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Parents' Gender Ideology and Gendered Behavior as Predictors of Children's Gender-Role Attitudes: A Longitudinal Exploration

Hillary Paul Halpern and Maureen Perry-Jenkins

Department of Psychology, Center for Research on Families, University of Massachusetts Amherst, Amherst, MA 01003

Abstract

The current study utilized longitudinal, self-report data from a sample of 109 dual-earner, working-class couples and their 6-year-old children living in the northeastern United States. Research questions addressed the roles of parents' gender ideology and gendered behaviors in predicting children's development of gender-role attitudes. It was hypothesized that parents' behavior would be more influential than their ideology in the development of their children's attitudes about gender roles. Parents responded to questionnaires assessing their global beliefs about women's and men's "rightful" roles in society, work preferences for mothers, division of household and childcare tasks, division of paid work hours, and job traditionality. These data were collected at multiple time points across the first year of parenthood, and during a 6-year follow-up. At the final time point, children completed the Sex Roles Learning Inventory (SERLI), an interactive measure that assesses gender-role attitudes. Overall, mothers' and fathers' behaviors were better predictors of children's gender-role attitudes than parents' ideology. In addition, mothers and fathers played unique roles in their sons' and daughters' acquisition of knowledge about gender stereotypes. Findings from the current study fill gaps in the literature on children's gender development in the family context—particularly by examining the understudied role of fathers in children's acquisition of knowledge regarding gender stereotypes and through its longitudinal exploration of the relationship between parents' gender ideologies, parents' gendered behaviors, and children's gender-role attitudes.

Keywords

child development; division of labor; feminism; family socialization; gender; parent-child relations; working class

Correspondence should be addressed to Hillary Halpern, 604 Tobin Hall, University of Massachusetts, Amherst, MA 01003, hphalpern@psych.umass.edu, or Maureen Perry-Jenkins, mpj@psych.umass.edu.

Compliance with Ethical Standards

The present study utilizes data from a larger study, which was approved by the University of Massachusetts Amherst's Institutional Review Board. In accordance with guidelines for this approval, the ethical protocol for work with human subjects has been met, including informed consent.

We are confident that the integrity of our research was not compromised by any conflicts of interest.

Introduction

At an early age, children demonstrate stereotyped beliefs about the gender roles that are dominant within their culture (Berk, 2009). Researchers have documented young children's tendency to "essentialize gender"—that is, to make assumptions about males and females based on their sex (Gelman, Taylor & Nguyen, 2004, p.1). Rigid adherence to stereotypical gender roles can have negative consequences in childhood and beyond, as these stereotypes can limit children's educational and occupational aspirations, perceived academic competency, emotional expression and social development (Liben, Bigler, & Krogh, 2002; Rainey & Rust, 1999). Without the ability to question socially prescribed gender norms, male and female children alike may fail to recognize the full spectrum of their cognitive and social capacities (Rainey & Rust, 1999). Empowering children to broaden their views of gender-appropriate behavior depends, in part, on identifying the factors that contribute to children's gender-role attitudes.

A growing body of literature examines the intergenerational transmission of gender ideology—meaning the system of values, beliefs and attitudes a person holds about the meaning of biological sex and gender—and how this transmission occurs within families (Kroska & Elman, 2009). The present study examines how both mothers' and fathers' gender ideologies and behaviors are related to their 6-year-old children's attitudes about gender. Unless otherwise noted, studies cited throughout our review of the literature were conducted in the U.S.; however, it is important to point out that the processes related to the gender socialization of children do not appear to differ consistently across cultures.

The primary research question addressed in the present study is whether mothers' and fathers' (a) gender ideology or (b) gendered behaviors are better predictors of sons' and daughters' gender-role attitudes. These questions are addressed through the analysis of self-report data collected in the U.S. from 109 dual-earner, working-class mothers and fathers across the first year of parenthood and at a 6-year follow-up, as well as data from their 6-year-old children at the final time point. Social-cognitive theory informs this exploration of children's gender-role attitudes, while a feminist perspective attends to the often-overlooked role of socio-contextual factors in children's development, with an emphasis on gender and social class.

Significance of Study

Previous studies have tended to overlook the ways in which both mothers and fathers contribute to their children's gender socialization in unique ways, often relying on mothers' reports of fathers' behavior (Fulcher, 2010) or overlooking fathers entirely (e.g., Cunningham 2001a & 2001b). The current study considers the potential for both mothers' and fathers' ideologies and performance of gendered behavior to predict their children's gender-role attitudes in the context of two-parent, heterosexual families. Furthermore, in light of the fact that previous research has typically focused on middle-class families—or has not considered the potential impact of socio-demographic characteristics at all—the present study explores the intersecting nature of gender and social class, as this intersection relates to how children develop gender-role attitudes in the context of their working-class family systems. Attention to these issues is crucial in order to understand the nuanced ways

in which individuals and family systems are impacted by power and oppression across multiple domains (Allen, Lloyd, & Few, 2009). Finally, the longitudinal approach utilized in the present study allows for the consideration of how gender socialization occurs within families across an extended period of time, accounting for the relative roles of each parent's early (across the child's first year) and late (6 years later) gender ideology and gendered behavior.

Gender Socialization in Contemporary U.S. Culture and Beyond

Findings from samples of diverse nationalities suggest that although gender socialization processes may vary across cultural contexts (Lobel, Gruber, Govrin, & Mashraki-Pedhatur, 2001), parents' roles in reinforcing socially acceptable behaviors and discouraging unacceptable behaviors is a common cross-cultural phenomenon (Rubin, 1998). Thus, attending to the relative roles of mothers' and fathers' ideology and behavior as they inform children's development can enhance our understanding of children's gender development across cultural contexts.

Mothers, Fathers, Sons and Daughters: Does Gender Match Matter?

Research suggests that the gender of both parent and child play a role in how gendered beliefs are passed across generations; however, there is conflicting evidence regarding the nature of these relationships. On one hand, a study of 346 infants, toddlers and 5-year-olds and their parents concluded that fathers' communication about gender roles is directed more toward sons than daughters, and that ideologically traditional fathers enforce more traditional behavior in children (Fagot & Hagan, 1991). In a related study of 134 Israeli families with adolescents, Kulik (2002) found that fathers and sons have stronger ideological agreement than fathers and daughters. A study of 158 mothers and their fifth-grade children found that egalitarian mothers provided equal help to sons and daughters with math homework, but highly educated mothers with traditional views gave more instruction to sons than daughters (Lindberg, Hyde, & Hirsch, 2008). In contrast, other findings suggest that familial gender socialization is similar for boys and girls. For example, in a study of 550 high school and college students, the gendered content of parent-child discourse varied little between families with sons versus daughters (Epstein & Ward, 2011). Mixed findings in this literature highlight the need for more research that addresses the roles of parent gender and child gender in the process of children's gender socialization.

Theoretical Perspectives on Gender Development

Both social cognitive theory and feminist theory offer frameworks for understanding how socialization fosters children's development of gender-role attitudes. Social cognitive theory provides a developmental framework that emphasizes the roles of both individual development and children's social environments in their construction of beliefs about the roles of men and women (Bussey and Bandura, 1999; Martin & Ruble, 2009). A central tenet of this theory is the idea that cognitive processes are bidirectional: as a child develops, she or he interacts with others and establishes a social network. Within this network, the child continues to develop at a cognitive level, creating a sort of feedback loop whereby social experiences and cognitive processes inform one another (Bussey & Bandura, 1999; Martin & Ruble, 2009).

Social cognitive theory suggests that as children develop the capacity to differentiate between males and females, modeling plays an important role in processing and applying this knowledge. Parents are likely the most influential figures in a child's life when it comes to modeling gender through both implicit and explicit cues. A criticism of social cognitive theory is that it has failed to adequately attend to the importance of contextual factors—such as race, ethnicity and social class—that may differently shape children's gender development processes.

From a gender perspective, Bem (1985) asserts that children internalize the gendered expectations promoted by their cultural environments at an early age. Much of children's early learning about gender occurs within the family context—namely, through children's attendance to parents' subtle messages about gender roles (Epstein & Ward 2011; Gelman et al., 2004). Parents' *ideology*—meaning the extent to which they hold traditional versus egalitarian views of men's and women's gender roles—is thought to play a part in children's development of gender-role attitudes (Bulanda, 2004). Traditional views of gender roles that emphasize women's capacity for nurturance and men's leadership capabilities have translated into the expectation that women are best suited for domestic tasks, such as childcare and housework, while men should be the primary breadwinners. In contrast, egalitarianism minimizes the differences between the sexes and promotes equality in terms of men's and women's roles within the family (Perrone-McGovern, Wright, Howell, & Barnum, 2014). In addition to ideology, parents' *behaviors* socialize their children through their modeling of either traditional or egalitarian roles; for example, through their division of domestic and paid labor (Turner & Gervai, 1995).

A feminist perspective calls attention to the many social and contextual factors that shape gender development. In considering the intersections of gender and social class as salient contexts for parents and children, research indicates that working-class, dual-earner, heterosexual couples negotiate and share household labor differently than middle-class, professional couples. For example, women in low-income families are more likely to be employed out of financial necessity, but are also more likely to hold traditional ideologies, thereby taking on the majority of housework (Deutsch & Saxon, 1998). In contrast, for middle-class, professional couples, *doing gender* (West & Zimmerman, 1987) often involves more negotiation about an equitable division of labor because these women tend to hold more social capital and egalitarian ideology.

Thus, gender and social class intersect to shape the ways in which couples negotiate and perform family labor (Goldberg & Perry-Jenkins, 2004) and, in turn, are likely to influence the socialization of children. Rather than carrying innate meaning, gendered beliefs are created through interactions with the social environment; the concept of gender may take on context-dependent meanings (West & Zimmerman, 1987). In turn, questions arise regarding children's development of gender-role attitudes; for example, do children attend to the behaviors parents perform (e.g., household tasks, paid work) or the ideologies they espouse? In addition, for children raised in two-parent, heterosexual families, are mothers' or fathers' roles more salient? Moreover, a feminist framework challenges us to consider how the circumstances surrounding low-wage work may lead to a mismatch between parents' gender ideologies and the behaviors they must enact (e.g., mothers who work outside the home

despite wanting to be full-time homemakers), and how this may relate to children's understanding of gender. In short, children are likely to be affected by the inequalities their parents experience in low-wage work, and the associated challenges these families face (Allen et al., 2009). In the following section, we review the developmental literature that describes how children acquire gendered preferences with an eye towards both social class and parent gender as influential contextual factors.

Gendered Preferences and Stereotyping in Early Childhood

Many studies have examined the gendered nature of preschoolers' preferences regarding toys and activities. Durkin and Nugent (1998) found that in a sample of 48 Australian 4- and 5-year-olds from a middle- to upper-middle-class families, girls already demonstrated stereotypically feminine preferences, while boys displayed stereotypically masculine interests. Furthermore, in a longitudinal study of 82 6- to 10-year old German children from undefined social class groups, it was found that beliefs about gender differences are the most rigid when children are between ages 5 and 7 (Trautner, Ruble, Cyphers, Kirsten, Behrendt, & Hartmann, 2005). Children with more rigid attitudes defined traits as either masculine or feminine (but not both), while more flexible children could consider a trait to be masculine, feminine, or both.

Other studies have focused on the traits and behaviors that children identify as masculine or feminine. Giles and Heyman (2005) compared stereotyping beliefs in a low-income sample of 40 preschoolers (ages 3 to 5) and a group of 40 7- and 8-year-olds. Participants were read scenarios in which a character enacted either relational or physical aggression, and were then asked to guess the character's gender. Boys and girls across age groups tended to rate males as perpetrators of physical aggression and females as perpetrators of relational aggression.

It is important to note that much of the gender socialization literature focuses on *typical* development and average patterns across children, with less attention to what factors predict variability in children's ideology. Focusing on *average* developmental patterns limits our understanding of how early experiences influence variability in children's gender development. Thus, our aim is to explore how parents' gender ideologies and gendered behaviors (i.e., division of paid labor and family work) predict differences in girls' and boys' gender-role attitudes.

Parents' Gender Ideology and Children's Gender-Role Attitudes

Research has found that when parents have more traditional views regarding gender roles, their children also tend to think in more traditional terms (Epstein & Ward, 2011; Fulcher, 2010; Sutfin, Fulcher, Bowles, & Patterson, 2008); on the other hand, when parents hold more egalitarian values, their children tend to have less traditional gender-role attitudes (Sutfin et al., 2008). Fathers' ideology has typically been overlooked in this literature.

Fulcher (2010) found that when middle-class mothers held more traditional ideas about children's gender roles, their children (ages 7 to 12) tended to report more gender-stereotyped career aspirations. Specifically, when mothers expected their children to be interested in traditionally gendered careers, children expressed more interest in careers that

promote gender stereotypes. A similar study of middle-class families with children ages 4 to 6 found that in both heterosexual and lesbian-headed families, children were more likely to endorse egalitarian views when their parents held similar ideas about gender roles (Sutfin et al., 2008).

Parents' Gendered Behavior and Children's Gender-Role Attitudes

To date, it is unclear whether children attend more to parents' ideological or behavioral cues as they develop beliefs about gender. Importantly, couples' gender ideologies and the ways in which they divide paid and unpaid labor may not always be in sync (Perry-Jenkins & Crouter, 1990). In fact, many working-class couples make specific efforts to define the husband's role as primary breadwinner and the wife's role as primary home caretaker, even when spouses work equal hours outside of the home (Deutsch & Saxon, 1998). Given that parents' gender ideologies and gendered behaviors are not always congruent, the question of how children use this information to form their own gendered beliefs is intriguing. Thus, the current study examines *both* the ideology and behavior of working-class parents as predictors of children's gender-role attitudes. Four domains are examined in which parents may perform gendered behavior: household labor, childcare tasks, work hours, and job traditionality.

Parents' division of household labor—Women in dual-earner, heterosexual couples perform more housework than their husbands (Goldberg & Perry-Jenkins, 2004; Sayer, 2005). Mothers who engage in more stereotypically masculine housework have children with less traditional ideas about gender (Serbin, Powlishta, & Gulko, 1993), and when parents divide household labor equally, children think more flexibly about gender roles (Fulcher, Sutfin, & Patterson, 2008). Traditional beliefs about gender have been associated with parents' tendency to behave in gender-stereotypical ways with regard to performing both household labor and childcare (Gervai, Turner, & Hinde, 1995). As mentioned previously, however, parents' ideology and behavior do not always align with one another, particularly in working-class families; thus, it is unclear how children's gender development is influenced by differing attitudes and behaviors.

Parents' division of childcare—Women also perform more childcare than their husbands, even when both parents work full-time (Sayer, 2005). Mothers engage in tasks like bathing and dressing children more frequently than fathers (Moon & Hoffman, 2008). Few studies have linked parents' division of childcare to children's gender-role attitudes. A cross-cultural study conducted in England and Hungary found that when fathers performed more childcare, their 4-year-olds demonstrated less knowledge of gender stereotypes (Turner & Gervai, 1995). Contextual factors, such as economic conditions, may play a role in how parents choose (or are forced) to divide childcare tasks. For example, working opposite shifts has been linked to a more equal division of childcare in low-income couples (Meteyer & Perry-Jenkins, 2010). These findings suggest that the ways in which parents divide labor does not necessarily reflect their ideological orientation, but rather external circumstances such as work conditions.

Parents' division of paid labor—A longitudinal investigation by Cunningham (2001b) found that the more time mothers spent in paid labor through the first year of their daughters' lives, the less stereotypically feminine housework their daughters performed as adults. The observed effect was not mediated by mothers' work hours when daughters were 15 years old, suggesting that children are particularly attuned to messages about the division of gendered labor in early childhood. Additional evidence for the lasting effects of mothers' participation in paid labor is provided by Fan and Marini (2000), who found that in a sample of 14–22 year olds, mothers' employment during adolescence was positively associated with their children's reports of egalitarian beliefs as young adults. Although fathers spend increased time in paid labor across the transition to parenthood (Glauber & Gozjolko, 2011), there is insufficient evidence to determine whether fathers' engagement in paid labor is linked to children's gender-role attitudes.

Traditionality of parents' occupations—Parents may transmit gendered messages to their children through occupational traditionality (Barak, Feldman, & Noy, 1991)—that is, how stereotypically masculine or feminine their job is considered to be. Job traditionality might reflect a parent's interests and ideology; at the same time, education and other socioeconomic factors may impact parents' access to certain types of jobs, and for some, taking a stereotypically feminine or masculine position is not a choice. Fulcher (2010) measured the traditionality of parents' jobs based on the relative percent of same-gender people holding similar positions in the United States, but found no relationship between parents' job traditionality and the career aspirations of children aged 7 to 12. Barak and colleagues (1991) found that mothers with more traditionally feminine occupations tended to have children with more stereotyped interests, regardless of the child's gender. Interestingly, fathers' job traditionality was not related to their children's interests. Thus, the conflicting evidence surrounding the relationship between parents' job traditionality and children's gender-role attitudes merits further consideration.

The current study examines (a) parents' early and concurrent gender ideologies and (b) parents' early and concurrent gendered behaviors as predictors of their children's attitudes about gender, as well as (c) whether parents' ideologies are better predictors of children's gender-role attitudes than parents' behaviors. We consider the ways in which boys and girls may attune to and learn differently from mothers' and fathers' ideology and behavior, and the unique instances that may arise within working-class families when resources limit the ability for parents' ideology and behavior to align. We ask the following questions:

Research Question 1—How are parents' (a) early gender ideologies (measured during the first year of parenthood) and (b) concurrent gender ideologies (measured when children are 6 years old) related to the gender-role attitudes held by their first grade children?

Hypothesis 1—Based on social cognitive theory, it is predicted that more traditional gender ideology at both time points will be significantly related to 6-year-olds' traditional attitudes, assessed through their (a) gender role stereotypes pertaining to their own gender, (b) gender role stereotypes pertaining to the opposite gender, and (c) gendered career preferences.

Research Question 2—How are mothers' and fathers' (a) early performance of gendered behaviors and (b) concurrent performance of gendered behaviors related to the gender-role attitudes held by their first grade children?

Hypothesis 2—Based on social cognitive theory, it is predicted that parents' performance of more traditional gendered behavior at each time point will be significantly related to children's traditional gender-role attitudes, assessed through (a) knowledge of gender role stereotypes pertaining to their own gender, (b) knowledge of gender role stereotypes pertaining to the opposite gender, and (c) gendered career preferences.

Research Question 3—Are mothers' and fathers' (a) gender ideologies or (b) gendered behaviors stronger predictors of children's gender-role attitudes, and what role does the match between parent gender and child gender play in these associations?

Hypothesis 3—Based on previous research, we expect that the relation between *mothers'* ideology and behavior and *daughters'* gender-role attitudes will be (a) positive, and (b) stronger than the match between mothers and sons, and that the relation between *fathers'* ideology and behavior and *sons'* gender-role attitudes will be (a) positive, and (b) stronger than the match between fathers and daughters. In all cases, we expect that parents' gendered behavior will significantly predict children's gender-role attitudes above and beyond the effects of parents' gender ideologies.

To test these hypotheses, principal component (PC) variables representing each parent's (a) Early Ideology, (b) Concurrent Ideology, (c) Early Behavior, and (d) Concurrent Behavior were used as predictors in hierarchical regression models to examine relationships between each set of predictors and each child outcome. All analyses were run separately for mothers and fathers. To answer Research Question 1, models tested the main effects of mothers' early and concurrent ideology on each of three indicators of children's gender ideology: *gender stereotypes regarding one's own gender*; *gender stereotypes regarding the opposite gender*, and *gendered career preferences*. These models were then replicated with fathers' early and concurrent ideology. The same process was used to address Research Question 2, using PCs for each parent's early and concurrent gendered behavior. For Research Question 3, Gender Ideology PCs were entered into the model as predictors in Step 1, followed by Gendered Behavior PCs in Step 2. Given the limited sample size, we tested interactions between child gender and each predictor separately, then developed final, trimmed models for each outcome.

Method

Participants and Procedure

Participants were 109 dual-earner, working-class couples and their children. Families were recruited for a longitudinal study through prenatal education classes at hospitals in Western Massachusetts prior to the birth of their first child. Criteria for eligibility included the following: (a) both members of the couple were employed fulltime (32+ hours per week) prior to the baby's birth, (b) both members of the couple planned to return to full-time work within 6 months of the baby's birth, (c) both members of the couple were "working-class"

(defined by restricting education level to an Associate's Degree or less, and work to unskilled or semiskilled positions, (d) both members of the couple were expecting their first child, and (e) the couple was either married or cohabiting (for at least 1 year) at the time of inclusion in the study.

Data from the hospitals and clinics we recruited from indicated that 75% to 85% of first-time parents attended prenatal classes. Of the 15 – 25% of parents not attending classes, close to 80% of that group were single mothers and did not fit the criteria for inclusion in the study. Thus, we had access to a fairly representative sample of first-time parents. Trained graduate students were given 5 minutes at the beginning of prenatal classes to describe the study to expectant parents and address questions. At that time, prospective participants completed a short demographic form with information on age, relationship status, income, type of job, work hours, and intent to return to work after the baby's birth. On a second sheet, respondents indicated whether they were willing to be contacted to learn details about the project and, if so, they provided their contact information. Potential participants who completed the screening materials received a phone call, at which time researchers further explained the scope of the study and assessed eligibility. Of the sample that was called, approximately 70% chose to participate. Families received \$50 for their participation in each interview, for a total of \$200, which was a strong incentive for this low-income sample. In comparing our participants to the broader population of first-time parents attending prenatal classes, the present sample—as expected, given the selection criteria—was less educated, had lower family income and worked more hours than the full sample of new parents participating in prenatal education.

Data were collected from parents at five time points across the first year of children's lives, and from parents and children approximately six years after the child's birth, as children were entering first grade. Data collection took place from 1996 until 2008. Parents were interviewed individually in their homes: 1) during the wife's third trimester of pregnancy; 2) after the baby's birth, but before the mother had returned to work (approximately one month postpartum); 3) approximately one month after mothers returned to work full-time (on average, 4 months postpartum); 4) when babies were 6 months old (via a mailed survey); and 5) when children were 1 year old. Scores for the early predictors of gender ideology and gendered behavior were averaged across all time points during the first year. All participants of the larger study ($N = 153$) were invited to participate in a 6-year follow-up study, and 79% ($N = 121$) consented. During a face-to-face interview, children completed the *Sex Roles Learning Inventory* (SERLI; Edelbrock, & Sugawara, 1978), an interactive measure of gender-role attitudes, and both parents completed measures of gender ideology and assessments of the divisions of paid and unpaid labor. The sample from the present study was limited to the 109 families for whom we had data for all of the measures we assessed (e.g., some mothers were not employed at phase 6, and not all children completed the SERLI at the follow-up interview).

On average, mothers were 27 years old ($SD = 4.82$) and fathers were 29 years old ($SD = 5.03$) upon beginning the study. In terms of race, the majority of participants identified as White (95.4% of mothers and 90.8% of fathers). It should be noted that to address the lack of racial and ethnic diversity in the current study, this project is being replicated with a more

racially and ethnically diverse sample. The majority of mothers (72.5%) and fathers (83.5%) held high school diplomas or the equivalent; 24.8% of mothers and 14.7% of fathers had an Associate's degree. No parents held a four-year college degree. Mothers reported an average gross salary of \$24,123 ($SD = \$10,309$) at the first time point. The average income for fathers at this time was \$31,028 ($SD = \$11,204$). Of the children who participated in the study, 62 were girls (56.9%) and 47 were boys (43.1%). Children ranged in age from 6.22 years to 7.50 years ($M = 6.90$, $SD = .26$).

Measures and Variables

Parents' gender ideology—Parents' global gender ideology was assessed at two time points during the first year—during the third trimester of pregnancy, and when children were 6 months old. Mothers and fathers each completed the *Men's and Women's Roles* questionnaire (Brogan & Kutner, 1976), a 36-item inventory that asks respondents about their beliefs regarding prescribed gender roles and gendered behaviors. Participants responded to items (including "It is certainly acceptable for boys, as well as girls, to play with dolls") on a 6-point Likert scale, where "1" indicated "Strongly Agree" and "6" indicated "Strongly Disagree." Cronbach's alphas ranged from .77 – .87 for women, and .90 – .91 for men.

The *Attitudes Towards Women Scale* (Spence & Helmreich, 1973) was used at the 6-year follow-up based on its brevity and the need to shorten the lengthy home interview. The AWS includes 15 items that assess beliefs about gender roles using a 4-point Likert scale. Items include "Women earning as much as their dates should bear equally the expense when they go out together." Participants rated items from 1 ("Agree strongly") to 4 ("Disagree strongly"). Cronbach's alphas were .75 for women and .83 for men. The AWS was highly correlated with *Men's and Women's Roles* questionnaire ($r = .86$ for women and $r = .92$ for men).

Each parent was also asked about their preferences regarding mothers' involvement in paid labor at four time points during the first year, and when children were 6. These preferences were expected to reflect beliefs about the primary role of mothers in children's lives. Women were given the prompt, "While some individuals have a strong desire to work outside of the home, others would rather not. How do you feel about working now?" Preferences were rated using a Likert scale ranging from 1 ("Strongly prefer NOT to work") to 4 ("Strongly prefer to work"). Average scores were created for data collected across the first year.

Parents' gendered behavior—Parents' gendered behaviors were measured through questionnaires that assessed the division of household labor (Cowan & Cowan, 1987), childcare tasks (Barnett & Baruch, 1987; Bouchard & Lee, 2000), and participation in paid employment.

Division of household labor: Participants completed *Who Does What?*, a 15-item questionnaire (Cowan & Cowan, 1987), at four time points during the first year and again when children were 6 years old. Analyses included each parent's mean score on the *feminine household tasks* subscale of this measure, composed of eight items assessing participants' perceptions of the proportion of traditionally feminine household tasks they

performed relative to their spouse. Participants were prompted with activities such as “dishwashing” and “laundry,” rated how often they performed each task using a 5-point Likert scale, where 1 indicated “Mostly or always my spouse/partner” and 5 indicated “Mostly or always me.” Cronbach’s alphas ranged from .65 – .74 for mothers and .51 – .59 for fathers across four time points during the first year. It should be noted that measures of household task performance sometimes yield low alphas because individual items on these scales are not expected to be internally consistent (Goldberg & Perry-Jenkins, 2007). Importantly, the division of family labor is often disrupted following the birth of a couple’s first child (Cowan & Cowan, 1999). As expected, Cronbach’s alphas for this measure were higher at year 6 (.70 for mothers and .72 for fathers).

Division of childcare tasks: Participants completed the 15-item *Childcare Responsibility* inventory (Barnett & Baruch, 1987) after their child’s birth, 1 month after mothers returned to work, and when children were 1 year old. Participants reported their relative contribution to tasks including “feeding the baby,” and “taking the baby to a doctor’s appointment,” using a 5-point Likert scale, where 1 indicated “Mostly or always my spouse/partner” and 5 indicated “Mostly or always me.” Cronbach’s alphas ranged from .83 – .89 for mothers, and .76 – .80 for fathers on this measure across the first year of parenthood.

When children were 6, parents completed the *Childcare Involvement* questionnaire (Bouchard & Lee, 2000) which assesses developmentally appropriate parental tasks such as monitoring a child’s morning routine and putting their child to bed, as well as childcare tasks, which include such activities as staying home when their child is sick or helping their child clean their room. Using a 7-point Likert scale, mothers and fathers each reported how often they performed both daily and occasional childcare tasks, where 1 indicated “Never” and 7 indicated “Almost always.” Cronbach’s alphas for this measure were .71 for mothers and .77 for fathers.

Parents’ work hours: Parents reported the total number of hours per week that they spent performing paid labor.

Traditionality of parents’ occupations: Each parent received a job traditionality score on a scale of 0–100, where higher scores represent more traditionally feminine jobs, and lower scores represent more traditionally masculine jobs. Scores were taken directly from the most recent census data published by the U.S. Department of Labor (2011), and reflect the percentage of women who comprise the total number of people currently holding a given job title in the U.S. An early job traditionality score was developed based on each parent’s job title when children were 1 year old, and a concurrent job traditionality score was developed based on parents’ job title when children were 6. Means for parents’ traditionality scores are reported in Table 1.

Children’s gender-role attitudes—The SERLI (Edelbrock & Sugawara, 1978) was used to assess children’s knowledge of gender-role stereotypes and how flexible they were when applying this knowledge to their own behavior. Three outcomes from the SERLI were included. *Gender stereotypes regarding one’s own gender (GS-OWN)* assessed girls’ knowledge of feminine stereotypes and boys’ knowledge of masculine stereotypes, and

gender stereotypes regarding the opposite gender (GS-OPP) assessed girls' knowledge of masculine stereotypes and boys' knowledge of feminine stereotypes. Data were collected for these subscales by showing children pictures of objects (such as a hammer or a doll) and asking them to identify the object as "for girls," "for boys," or "for girls and boys." Upon completion of this activity, children engaged in a forced-choice exercise in which they were asked to identify the gender-neutral objects as either feminine or masculine. Scores ranged from 60–100 on GS-OWN and 10–100 on GS-OPP, reflecting the percentage of correctly identified stereotypes, with a high score on each of these subscales indicating more knowledge of gender stereotypes.

The SERLI also assessed children's *gendered career preferences (GCP)* through an activity that gauged children's interest in future traditionally gendered occupations. Children were shown pictures of adults engaging in traditionally feminine or masculine occupational positions (such as teacher and firefighter) and asked to report how much they would be interested in each occupation. Scores ranged from 27–80, reflecting the inverse of the sum of probabilities that children would rank-order stereotypically gendered careers over non-stereotypically gendered careers. For girls, a high score indicates more interest in traditionally feminine occupations; for boys, a high score indicates more interest in traditionally masculine occupations.

Control variables—Because there was some variability in income among families, and because divisions of paid labor might not reflect working-class couples' gender ideologies (Deutsch & Saxon, 1998), we controlled for each parent's income. Reported individual gross income, measured on a continuous scale at each time point, was included in regression models.

Given that multiple indicators of parents' gender ideology and gendered behavior were assessed, and to retain greater power for the analyses, we used Principal Components Analysis (PCA; Afifi, Clark, & May, 2004) to create composite variables representing four substantive constructs: 1) Early Gender Ideology, 2) Early Gendered Behavior, 3) Concurrent Gender Ideology, and 4) Concurrent Gendered Behavior for each parent. *Gender Ideology PCs* for mothers and fathers included two measures (a) global gender ideology, and (b) work preferences. Scores on the original measures were recoded so that for both mothers and fathers, a high score on the Gender Ideology PC represents more egalitarian views, while a low score represents more traditional views. The *Gendered Behavior PCs* were comprised of four constructs: (a) performance of traditionally feminine household chores, (b) childcare tasks, (c) average weekly work hours, and (d) job traditionality. These Gendered Behavior PCs were constructed individually for mothers and fathers during the first year and during year 6. Scores on the original measures were recoded so that in all cases, high scores represent a more traditional division of labor. Specifically, for mothers, a high score on the Gendered Behavior PC represents more traditionally feminine behavior (i.e., housework, childcare, traditionally feminine job position), and less traditionally masculine behavior (i.e., hours spent in paid employment). For fathers, a high score on the Gendered Behavior PC represents less traditionally feminine behavior and more traditionally masculine behavior.

Results

Descriptive data for parents' predictor variables at each time point are displayed in Table 1. Means and standard deviations are reported for parents of all children ("Full sample")—and separately for mothers and fathers of girls and of boys. Notably, a MANOVA analysis revealed no significant mean differences between boys and girls on any of the three outcome variables.

Table 2 displays correlations among mothers' and fathers' PC predictor variables at both time points with boys' and girls' scores on each of the outcome variables. Analyses revealed that mothers' and fathers' gross income at each time point was unrelated to children's gender-role attitudes, so these control variables were excluded from final analyses.

Parents' Gender Ideology and Children's Gender-Role Attitudes

Our first research question tested the main effects of mothers' and fathers' early and concurrent ideologies on children's gender-role attitudes. It was predicted that more traditional gender ideology at both time points would be significantly related to 6-year-olds' traditional attitudes across the three SERLI subscales. Multicollinearity was not a concern in regression models for mothers ($VIF = 1.18 - 1.19$ for early and concurrent ideology) or for fathers ($VIF = 1.64 - 1.66$ for early and concurrent ideology).

Gender stereotypes—Children's knowledge of gender stereotypes was assessed in two domains: (a) stereotypes about members of their own gender (GS-OWN) and (b) stereotypes about the opposite gender (GS-OPP). Only one trend was observed for mothers' concurrent ideology ($\beta = -.21, p < .10$). Mothers' more egalitarian values when children were 6 were related to children demonstrating less knowledge about stereotypes regarding their own gender. There were no significant relationships between fathers' early or concurrent gender ideology and children's scores on the GS-OWN measure. No relationships emerged between mothers' early or concurrent reports of gender ideology and children's knowledge of stereotypes about the opposite gender. In contrast, as fathers reported more egalitarian values, children showed less knowledge of stereotypes relating to members of the opposite gender ($\beta = -.28, p < .01$). Furthermore, fathers' early gender ideology predicted children's scores on this measure even after controlling for fathers' concurrent ideology.

Gendered career preferences—Neither mothers' nor fathers' ideologies at either time point predicted children's interest in future occupations. In sum, relatively few findings linked parents' early or concurrent gender ideology to children's gender-role attitudes.

Parents' Gendered Behavior and Children's Gender-Role Attitudes

Research Question 2 examined the main effects of mothers' and fathers' gendered behavior on children's gender-role attitudes. It was predicted that a significant, positive relationship would exist between parents' performance of traditional gendered behaviors and children's traditional gender-role attitudes across the three outcome measures. Multicollinearity was

not a concern in the regression models for mothers ($VIF = 1.17 - 1.19$ for early and concurrent behavior) or for fathers ($VIF = 1.61 - 1.65$ for early and concurrent behavior).

Gender stereotypes—Mothers' early gendered behavior was a marginal predictor of children's gender stereotypes about their own gender ($\beta = .19, p < .10$). When mothers reported engaging in more traditionally gendered behaviors during children's first year of life, children reported more knowledge of gender-role stereotypes regarding their own gender. Mothers' concurrent behavior and fathers' gendered behavior at both time points were unrelated to children's scores on GS-OWN. No relationships emerged between mothers' or fathers' early or concurrent reports of gendered behaviors and children's knowledge of stereotypes relating to members of the opposite gender.

Gendered career preferences—Mothers' early gendered behavior significantly predicted children's interest in traditionally gendered occupations ($\beta = .35, p < .01$), and this finding held up when controlling for mothers' concurrent behavior ($\beta = .34, p < .01$). The more mothers engaged in traditional behavior during the child's first year of life, the more children demonstrated interest in gender-stereotypical careers. In addition, fathers who engaged in more traditional behavior during the child's first year had children who expressed an interest in more gender-stereotyped professions ($\beta = .25, p < .05$). In sum, both mothers' and fathers' gendered behavior during the first year predicted 6-year-olds' gender-role attitudes above and beyond parents' concurrent behavior.

Relative Effects of Parents' Gender Ideology and Gendered Behavior on Boys' and Girls' Gender-Role Attitudes

Research Question 3 addressed the combined effects of gender ideology and gendered behavior as predictors of children's gender-role attitudes across the three subscales. It was predicted that the relation between *mothers'* ideology and behavior and *daughters'* gender-role attitudes would be (a) positive, and (b) stronger than the match between mothers and sons, and that the relation between *fathers'* ideology and behavior and *sons'* gender-role attitudes would be (a) positive, and (b) stronger than the match between fathers and daughters. We expected that parents' gendered behavior would predict children's gender-role attitudes above and beyond the effects of parents' gender ideologies. Analyses showed that the assumption of collinearity was met in the models for mothers ($VIF = 1.29 - 1.33$ for early and concurrent ideology, and $1.17 - 1.22$ for early and concurrent behavior) and the models for fathers ($VIF = 1.61 - 1.64$ for early and concurrent ideology, and $1.64 - 1.71$ for early and concurrent behavior).

Gender stereotypes—For mothers, concurrent gender ideology was a marginal predictor of children's knowledge of gender stereotypes regarding their own gender (see Table 3). The more mothers held egalitarian beliefs when children were 6, the less knowledge children demonstrated about stereotypes relating to the child's own gender. This trend held up even when mothers' early and concurrent behavior variables were added to the model. There were no significant relationships between fathers' early or concurrent ideology or behavior and children's scores on this measure. There were no significant relationships between mothers' early or concurrent ideology or behavior and children's knowledge of

opposite-gender stereotypes. One trend emerged for fathers, such that the combination of both early and concurrent gender ideology predicted children's knowledge of stereotypes regarding the opposite gender at a marginal level, suggesting that the more fathers held egalitarian ideology, the less stereotypical views children held about the opposite gender.

Gendered career preferences—The more traditional behavior mothers engaged in during the first year, the more children expressed interest in traditionally gendered occupations at age 6. Similarly, when fathers engaged in more traditional behavior during their child's first year, children endorsed more interest in stereotyped occupations at age 6.

Best Trimmed Models for Predicting Boys' and Girls' Gender-Role Attitudes

A final set of analyses was conducted with the aim of identifying the best (trimmed) models explaining the greatest amount of variance in each of the three measures of children's gender-role attitudes, as predicted by both mothers' and fathers' ideology and behavior, while also testing for interactions with child gender. We tested the main effects of all eight parental predictors separately for each child outcome measure, adding interactions between child gender and each predictor, one at a time. Final models for each outcome are displayed in Table 4.

Gender stereotypes—In the final trimmed model for GS-OWN, predictors explained 34% of the outcome variance (see Table 4). In this model, mothers' concurrent behavior interacted with child gender to predict children's knowledge of stereotypes about members of their own gender. The *more* mothers engaged in traditionally feminine behavior, the *more* knowledge girls demonstrated regarding *feminine* stereotypes and the *less* knowledge boys showed about *masculine* gender stereotypes (see Figure 1).

The final trimmed model for GS-OPP predicted 15% of the variance in this outcome, and was primarily explained by an interaction between fathers' early ideology and child gender. The more traditional ideology fathers held during the first year, the more knowledge their sons had regarding feminine stereotypes. Conversely, more egalitarian fathers had sons with less knowledge about feminine stereotypes (see Figure 2). No relationship emerged for fathers' early ideology and daughters' knowledge of masculine stereotypes.

Gendered career preferences—The final model explained 21% of the variance in GCP and included all eight parental predictors, but no interaction terms since child gender did not interact with any predictors (see Table 4). The strongest effect revealed that the more traditional behavior mothers performed during the first year, the more their children expressed interest in traditionally gendered careers. Contrary to our expectation, a trend revealed that fathers' more *egalitarian* views in the first year predicted children's preferences for more *stereotypical* careers.

Discussion

The present study explored relationships between parents' early and concurrent gender ideology and gendered behavior and their sons' and daughters' gender-role attitudes at age 6. Different findings emerged for parents' gender ideology and gendered behavior relating to

children's scores on each of the three SERLI subscales: 1) Gender Stereotypes (Own Gender); 2) Gender Stereotypes (Opposite Gender); and 3) Gendered Career Preferences.

Parents' Ideologies and Behavior in Relation to Children's Gender Stereotypes

The most significant results emerged when examining the match between mothers, fathers, sons and daughters. Girls demonstrated more knowledge of feminine gender stereotypes when their mothers engaged in more traditional behaviors, such as performing more housework and childcare, during their sixth year. In contrast, boys showed less knowledge of masculine behavior when their mothers performed more stereotypically feminine tasks. These findings suggest that mothers are the primary imparters of knowledge about feminine behavior for girls, and masculine behavior for boys. This notion is supported by previous findings that women provide more physical and emotional childcare than their husbands (Moon & Hoffman, 2008; Sayer, 2005) and that in the process of receiving more care from their mothers, children also receive messages about the roles of women and men.

Social cognitive theory supports the idea that modeling plays a crucial role in children's ability to understand and apply their knowledge regarding differences between males and females (Bussey & Bandura, 1999; Martin & Ruble, 2009), and this process appears to explain how girls observe and model their mothers' feminine behavior. How boys learn about masculine stereotypes from their mothers is less clear. Perhaps the finding that more traditional mothers tend to have sons with less knowledge of masculine gender stereotypes has less to do with mothers' behavior, and more to do with a *lack of knowledge* about *fathers'* behavior. If traditional mothers are married to men who perform more traditionally gendered behavior (e.g., spending more time in paid labor), boys' lack of knowledge about masculine gender stereotypes might be better explained by the absence of consistent exposure to their fathers.

Contrary to our expectations, neither mothers' gender ideology nor gendered behaviors were related to children's knowledge of gender stereotypes about the opposite gender. Importantly, fathers' early ideology was the only significant predictor of children's scores on this measure. Specifically, boys demonstrated more knowledge of feminine stereotypes when their fathers held more traditional ideology during the first year, and less knowledge of feminine stereotypes when their fathers were more egalitarian. No results emerged for fathers and daughters. These findings align with previous research suggesting that fathers' ideology is more closely related to sons' attitudes than to daughters' (Kulik, 2002). If traditional fathers caution their sons against engaging in feminine behavior, it would hold that sons of traditional men have more knowledge of these feminine stereotypes than sons of egalitarian men. Furthermore, because fathers have been found to react less positively to 18-month-old boys' play with stereotypically feminine toys than with stereotypically masculine toys (Fagot & Hagan, 1991), it is possible that fathers dictate gendered play even earlier in their sons' lives. This would explain why fathers' early ideology predicted boys' attitudes above and beyond concurrent ideology.

The finding that fathers' early ideology predicts boys' stereotypes about girls is particularly compelling, given that fathers' gender ideology has been virtually unexamined as a predictor

of children's gender development over time. Findings from the present study should be used to inform hypothesis-driven longitudinal research that follows fathers and their children.

The key finding related to career preferences was that mothers' early gendered behavior, above and beyond their concurrent gendered behavior, was the best predictor of both sons' and daughters' career preferences. In short, the more traditional behavior mothers performed during the first year, the more their children expressed interest in traditionally gendered careers. These findings are consistent with earlier research on mothers' behavior and children's gender-role attitudes (Cunningham, 2001a; 2001b; Fan & Marini, 2000); however, no support was found for the hypothesis that fathers' gendered behaviors would predict children's career preferences. Fulcher and colleagues (2008) found that when mothers of 6-year-olds performed more childcare than fathers, children expressed more interest in traditionally gendered occupations; however, our data suggest that patterns established in the first year of life might explain children's attitudes above and beyond the effects of parents' concurrent behavior.

The question of how these findings can be used to empower young children to be freer and more flexible in their thinking about what it means to be male or female differs for fathers and mothers with sons and daughters. Girls are more attuned to what they see their mothers doing, as opposed to what mothers might be saying about gender equality. In terms of career preferences, the more egalitarian behaviors mothers perform across the first year of life (e.g., work for pay, share domestic labor), the less gendered career preferences daughters and sons hold. These early behaviors are significant even when controlling for current behaviors, suggesting that early modeling of gender equality matters for children's ideology. The question of how this process unfolds over time is open to inquiry. Perhaps the early parental behaviors we measured are followed by a trajectory of more equitable parental behavior over time. If parents are modeling equality for their children consistently across the early years, continuity may be the critical ingredient. It is notable that fathers' behavior and ideology had little influence on girls' outcomes. In contrast, fathers with more egalitarian ideology in the first year of life had sons with fewer stereotypes about the opposite gender. This finding, similar to the early behavior findings for mothers, is critical because it suggests that fathers' early egalitarian ideology may be a precursor to a series of family patterns and decisions that support equal roles. Using a feminist lens, these findings suggest that parents who aim to raise children with flexible gender ideology must know that: 1) this education starts early, in the first year of life; 2) mothers' behavior, both early in life and later, has a significant impact on both sons and daughters, and 3) fathers' early ideology is particularly important for their sons' gender development.

The limitations of our methodological approach should be considered. First, three of our measures—including the global parental gender ideology scales and the SERLI— were developed over 30 years ago, raising the possibility that they do not fully capture contemporary thinking. These measures were chosen because they were the best and most widely used measures at the time of data collection, and they continue to be used in research. Second, our sample size was limited; replicating this study with a larger sample would make it possible to test hypotheses with more robust analyses (e.g., by using structural equation modeling).

The current study consists of working-class, predominantly White heterosexual parents and their children. The nature of this sample may have influenced findings in a variety of ways. First, economic hardship may shape the ways in which parents divide household and paid labor. It is possible that as a result, parents' gendered behavior as it is measured in the current study does not map onto parents' ideology, which can cause strain at both the individual level and between partners (Deutsch & Saxon, 1998). In addition, it is possible that findings may differ across racial, ethnic, and religious backgrounds (Kroska & Elman, 2009). For example, Glauber and Gozjolko (2011) found that during the transition to parenthood, White fathers with traditional ideologies spent significantly more time in paid labor than White men with more egalitarian views, but there was no relationship between ideology and work hours for Black fathers. These findings suggest that race, gender, ideology and behavior may be uniquely related for parents, and it is possible that the nuances of these relationships could impact the messages that children receive about the meaning of gender. Family structure and parental sexual orientation may also shape implicit and explicit communication about gender as a construct (Goldberg, Kashy & Smith, 2012). It is likely that differences in parents' ideology and behavior across diverse family structures lead to different learning experiences for children. There is clearly more to understand about how the family system shapes children's gender development. Future research can build from the present study's findings by extending the exploration of early versus concurrent parental variables across a longer time period.

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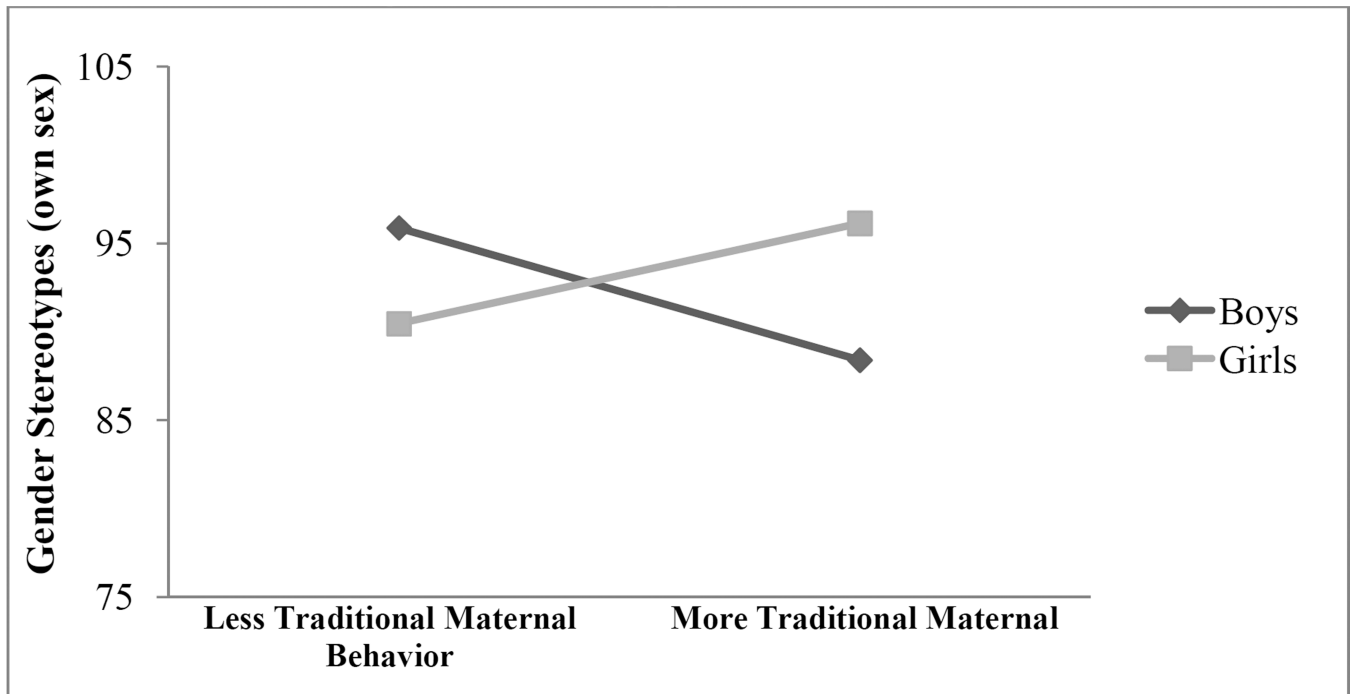


Figure 1.
Interaction Between Mothers' Concurrent Gendered Behavior and Child Gender Predicting Gender Stereotypes (Own Sex) in the Final Trimmed Model
Note. A high score on the Gendered Behavior scale represents more traditionally feminine behavior (i.e., housework, childcare) and less traditionally masculine behavior (i.e., fewer hours spent in paid employment). For children, a high score on the Gender Stereotypes (Own Gender) indicates more knowledge about gender stereotypes as they relate to members of the child's own sex.

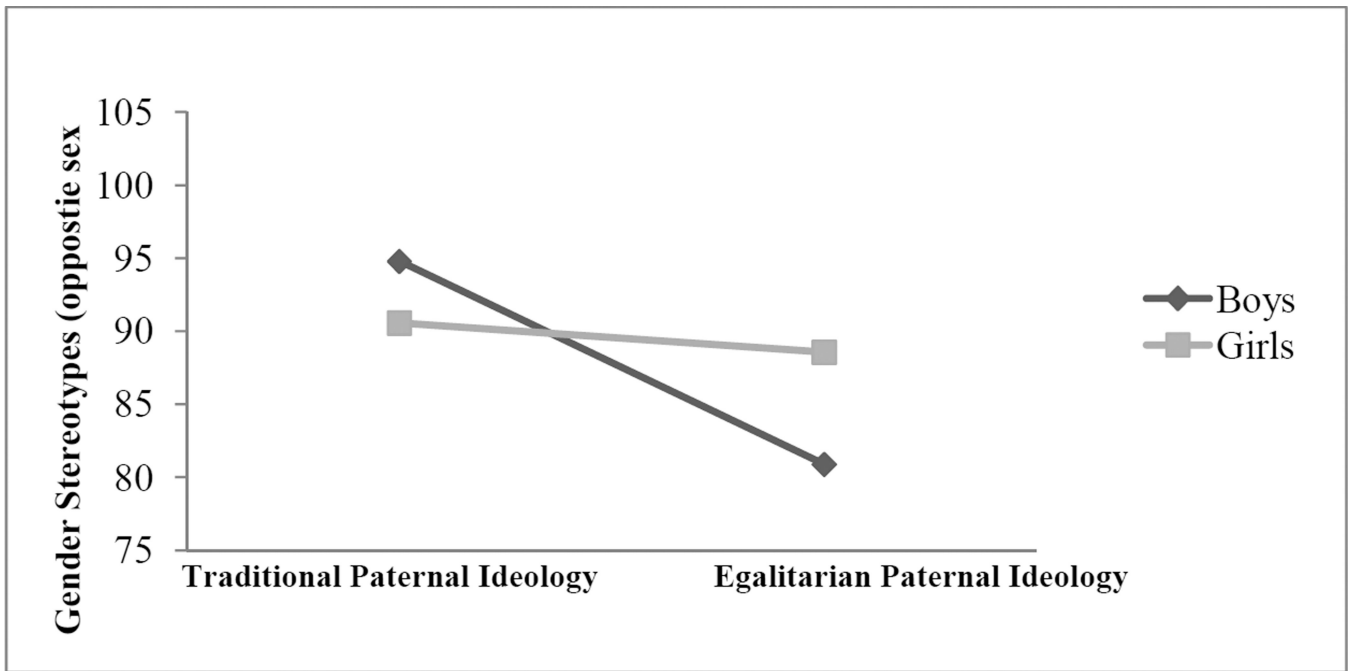


Figure 2.

Interaction Between Fathers' Early Ideology and Child Gender Predicting Gender Stereotypes (Opposite Gender) in the Final Trimmed Model

Note. A high score on Gendered Behavior scale represents more traditionally feminine behavior (i.e., housework, childcare), and less traditionally masculine behavior (i.e., paid work hours). For children, a high score on the Gender Stereotypes (Opposite Gender) indicates more knowledge about gender stereotypes about children of opposite gender.

Table 1

Descriptive Statistics for Mothers' and Fathers' Predictors Based on Child Gender.

	M	SD	M	SD
Mothers' Year 1 Predictors				
Gender ideology (Full sample)	5.30***	.45	4.88***	.59
Boys	5.32	.42	4.93	.61
Girls	5.29	.48	4.84	.58
Work preferences (Full sample)	2.54**	.67	2.72**	.58
Boys	2.44	.64	2.74	.54
Girls	2.61	.68	2.71	.61
Fem. HHT (Full sample)	3.96***	.49	2.45***	.40
Boys	3.94	.45	2.49	.32
Girls	3.96	.52	2.40	.45
CCT (Full sample)	3.67***	.37	2.56***	.25
Boys	3.67	.39	2.61 ^a	.23
Girls	3.67	.36	2.52 ^a	.27
Work hours (Full sample)	35.61***	10.48	45.67***	8.24
Boys	36.57	10.22	44.67	5.32
Girls	34.82	10.70	46.50	10.02
Job traditionality (Full sample)	65.87***	24.96	24.88***	22.88
Boys	63.33	24.23	22.38	23.13
Girls	68.02	25.59	27.08	22.66
Fathers' Year 1 Predictors				
Gender ideology (Full sample)	3.46***	.34	3.27***	.44
Boys	3.47	.32	3.25	.55
Girls	3.44	.36	3.28	.33
Work preferences (Full sample)	2.61	.95	2.55	.80
Boys	2.60	1.01	2.72 ^b	.72
Girls	2.61	.91	2.42 ^b	.85
Fem. HHT (Full sample)	4.10***	.58	2.43***	.64
Fathers' Year 6 Predictors				
Gender ideology (Full sample)	3.46***	.34	3.27***	.44
Boys	3.47	.32	3.25	.55
Girls	3.44	.36	3.28	.33
Work preferences (Full sample)	2.61	.95	2.55	.80
Boys	2.60	1.01	2.72 ^b	.72
Girls	2.61	.91	2.42 ^b	.85
Fem. HHT (Full sample)	4.10***	.58	2.43***	.64

	M	SD	M	SD
Boys	3.99 ^a	.55	2.49	.59
Girls	4.20 ^a	.59	2.36	.68
CCT (Full sample)	5.29 ^{***}	.85	3.86 ^{***}	.88
Boys	5.06 ^b	.78	4.09 ^c	.79
Girls	5.48 ^b	.86	3.65 ^c	.91
Work hours (Full sample)	33.81 ^{***}	13.24	45.88 ^{***}	11.91
Boys	36.70 ^c	11.33	44.99	11.22
Girls	31.67 ^c	14.22	46.57	12.47
Job traditionality (Full sample)	65.28 ^{***}	25.16	28.88 ^{***}	27.29
Boys	60.05 ^d	22.42	29.90	28.77
Girls	69.23 ^d	26.57	28.10	26.38

Note.

**
p < .01;

p < .001 indicates that mothers' scores differed significantly from their husbands' at the same time point.

Different letter superscripts (a,b,c) indicate boys and girls differ on mean scores. High scores on global gender ideology (scale: 1–6 for Year 1; 1–4 for Year 6) indicate more egalitarian beliefs. High scores on work preferences (scale: 1–4) indicate stronger preferences for mothers to work outside the home. High scores on traditionally feminine household tasks (Fem. HHT; scale: 1–5) and childcare tasks (CCT; scale: 1–5 for Year 1; 1–7 for Year 6) indicate more frequent performance of tasks relative to one's partner. Higher scores on job traditionality indicate that more women than men in the U.S. who hold the same job title.

Table 2

Correlations Between Parents' Gender Ideology and Gendered Behavior and Children's Gender-Role Attitudes.

	Mothers' Early Ideology	Mothers' Early Behavior	Mothers' Concurrent Ideology	Mothers' Concurrent Behavior
Boys				
Gender Stereotypes—Own Gender (GS-OWN)	-.17	-.05	-.21	-.39*
Gender Stereotypes—Opposite Gender (GS-OPP)	-.07	.02	-.04	-.07
Gendered Career Preferences (GCP)	-.09	.39**	.04	.20
Girls				
Gender Stereotypes—Own Gender (GS-OWN)	-.13	.39**	-.26*	.45**
Gender Stereotypes—Opposite Gender (GS-OPP)	-.08	.06	-.03	.13
Gendered Career Preferences (GCP)	.15	.11	-.19	.23
	Fathers' Early Ideology	Fathers' Early Behavior	Fathers' Concurrent Ideology	Fathers' Concurrent Behavior
Boys				
Gender Stereotypes—Own Gender (GS-OWN)	-.09	.03	-.05	.04
Gender Stereotypes—Opposite Gender (GS-OPP)	-.39**	.07	-.22	.17
Gendered Career Preferences (GCP)	.09	.17	.07	.14
Girls				
Gender Stereotypes—Own Gender (GS-OWN)	-.17	.25 ⁺	-.14	.22
Gender Stereotypes—Opposite Gender (GS-OPP)	-.05	.04	-.11	-.02
Gendered Career Preferences (GCP)	.03	.22	-.18	-.16

Note.

⁺ $p < .10$;

* $p < .05$;

** $p < .01$.

For both mothers and fathers, a high score on the Gender Ideology scale represents more egalitarian beliefs. For mothers, a high score on the Gendered Behavior scale represents more traditionally feminine behavior (i.e., housework, childcare, traditionally feminine job title), and less traditionally masculine behavior (i.e., hours spent in paid employment). For fathers, a high score on the Gendered Behavior scale represents less traditionally feminine behavior and more traditionally masculine behavior. For children, high scores on GS-OWN and GS-OPP indicate more knowledge about gendered stereotypes. High scores on GCP indicate more interest in gender-stereotyped occupations.

Table 3

Mothers' and Fathers' Early and Concurrent Gender Ideology and Gendered Behaviors Predicting Children's Gender-Role Attitudes

	Gender Stereotypes (GS-OWN)						Gender Stereotypes (GS-OPP)						Gendered Career Preferences (GCP)									
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2			
	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	
Mothers																						
Early GI	-.83	1.30	-.08	-.46	1.33	1.33	-.05	-.86	2.06	2.06	-.06	-.86	2.14	2.14	-.06	-.95	2.05	2.05	-.06	.05	1.96	.00
Concurrent	-	1.35	-.21 ⁺	-2.30	1.36	1.36	-.23 ⁺	.63	2.16	2.16	.04	.69	2.20	2.20	.04	-.73	2.07	2.07	-.05	-.52	1.96	-.27
GI	2.32																					
Early			1.83	1.27	1.83	1.27	.18				.15	2.03	.01			5.06	1.84	1.84	3.55 ^{**}			
Behavior																						
Concurrent			-.08	1.15	1.15	-.01					.48	1.87	.03			1.06	1.69	1.69	.08			
Behavior																						
<i>R</i> ²		.08			.11				.003			.004					.01			.15		
<i>F</i> change in <i>R</i> ²		2.87 ⁺			1.17				.09			.05					.32			5.45 ^{**}		
Fathers																						
Early GI	-.49	1.28	-.06	-.27	1.29	1.29	-.03	-3.03	1.84	1.84	-.24	-3.12	1.88	1.88	-.25	3.05	1.91	1.91	.24	3.85	1.88	.30
Concurrent GI	-.78	1.27	-.09	-.45	1.31	1.31	-.05	-.43	1.85	1.85	-.03	-.13	1.89	1.89	-.01	-2.49	1.88	1.88	-.20	-1.87	1.87	-.15
Early			.85	1.33	.85	1.33	.09									3.76	1.92	1.92	3.07 ⁺			
Behavior																						
Concurrent			.76	1.14	.76	1.14	.09					2.16	1.94	.17		.27	1.19	1.19	.02			
Behavior																						
<i>R</i> ²		.02			.04				.07			.09				.04				.12		
<i>F</i> change in <i>R</i> ²		.67			.86				2.66 ⁺			.66				1.37				3.07 ⁺		

Note. "GI" indicates parental gender ideology.

⁺ *p* < .10;

* *p* < .05;

** *p* < .01.

Table 4

Final Best Trimmed Models Predicting Children's Gender-Role Attitudes.

	Gender Stereotypes (GS-OWN)			Gender Stereotypes (GS-OPP)			Gendered Career Preferences		
	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β	<i>B</i>	<i>SEB</i>	β
M Early GI	-1.33	1.61	-.13	-	-	-	-.57	2.08	-.04
M Early Behavior	1.98	1.67	.19	-	-	-	5.13	2.36	.35*
M Concurrent GI	-1.60	1.50	-.15	-	-	-	-1.01	2.05	-.07
M Concurrent Behavior	-6.30	2.22	-.64**	-	-	-	1.29	1.86	.09
F Early GI	1.11	1.44	.11	-6.95	2.09	.54**	3.51	1.77	.24 ⁺
F Early Behavior	-.84	1.71	-.09	1.26	1.94	-.09	.32	2.09	.02
F Concurrent GI	-2.45	1.82	-.20	-	-	-	-	-	-
F Concurrent Behavior	.53	1.47	.06	1.18	1.93	.09	-.65	2.18	-.05
Child Gender	.75	2.56	.04	1.17	3.02	.04	-.73	3.32	-.03
M Concurrent Behavior	11.04	2.73	.86***	-	-	-	-	-	-
x Child Gender									
F Early GI x Child Gender	-	-	-	5.95	2.83	.33*	-	-	-
<i>R</i> ²		.34			.15			.21	
<i>F</i> change in <i>R</i> ²		16.29***		4.43*				2.24*	

Note.

⁺ $p < .10$;

* $p < .05$;

** $p < .01$;

*** $p < .001$.

"M" indicates mothers' predictor variables; "F" indicates fathers' predictor variables. "GI" indicates parental gender ideology. The notation "-" indicates that the corresponding variable was excluded from the model.