the course of the year, and future research may need to account for these changes.

## Conclusions

Whereas previous work on the division of childcare responsibilities focused either on a single child in the family or aggregated across children, we uncovered different patterns of father involvement when examining individual children within dual-earner and single-earner families. We also found that different family processes emerged after the birth of a second child within dual- and single-earner families. Dual-earner fathers with more egalitarian gender role beliefs provided more care for their older children, immediately after the birth, which, in turn, predicted their involvement with the infant over the year following the birth. For single-earner fathers, egalitarian gender role beliefs predicted their involvement with their infants only slightly over
time, yet single-earner fathers were less involved with both children and infants than were their dual-earner counterparts. These findings suggest that future work on father involvement in child care should consider an examination of multiple children in the family in order to accurately portray what fathers do in the family. Further, research comparing dual- and single-earner families should also evaluate both family context and process instead of only examining group levels.

## Footnote

${ }^{1}$ Because the inclusion of regression paths between growth factors changed the slopes to dependent variables and then we were not able to obtain the means and variances of the slope factors, we estimated a version of the unconditional dual trajectory that removed the regression paths and replaced it with correlations, and model fit was identical to unconditional juggling model.

Firstborns

## Infants



Figure 4.1. Dual Trajectory model illustrating hypothesized juggling process. Note that for ease of presentation error covariances between corresponding time points $(1,4,8,12)$ between firstborn and infant trajectories are not depicted here.


Figure 4.2. Dual trajectory model illustrating gender role beliefs and child age as predictors of growth factors. Unstandardized estimates are shown, dual-earner estimates reported first and single-earner estimates reported after the /. Solid black lines represent significant paths for both groups. Black dashed lines represent significant paths for one group but not the other. Grey dotted lines represent nonsignificant paths.

Table 4.1. Correlation Matrix and Descriptive Statistics for Division of Child and Infant care and Gender Role Beliefs

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Moms' Gender Role Beliefs | - | .54** | . 08 | -. 02 | -. 07 | . 07 | . 05 | . 05 | . 08 | . 20 |
| 2. Dads' Gender Role Beliefs | . $50 * *$ | - | . 08 | . 04 | -. 02 | . 08 | -. 04 | . 08 | . 06 | . 09 |
| 3. 1 Month Childcare | . 10 | .26** | - | .56** | . $45^{* *}$ | . 51 ** | . 28 ** | . 08 | . 04 | . 12 |
| 4. 4 Month Childcare | . 18 | . $31 * *$ | . $57 * *$ | - | . $77 * *$ | .71** | .23* | . $41 * *$ | . $33 * *$ | . $31 * *$ |
| 5. 8 Month Childcare | . 13 | .25* | . $58 * *$ | .79** | - | .74** | .23* | . $34 * *$ | .44** | .33** |
| 6.12 Month Childcare | . 12 | . 20 | .43** | .66** | .73** | - | . $32 * *$ | .44** | .39** | .51** |
| 7. 1 Month Infant Care | . 09 | -. 09 | -. 02 | . 09 | .20* | .27** | - | .71** | .58** | . $52 * *$ |
| 8. 4 Month Infant Care | . 05 | -. 03 | -. 11 | .23* | .24* | . $38 * *$ | .64** | - | .71** | .64** |
| 9.8 Month Infant Care | . 09 | -. 02 | . 03 | . 40 ** | . 41 ** | . 42 ** | .49** | .77** | - | .81** |
| 10.12 Month Infant Care | . 09 | . 04 | . 10 | . $37 * *$ | . 41 ** | . $55 * *$ | .45** | .66** | .76** | - |
| Dual-Earner M(SD) | 5.63(.69) | 5.56(.61) | 2.59(.57) | 2.53(.42) | 2.49(.47) | 2.46(.43) | 1.78(.47) | 1.98(.53) | 2.25(.52) | $2.39(.52)$ |
| Single-Earner M(SD) | 5.29(.78) | 5.11(.73) | 2.49 (.54) | 2.20(.46) | 2.18(.47) | 2.11(.48) | 1.81(.46) | 1.78(.54) | 1.96(.56) | 2.02(.54) |

Note. Correlations for Dual-Earners presented below the diagonal, Single-Earners presented above diagonal. ${ }^{*} p<.05 * * p<.01$

Table 4.2. Means and Standard Errors for the Time x Earner interaction

| Family Structure | 1 Month | 4 Months | 8 Months | 12 Months |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dual-Earner | $2.17^{\mathrm{a}}(.04)$ | $*\left\{\begin{array}{l}2.25^{b}(.04) \\ 2.00^{b}(.04)\end{array}\right.$ | $*\left\{\begin{array}{l}2.36^{c}(.04) \\ 2.06^{\mathrm{ab}}(.05)\end{array}\right.$ | $*\left\{\begin{array}{l}2.41^{c}(.04) \\ 2.07^{\mathrm{a}}(.05)\end{array}\right.$ |
| Single-Earner | $2.14^{\mathrm{a}}(.04)$ |  |  |  |

Note. Standard Errors presented in parentheses. Unique subscripts indicate significant differences at $p<.05 .^{*}\{$ denotes between group differences within timepoints.

Table 4.3. Means and Standard Errors for the Child x Time Interaction

| Child |  | 1 Month |  | 4 Months |  | 8 Months |  | 12 Months |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Firstborn |  | $2.53{ }^{\text {a }}$. 04 ) |  | $2.36{ }^{\text {b }}$. 03 ) |  | $2.32^{\mathrm{bc}}(.03)$ |  | $2.28{ }^{\text {c }}$. 03 ) |
| Infant | * | $1.78{ }^{\text {a }}$. 03$)$ | * | $1.89^{\text {b }}$ (.04) | * | $2.09^{\text {c }}$ (.04) | * | $2.20{ }^{\text {d }}$ (.04) |

Note. Standard Errors presented in parentheses. Unique subscripts indicate significant differences at $p<.05 .^{*}\{$ denotes between group differences within timepoints.

Table 4.4. Growth Parameters in Father Involvement for Dual- and Single-Earner Families

|  | Dual-Earners |  | Single-Earners |  |
| :--- | :--- | :--- | :--- | :---: |
|  | Means | Variance | Means | Variance |
|  | $\mathrm{M}(\mathrm{SE})$ | $\mathrm{M}(\mathrm{SE})$ | $\mathrm{M}(\mathrm{SE})$ | $\mathrm{M}(\mathrm{SE})$ |
| Firstborn Intercept | $2.57^{* * *}(.05)$ | $.16^{* * *}(.03)$ | $2.35^{* * *}(.05)$ | $.15^{* * *}(.03)$ |
| Firstborn Slope | $-.01^{*}(.00)$ | $.00(.00)$ | $-.02^{* * *}(.00)$ | $.00(.00)$ |
| Infant Intercept | $1.75^{* * *}(.05)$ | $.18^{* * *}(.03)$ | $1.71^{* * *}(.05)$ | $.19^{* * *}(.04)$ |
| Infant Slope | $.05^{* * *}(.01)$ | $.00^{* * *}(.00)$ | $.03^{* * *}(.01)$ | $.00^{* * *}(.00)$ |

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## CHAPTER 6: General Discussion

Experiences of shared parenthood are assumed to be intertwined with gender.
Socialization of parenting and caregiving are more strongly geared toward women compared to men. The main focus of this dissertation was to investigate gender roles and parenthood during transition periods (birth of an infant) during which gender roles are likely to be amplified (KatzWise, Priess, \& Hyde, 2010). I explored two central questions: 1) Do media portrayals of fathers in families shape beliefs about fathers and gender roles? 2) Do gender role beliefs contribute to coparenting dynamics and the sharing of child care between mothers and fathers after the birth of a second child? Whereas the first two studies addressed parenting and gender roles from an individual perspective, the last two studies addressed parenting and gender roles from a coupleperspective and a focus on the mother-father dyad.

## Fathers on Television and Beliefs about Father Roles in First-Time Expectant Parents

Gender portrayals of men and women in relationships are frequent in the media and television portrayals are no exception (Scharrer, 2013). How men are portrayed as fathers in sitcoms and other frequently watched television programs may play a part in how young men embrace their roles as fathers, particularly for first-time fathers with no previous child-rearing experience. As such, study 1 explored whether regular exposure to fathers on television across genres was related to beliefs both about gender roles in families and about fathers' importance to children in first-time expectant parents. Results revealed that perceived realism of television was uniquely predictive of gender role beliefs, but television exposure was not. Results surrounding
beliefs about fathers' importance to child development were more nuanced. Men who watched more television programs featuring fathers were less likely to endorse that fathers were important, in comparison to women. Furthermore, men who watched more television programs featuring fathers despite low levels of perceived realism endorsed the lowest levels of support for the notion that fathers were important to child development. Taken together, first-time expectant fathers may be especially vulnerable to media messages about fathers.

Study 2 examined the portrayals of fathers specifically in sitcoms and examined whether a manipulation of the portrayal could affect expectant parents' beliefs about fathers and gender roles. Participants who viewed men engaging in father roles also offered stronger endorsement of the importance of fathers to children's development and more egalitarian gender role beliefs. Participants who viewed the incompetent fathers were simultaneously likely to endorse that fathers should be equally involved and are important but were also likely to describe fathers as incompetent and distant. Therefore, viewing images of incompetent fathers appeared to elicit ambivalent attitudes about paternal roles.

Studies 1 and 2 tested a long-held but never tested hypothesis that (negative) portrayals of fathers on television influence beliefs about fathers' roles (Parke \& Brott, 1999), using correlational and experimental approaches. When evaluating the findings from studies 1 and 2, there appeared to be some discrepancy - if viewing men in fathers' roles produces short-term endorsement of egalitarian gender roles and of fathers' importance to child development, why is regular exposure to television fathers linked with these beliefs in the opposite direction? There are two possible explanations. One explanation is that Study 2 video clips featured fathers interacting with children. I chose these clips to be able to test for incompetent vs. competent portrayals of fathers, but during regular television viewing, father images are also accompanied
by mother images. Furthermore, mothers often joke about fathers' foolishness in sitcoms (Scharrer, 2001). Thus, compared to mothers, fathers may come across as less competent and involved during regular television viewing. The second explanation focuses on negativity biases and cultural schema that highlight fathers' deficits. Incompetent father images may be more salient to viewers in comparison to competent images because they are negative images and they fit into larger cultural conceptions about underinvolved, incompetent fathers. Thus, as viewers watch more programming featuring fathers, they more easily remember the negative images that already fit into deficit schemas. These negative images may in turn facilitate beliefs that fathers are incompetent and distant, further solidifying beliefs that fathers are not important to children.

## Gender in Action During the Transition to Second-Time Parenthood

Nearly $80 \%$ of families in the U.S. have at least two children so the birth of a second child is a significant life event for many couples. The quality of the coparenting relationship (i.e., cooperation versus conflict) between mothers and fathers before the birth of the second child is an important predictor of how well the firstborn child adjusts to becoming an older sibling (Kolak \& Volling, 2013; Song \& Volling, 2015). For example, older siblings were more likely to engage in prosocial behavior toward their infant siblings 1 month after the birth if mothers and fathers were high in coparenting cooperation and low in coparenting conflict (Song \& Volling, 2015). Thus, how well mothers and fathers can negotiate coparenting conflict over this transition has important implications for children's adjustment and recommendations for interventions to assist parents and children undergoing the transition to second-time parenthood. The main goal of study 3, then, was to determine what factors best predicted coparenting after the birth of a second child.

According to Family Systems Theory (Minuchin, 1985), there is mutual interdependence in the coparenting relationship (which we term the mutual influence hypothesis), but others have suggested that mothers and fathers may have unequal influence within the coparenting relationship based on parent gender. The maternal gatekeeping hypothesis posits that because parenting is typically a woman's "domain," mothers have the ability to allow or exclude their spouse's involvement in the coparenting relationship (Allen \& Hawkins, 1999). Others have suggested that because father involvement is more "voluntary" than mother involvement in families, fathers' coparental involvement is more likely to be influenced by his experiences, which we termed the paternal decision-making hypothesis (Davies, Sturge-Apple, Woitach, \& Cummings, 2009; Volling \& Belsky, 1991).

Our first research question was to test who has more influence in the coparenting relationship by evaluating unequal influence (maternal gatekeeping, paternal decision making) models against the mutual influence model. Our second question was to test what predicts coparenting using an ecological systems framework (Feinberg, 2003), specifically: gender role beliefs, marital satisfaction, and children's difficult temperament.

Instead of finding gender differences or evidence of unequal influence based on gender, this study largely found gender similarities in predicting coparenting. These results, coupled with previous work on the transition to second-time parenthood, show that both mothers and fathers appear equally important in contributing to coparenting adjustment during the transition (Kreppner, Paulsen, \& Schuetze, 1982; Stewart, 1990).

Whereas egalitarian gender role beliefs offset perceptions of conflict in the coparenting relationship, gender role beliefs were not uniquely predictive of coparenting cooperation when accounting for pre-birth levels of cooperation. Intriguingly, despite theoretical claims that the
marital relationship is the most important predictor of the coparenting relationship (Feinberg, 2003), only fathers' marital satisfaction was predictive of coparenting cooperation, but not conflict. Intriguingly, this study highlighted the importance of the child's characteristics to the coparenting relationship after the birth of a second child. Firstborn children with more difficult temperaments appeared to exacerbate coparenting difficulty.

In an effort to further examine how men and women negotiate family roles, Study 4 examined father involvement in child and infant care after the birth of a second child within dual- and single-earner families. Overall patterns of father involvement revealed that fathers slightly decreased their involvement with firstborns whereas they increased their involvement with infants. When examining the "juggling" process between children, dual-earner couples juggled childcare responsibilities between themselves and between their two children, whereas single-earner couples engaged in more "gendered" divisions of labor, with mothers becoming primarily responsible for both children. Gender role beliefs contributed to different processes between dual- and single-earner families. Dual-earner fathers who were part of egalitarian couples increased their involvement with older siblings immediately after the transition. In contrast, egalitarian gender role beliefs contributed to fathers' increasing involvement with infants in single-earner couples. These findings highlight that gender role beliefs shape father involvement in different ways within different family structures. The major contributions from this study was discovering that 1) father involvement differs between children within families, and 2) there are different family processes in dual-and single-earner families during the transition to second-time parenthood.

## Patterns of Findings Across Studies: Gender Differences or Gender similarities?

Collectively, these studies demonstrated that although the contribution of television to the socialization of family roles appears gendered, the impact of gender role beliefs on coparenting dynamics within families is not gendered. The two studies that looked specifically at gender differences were Studies 1 and 3. Whereas Study 1 found gender differences in associations between television use and beliefs about fathers' roles, Study 3 largely did not find gender differences between mothers and fathers in associations between coparenting, marital satisfaction, and gender role beliefs. I believe the main reason why there were gender differences in Study 1 and not in Study 3 was due to the design of the two studies. Whereas Study 3 was a study of couples within families, Study 1 used an independent design, where individual expectant parents were recruited from different couples. Given that gender differences tend to disappear once accounting for shared variance within couples (Volling, Oh, Gonzalez, Kuo, \& Yu, 2015), the impact of television on expectant parents' beliefs about fathers may be less gendered when adopting a within-couple approach.

## Limitations

In this dissertation, I specifically explored gender roles in heterosexual couples, and thus my findings may not apply to same-sex couples or individuals who do not identify as heterosexual. One of the limitations across studies was the use of a gender role beliefs measure (Bird, Bird, \& Scruggs, 1984) that specifically assessed gender roles in married couples. Although this measure was chosen because it has been validated and used in previous work, the measure may not reflect current gender norms and beliefs in the U.S. and elsewhere. In dissertation studies 1 and 2, about a quarter of individuals were cohabitating, but not married ( $26.9 \%$ in Study 1; $24.8 \%$ in study 2). Cohabitating individuals may have different beliefs about marriage or may feel that the roles of married couples do not apply to them. Similarly, same-sex
couples may not adhere to traditional beliefs about male and female gender roles in the family even if there are two partners performing child rearing responsibilities, so the findings from the current set of studies may not generalize to same-sex couples. Future research examining gender role beliefs, coparenting, and the division of household labor would be well-advised to take these differences in family and partner relationships into consideration when devising studies on coparenting and the division of child care. Future research needs to be sensitive to these issues and include more nuanced measures of gender role beliefs that are inclusive of diverse family forms (e.g., non-married, same-sex couples).

## Implications

Overall, this dissertation showed that television portrayals of fathers in families contribute to beliefs about fathers' roles during the transition to first-time parenthood. But the contribution of gender role beliefs to coparenting and division of childcare during the transition to second-time parenthood was less clear. My studies were not unique from other papers on the contribution of gender role beliefs on coparenting and division of labor which also found mixed results (Buckley \& Schoppe-Sullivan, 2010; Davis \& Greenstein, 2009; Schoppe-Sullivan \& Mangelsdorf, 2013).

I offer a few hypotheses for why gender role beliefs do not consistently predict coparenting dynamics. Gender role beliefs revolve around what dads and moms "should" and "should not" do. These are ideals, but the realities of balancing work and family responsibilities may pose a different set of constraints, as we saw in Study 4 that compared dual- and singleearner families. The contribution of gender role beliefs on division of childcare appeared context-dependent: Egalitarian fathers participated in childcare with older siblings to manage the immediate transition in dual-earner families, and egalitarian fathers increased in their infant care
involvement across the year in single-earner families. Thus, gender role beliefs may shape family dynamics in different ways depending on family structure and depending on the child.

Another hypothesis I have for the inconsistent contribution of gender role beliefs to coparenting and father involvement is that egalitarian gender role beliefs can co-exist with other beliefs that may undermine paternal involvement. As I found in Study 2, one can endorse egalitarian gender role beliefs while espousing implicit beliefs that fathers are incompetent and distant from their families. Clearly, ambivalence can exist toward father involvement, and these beliefs about fathers' incompetence or disinterest are presumed to hinder fathers' active involvement in families. If parents believe fathers should be equally involved as mothers, but also believe that fathers are not as capable as mothers, then those beliefs about competence may actually trump beliefs about gender roles. Thus, the enactment of actual division of childcare and coparenting dynamics becomes a battle between ideology (what one "should" do) and perceived competencies (what one "can" do). Therefore, future research may need to take into consideration both beliefs and competencies when dissecting the role of gender in families. These patterns may begin early in infancy: A baby cries, and her father tries to soothe her. He is unsuccessful, so he hands her to the mother. If the mother also holds beliefs that fathers are not as competent as mothers, the mother may be all too happy to take the baby and soothe her successfully, and in the process reinforcing both mothers' and fathers' beliefs that women are better at caregiving than men. . With each successful attempt, the mother then has more opportunities to learn how to respond sensitively to her daughter's cues, whereas the father does not. Eventually, the daughter prefers her mother as a caregiver and her father as a playmate. Based on this preference, the mother now spends more time engaged in childcare tasks than the father. These repeated exchanges that are so simple and so common may be what reinforces
gendered patterns of behavior in shared parenting. Future research can explore the interactions between gender role beliefs and perceived competence in childcare tasks on coparenting and division of childcare.

Because scholars have placed more emphasis on the role of the parents' characteristics and their relationship with each other in shared parenting, one of the more surprising findings in this dissertation was the importance of the child. In Study 3, firstborn children's difficult temperament uniquely predicted coparenting after the birth of a second child, but parents' marital satisfaction and gender role beliefs played a less conclusive role. In Study 4, levels of father involvement differed between firstborns and infants, and dual-earner fathers participated in more infant care when their firstborns were older. Taken together, it appears that children in the family are active agents that contribute to coparenting relationship dynamics between parents.

Existing theory on the ecological model of coparenting emphasizes the marital relationship and parents' individual characteristics as the most important contributors to the coparenting relationship (Feinberg, 2003), while the child's characteristics are considered as tertiary compared to the parents' characteristics. My studies on coparenting during the transition to second-time parenthood revealed that fathers had different levels of involvement depending on the child (older sibling or infant), and that temperamentally difficult older siblings exacerbated coparenting problems after the birth of a second child. I argue that although the development of the coparenting relationship may be more influenced by marital and parent factors during the transition to first-time parenthood, the relative impact of these ecological factors may change in different contexts, such as the transition to second-time parenthood and also over developmental stages of the family-life cycle. Future research focused on what predicts coparenting dynamics during the transition to second-time parenthood would be well advised to measure child
characteristics, particularly age and temperament, as important contributors. Findings from this dissertation also highlighted television as a potential socialization source into parenting roles, especially for first-time expectant fathers. Previous work on television fathers focused only on the nature of the portrayals, and the studies from this dissertation formed a new line of inquiry on media impacts on beliefs about fathers and parenting roles. Future research should examine whether television contributes to actual parenting practices or coparenting dynamics after the transition to parenthood.

## Conclusions

When we do not socialize boys and men into fatherhood roles, when we exclude men or give them very little information about parenting when their partners are pregnant (Parke \& Brott, 1999), we are setting future fathers up for "failure." Hence, men may feel underprepared to meet present-day fatherhood ideals of actively sharing in childcare tasks. Men who do not have traditional resources (e.g., groups, classes, family and friends as role models) may turn to television instead (Hinckley, Ferreira, \& Maree, 2007), which portrays men to be especially incompetent relative to mothers (Scharrer, 2001). To un-stall the gender revolution, society needs to give families the resources (i.e., classes, programs) and support (i.e., parental leave for men) that would facilitate father involvement in families.

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