



Published in final edited form as:

*Sex Roles*. 2009 August ; 61(3-4): 221–234. doi:10.1007/s11199-009-9619-3.

## Family Patterns of Gender Role Attitudes

Jaime Marks, Lam Chun Bun, and Susan M. McHale

The Pennsylvania State University

### Abstract

Study goals were to identify family patterns of gender role attitudes, to examine the conditions under which these patterns emerged, and to assess the implications of gender attitude patterns for family conflict. Participants were mothers, fathers, and first- and second-born adolescents from 358 White, working and middle-class US families. Results of cluster analysis revealed three gender role attitude patterns: egalitarian parents and children, traditional parents and children, and a divergent pattern, with parents more traditional and children more egalitarian. Mixed-model ANOVAs indicated that these family patterns were related to socioeconomic status, parents' time spent in gendered household tasks and with children, and the gender constellation of the sibling dyad. The traditional family group reported the most family conflict.

### Keywords

gender; family systems; socialization; child effects

### Introduction

Although the importance of gender role attitudes in family dynamics has been of interest to researchers for several decades (e.g., Benin & Agostinelli, 1988; Ruble, Martin, & Berenbaum, 2006; Thompson & Walker, 1989), the gender role attitudes of family members—mothers, fathers, sisters and brothers—are typically studied in adults and children separately, or within single (i.e., marital or parent-child) dyads. This approach is likely to limit our understanding of the way in which family members' gender characteristics are connected. As proposed within a family systems perspective, families are composed of subsystems that are interrelated (Cox & Paley, 1997; Minuchin, 1985) and, as such, understanding of one subsystem in the family is incomplete if the processes that operate in other subsystems are not considered. The present study was intended to fill a gap in the literature on gender role attitudes and family dynamics. Using interview data on US families, we aimed: (1) to identify distinct *family patterns* of gender role attitudes of mothers, fathers, and two adolescent siblings using cluster analysis; (2) to explore the conditions under which different family patterns emerged, including family socioeconomic status (SES), parents' time spent on gendered household tasks, parents' time spent with children, and the sex constellation of sibling dyads; and (3) to assess the implications of family patterns of gender role attitudes for conflict between family members. We focused on gender role attitudes because of the extensive changes in gender ideologies within the US in recent decades (Fortin, 2005). We reasoned that sustained social change may differentially affect families and family members and thus give rise to distinct family patterns of gender role attitudes, with some families exhibiting more traditional attitudes, some exhibiting more

egalitarian attitudes, some exhibiting similarity in attitudes within the family, and some exhibiting differences in attitudes within the family.

### **Gender Roles Attitudes of Family Members: Congruence and Incongruence**

Our first goal was to identify family patterns of gender role attitudes. We used a cluster analysis approach which involves grouping units (families in our case) based on their similarities in multiple measures and which produces subgroups that maximize within-group similarities and between-group differences (Henry, Tolan, & Gorman-Smith, 2005). This pattern-analytic technique is exploratory in nature and involves few a priori assumptions about the structure of the resultant patterns (Whiteman & Loken, 2006). Within the family literature, efforts to identify types of families based on similarity and differences between family members are rare, and we found no prior research that explored family patterns of gender role attitudes. Thus we had no data to guide our predictions on what types of families would emerge. However, as we describe below, a review of literature on gender role attitudes and family systems theory, in general, suggested that, whereas some families may be characterized by congruence in attitudes across family members (e.g., all members are traditional or all are egalitarian), other families may be characterized by incongruence (i.e., some members are traditional and some are egalitarian).

**Congruence and Incongruence between Wives and Husbands**—One line of studies grounded in the assortive mating theory (Crow & Felsenstein, 1968) predicts that individuals will tend to choose mates with attributes similar to themselves, and thus that wives and husbands will be more similar than unrelated women and men. Empirical findings support this perspective in showing that married couples, as compared to randomly paired couples, are more similar on demographics, values, attitudes, personality, and psychological outcomes (Luo & Klohnen, 2005). From this perspective, wives' and husbands' gender role attitudes should be similar.

A family systems perspective, in contrast, posits that families are complex units composed of individuals with different experiences and needs (Cox & Paley, 1997; Minuchin, 1985). As integrated units, families self-organize in response to both external and internal forces. Across the course of family development, some components of the family may change more rapidly than others (Ross, Mirowsky, & Huber, 1983). Spouses' gender role attitudes, for example, may develop and change at different rates. Studies based on nationally representative samples of U.S. couples found that husbands hold more traditional gender role attitudes than their wives (Bolzendahl & Myers, 2004; Zuo & Tang, 2000). This is not surprising, given that concepts of male privilege and dominance are inherent in traditional views of gender roles (Ferree, 1990). Further evidence suggests that the effects of assortive mating are stronger for demographic characteristics than for psychosocial traits: Although spousal correlations for psychosocial traits are statistically significant, the effect sizes typically range from low to moderate (Epstein & Guttman, 1984). Taken together, theory and findings on attitude congruence in marital dyads may mean that some couples exhibit similar views on gender roles, but others do not.

**Congruence and Incongruence between Parents and Children**—A socialization perspective highlights parents' roles as instructors, reinforcers, and models of children's gender role attitudes (Lytton & Romney, 1991). Specifically, parents directly communicate their beliefs about gender by providing instruction, guidance, and training to their children (Eccles, 1994). They also reinforce sex-typed behaviors by encouraging their children's involvement in gender-stereotypical activities (Lytton & Romney, 1991). In addition, gender socialization messages are indirectly transmitted through parents' modeling of sex-typed behaviors (Collins & Russell, 1991). For example, children learn that women and men

(should) act differently when they observe that mothers spend more time on care-giving and fathers, on leisure activities with their children. From this perspective, parents should pass their attitudes about gender roles to their children, resulting in congruence between parents' and children's gender role attitudes.

A gender schema perspective, in contrast, emphasizes the importance of cognitive processes in gender development. Across childhood and adolescence, youth build schemas about gender-appropriate roles and behaviors (Martin & Ruble, 2004). Through the cognitive processes of identification and categorization, youth continually integrate novel ideas about gender into their schemas. These processes are based upon the unique learning contexts in which youth develop, including family and non-family contexts (Serbin, Powlishtak, & Gulko, 1993). Therefore, although a gender schema perspective also acknowledges parents as key socializing agents, from this perspective, youth act as producers of their own development (Martin, Ruble, Szkrybalo, 2002), meaning that youth's gender role attitudes are informed, but not determined, by parental practices and the larger social world. In fact, empirical studies show only modest and sometimes nonsignificant associations between parents' and children's gender role attitudes (Crouter, Whiteman, McHale, & Osgood, 2007; Tenenbaum & Leaper, 2002). These findings suggest that, whereas some children model their parents' views on gender roles, others do not.

**Congruence and Incongruence between Siblings**—We know much less about similarities and differences between siblings' gender role orientations than we do about those of marital and parent-child dyads. The larger literature on siblings, however, highlights the role of siblings as models, companions, and sources of advice and reinforcement, particularly in adolescence, when parents may be seen as less knowledgeable about peer and school social norms and activities (McHale, Kim, & Whiteman, 2006). From a social learning perspective, influence processes should operate to produce similarities between siblings' gender role attitudes. Indeed, consistent with social learning tenets, one study found that the gender attitudes of older siblings predicted changes in the attitudes of younger siblings over a two year period (McHale, Updegraff, Helms-Erikson, & Crouter, 2001): When older siblings reported more egalitarian attitudes, younger siblings' egalitarianism increased more over time.

In this study, however, evidence for a competing sibling influence process, termed de-identification, also emerged: When younger siblings reported more egalitarian attitudes, older brothers' attitudes became more traditional over time (McHale et al., 2001). Findings also revealed that sisters' attitudes were more egalitarian than brothers, on average, and longitudinal analyses indicated that the attitudes of sisters with younger brothers became more egalitarian over time. Findings of divergence between siblings are consistent with Alfred Adler's Theory of Individual Psychology (Ansbacher & Ansbacher, 1956) which holds that siblings de-identify with one another during the course of their development, choosing distinct niches in their families in an effort to reduce competition and garner unique family resources. In sum, although empirical data are limited, there is reason to expect both similarities and differences between siblings' gender role attitudes.

Taken together, although it is likely to observe congruence in gender role attitudes across family members in the same family, developmental and family dynamics may also operate to make family members different. As noted, the latter is consistent with the family systems perspective that highlights the potential for divergent experiences and points of view among different family members (Cox & Paley, 1997; Minuchin, 1985). Our first study goal was using cluster analysis to identify distinct and meaningful patterns based on the gender roles attitudes of four family members— wives, husbands, and two adolescents— from the same families.

## Conditions Underlying Family Patterns of Gender Roles Attitudes

Our second goal was to explore the conditions under which family patterns of gender role attitudes emerged. Given that the purpose of cluster analysis is to discover rather than enforce a predetermined structure on the data (Whiteman & Loken, 2006), we could not precisely predict how many subgroups would be found, nor how these subgroups would be linked to other family conditions. However, previous literature targets some family conditions that are related to gender traditionality of parents and children: If we were successful in identifying subgroups of more and less traditional families, we would then expect significant differences between these subgroups in family factors, including SES, parents' time spent on gendered household tasks, parents' time with children, and the sex constellation of sibling dyads.

**Family SES**—Evidence that socioeconomic factors may affect family gender role attitudes includes findings that women and men who have higher educational attainment and income express more egalitarian gender role orientations (e.g., Crompton & Lyonette, 2005; Lackey, 1989). Within the educational system in the US, students are exposed to egalitarian ideas and both female and male role models, and are taught to identify gender myths and stereotypes (Brooks & Bolzendahl, 2004; Cassidy & Warren, 1996). In addition, higher education levels provide both women and men with training and credentials for higher paying jobs and, in turn, the ability to contribute to the family economy (Raley, Mattingly, & Bianchi, 2006). Longitudinal studies based on nationally representative samples in the US have shown that wives tend to be more egalitarian when they contribute more to the total family income (Zou & Tang, 2000). Consistent with a social learning perspective, children from more economically advantaged family backgrounds also have more egalitarian gender attitudes (e.g., Antill, Cunningham, & Cotton, 2003; Kulik, 2002).

**Parents' Time Spent on Gendered Household Tasks**—As noted, children learn about gender appropriate behaviors by observing the behaviors of their parents. Over time, their knowledge consolidates to form cognitive schema which later organize new knowledge about gender and channel gendered behaviors (Martin & Ruble, 2004). Based on data from a 31-year panel study of US families, Cunningham (2001) found that parents' division of housework, measured when children were about one year of age, predicted children's later participation in household tasks in their own marriages. Specifically, fathers' contribution to stereotypically feminine housework predicted sons' involvement in the same type of work in adulthood. Cunningham's findings, along with other studies on household task division (e.g., Blair, 1992; White & Brinkerhoff, 1981), point to the importance of parents' time spent on housework in children's gender role development: Non-traditional allocation of housework is likely to promote egalitarian attitudes within the family.

**Parents' Time with Children**—Another family process that may affect children's gender role attitudes is fathers' temporal involvement (Risman & Myers, 1997). Child care is a stereotypically feminine activity, and marks a less traditional family role for fathers. This may be especially the case when fathers spend time with daughters. On the other hand, within-family comparisons have shown that fathers are more inclined toward sex-typed activities with children (especially boys) than are mothers (Harris & Morgan, 1991; Crouter, McHale, & Bartko, 1993). As reviewed by Maccoby (2003), fathers-son dyads engaged in almost twice as much rough-and-tumble play as mother-son dyads in experimental settings. Fathers also react more negatively to crying, fearfulness, or signs of feebleness in sons than in daughters. These data suggest that, although fathers' involvement with children, generally, reflects a more egalitarian gender role orientation, high level of paternal involvement selectively with sons may reinforce a more traditional gender ideology.

**Sex Constellation of Sibling Dyads**—A family systems perspective emphasizes the bidirectional influences between parents and children, and previous research suggests that children may influence parents in some of the same ways that parents influence children. McHale and Crouter (2003) have shown, for example, that the sex constellation of sibling dyads shapes gendered patterns of family activities. Studying two-parent US families with at least two children in middle childhood, they found that mothers spent more time with children than did fathers in families with two daughters, whereas fathers spent more time with children than did mothers in families with two sons. That is, parents' greater involvement was predicted by having not one, but two children of their same gender. Given that fathers are more concerned about the gender typicality of boys (Maccoby, 2003) and that brother-brother sibling dyads tend to spend more time with their fathers, we may find that they have more traditional gender role attitudes when compared to sister-sister dyads. Findings from McHale and Crouter's (2003) study also showed that children's involvement in household tasks varied as a function of the sibling dyad sex constellation. Older siblings generally performed more housework than younger siblings, but this difference was most pronounced in older-sister-younger-brother dyads. Further, in older-brother-younger-sister dyads, younger girls did more housework than their older brothers. These findings suggest that the presence of a boy and a girl in the same family affords an opportunity for parents to reinforce traditional gender role orientations. As such, families with mixed-sex sibling dyads may have more traditional gender role patterns, particularly as compared to families with sister-sister sibling dyads.

### Gender Role Attitudes and Family Conflict

Our third aim was to assess the implications of the family patterns of gender role attitudes for the quality of family relationships. As mentioned, unlike a priori methods, cluster analysis does not allow us to make precise predictions about the underlying latent patterns, nor about how the derived patterns would be related to other constructs (Whiteman & Loken, 2006). However, previous literature suggests that family members with divergent attitudes are less satisfied with their family relationships. If we proved successful in identifying subgroups of families that are characterized by congruence and incongruence among family members' attitudes, the literature generally suggests that there would be more conflict in families marked by incongruence.

**Marital Conflict**—Marital quality has been found to be related to spousal similarity. Couples who are similar in values, leisure interests, role preferences, and cognitive skills tend to be more satisfied with their marriages than those who are dissimilar in these aspects (e.g., Burlison & Denton, 1992; Ickes, 1993; Kaslow & Robison, 1996). Furthermore, based on nationally representative samples of US couples, Lye and Biblarz (1993) found that when couples disagree with respect to gender role attitudes (i.e., housework division), both wives and husbands report higher levels of marital tension and conflict. As Cook and Jones (1963) observed, couples with different values and attitudes may have difficulty in their relationships because they appraise events from different perspectives. Dissimilar wives and husbands may have to constantly negotiate and redefine their marital roles—a process that may generate new sources of disagreement and problems.

**Parent-Child Conflict**—Only few studies examined intergenerational incongruence in attitudes and its links to parent-child relationships. For example, a limited body of research on acculturation has documented the existence of intergenerational conflicts due to differential acculturation of immigrant parents and their children (e.g., Atzaba-Poria & Pike, 2007; Tsai-Chae & Nagata, 2008; Ying & Han, 2007). Overall, findings suggest that when parents and children show marked discrepancies in cultural values and attitudes, they report more conflict and poorer relationship quality. Comparable consequences may occur when



parents and children have different views on gender roles. Like dissimilar couples, dissimilar parents and children may need to negotiate and redefine their roles in the family, which may, in turn, compromise parent-child relationships. However, it is important to recognize that in some instances children's divergence from their parents' attitudes is encouraged by parents (Acock, 1984), and thus incongruence may not always result in problematic relationships.

**Sibling Conflict**—Our review of the literature found no studies linking sibling attitude similarity with sibling conflict, and from a theoretical perspective, predictions are inconsistent. Social learning theories highlight the role of a model's warm and nurturant behavior in observational learning (Bandura, 1977), and indeed, some research shows that siblings with closer relationships exhibit more similarity in their behaviors (McHale et al., 2006). On the other hand, sibling differentiation theory suggests that siblings pick different niches in their families in an effort to reduce sibling rivalry (Ansbacher & Ansbacher, 1956). From this perspective, sibling conflict should be lower when siblings exhibit larger differences in their gender role attitudes.

### Study Objectives and Hypotheses

The present study was designed to address three research goals. Our first aim was using mothers, fathers, and first- and second-born siblings' reports on gender role attitudes as clustering variables to identify groups of families that differ in their family-wide patterns of gender role attitudes. We followed recent studies (e.g., Allen & Olson, 2001; Fisher & Ransom, 1995; Fowers & Olson, 1992), and took a two-step approach of cluster analysis. First, a hierarchical cluster analysis using a cosine index of similarity with average linkage was conducted. Families were successively paired until all units were grouped into a common cluster. Hierarchical clustering was used here because nonlinear methods cannot represent nested structures within multivariate data (Henry et al., 2005). Solutions with different numbers of clusters were compared based on several stopping criteria, including dendrogram patterns, interpretability, and cell size (Blashfield & Aldenderfer, 1988). Second, a confirmatory factor analysis using the *K*-means method was conducted. The additional cluster analysis determined whether the chosen cluster structure derived from the hierarchical cluster analysis was replicable (see Whiteman & Loken, 2006, for a detailed discussion of the procedure and advantages of this two-step approach). To further test our hypothesis regarding gender role attitude patterns, we conducted a mixed model analyses of variance (ANOVA) to examine the between- (cluster) and within-group (family member) differences in the clustering variables.

Our second aim was to explore the conditions under which different patterns of gender role attitudes emerged by comparing family clusters in terms of SES, parents' time spent on gendered household tasks, parents' time with children, and the sex constellation of sibling dyads. Here we conducted a series of mixed model ANOVAs and chi-square analysis to examine the between- (cluster) and within-group (family member) differences in these factors.

Our third aim was to assess the potential implications of family patterns for family conflict by comparing family clusters in terms of marital, parent-child, and sibling conflict. Toward this end, we also conducted mixed model ANOVAs to examine the between- (cluster) and within-group (family member) differences in family conflicts.

We tested the following hypotheses.

- 1 Cluster analyses will identify family patterns characterized by congruence and incongruence among family members' gender role attitudes.

- 2(a) In families characterized by more traditional gender role attitudes, parents will have lower SES (i.e., lower education and income levels).
- 2(b) In families characterized by more traditional gender role attitudes, parents will have a more traditional division of household labor.
- 2(c) In families characterized by more traditional gender role attitudes, fathers will spend more time with sons.
- 2(d) The group of families with more egalitarian gender role attitude patterns will include more families with girl-girl sibling dyads as compared to boy-boy or mixed-sex sibling dyads.
- (3) Families characterized by incongruent gender role attitudes across family members will have higher levels of marital, parent-child, and sibling conflict compared to families characterized by congruent gender role attitudes across family members.

## Method

### Participants

Participants were 358 two-parent families from two cohorts of a longitudinal study of family relationships. One cohort included a firstborn and a secondborn sibling who were in middle childhood when they first entered the study, and the second cohort included a firstborn and a secondborn sibling who were in adolescence when they first entered the study. Recruitment letters were sent home to all families with children of the targeted age within school districts of a northeastern state. The letters explained the purpose of the research project, and described the criteria for participation. Families were given postcards to fill out and return if they were interested in participating. Families were eligible if the couple was married, both parents were working, and they had at least two children in middle childhood or adolescence who were not more than four years apart in age. Over 90% of families that returned postcards were eligible and eventually participated. For the present analyses, we only used data from one occasion for each cohort in which (a) data on gender attitudes of both parents and children were collected and; (b) children were in early (younger siblings) and middle (older siblings) adolescence.

This study included an exclusively White working- and middle-class sample. The average income was \$24,756 ( $SD = 17,733$ ) for mothers and \$48,747 ( $SD = 28,158$ ) for fathers. The average level of education was 14.66 years ( $SD = 2.19$ ) for mothers and 14.60 years ( $SD = 2.39$ ) for fathers, where a score of 12 signified a high school graduate and 16 a college graduate. The average age was 42.05 years ( $SD = 3.95$ ) for mothers, 44.17 years ( $SD = 4.70$ ) for fathers, 16.72 ( $SD = .80$ ) for firstborn siblings, and 14.20 years ( $SD = 1.12$ ) for secondborn siblings.

### Procedure

We collected data through home and phone interviews. Trained interviewers visited families to conduct individual home interviews. At the beginning of the interview, informed consent was obtained, and the family received a \$100 or \$200 honorarium depending on the study phase. Family members were then interviewed individually. In the interviews, family members reported on measures of development, adjustment, and family relationships.

In the two to three weeks following the home interviews, parents and children respectively completed four (3 weekdays, 1 weekend day) and seven (5 weekdays, 2 weekend days) nightly phone interviews. Trained interviewers called family members in their homes,

mostly during the evening hours. Each family member completed their portion of calls individually. The interviewer guided each parent and child through a list of activities and probed for the context of any completed activities, including the type of activities, how long they lasted, and with whom they engaged in the activities. Youth reported on activities, including household tasks, personal activities, sports participation, and hobbies. Parents reported on all of their own household tasks, as well as any activities they did with either child, using the provided list of activities. The two children participated in all seven phone calls and parents participated in four calls each. Phone interviews lasted between 30 to 45 minutes per call.

## Measures

**Background characteristics**—We collected information on family members' ages and parents' education level and income during home interviews with parents.

**Parents' gender role attitudes**—Parents completed the 15-item Attitudes Towards Women (ATW) Scale (Spence & Helmreich, 1972). A sample item was “In general, the father should have greater authority than the mother in making decisions about raising children.” Responses ranged from 1 (*strongly agree*) to 4 (*strongly disagree*). The parents' attitudes scores were computed by summing the scores for all 15 items, with higher scores indicating more traditional views on gender roles. Cronbach's alphas were .80 for mothers and .77 for fathers.

**Youth's gender role attitudes**—Youth completed either the Attitudes Towards Women Scale (Spence & Helmreich, 1972) or the Children's Attitudes Towards Women Scale (Antill, Cotton, Goodnow, & Russell, 1993). Different scales were used for the two cohorts because the children entered our longitudinal study at different age. Given that different measures were used, youth's scores on each scale were standardized within cohort and birth order. The Attitudes Towards Women Scale, completed by youth who entered the study as adolescents, was the same measure as described above for parents. Cronbach's alpha was .80 for first- and .81 for secondborn siblings. The Children's Attitudes Towards Women Scale, completed by youth who entered the study in middle childhood, was a 19-item measure with responses ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). A sample item was “Sons in a family should be given more help to go to college than daughters.” Cronbach's alpha was .88 for first- and .83 for secondborn siblings. The youth's attitudes scores were computed by summing the scores for all 19 items, with higher scores indicating more traditional views on gender roles.

**Parents' time spent on feminine household tasks**—We assessed parents' participation in feminine household tasks via telephone interviews with parents. Specifically, mothers and fathers reported how much time they spend doing dishes, cooking meals, cleaning the house (e.g., dusting, washing floors), and doing laundry across the 4 days of time use data. These tasks were labeled as feminine tasks based upon prior theory and research (Atkinson & Huston, 1984). Additionally, a paired *t*-test showed that mothers in this sample reported spending significantly more time in these tasks than did fathers,  $t(341) = 22.78, p < .01$ . Reports of these activities were aggregated across the four calls each parent completed to construct measures of how much time mothers and fathers spent on stereotypically feminine household tasks. To correct for skewness, square root transformations of the total duration of time (minutes per 4 days) were used.

**Parents' time with children**—We assessed parent-child shared time via phone interviews with youth. Parent-child dyadic time (parent-child shared time with no one else present) was measured by summing the minutes each child reported spending alone with



each parent across all activities and across the seven calls each child completed. To correct for skewness, square root transformations of the total duration of time (minutes per 7 days) were used.

**Parents' marital conflict**—Parents completed a 5-item scale developed by Braiker and Kelly (1979). A sample item was “How often do you feel angry or resentful toward your partner?” Responses ranged from 1 (*not at all*) to 9 (*very much*). Total marital conflict scores were computed by summing the score for each of the 5 items. Cronbach's alphas were .75 and .73 respectively for mothers' and fathers' reports on marital conflict.

**Parent-child conflict**—Youth completed an 11-item measure adapted from Smetana (1998). Youth reported on the frequency of conflict within 11 domains of daily life (e.g., chores, homework/schoolwork, social life, bedtime/curfew) respectively for mothers and fathers. Responses ranged from 1 (*not at all*) to 6 (*several times a day*). Total parent-child conflict scores were computed by summing the score for each of the 11 domains. A separate score was computed for each parent-child dyad (i.e., mother-firstborn, mother-secondborn, father-firstborn, father-secondborn). Cronbach's alpha coefficients ranged from .78 to .83.

**Youth's conflict with siblings**—Youth completed a 5-item scale developed by Stocker and McHale (1992). A sample item was, “How often do you feel mad or angry at your brother/sister?” Responses ranged from 1 (*not at all*) to 5 (*very much*). Total sibling conflict scores were computed by summing the score for each of the 5 items. Cronbach's alpha were .75 and .79 respectively for first- and second-born siblings' reports on sibling conflict.

## Results

Means and standard deviations of all variables in the study are shown in Table 1 separately for mothers, fathers, and female and male first- and secondborn siblings. Paired-sample *t*-tests showed that mothers had significantly lower income,  $t(352) = -13.35, p < .01$ , were more egalitarian,  $t(357) = -5.18, p < .01$ , spent more time on household tasks,  $t(341) = 22.78, p < .01$ , and reported higher levels of marital conflict compared to fathers,  $t(353) = 5.28, p < .01$ . Independent sample *t*-tests showed that first- and second-born girls were more egalitarian than firstborn,  $t(356) = -9.95, p < .01$ , and second-born boys,  $t(356) = -7.09, p < .01$ . Adolescents also spent more time with their same-sex parents: Whereas first- and second-born girls spent more time with mothers than did firstborn,  $t(339) = 6.90, p < .01$ , and second-born boys,  $t(339) = 5.46, p < .01$ , first- and second-born boys spent more time with fathers than did firstborn,  $t(339) = -4.44, p < .01$ , and second-born girls,  $t(339) = -3.10, p < .01$ .

### Patterns of Gender Role Attitudes

Hypothesis (1) posited that cluster analyses would identify family patterns characterized by congruence and incongruence among family members' gender role attitudes. Prior to conducting the cluster analyses, all reports of attitudes were standardized so that variables with larger variances would not dominate the cluster solution. We compared several solutions with two-, three-, four- and five-cluster structures derived from hierarchical clustering. On the basis of several stopping criteria, including dendrogram patterns, interpretability, and cell size (Blashfield & Aldenderfer, 1988), we chose a three-cluster solution as the best characterization of the data. The solution was replicated by *K*-means clustering technique,  $\chi^2(4) = 286.68, p < .01$  (see Table 2). Three patterns of families emerged were consistent with our expectation: A traditional group ( $n = 164$ ), in which both parents and both siblings scored above the sample means on gender role attitude traditionality, an egalitarian group ( $n = 126$ ), in which both parents and both siblings scored

below the means on gender role traditionality, and a divergent group ( $n = 68$ ), in which parents reported relatively more traditional, but siblings reported relatively less traditional attitudes (see Table 3 and Figure 1 for standardized means of the clustering variables).

To further test our hypothesis regarding the family patterns, we compared the clusters using a 3 (cluster)  $\times$  4 (family member) mixed model ANOVA, and found significant univariate effects for mothers',  $F(2, 357) = 71.29, p < .01, \epsilon = .53$ , fathers'  $F(2, 357) = 72.56, p < .01, \epsilon = .53$ , firstborns',  $F(2, 357) = 65.70, p < .01, \epsilon = .51$ , and second-borns',  $F(2, 357) = 131.12, p < .01, \epsilon = .65$ , gender role attitudes (see Table 3), as well as a significant between groups effect of cluster,  $F(2, 357) = 233.93, p < .01, \epsilon = .75$ , and a significant cluster  $\times$  family member interaction,  $F(2, 357) = 29.59, p < .01, \epsilon = .37$ .

Tukey follow-up tests for the univariate effects indicated that fathers in all groups were significantly different from each other in their gender role attitudes, with fathers in the divergent group reporting the most, and fathers in the egalitarian group reporting the least traditional attitudes. The results also showed that mothers in the egalitarian group were significantly different from mothers in both the traditional and divergent groups, but mothers in the traditional and divergent groups did not differ. Finally, both first- and second-born children in the traditional group were significantly different from those in the egalitarian and divergent groups, but there were no differences between the latter two groups.

To follow up the cluster  $\times$  family member interaction, we examined difference scores between family members using Tukey follow-up tests. Beginning with mother-father comparisons, these analyses revealed that parents differed from one another in both the traditional and the divergent groups such that fathers were less traditional than mothers in the traditional group, but more traditional than mothers in the divergent group. There were no differences between siblings in any of the groups. Finally, except for a father-second-born difference in the traditional cluster, the divergent cluster was the only family type in which parent-child differences were significant.

### Conditions Underlying Family Patterns of Gender Role Attitudes

To identify the conditions under which different family patterns of gender role attitudes emerged, we conducted a series of mixed model ANOVAs and chi-squared analysis. Specifically, the analyses examined differences between the family clusters in terms of SES, parents' time spent on gendered household tasks, parents' time spent with children, and the sex constellation of the sibling dyad (see Tables 4 and 5).

Hypothesis 2(a) posited that parents in families characterized by more traditional gender role attitudes would have lower SES. A 3 (cluster)  $\times$  2 (parent) mixed model ANOVA revealed a significant effect of cluster on mothers' income,  $F(2, 352) = 5.07, p < .01, \epsilon = .15$ , a trend-level effect of cluster on fathers' income,  $F(2, 352) = 2.19, p < .11, \epsilon = .08$ , and a significant overall cluster effect,  $F(2, 352) = 6.29, p < .01, \epsilon = .17$ . Tukey follow-up tests revealed that, consistent with our hypothesis, parents in both traditional and divergent families had significantly lower income than those in egalitarian families. Additionally, a 3 (cluster)  $\times$  2 (parent) mixed model ANOVA focusing on mothers' and fathers' education revealed a significant effect of cluster on mothers' education,  $F(2, 355) = 13.01, p < .01, \epsilon = .25$ , father's education,  $F(2, 355) = 13.08, p < .01, \epsilon = .25$ , and an overall between cluster effect,  $F(2, 355) = 17.82, p < .01, \epsilon = .29$ . Consistent with our expectation, a Tukey follow-up test revealed that parents in both the traditional and divergent families had significantly lower levels of education than parents in egalitarian families. Given these findings and a significant correlation between parents' education and family income,  $r = .51, p < .01$ , we created a composite SES score, combining family income and both parents' education levels

by standardizing each score and summing them. This SES index was used as a control variable in all remaining analyses.

Hypothesis 2(b) posited that parents in families characterized by more traditional gender role attitudes would have a more traditional division of household labor. A 3 (cluster)  $\times$  2 (parent) mixed model ANCOVA with parent as the within groups factor and SES as a control variable revealed a trend-level univariate cluster effect for mothers' participation in household tasks,  $F(2, 336) = 2.51, p = .08, \epsilon = .09$ , a significant cluster effect for fathers' participation in household tasks,  $F(2, 336) = 4.07, p < .01, \epsilon = .13$ , a significant overall parent effect,  $F(2, 336) = 465.33, p < .01, \epsilon = .85$ , and a significant overall cluster  $\times$  parent interaction,  $F(2, 336) = 5.20, p < .01, \epsilon = .16$ . Tukey follow-up tests for the main effects for cluster showed that mothers in the divergent group spent more time on feminine household tasks than did mothers in the egalitarian group, and that fathers in the egalitarian group spent more time on feminine household tasks than fathers in both the traditional and divergent groups. The overall parent effect indicated that mothers generally spent more time on feminine household tasks than did fathers. However, consistent with our hypothesis, follow-up of the parent  $\times$  cluster interaction indicated that mothers and fathers in the egalitarian group were more similar in time spent on feminine tasks as compared to the other groups.

Hypothesis 2(c) posited that fathers in families characterized by more traditional gender role attitudes would spend more time with their sons. Analyses of parents' time with children revealed no univariate cluster effect for mothers' time spent with children. However, a 3 (cluster)  $\times$  4 (gender constellation)  $\times$  2 (sibling) mixed model ANCOVA revealed a univariate cluster effect for older siblings' dyadic time with father,  $F(2, 334) = 5.31, p < .01, \epsilon = .16$ , and a cluster  $\times$  sibling interaction,  $F(2, 334) = 4.75, p < .01, \epsilon = .15$ . A follow-up test of the univariate main effect showed that fathers spent significantly more time with their older children in the divergent group as compared to the traditional group. A Tukey follow-up test of the cluster  $\times$  sibling interaction revealed that fathers in the divergent group spent more similar amounts of time with their two children compared to fathers in the traditional and egalitarian groups. Taken together, this pattern suggests that fathers in the divergent group were relatively more involved with their children.

Hypothesis 2(d) posited that families characterized by more egalitarian gender role attitudes would be more likely to have girl-girl sibling dyads than boy-boy or mixed-sex sibling dyads. A 3 (cluster)  $\times$  4 (gender constellation) chi-squared analysis,  $\chi^2(6) = 28.91, p < .01$ , suggested that, in partial support of our expectation, the traditional family type included a preponderance of brother-brother pairs, whereas the divergent family type was made up largely of sister-sister pairs. In addition, the egalitarian group had somewhat more sister-sister than brother-brother pairs. In contrast to our hypothesis, however, mixed sex dyads (sister-brother and brother-sister) appeared to be distributed equally across the family types (see Table 5).

### Gender Role Attitudes and Family Conflicts

Hypothesis (3) posited that families characterized by incongruent gender role attitudes across family members would have higher levels of parent-child, marital, and sibling conflict compared to families characterized by congruent gender role attitudes across family members. A 3 (cluster)  $\times$  2 (parent) mixed model ANCOVA revealed no effects involving cluster for marital conflict. Similarly, a 3 (cluster)  $\times$  2 (sibling) mixed model ANCOVA revealed no effects involving cluster for sibling conflict. For parent-child conflict, however, a pair of 3 (cluster)  $\times$  4 (gender constellation)  $\times$  2 (sibling) mixed model ANOVAs revealed significant overall cluster effects for both mother- and father-child conflict,  $F(2, 352) = 3.90, p < .01, \epsilon = .13$ , and  $F(2, 352) = 6.15, p < .01, \epsilon = .17$ , respectively. Inconsistent with our hypothesis, Tukey follow-up tests revealed higher levels of mother-child conflict in the

traditional group compared to the egalitarian group and higher levels of father-child conflict in the traditional group compared to the other two family types.

## Discussion

Although some researchers have begun to use person-oriented or pattern-analytic approaches to studying families (e.g., Crouter, McHale, & Tucker, 1999; Johnson, 2003), these approaches have traditionally been used to study individuals (Bergman, Magnusson, & El-Khoury, 2003). The current study demonstrates the utility of a pattern analytic approach for studying family systems. Our analyses revealed that families varied in their patterns of parents' and children's gender role attitudes. In the majority of families, there was congruence across four family members, in that all family members were either relatively more egalitarian or relatively more traditional as compared to individuals from other families. One group of families, however, showed an incongruent pattern in which both siblings displayed more egalitarian attitudes despite the more traditional views of their parents. This pattern is consistent with family systems notions about within-family variability. The emergence of a divergent pattern also suggests that, whereas social learning processes explain children's gender role attitude development in some families, different mechanisms may be at work in other families.

Our analyses revealed that between- and within-family comparisons provide somewhat different pictures of family attitude congruence and divergence: In both the divergent and traditional groups, mothers and fathers also differed in their attitudes, such that fathers in the divergent group were more traditional than their wives, and mothers in the traditional group were more traditional than their husbands. As we have suggested, most studies of gender attitudes focus on individuals or dyads. Our family-oriented approach reveals a more complex set of processes than has been found in prior work.

There were no instances in which two siblings differed from each other in their gender role attitudes. Social learning mechanisms may be functioning in these families such that younger siblings model the gender role attitudes of their older siblings (e.g., McHale et al., 2001). Future work exploring the relationships between siblings' gender role attitudes over time could provide further insight into the social learning processes that impact gender role development throughout adolescence.

## Conditions Underlying Family Patterns

In exploring the conditions underlying these family patterns, the results were consistent with earlier studies in showing that parental education and income distinguished families with more traditional attitudes from those with more egalitarian attitudes (e.g., Bolzendahl & Myers, 2004). The divergent group was also characterized by lower education and income, as would be expected given parents' traditionality; however, in this family type, as noted, the attitudes of children were more egalitarian. Although the attitudes of parents in this group may have been grounded in socioeconomic factors, it appears that those of their children were not.

In addition to background characteristics, family patterns of gender role attitudes also differed in terms of parents' time use within the family. The divergent group exhibited a seemingly paradoxical pattern. On the one hand, parents in this group displayed a more traditional division of household labor; on the other hand, fathers appeared to be more involved with their children compared to fathers in other family types. Although the traditional division of household labor fits with the traditional gender attitudes of the parents in this group, the relatively high involvement in children on the part of fathers suggested less traditionality. High paternal involvement in the divergent group is particularly noteworthy,

given that girl-girl sibling dyads were over-represented in this group and that fathers in this group reported the most traditional attitudes. Notably, although mothers in this group reported more traditional attitudes compared to other mothers, they were less traditional than their husbands. The findings illustrate the multidimensionality of gender: A person with traditional gender role attitudes does not necessarily exhibit gender-typed behaviors in all domains of life.

The findings also provide some insight into the basis for the incongruence between parents' and children's attitudes in the divergent families. When fathers differ in their attitudes and behaviors, their messages to their children about gender may be diluted. Despite the traditional attitudes of both parents, children in these families (daughters in particular) may notice the more egalitarian side of their fathers and react against their mother's traditional role in domestic labor. This highlights the complexity of socialization influences: both mothers' and fathers' attitudes and behaviors may be important in children's gender attitude development.

Our results revealed that family patterns of gender role attitudes were linked to the sex constellation of the sibling dyad. It was having not just one, but two girls, however, that increased families' chances of falling into the divergent group, and having not just one, but two boys that increased families' chances of falling into the traditional group. Although one cannot draw causal inferences from a correlational study like this one, it seems more sensible to conclude that the sex constellation of the dyad "caused" the family pattern of gender role attitudes rather than the other way around. Other researchers have pointed to the importance of considering the role of child effects in shaping the family environment and experiences (Bell & Chapman, 1986; Crouter & Booth, 2003; Russell & Russell, 1992), and yet there is a tendency in family and child development research to assume unidirectional effects from parents to children. McHale and Crouter (2003) have previously demonstrated the important role that the sex of children plays in shaping family dynamics. Other research examining parents' differential treatment of siblings suggests that the sex constellation of siblings may influence the levels and types of parents' behaviors toward each of their children (e.g., McHale, Updegraff, Jackson-Newsom, Tucker, & Crouter, 2000). Future researchers may gain new insights when moving beyond between- to within-family comparisons.

Particularly important was the finding that having not one, but two children of a particular sex distinguished between the family clusters. In the case of the divergent group in which sister-sister pairs were more common, girls may have found it easier to express attitudes that were inconsistent with parents' when they had support from their sisters. Similarly, the higher number of sister-sister pairs in the divergent group may explain mothers' less traditional attitudes relative to fathers, in the sense that having two daughters may encourage mothers to gravitate toward less traditional attitudes. In the traditional group, in contrast, the preponderance of boys in these families may have limited parents' exposure to and understanding of issues related to gender discrimination and equality that may arise when raising daughters.

### **Family Gender Role Attitudes and Family Conflict**

Contrary to expectations, there was no evidence that the attitude incongruence of the divergent group had negative implications for parent-child relationships. Instead, there were higher levels of parent-child conflict in the traditional families. Importantly, this family type had an abundance of boy-boy pairs. One possible explanation of the high conflict, then, is that a high value placed on "masculinity" in these families could encourage more stereotypically masculine relationship behaviors, such as dominance, competition, and aggression (Maccoby, 1990; Thompson & Pleck, 1986). Furthermore, the traditional gender



role attitudes of parents may be coupled with more authoritarian parenting styles that have implications for conflict with sons and daughters. Interestingly, mothers in this group were more traditional than fathers, and it is possible that this relative incongruence between parents' attitudes fueled conflict among parents and children.

### Limitations and Future Directions

This investigation provides a contribution to understanding how families work as systems. Nonetheless, there remain some issues to be addressed in future research. First, this study was limited to a cross-sectional analysis. In order to fully understand the processes involved in the formation of family patterns of attitudes, longitudinal studies are vital. Although it may seem logical to conclude that the sex constellation of sibling dyads exerted an influence on family patterns of attitudes rather than the other way around, a longitudinal analysis exploring the development of gender role attitudes within the family could help to pinpoint the unique way in which parents and children impact the family system. Just as children's gender role attitudes may arise through developmental processes, patterns of family attitudes may ebb and flow. Similarly, longitudinal analyses are necessary to better understand what experiences and conditions precede the divergence of attitudes among family members and whether these differences have implications over the long-run.

A second limitation of our study pertains to the generalizability of the results. Although the participants reflected the demographic characteristics of the region in which they resided, the sample was fairly homogenous, both in terms of ethnicity and SES. Gender role orientations are not only multidimensional within family systems, but also across different family contexts. As such, these patterns of gender role attitudes may not be universal. The results of the cluster analysis should be replicated in other samples before drawing conclusions about the nature and correlates of family gender role attitude patterns.

Finally, the measure of parent-child conflict may be limited in its validity. Although the 11 domains assessed in the parent-child conflict scale certainly represent domains of family life that may trigger conflict, it is possible that these domains more closely represent household disciplinary or regulatory practices. Future studies could validate the findings in this study related to conflict by using alternative measures of parent-child conflict.

In conclusion, our findings highlight the importance of measuring the gender role attitudes of multiple family members. By examining family patterns of gender role attitudes rather than just focusing on individuals or single dyads, a deeper understanding of the processes involved in gender role attitude development, among both parents and children, can be gained. As this study demonstrates, gender role attitudes are connected to aspects of family life, including relationship quality and division of labor, and are shaped by the family context in which they are embedded.

### Acknowledgments

The authors are grateful to their undergraduate and graduate student, staff, and faculty collaborators, as well as the dedicated families who participated in this project. This work was funded by grants from the National Institute of Child Health and Human Development, R01-HD32336 and R01-HD29409, Ann C. Crouter and Susan M. McHale, Co-Principal Investigators.

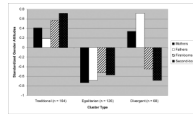
### References

- Acock AC. Parents and their children: The study of intergenerational influences. *Sociology and Social Research*. 1984; 68:151–171.
- Allen WD, Olson DH. Five types of African-American marriages. *Journal of Marriage and Family Therapy*. 2001; 27:301–314.

- Ansbacher, HL.; Ansbacher, RR. The individual psychology of Alfred Adler. Basic Books; New York: 1956.
- Antill JK, Russell G, Goodnow JJ, Cotton S. Measures of children's sex typing in middle childhood. *Australian Journal of Psychology*. 1993; 45:25–33.
- Antill JK, Cunningham JD, Cotton S. Gender-role attitudes in middle childhood: In what ways do parents influence their children? *Australian Journal of Psychology*. 2003; 55:148–153.
- Atkinson J, Huston TL. Sex role orientation and division of labor early in marriage. *Journal of Personality and Social Psychology*. 1984; 46:330–345.
- Atzaba-Poria N, Pike A. Are ethnic minority adolescents at risk for problem behaviour? Acculturation and intergenerational acculturation discrepancies in early adolescence. *British Journal of Developmental Psychology*. 2007; 25:527–541.
- Bandura, A. *Social Learning Theory*. Prentice Hall; Englewood Cliffs, NJ: 1977.
- Bell RQ, Chapman M. Child effects in studies using experimental or brief longitudinal approaches to socialization. *Developmental Psychology*. 1986; 22:595–603.
- Benin MH, Agostinelli J. Husbands' and wives' satisfaction with the division of labor. *Journal of Marriage and the Family*. 1988; 50:349–361.
- Bergman, LR.; Magnusson, D.; El-Khoury, BM. Studying individual development in an interindividual context: A person-oriented approach. Lawrence Erlbaum; Mahway, NJ: 2003.
- Blair S. The sex-typing of children's household labor: Parental influence on daughters and sons' housework. *Youth and Society*. 1992; 24:178–203.
- Blashfield, RK.; Aldenderfer, MS. The methods and problems of cluster analysis. In: Nesselroade, JR.; Cattell, RB., editors. *Handbook of multivariate experimental psychology: Perspectives on individual differences*. 2nd ed.. Plenum Press; New York: 1988. p. 447-473.
- Bolzendahl CI, Myers DJ. Feminist attitudes and support for gender equality: Opinion change in women and men, 1974–1998. *Social Forces*. 2004; 83:759–790.
- Burleson BR, Denton WH. A new look at similarity and attraction in marriage: Similarities in social-cognitive and communication skills as predictors of attraction and satisfaction. *Communication Monographs*. 1992; 59:268–287.
- Braiker, HB.; Kelley, HH. Conflict in the development of close relationships. In: Burgess, R.; Huston, T., editors. *Social exchange in developing relationships*. Academic Press; New York: 1979. p. 135-168.
- Brooks C, Bolzendahl C. The transformation of US gender role attitudes: Cohort replacement, social-structural change, and ideological learning. *Social Science Research*. 2004; 33:106–133.
- Cassidy ML, Warren BO. Family employment status and gender role attitudes: A comparison of women and men college graduates. *Gender & Society*. 1996; 10:312–329.
- Cook JL, Jones RM. Congruency of identity style in married couples. *Journal of Family Issues*. 2002; 23:912–926.
- Collins WA, Russell G. Mother-child and father-child relationships in middle childhood and adolescence: A developmental analysis. *Developmental Review*. 1991; 11:99–136.
- Cox MJ, Paley B. Families as systems. *The Annual Review of Psychology*. 1997; 48:243–267.
- Crompton R, Lyonette C. The new gender essentialism—domestic and family 'choices' and their relation to attitudes. *The British Journal of Sociology*. 2005; 56:601–620. [PubMed: 16309438]
- Crouter, AC.; Booth, A. *Children's influence on family dynamics: the neglected side of family relationships*. Lawrence Erlbaum; Mahwah, New Jersey: 2003.
- Crouter AC, McHale SM, Bartko WT. Gender as an organizing feature in parent-child relationships. *Journal of Social Issues*. 1993; 49:161–174.
- Crouter AC, McHale SM, Tucker CJ. Does stress exacerbate parental differential treatment of siblings? A pattern-analytic approach. *Journal of Family Psychology*. 1999; 13:286–299.
- Crouter AC, Whiteman SD, McHale SM, Osgood DW. Development of gender attitude traditionality across middle childhood and adolescence. *Child Development*. 2007; 78:911–926. [PubMed: 17517012]
- Crow JF, Felsenstein J. The effect of assortative mating on the genetic composition of a population. *Eugenics Quarterly*. 1968; 15:85–91. [PubMed: 5702332]

- Cunningham M. Parental influences on the gendered division of housework. *American Sociological Review*. 2001; 66:184–203.
- Eccles JS. Understanding women's educational and occupational choices: Applying the Eccles et al. model of achievement-related choices. *Psychology of Women Quarterly*. 1994; 18:585–609.
- Epstein E, Guttman R. Mate selection in man: evidence, theory, and outcome. *Social Biology*. 1984; 31:243–278. [PubMed: 6400148]
- Ferree MM. Beyond separate spheres: Feminism and family research. *Journal of Marriage and the Family*. 1990; 52:866–884.
- Fisher L, Ransom DC. An empirically derived typology of families: I. Relationships with adult health. *Family Process*. 1995; 34:161–182. [PubMed: 7589416]
- Fowers BL, Olson DH. Four types of premarital couples: An empirical typology based on REPAIR. *Journal of Family Psychology*. 1992; 6:10–21.
- Fortin NM. Gender Role Attitudes and the Labour-market Outcomes of Women across OECD Countries. *Oxford Review of Economic Policy*. 2005; 21:416–438.
- Harris KM, Morgan SP. Fathers, sons, and daughters: Differential paternal involvement in parenting. *Journal of Marriage and the Family*. 1991; 53:531–544.
- Henry DB, Tolan PH, Gorman-Smith D. Cluster analysis in family psychology research. *Journal of Family Psychology*. 2005; 19:121–132. [PubMed: 15796658]
- Ickes W. Traditional gender roles: Do they make, and then break, our relationships? *Journal of Social Issues*. 1993; 49:71–85.
- Johnson VK. Linking changes in whole family functioning and children's externalizing behavior across the elementary school years. *Journal of Family Psychology*. 2003; 17:499–509. [PubMed: 14640800]
- Kaslow F, Robison JA. Long-term satisfying marriages: Perceptions of contributing factors. *American Journal of Family Therapy*. 1996; 24:153–170.
- Kulik L. The impact of social background on gender-role ideology. *Journal of Family Issues*. 2002; 23:53–73.
- Lackey PN. Adult attitudes about assignments of household chores to male and female children. *Sex Roles*. 1989; 20:271–282.
- Luo S, Klohnen EC. Assortative mating and marital quality in newlyweds: A couple-centered approach. *Journal of Personality and Social Psychology*. 2005; 88:304–326. [PubMed: 15841861]
- Lye DN, Biblarz TJ. The effects of attitudes toward family life and gender roles on marital satisfaction. *Journal of Family Issues*. 1993; 14:157–188.
- Lytton H, Romney DM. Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin*. 1991; 109:267–296.
- Maccoby EE. Gender and relationships. *American Psychologist*. 1990; 45:513–520. [PubMed: 2186679]
- Maccoby, EE. The gender of child and parent as factors in family dynamics. In: Crouter, AC.; Both, A., editors. *Children's influence on family dynamics: The neglected side of family relationships*. Lawrence Erlbaum Associates; Mahwah, NJ, US: 2003. p. 191-206.
- Martin CL, Ruble D. Children's search for gender cues: Cognitive perspectives on gender development. *Current Directions in Psychological Science*. 2004; 13:67–70.
- Martin CL, Ruble DN, Szkrybalo J. Cognitive theories of early gender development. *Psychological Bulletin*. 2002; 128:903–933. [PubMed: 12405137]
- McHale, SM.; Crouter, AC. How do children exert an impact on family life?. In: Crouter, AC.; Both, A., editors. *Children's influence on family dynamics: The neglected side of family relationships*. Lawrence Erlbaum Associates; Mahwah, NJ, US: 2003. p. 207-220.
- McHale, SM.; Kim, J.; Whiteman, SD. Sibling relationships in childhood and adolescence. In: Noller, P.; Feeney, J., editors. *Close Relationships*. Psychology Press; 2006. p. 127-150.
- McHale SM, Updegraff KA, Helms-Erikson H, Crouter AC. Sibling influences on gender development in middle childhood and early adolescence: A longitudinal study. *Developmental Psychology*. 2001; 37:115–125. [PubMed: 11206426]

- McHale, Updegraff KA, Jackson-Newsom J, Tucker CJ, Crouter AC. When does parents' differential treatment have negative implications for siblings? *Social Development*. 2000; 2:149–172.
- Minuchin, S. *Families and family therapy*. Harvard University Press; Cambridge, MA: 1974.
- Raley S, Mattingly MJ, Bianchi SM. How Dual Are Dual Income Couples? Documentary Change from 1970 to 2001. *Journal of Marriage and the Family*. 2006; 68:11–28.
- Risman BJ, Myers K. As the twig is bent: Children reared in feminist households. *Qualitative Sociology*. 1997; 20:229–252.
- Ross CE, Mirowsky J, Huber J. Dividing work, sharing work, and in-between: Marriage patterns and depression. *American Sociological Review*. 1983; 48:809–823. [PubMed: 6666885]
- Ruble, DN.; Martin, CL.; Berenbaum, S. Gender Development. In: Eisenberg, N., editor. *Handbook of Child Psychology: Vol. 3. Social, Emotional, and Personality Development*. 6th ed.. Wiley; New York: 2006. p. 858-932.
- Russell A, Russell G. Child effects in socialization research: Some conceptual and data analysis issues. *Social Development*. 1992; 1:163–184.
- Serbin LA, Powlishtak KK, Gulko J. The development of sex typing in middle childhood. *Monographs of the Society for Research in Child Development*. 1993; 58(2, Serial No. 232)
- Spence, JT.; Helmreich, RL. *Masculinity and femininity: Their psychological dimensions, correlates, and antecedents*. University of Texas Press; Austin: 1972.
- Stocker CM, McHale SM. The Nature and Family Correlates of Preadolescents' Perceptions of their Sibling Relationships. *Journal of Social and Personal Relationships*. 1992; 9:179–195.
- Tenenbaum HR, Leaper C. Are parents' gender schemas related to their children's gender-related cognitions? A meta-analysis. *Developmental Psychology*. 2002; 38:615–630. [PubMed: 12090490]
- Thompson EH, Pleck JH. The structure of male norms. *American Behavioral Scientists*. 1986; 29:531–543.
- Thompson L, Walker AJ. Gender in families: Women and men in marriage, work, and parenthood. *Journal of Marriage and the Family*. 1989; 51:845–871.
- Tsai-Chae AH, Nagata DK. Asian values and perceptions of intergenerational family conflict among Asian American students. *Cultural Diversity and Ethnic Minority Psychology*. 2008; 14:205–214. [PubMed: 18624585]
- White LK, Brinkerhoff DB. The sexual division of labor: Evidence from childhood. *Social Forces*. 1981; 60:170–181.
- Whiteman S, Loken E. Comparing analytic techniques to classify dyadic relationships: An example using siblings. *Journal of Marriage and Family*. 2006; 68:1370–1382.
- Ying YW, Han MY. The longitudinal effect of intergenerational gap in acculturation on conflict and mental health in Southeast Asian American adolescents. *American Journal of Orthopsychiatry*. 2007; 77:61–66. [PubMed: 17352586]
- Zuo J, Tang S. Breadwinner status and gender ideologies of men and women regarding family roles. *Sociological Perspectives*. 2000; 43:29–43.



**Figure 1.**  
Family Patterns of Gender Role Attitudes



**Table 1**  
Means (and Standard Deviations) of all Variables Reported by Mothers, Fathers, and Youth

	Mothers	Fathers	Firstborns		Secondborns	
			Girls (N = 176)	Boys (N = 182)	Girls (N = 178)	Boys (N = 180)
Parents' Education	14.66 (2.19) <sup>a</sup>	14.60 (2.39) <sup>a</sup>	-	-	-	-
Parents' Income	24,756 (17,733) <sup>a</sup>	48,747 (28,158) <sup>b</sup>	-	-	-	-
Attitudes toward women	26.19 (6.05) <sup>a</sup>	28.11 (5.82) <sup>b</sup>	-.48 (.70) <sup>a</sup>	.45 (1.03) <sup>b</sup>	-.36 (.87) <sup>a</sup>	.35 (1.01) <sup>b</sup>
Parents' time on household tasks	18.07 (8.77) <sup>a</sup>	8.76 (5.13) <sup>b</sup>	-	-	-	-
Mothers' time with children	-	-	8.16 (5.44) <sup>a</sup>	4.46 (4.43) <sup>b</sup>	9.42 (5.49) <sup>a</sup>	6.42 (4.60) <sup>b</sup>
Fathers' time with children	-	-	4.87 (4.31) <sup>a</sup>	7.33 (5.78) <sup>b</sup>	6.30 (4.75) <sup>a</sup>	8.11 (6.01) <sup>b</sup>
Marital conflict	20.03 (6.28) <sup>a</sup>	18.28 (5.87) <sup>b</sup>	-	-	-	-
Mother-child conflict	-	-	23.53 (6.06) <sup>a</sup>	23.52 (5.94) <sup>a</sup>	24.43 (6.15) <sup>a</sup>	25.19 (7.06) <sup>a</sup>
Father-child conflict	-	-	21.97 (6.23) <sup>a</sup>	22.02 (6.12) <sup>a</sup>	22.22 (6.79) <sup>a</sup>	23.16 (6.54) <sup>a</sup>
Sibling conflict	-	-	18.85 (7.50) <sup>a</sup>	19.07 (7.23) <sup>a</sup>	19.42 (7.66) <sup>a</sup>	19.07 (7.33) <sup>a</sup>

Note. Mothers' and fathers' scores were compared using pair-sample *t*-tests. Girls' and boys' scores were compared separately for first- and secondborn siblings using independent sample *t*-tests; Scores for time variables represent square root transformations of number of minutes;

Scores for youth-reported gender role attitudes were standardized within cohort and birth order.

*a*, *b*, *c* Scores with different subscripts are significantly different,  $p < .05$ ;

**Table 2**

Cross-Tabulation of Results of the Hierarchical and K-Means Clustering Techniques

Hierarchical	K-Means			Total
	Cluster 1	Cluster 2	Cluster 3	
Cluster 1	100	35	29	164
Cluster 2	0	108	18	126
Cluster 3	1	10	57	68
Total	101	153	104	358

**Table 3**

Standardized Means (and Standard Deviations) of Clustering Variables by Family Types

	Cluster 1: Traditional	Cluster 2: Egalitarian	Cluster 3: Divergent
Mother's Attitudes	.41 (.101) <sup>a,1</sup>	-.73 (.60) <sup>b,1</sup>	.34 (.83) <sup>a,1</sup>
Father's Attitudes	.18 (.91) <sup>a,2</sup>	-.69 (.72) <sup>b,2</sup>	.71 (.79) <sup>c,2</sup>
Older Sibling's Attitudes	.57 (1.02) <sup>a,3,4</sup>	-.52 (.73) <sup>b,2</sup>	-.45 (.57) <sup>b,3,4</sup>
Younger Sibling's Attitudes	.71 (.89) <sup>a,1,3,4</sup>	-.57 (.69) <sup>b,1,2</sup>	-.68 (.52) <sup>b,1,3,4</sup>

Note.

<sup>a,b,c</sup> Scores with different subscripts within row are significantly different,  $p < .05$ ;<sup>1,2,3,4</sup> Scores with different subscripts within column are significantly different,  $p < .05$ .

**Table 4**

Means (and Standard Deviations) of Demographic Variables, Parents' Household Tasks, and Parent-Child Shared Time by Family Types

	Cluster1: Traditional	Cluster2: Egalitarian	Cluster3: Divergent
<i>Control Variables</i>			
Mothers' Education	14.31 (2.10) <sup>a</sup>	15.42 (2.20) <sup>b</sup>	14.07 (2.02) <sup>a</sup>
Fathers' Education	14.10 (2.22) <sup>a</sup>	15.43 (2.44) <sup>b</sup>	14.26 (2.32) <sup>a</sup>
Mothers' Income	22, 666 (14,319) <sup>a</sup>	28, 746 (28,478) <sup>b</sup>	21, 632 (22,601) <sup>a</sup>
Fathers' Income	47, 570 (27,462) <sup>a</sup>	53, 127 (52,629) <sup>b</sup>	44, 743 (45,130) <sup>a</sup>
<i>Parents' Time</i>			
Mother Feminine Tasks	18.26 (5.38) <sup>ab</sup>	17.18 (5.09) <sup>a</sup>	19.29 (4.92) <sup>b</sup>
Father Feminine Tasks	8.35 (5.26) <sup>b</sup>	9.73 (4.72) <sup>a</sup>	7.92 (5.32) <sup>b</sup>
Difference in Mother-Father Feminine Tasks	10.08 (8.06) <sup>a</sup>	7.58 (6.93) <sup>b</sup>	11.46 (6.73) <sup>a</sup>
Mother-Firstborns	6.06 (5.12) <sup>a</sup>	6.50 (5.42) <sup>a</sup>	6.65 (5.5) <sup>a</sup>
Mother-Secondborns	7.36 (5.24) <sup>a</sup>	8.35 (5.28) <sup>a</sup>	8.35 (5.27) <sup>a</sup>
Father-Firstborns	5.54 (5.18) <sup>a</sup>	5.95 (5.05) <sup>ab</sup>	7.58 (5.44) <sup>b</sup>
Father-Secondborns	7.37 (6.37) <sup>a</sup>	7.47 (4.55) <sup>a</sup>	6.40 (4.85) <sup>a</sup>

Note:

Scores for time variables represent square root transformations of number of minutes.

<sup>a, b, c</sup> Scores with different subscripts are significantly different,  $p < .05$ ;

**Table 5**

Distribution (and Cell Percentages) of Sibling Gender-Constellation by Family Types

	<b>Cluster 1: Traditional</b>	<b>Cluster 2: Egalitarian</b>	<b>Cluster 3: Divergent</b>	<b>Total</b>
Girl-Girl	22 (6.15%)	36 (10.06%)	30 (8.38%)	88
Girl-Boy	46 (12.85%)	30 (8.38%)	12 (3.35%)	88
Boy-Girl	42 (11.73%)	34 (9.50%)	14 (3.91%)	90
Boy-Boy	54 (15.08%)	26 (7.26%)	12 (3.35%)	92
Total	164	126	68	358



**Table 6**

Means (and Standard Deviations) of Family Conflict by Family Types

	Cluster1: Traditional	Cluster2: Egalitarian	Cluster3: Divergent
<i>Parent-Child Conflict</i>			
Mother-Firstborn	24.34 (6.29) <sup>a</sup>	22.98 (5.62) <sup>a</sup>	22.56 (5.72) <sup>a</sup>
Mother-Secondborn	25.71 (6.51) <sup>a</sup>	23.84 (6.50) <sup>b</sup>	24.46 (6.91) <sup>ab</sup>
Mother-Child	24.83 (4.69) <sup>a</sup>	23.27 (4.72) <sup>b</sup>	23.54 (4.77) <sup>ab</sup>
Father-Firstborn	23.11 (6.62) <sup>a</sup>	21.06 (5.77) <sup>b</sup>	21.05 (5.33) <sup>ab</sup>
Father-Secondborn	23.85 (6.74) <sup>a</sup>	21.42 (6.24) <sup>b</sup>	22.28 (6.88) <sup>ab</sup>
Father-Child	23.34 (5.11) <sup>a</sup>	21.21 (4.72) <sup>b</sup>	21.90 (4.83) <sup>b</sup>
<i>Marital Conflict</i>			
Mothers	19.66 (6.56) <sup>a</sup>	20.47 (6.06) <sup>a</sup>	20.27 (6.04) <sup>a</sup>
Fathers	18.36 (6.20) <sup>a</sup>	18.16 (5.66) <sup>a</sup>	18.37 (5.47) <sup>a</sup>
<i>Sibling Conflict</i>			
Firstborns	19.47 (7.27) <sup>a</sup>	18.41 (7.41) <sup>a</sup>	18.75 (7.49) <sup>a</sup>
Secondborns	19.70 (7.30) <sup>a</sup>	18.89 (7.81) <sup>a</sup>	18.78 (7.37) <sup>a</sup>

Note:

<sup>a</sup>, <sup>b</sup>, <sup>c</sup> Scores with different subscripts are significantly different,  $p < .05$ .