# Mothers' Favoritism in Later Life

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# The Role of Children's Birth Order

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The authors used data on 426 older mothers' relationships with their 1,823 adult children to explore the relationship between birth order and parental favoritism. The findings demonstrate that birth order continues to play an important role in explaining favoritism when families enter later stages of the life course. Last-born adult children were most likely to be named as those to whom their mothers were most emotionally close; firstborn children were most likely to be chosen as those to whom mothers would turn when facing personal problems or crises. Further analyses revealed that these patterns remained largely unaffected by family size, race, and child spacing. Middleborn children were substantially underrepresented in mothers' choices; such a pattern is particularly striking considering that the number of middle-born children far exceeded that of firstborn and last-born children in the sample.

Keywords: birth order; parent-adult child relations; parental favoritism

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**B**eginning with the Biblical story of Israel favoring his last-born son Joseph and continuing through Conroy's *Beach Music*, there has been popular interest in the effects of birth order on parent–adult child relations. The role of birth order has also been of substantial interest to scholars across a wide range of disciplines, from evolutionary biology (Daly and Wilson 1988) to psychology (Sulloway 1996; Whiteman, McHale, and Crouter 2003), sociology (Conley 2004; Downey 1995; Steelman et al. 2002), and economics (Becker 1991; Becker and Tomes 1986). This line of research has focused primarily on the ways in which birth order affects characteristics such as intelligence, personality, and social attitudes, as well as such developmental outcomes as educational attainment.

Surprisingly, scholars have not investigated extensively the situation in which birth order might be predicted to have a particularly strong effect in adulthood: parent-child relationships. In the present article, we draw on insights from sociology and developmental psychology to address this issue. Specifically, we explored the relationship between birth order and parental favoritism in adulthood using data on 426 older mothers' relationships with their adult children. We examined two primary research questions: (1) Does birth order affect to which children mothers are most emotionally close? and (2) Does birth order affect to which children mothers are most likely to turn as sources of emotional and instrumental support? In asking these questions, the present article responds to the call to focus not only on psychological outcomes of birth order, such as personality or IQ, but also on implications of birth order for family dynamics and processes (Rohde et al. 2003; Whiteman et al. 2003).

# **Birth Order and Parent-Child Relations**

The developmental psychological literature on families with young and adolescent children has shown that parents differentiate among their off-spring across a range of dimensions (Brody et al. 1992a, 1992b; Kowal and Kramer 1997; McHale et al. 1995). Combining theory and research on birth order and on social exchange suggests that the birth-order patterns established in the early years may have long-term consequences for intergenerational support and closeness.

#### **Birth Order and Support**

The resource dilution model has been used widely to frame research on birth order in childhood. This model posits that as a greater number of offspring become members of the family unit, the ability to provide equal resources to them all declines, resulting in children being benefited unequally (Downey 2001; Hertwig, Davis, and Sulloway 2002). Downey (2001) did not explicitly directly address the issue of birth-order effects, but the implication of his argument is that children born into a family first would have the greatest advantage, whereas other children would be increasingly disadvantaged the later they joined the family. Empirical research has provided support for this argument in the early years of the life course. As the number of siblings increases, parents spend less time in activities such as reading, talking with, and supervising each child (Blake 1989; Downey 1995; Hertwig et al. 2002; Marjoribanks 1999; Mercy and Steelman 1982; Powell and Steelman 1990). Further as Hertwig et al. (2002) illustrated, even when parents attempt to evenly divide interpersonal resources as their families grow, firstborn children receive the greatest overall investment because they spent time without sibling competition, whereas subsequent children receive a decreasing proportion.

Drawing on principles of exchange theory, we argue that such early undivided attention and greater overall proportion of parental resources enjoyed by firstborn children would lead parents to anticipate higher levels of support from these children in adulthood. Exchange theory has been used for several decades to explain the quality of family relationships, including those between parents and adult children (Komter and Vollebergh 1997; Nye and Gecas 1976; Suitor and Pillemer 1988). This theory suggests that individuals expect the rewards they provide to other persons to be reciprocated, although not necessarily immediately or in kind. It is possible that on the basis of the greater investment in their eldest children, parents have higher expectations for support to be returned when their need for assistance develops in the later years. This argument is consistent with the suggestion that parents expect to gain a "pay-off" from their children on the basis of early investment (Becker 1991; Hertwig et al. 2002).

Personality differences that parents believe characterize firstborn children may also contribute to a preference for assistance from these children in later years. Firstborn children are most likely to be identified as mature, conscientious, and responsible (Eckstein 2000; Paulhus, Trapnell, and Chen 1999; Sulloway 1996). Furthermore, because parents tend to attribute these personality characteristics to their firstborn children and act accordingly in terms of granting them greater autonomy and independence, these children may actually become more mature and responsive to responsibilities (Bumpus, Crouter, and McHale 2001; Hertwig et al. 2002; Sulloway 1996). On the basis of these theoretical arguments and empirical findings, we hypothesized that firstborn children would be the children to whom mothers would be most likely to turn for support, particularly when facing personal problems, crises, illness, or disability.

#### **Birth Order and Emotional Closeness**

The resource dilution model also can be used to suggest that birth order would affect parent-child closeness in adulthood. Scholars studying birth order have suggested that last-born children develop more sensitive social skills in an attempt to create special positions in families, enabling them to compensate for resource advantages their eldest siblings accrue (Paulhus et al. 1999; Sulloway 1996). Several studies have indicated that such efforts by last-born children to carve out a unique niche in childhood are often successful. For example, Brody, Stoneman, and Burke (1987); Brody et al. (1992a); and Bryant and Crockenberg (1980) reported that later-born children received more positive attention from parents than did firstborn children. Furthermore, Dunn and Plomin (1991) reported that the majority of the mothers in their studies reported feeling greater affection for their last-born children, and Tucker, McHale, and Crouter (2003) found that parents reported giving somewhat more attention to their last-born children. Finally, Whiteman et al. (2003) reported that parents had less conflict with and greater knowledge about their later-born offspring. On the basis of this combined evidence, we hypothesized that mothers would select last-born children as the children to whom they were most emotionally close in adulthood.

#### The Middle-Child Disadvantage

Perhaps the most consistent finding in the literature on birth order in younger families is the difference between the parent-child relations of middle-born children and those of both firstborn and last-born children (Jenkins, Rasbash, and O'Conner 2003; Kidwell 1981; Salmon 1999; Salmon and Daly 1998). Specifically, the empirical literature on parent-child relations has shown that both firstborn and last-born children's advantage is far greater than that of middle-born children in terms of both material and interpersonal resources in the early years (Jenkins et al. 2003; Kidwell 1981).

Research on young adults suggests that such differences persist beyond childhood. Salmon (1999) and Salmon and Daly (1998) found that middleborn children are less close to parents and have lower feelings of family solidarity. In several related studies, they found that middle-born students were less likely to name parents as the persons to whom they would turn in distress or to whom they felt closest. Similarly, Kennedy (1989) found that middle-born college students were less likely to feel close to parents, to phone home, and to receive financial support. Additionally, when parents were middleborn children, contact between grandchildren and grandparents was less frequent (Salmon 1999). On the basis of these findings in children and young adults, we hypothesized that the pattern of less intense involvement with middle children would persist into adulthood, with mothers least likely to choose middle-born children as either the children to whom they were most emotionally close or to whom they would turn for help.

#### **Birth-Order Versus Social-Structural Explanations**

Research on birth order has been criticized for a failure to control for potentially confounding variables (Conley 2004; Hertwig et al. 2002). In particular, we are persuaded by Freese, Powell, and Steelman's (1999) call for contrasting the influence of birth order with sociological explanations. For this reason, we believe that it is important to consider social-structural characteristics that have been found to be related to parent–adult child relationships in adulthood.

The first and perhaps most salient of these characteristics is gender, given the finding that daughters are both more likely to have close relationships with mothers than are sons (Silverstein and Bengtson 1997; Spitze et al. 1994; Suitor and Pillemer 2000, 2006) and are relied on most often for support (Shuey and Hardy 2003; Silverstein, Parrott, and Bengtson 1995). Education and employment may also play a role in parent-child relations in adulthood because children who are employed and who have completed more education may have access to greater financial resources that would allow them to help parents (Hogan, Eggebeen, and Clogg 1993). Children with higher educational attainment may also have jobs that allow greater flexibility to assist their parents (Merrill 1997). Furthermore, parents may be more satisfied with and feel more positively about successful children (Pillemer and Suitor 2002).

Children's marital and parental statuses may also affect parental favoritism, although the direction is not entirely clear. There is some evidence that adult offspring become closer emotionally to parents after marrying and having children (Aldous, Klaus, and Klein 1985; Umberson 1992). However, other studies have found the opposite effect or no effect, possibly because these children have more competing responsibilities than their single, childless siblings (Aquilino 1999; Hogan et al. 1993). In addition to characteristics of children, we also controlled for geographical proximity, because it is possible that distance may reduce the likelihood that a child is selected for both support and closeness (Hogan et al. 1993).

Beyond including the social-structural positions just discussed as controls, we believed that it was important to examine whether the hypothesized relationships were present in several subgroups in the sample. Family size and race are standard control variables in many studies of both birth order and parent-child relations (Conley 2004; Rugala and Nystul 1998; Shuey and Hardy 2003). Furthermore, the spacing between children's births has been identified as an important variable in birth-order analyses (Steelman et al. 2002). Finally, although not directly related to birth order, subgroup analyses by mothers' health and marital status were also conducted because these factors have been shown to be related to the provision of support (Pillemer and Suitor forthcoming; Silverstein et al. 1995). To explore these issues, we conducted a set of subgroup analyses that took all of these factors into consideration.

In summary, in this study, we used data from 426 mothers aged 65 to 75 years to address three primary hypotheses: (1) mothers will favor their firstborn children as sources of emotional and instrumental support, (2) mothers will favor their last-born children for emotional closeness, and (3) mothers will be unlikely to favor middle children for either closeness or support. We included as controls alternative variables that may predict parental favoritism, and we conducted several subgroup analyses to determine if the hypothesized relationships held across differences in family size, mothers' health, mothers' marital status, race, and child spacing.

The present study differed from previous research on birth order and family relations in several ways. First, because we were interested in parents' perceptions of parental favoritism, we relied on mothers' reports rather than those of children. Second, a limitation of previous studies is that they have relied typically on between-family designs, in which the individuals who were the subjects of birth-order comparisons came from different families (Paulhus et al. 1999). In contrast, we compared children from the same family, following a growing trend in birth-order research (Whiteman et al. 2003). Third, the study focused on older mothers with children in middle adulthood, a group among which parental favoritism has been virtually unstudied.

# Methods

#### **Design Goals**

The project was designed to provide data on within-family differences in parent–adult child relations in later life. The research plan was similar to

those that have been used by developmental psychologists such as Dunn (1988); Dunn and Kendrick (1982); Dunn and Plomin (1991); McHale et al. (2000); and McHale, Crouter, and Tucker (1999) in studying withinfamily differences in earlier stages of the life course. The design involved selecting a sample of mothers aged 65 to 75 years with at least two living adult children and collecting data from mothers regarding each of their children. A further decision was including only community-dwelling mothers in the sample to reduce the likelihood that the women would be in need of extensive caregiving, thus allowing us to study relationships outside of the context of caregiving.

## Sampling

Massachusetts town lists were the source of the sample. Massachusetts requires communities to keep town lists of all residents by address. Town lists also provide the ages and genders of residents. The first step was to randomly select 20 communities from the total of 80 that were available. With the assistance of the University of Massachusetts, Boston, we drew a systematic sample of women aged 65 to 75 years from the town lists from 20 communities in the greater Boston area, specifically the census-designated primary metropolitan statistical area. Once communities were selected and appropriate town lists obtained, an equal number of women in the target age group were selected from each community. We then sent a letter of introduction to each woman describing the study and explaining that an interviewer would contact her from the Center for Survey Research to screen her to determine her eligibility for participation and attempt to schedule a face-to-face interview if she met the study criteria.

The interviewers began contacting potential respondents and continued until they had completed interviews with 566 mothers, which represented 61% of those who were eligible for participation. The interviews were conducted between August 2001 and January 2003. The subsample of 426 women with three or more living children was used for all but one of the analyses, allowing us to compare the effects of all three sibship positions in the family structure on parent–adult child relations. The subsample of 130 families with two children was used in one of the sets of analyses of subgroups.

Each of the mothers was interviewed for between one and two hours. More than 90% of the interviews were audiotaped and fully transcribed. Field notes were prepared for each interview that was not fully taped.

#### **Sample Characteristics**

*Mothers' characteristics.* Table 1 provides a summary of the characteristics of the women and their adult children. It is important to note that although the mean number of living children in this subsample was higher than would be found in a nationally representative sample of women in this age group, this was due primarily to the criterion that all participants must have at least two living adult children. The mean number of children of women in the subsample was similar to that found in national samples, such as the National Survey of Families and Households (Sweet and Bumpass 1996), when comparing specifically with mothers in the same age group who had two or more children.

#### Measures

Dependent variables. To determine parental preference, we asked the mothers a series of questions that required them to select among their adult children, the method most commonly used in the literature on parental favoritism in childhood and adolescence. Specifically, each mother was asked to select the child (1) to whom she would be most likely to talk about a personal problem, (2) from whom she would prefer help if she (the mother) became ill or disabled, (3) to whom she would turn first in a crisis, and (4) to whom she felt the most emotionally close. Each child was coded zero for each item for which he or she was not chosen and one for each item for which he or she was chosen. In cases in which respondents were initially unwilling to differentiate among their children, the interviewers were instructed to prompt the mothers with a follow-up question (e.g., "But is there one child whom you would call first?"). Analyses of the data revealed that fewer than 5% of the mothers were moved by the prompt to select a child, and there were no differences between mothers who did and did not respond to the prompt.

As shown in Table 2, most, but not all, mothers were willing to name particular children to whom they were most close, in whom they would prefer to confide, and from whom they would seek instrumental support. Separate analyses revealed that none of the mothers' characteristics on which we had data (e.g., age, marital status, education, race, religion, religiosity, health, or number of children) consistently predicted mothers' willingness to choose among their children. Given that the focus of the analysis was on understanding patterns of favoritism when mothers are willing to choose among

Mothers $(n = 426)$ 70.9 $(SD = 3.1)$ Race (%)     70.9 $(SD = 3.1)$ White     69.8       Black     28.7       Hispanic     1.4       Married     46.4       Widwed     36.5       Divorced     17.1       Never married     1.0       Educational attainment (%)     24.3       Less than 12 years of school     24.3       High school     23.1       College graduate     17.7       Employed     23.1       Total family income during previous year (%)     23.1       Less than \$20.000     34.0       \$20,000 to \$29.999     8.2       \$50,000 or greater     20.6       Religin (%)     24.3       Catholic     46.2       Protestant     41.3       Jewish     5.4       Other or no religious affiliation     7.1       Number of living children     4.4 (SD = 1.7)       Adult children combined     42.8 (SD = 5.9)       Firstborn (years)     47.4 (SD = 4.6)       Middle-born     43.0 (SD	Variable	Value
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Race (%)     69.8       Black     28.7       Hispanic     1.4       Marital status (%)	Age (years)	70.9 (SD = 3.1)
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Divorced     17.1       Never married     1.0       Educational attainment (%)     24.3       Less than 12 years of school     24.3       High school     43.1       Some college     14.9       College graduate     17.7       Employment status (%)     23.1       Total family income during previous year (%)     34.0       Less than \$20,000     \$25.6       \$30,000 to \$29,999     25.6       \$30,000 to \$29,999     11.6       \$40,000 to \$49,999     8.2       \$50,000 or greater     20.6       Religion (%)     41.3       Catholic     46.2       Protestant     41.3       Jewish     5.4       Other or no religious affiliation     7.1       Number of living children     4.4 (SD = 1.7)       Adult children (n = 1,823)     42.8 (SD = 5.9)       Firstborn (years)     47.4 (SD = 4.6)       Middle-born     43.0 (SD = 4.7)       Last-born     37.3 (SD = 5.1)       Gender (%)     Female     49.3       Maried     50.7	Widowed	36.5
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Less than 12 years of school   24.3     High school   43.1     Some college   14.9     College graduate   17.7     Employment status (%)   23.1     Total family income during previous year (%)   34.0     Less than \$20,000   34.0     \$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Catholic   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   42.8 (SD = 5.9)     Firstborn (years)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   Female     Female   49.3     Male   50.7     Married   57.4     Cohabiting   5.6	Educational attainment (%)	
High school   43.1     Some college   14.9     College graduate   17.7     Employment status (%)   23.1     Total family income during previous year (%)   24.0     Less than \$20,000   34.0     \$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   41.3     Catholic   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   Female   49.3     Male   50.7     Martial status (%)   Married   57.4     Cohabiting   5.6	Less than 12 years of school	24.3
Some college   14.9     College graduate   17.7     Employment status (%)   23.1     Total family income during previous year (%)   23.1     Less than \$20,000   34.0     \$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Catholic   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   49.3     Female   49.3     Male   57.4     Cohabiting   5.6	High school	43.1
College graduate   17.7     Employment status (%)   23.1     Total family income during previous year (%)   34.0     Less than \$20,000   34.0     \$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Catholic   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   42.8 (SD = 5.9)     Firstborn (years)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   50.7     Marited   50.7     Marited   50.7     Marited   57.4     Cohabiting   5.6	Some college	14.9
Employment status (%)   23.1     Total family income during previous year (%)   34.0     Less than \$20,000   34.0     \$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   42.8 (SD = 5.9)     Firstborn (years)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   50.7     Marited   50.7     Marited   57.4     Cohabiting   5.6	College graduate	17.7
Employed   23.1     Total family income during previous year (%)   34.0     Less than \$20,000   34.0     \$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Catholic   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   42.8 (SD = 5.9)     Firstborn (years)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   49.3     Female   49.3     Male   50.7     Martied   50.7     Martied   57.4     Cohabiting   5.6	Employment status (%)	
Total family income during previous year (%)   34.0     Less than \$20,000   34.0     \$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Catholic   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   42.8 (SD = 5.9)     Firstborn (years)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   50.7     Martiel status (%)   57.4     Married   57.4     Cohabiting   5.6	Employed	23.1
Less than \$20,000   34.0     \$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Catholic   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   42.8 (SD = 5.9)     Firstborn (years)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   50.7     Martial status (%)   57.4     Married   57.4     Cohabiting   5.6	Total family income during previous year (%)	
\$20,000 to \$29,999   25.6     \$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Catholic   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 (SD = 1.7)     Adult children (n = 1,823)   42.8 (SD = 5.9)     Firstborn (years)   47.4 (SD = 4.6)     Middle-born   43.0 (SD = 4.7)     Last-born   37.3 (SD = 5.1)     Gender (%)   49.3     Female   49.3     Male   50.7     Marital status (%)   57.4     Cohabiting   5.6	Less than \$20,000	34.0
\$30,000 to \$39,999   11.6     \$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 ( $SD = 1.7$ )     Adult children ( $n = 1,823$ )   47.4 ( $SD = 4.6$ )     Middle-born   43.0 ( $SD = 4.7$ )     Last-born   37.3 ( $SD = 5.1$ )     Gender (%)   50.7     Marital status (%)   57.4     Cohabiting   57.4	\$20,000 to \$29,999	25.6
\$40,000 to \$49,999   8.2     \$50,000 or greater   20.6     Religion (%)   46.2     Protestant   41.3     Jewish   5.4     Other or no religious affiliation   7.1     Number of living children   4.4 ( $SD = 1.7$ )     Adult children ( $n = 1,823$ )   47.4 ( $SD = 4.6$ )     Middle-born   43.0 ( $SD = 4.7$ )     Last-born   37.3 ( $SD = 5.1$ )     Gender (%)   50.7     Marital status (%)   57.4     Cohabiting   57.4	\$30,000 to \$39,999	11.6
\$50,000  or greater $20.6$ Religion (%)46.2Protestant41.3Jewish5.4Other or no religious affiliation7.1Number of living children4.4 ( $SD = 1.7$ )Adult children ( $n = 1,823$ )47.4 ( $SD = 4.6$ )All children combined42.8 ( $SD = 5.9$ )Firstborn (years)47.4 ( $SD = 4.6$ )Middle-born43.0 ( $SD = 4.7$ )Last-born37.3 ( $SD = 5.1$ )Gender (%)50.7Marital status (%)51.4Married57.4Cohabiting5.6	\$40,000 to \$49,999	8.2
Religion (%)46.2Catholic46.2Protestant41.3Jewish5.4Other or no religious affiliation7.1Number of living children4.4 ( $SD = 1.7$ )Adult children ( $n = 1,823$ )42.8 ( $SD = 5.9$ )Age (years)47.4 ( $SD = 4.6$ )Middle-born43.0 ( $SD = 4.7$ )Last-born37.3 ( $SD = 5.1$ )Gender (%)50.7Marital status (%)57.4Married57.4Cohabiting5.6	\$50,000 or greater	20.6
Catholic46.2Protestant41.3Jewish5.4Other or no religious affiliation7.1Number of living children4.4 ( $SD = 1.7$ )Adult children ( $n = 1,823$ )42.8 ( $SD = 5.9$ )Age (years)47.4 ( $SD = 4.6$ )Middle-born43.0 ( $SD = 4.7$ )Last-born37.3 ( $SD = 5.1$ )Gender (%)50.7Marital status (%)57.4Married57.4Cohabiting5.6	Religion (%)	
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Jewish $5.4$ Other or no religious affiliation $7.1$ Number of living children $4.4$ ( $SD = 1.7$ )Adult children ( $n = 1,823$ ) $4.4$ ( $SD = 1.7$ )Age (years) $42.8$ ( $SD = 5.9$ )Firstborn (years) $47.4$ ( $SD = 4.6$ )Middle-born $43.0$ ( $SD = 4.7$ )Last-born $37.3$ ( $SD = 5.1$ )Gender (%) $50.7$ Mariel $50.7$ Married $57.4$ Cohabiting $5.6$	Protestant	41.3
Other or no religious affiliation7.1Number of living children $4.4 (SD = 1.7)$ Adult children $(n = 1,823)$ $4.4 (SD = 1.7)$ Age (years) $42.8 (SD = 5.9)$ Firstborn (years) $47.4 (SD = 4.6)$ Middle-born $43.0 (SD = 4.7)$ Last-born $37.3 (SD = 5.1)$ Gender (%) $7.4$ Female $49.3$ Male $50.7$ Marital status (%) $57.4$ Cohabiting $5.6$	Jewish	5.4
Number of living children $4.4 (SD = 1.7)$ Adult children $(n = 1,823)$ Age (years)All children combined $42.8 (SD = 5.9)$ Firstborn (years) $47.4 (SD = 4.6)$ Middle-born $43.0 (SD = 4.7)$ Last-born $37.3 (SD = 5.1)$ Gender (%)FemaleFemale $49.3$ Male $50.7$ Marital status (%) $57.4$ Cohabiting $5.6$	Other or no religious affiliation	7.1
Adult children ( $n = 1,823$ )     Age (years)     All children combined $42.8 (SD = 5.9)$ Firstborn (years) $47.4 (SD = 4.6)$ Middle-born $43.0 (SD = 4.7)$ Last-born $37.3 (SD = 5.1)$ Gender (%)   Female     Female $49.3$ Male $50.7$ Married $57.4$ Cohabiting $5.6$	Number of living children	4.4 (SD = 1.7)
Age (years)   42.8 ( $SD = 5.9$ )     Firstborn (years)   47.4 ( $SD = 4.6$ )     Middle-born   43.0 ( $SD = 4.7$ )     Last-born   37.3 ( $SD = 5.1$ )     Gender (%)   7     Female   49.3     Male   50.7     Married   57.4     Cohabiting   5.6	Adult children ( $n = 1,823$ )	
All children combined $42.8 (SD = 5.9)$ Firstborn (years) $47.4 (SD = 4.6)$ Middle-born $43.0 (SD = 4.7)$ Last-born $37.3 (SD = 5.1)$ Gender (%)   Female     Female $49.3$ Male $50.7$ Married $57.4$ Cohabiting $5.6$	Age (years)	
Firstborn (years) $47.4 (SD = 4.6)$ Middle-born $43.0 (SD = 4.7)$ Last-born $37.3 (SD = 5.1)$ Gender (%) $49.3$ Male $50.7$ Marital status (%) $57.4$ Cohabiting $5.6$	All children combined	42.8 (SD = 5.9)
Middle-born $43.0 (SD = 4.7)$ Last-born $37.3 (SD = 5.1)$ Gender (%) $49.3$ Male $50.7$ Marital status (%) $57.4$ Cohabiting $5.6$	Firstborn (years)	47.4 (SD = 4.6)
Last-born   37.3 (SD = 5.1)     Gender (%)   49.3     Female   49.3     Male   50.7     Marital status (%)   57.4     Cohabiting   5.6	Middle-born	43.0 (SD = 4.7)
Gender (%)49.3Female49.3Male50.7Marital status (%)57.4Cohabiting5.6	Last-born	37.3 (SD = 5.1)
Female49.3Male50.7Marital status (%)57.4Married57.6	Gender (%)	
Male50.7Marital status (%)57.4Married57.6	Female	49.3
Marital status (%)57.4Married57.4Cohabiting5.6	Male	50.7
Married57.4Cohabiting5.6	Marital status (%)	
Cohabiting 5.6	Married	57.4
	Cohabiting	5.6

Table 1Sample Characteristics

(continued)

Variable	Value
Divorced	13.9
Never married	21.1
Widowed	1.3
Educational attainment (%)	
High school or less	43.8
Some college	13.2
College graduate	27.9
Graduate school	14.9
Employment status (%)	
Employed	81.6
Parental status (%)	
Parents (mean number of children = $2.3$ , $SD = 1.2$ )	69.9

Table 1 (continued)

Table 2Mothers' Favoritism by Birth Order and Relational Context

Dimensions of Mother Child	Percer Chose of Birth W	ntage of Adult C n Within Each C h Order Among Vho Chose A Ch	Shildren Category Mothers ild	Percentage of Mothers Who
Relations	Firstborn	Middle Born	Last Born	(n = 426)
Child mother most emotionally close to $(n = 1,225)$	26.5	17.6	39.2*	62.4
Child mother would most likely confide in about a personal problem ( $n = 1,592$ )	32.3	24.0	28.6*	81.2
Child mother would turn to first in a crisis $(n = 1,578)$	36.8	22.3	21.8*	81.7
Child mother prefers provide her help if ill or disabled (n = 1,360)	26.1	22.9	33.1*	71.6

\*p < .01 (significance of birth-order differences).

their children, only the subsample of women who chose among their children met the criteria for inclusion in the multivariate analyses.

*Birth order.* Each child was coded as first born, middle born, or last born on the basis of the mothers' reports of their children's ages. Throughout the

multivariate analyses of families with three or more children, middle born was used as the referent category and was therefore omitted from the equations.

*Control variables.* As discussed above, the control variables used in the multivariate analyses were proximity and a set of children's demographic characteristics, including child's gender, marital status, parental status, educational attainment, and employment status. Child's gender was coded 0 = son, 1 = daughter. Marital status was measured by whether the adult child was currently married (0 = child not married, 1 = child married). Parental status was measured by whether the adult child reactional categories each of their adult children fell: (1) less than high school, (2) some high school, (3) high school graduate, or (7) completed graduate school.

Mothers were asked whether their children were employed, but not the number of hours they worked; thus, employment was coded 0 = notemployed, 1 = employed. Proximity was measured in distance a child lived from his or her mother in terms of travel time by ground transportation. The categories were (1) same house, (2) same neighborhood, (3) less than 15 minutes away, (4) 15 to 30 minutes away, (5) 30 to 60 minutes away, (6) more than 1 hour but less than 2 hours away, and (7) 2 or more hours away. Finally, we created a set of spacing variables for each child, modeling our measure on work on sibship structure by Powell and Steelman (1990). We created six variables for each adult child: (1) the number of siblings less than three years older, (2) the number of siblings between three and five years older, (3) the number of siblings six or more years older, (4) the number of siblings less than three years younger, (5) the number of siblings between three and five years younger, and (6) the number of siblings six or more years younger.

The family-level controls that were used in conducting subgroup analyses were family size, race, mother's health, and mother's marital status. To determine family size, mothers were asked how many living adult children they had. To conduct subgroup analyses by family size, we created three categories: (1) two-child families, (2) three-child families, and (3) families with four or more children. Race was coded 0 = White, 1 = Black. Mother's marital status was coded 0 = divorced or widowed, 1 = married. To measure health, mothers were asked, "Would you say that your physical health is excellent, very good, good, fair, or poor?" To conduct the subgroup analyses, mother's health was collapsed into two categories: excellent or very good and fair or poor.

#### **Open-Ended Responses**

One of our goals was to understand mothers' rationales for the choices they made when selecting from among their children. To this end, at each point at which mothers were asked to choose from among their children, we included an open-ended question asking why they had selected that child. The data that are most relevant to the present article are the mothers' explanations of why they chose particular children as those to whom they were most close or to whom they would turn for support.

A research team of nine students transcribed the interviews, coded the open-ended items, and prepared detailed case summaries of each family. Codes were developed for the open-ended items as data preparation continued rather than established prior to the coding process. In contrast to having coders working independently and calculating  $\kappa$  values on the basis of coders' consistency, we used a consensus approach on the basis of the group interactive analysis component of Borkan's (1999) "immersion/ crystallization" method for analyzing qualitative data. Each week, one of the principal investigators (PIs) surveyed all of the open-ended coding that had been completed during the previous week. Approximately 90% of the coders' original decisions were in agreement with those of the PI; any coding that was not in agreement with the PI's assessment was discussed by the entire group at weekly team meetings until consensus could be reached.

#### **Statistical Approach**

It is important to note that throughout the quantitative analysis, the child, rather than the parent, was the unit of analysis. In other words, the 1,823 children who were the units of analysis were nested within the 426 mothers on whose reports the analysis was based; thus, the observations were not independent. It is possible that characteristics that we did not measure could have effects on mothers' choices. To address this concern, we used conditional logistic regression throughout the multivariate analysis. Conditional logistic regression is preferable to standard logistic regression in this case because the procedure controls on mothers' characteristics much as would be the case if a dummy variable were created for each of the 426 mothers and the set of dummy variables were included in the regression equations in which the mother-child pair was the unit of analysis (cf. Alwin 1976; Suitor and Pillemer 1996). Thus, conditional logistic regression allowed us to focus on our primary question of interest—within each family, which child does the mother choose?—while controlling on mothers' characteristics.

We used listwise deletion throughout the multivariate analysis; thus, only cases for which we had data for all of the variables in each equation were included.

# Results

#### **Emotional Closeness**

The bivariate analysis shown in Table 2 and the multivariate analysis shown in Table 3 revealed that birth order played a role in explaining which children mothers named when asked to whom they were most emotionally close. In particular, both analyses showed that mothers were substantially more likely to choose their youngest children over their middle or eldest children. As shown in the left column in Table 3, the odds of mothers choosing their last-born children as those to whom they were most close were almost 80% greater than the odds of choosing middle children. Several control variables were also predictors of parental preference regarding closeness. As would be expected on the basis of the literature, mothers were more likely to choose daughters than sons as the children to whom they were most close. Mothers were also more likely to choose children who lived in closer proximity.

We conducted a set of analyses to determine whether the birth-order patterns regarding emotional closeness that we found using the full sample were affected by family size, mother's health, marital status, race, or child spacing. First, we explored variations in family size. We conducted three sets of analyses: families with two children, families with three children, and families with four or more children. Next, we divided the sample by mother's health (good or excellent vs. fair or poor) and conducted the analyses again. We also divided the sample by mother's marital status (married vs. widowed or divorced). Finally, we divided the sample by race. The findings from the full sample were, without exception, replicated across all subgroups. Thus, the results showed a strong and consistent pattern of mothers choosing their last-born children as those to whom they were most emotionally close.

We questioned whether the birth-order patterns we found would be mirrored if we compared only firstborn and last-born children. To address this issue, we conducted another analysis, omitting all middle-born children. Mothers' preference for last-born children remained unchanged.

	Emotional C	loseness	Confidi	ing	Help if III or Di	sabled	Help in a Cri	sis
Independent Variable	B (SE)	$e^{B}$	B~(SE)	$e^{B}$	B (SE)	$e^{B}$	B~(SE)	$e^{B}$
Birth order								
Eldest	0.24(0.17)	1.27	0.29*(0.13)	1.33	0.13(0.17)	1.14	$0.56^{**}(0.13)$	1.75
Youngest	$0.57^{**}$ (0.15)	1.78	-0.06(0.15)	0.94	0.24(0.16)	1.27	-0.13(0.16)	0.88
Children's characteristics								
Daughter	$0.64^{**}$ (0.15)	1.89	$1.50^{**} (0.15)$	4.49	$2.06^{**}$ (0.18)	7.87	0.20(0.13)	1.22
Married	-0.23(0.18)	0.79	0.33*(0.15)	1.39	0.23(0.18)	1.26	$0.55^{**}(0.16)$	1.73
Parent	-0.22 (0.18)	0.80	-0.06(0.16)	0.94	-0.39 (0.20)	0.75	0.14(0.17)	1.45
Education	0.24(0.17)	1.07	0.19*(0.06)	1.21	$0.14^{*}$ (0.07)	1.15	$0.29^{**}(0.06)$	1.34
Employment	-0.37 (0.20)	0.69	0.07 (0.18)	1.07	-0.14(0.21)	0.87	0.33(0.21)	1.39
Distance from mother	-0.11*(0.04)	0.90	-0.08*(0.04)	0.93	$-0.20^{**}$ (0.05)	0.82	$-0.32^{**}(0.04)$	0.73
Children's problems								
Delinquent as adult	-0.47 (0.29)	0.62	-0.63*(0.28)	0.53	-0.61 (0.32)	0.54	$-0.94^{**}(0.29)$	0.39
Illness as adult	-0.04 (0.22)	0.97	-0.20 (0.19)	0.82	0.10(0.21)	1.11	-0.25(0.19)	0.78
Model χ	$63.21^{**}$	$158.20^{**}$	$204.50^{**}$	$125.62^{**}$				
df	10	10	10	10				
u	1,082	1,397	1,212	1,394				

Table 3

Note: The number of cases differs across models because the only cases included in each analysis were those in which mothers were willing to choose among their children, which varied by the dimensions of support and closeness. \*p < .05. \*\*p < .01.

# **Instrumental and Emotional Support**

Mothers' preferences for confiding and for soliciting support when experiencing crises or a need for care were examined using both bivariate (Table 2) and multivariate (Table 3) analyses. As hypothesized, mothers were more likely to choose their firstborn children as confidants and sources of support when facing crises. As shown in Table 3, the odds of mothers choosing their firstborn children for help in crises were more than 70% greater than the odds of choosing middle children. The odds of choosing firstborn children to confide in about personal problems were 33% greater than the odds of choosing middle-born children. For both forms of support, there were no substantive differences in the odds of choosing last-born children over middle children.

Our predictions regarding birth order were not supported regarding which children mothers would prefer to care for them if they became ill or disabled. The bivariate analysis shown in Table 3 indicates that mothers were slightly more likely to choose their last-born children as caregivers, but this relationship did not reach statistical significance in the multivariate analysis that is presented in Table 3. It is possible that the dynamics of parental preference regarding the major investment of caregiving differ from the two other types of support. That is, birth order may have a strong effect for short-term, problem-oriented support, but different factors may determine the long-term and emotionally intense responsibility of caregiving. We consider this possibility in more detail in the "Discussion and Conclusions" section.

As expected, on the basis of the literature, several other variables also predicted mothers' choices for emotional and instrumental support. Mothers named children who lived closer to them across all three support contexts. In addition, when choosing children as sources of support when facing crises or personal problems, mothers disproportionately turned to those who had achieved normative adult statuses: those who were welleducated and married. Mothers chose daughters over sons across all contexts besides help in a crisis; the strongest finding revealed by the entire set of analyses was mothers' choice of daughters over sons for help when ill or disabled. Mothers also preferred to confide in and seek help from children who had not engaged in deviant behaviors in adulthood.

Finally, we examined whether the findings regarding birth order and parental preference held for several important subgroups in the sample. We began by exploring variations in family size. We conducted three sets of analyses: families with two children, families with three children, and families with four or more children. The findings of these analyses mirrored those using the full sample, with one exception; mothers with three children were no more likely to choose firstborn children than other children as sources of support for personal problems. Next, we divided the sample by mothers' health, marital status, race, and spacing of adult children. In only one case did any of these subgroup analyses reveal a pattern that varied from those found using the full sample: the effects of birth order were stronger for Black than for White mothers. Last, we omitted middle-born children and conducted a full set of analyses comparing firstborn children and last-born children. The patterns of mothers' preferences for firstborn children as confidants and sources of support in crises remained unchanged.

#### **Analysis of Middle-Born Children**

One pattern that was evident throughout all of the analyses was the underrepresentation of middle children in mothers' choices. This pattern is particularly striking given that the actual number of middle-born children far exceeded that of firstborn and last-born children. For example, although 40% of the offspring in families with three or more children were middle-born children, only 18% were selected as those to whom their mothers were most emotionally close, compared with 26% of firstborn children and 39% of last-born children.

Nevertheless, it is possible that mothers differentiate among middle-born children, even if they are less likely to choose them than to choose other children in their families. To explore this issue, we created variables designating each middle-born child as the eldest, youngest, or middle among the middle-born children. We then conducted the set of analyses with the same controls. These analyses revealed no differentiation among middle-born children across any of the four types of mothers' favoritism under consideration.

In summary, the findings suggest that birth order is a predictor of mothers' choices for support, independent of several salient control variables. Furthermore, with few exceptions, these findings held regardless of family size, race, mother's health, marital status, or the spacing of children.

#### **Mothers' Explanations for Their Choices**

Although in-depth qualitative analysis is beyond the scope of this article, it is useful to examine results from the open-ended questions to explore possible mechanisms that help explain child selection. As described in the "Methods" section, after each respondent selected a child, she was asked

for the reasons behind her choice. As expected, mothers' open-ended explanations often reflected the role of birth order.

When explaining their choices of their eldest children as sources of support when facing personal problems or crises, mothers often referred to birth order: "[I chose] Joan, I think, because she's the oldest." In many cases, mothers who chose eldest children went on to describe the attributes they believed led them to choose those children for support in a crisis or when experiencing a personal problem. As would be expected, on the basis of the literature, these mothers often linked their birth-order choices to the types of attributes that are frequently ascribed to firstborn offspring, such as maturity and responsibility:

In a real crisis, uh, I think I would select my [eldest] son because he's not easily emotional so I think he could handle a real crisis easily.

[I would choose] the one that wouldn't panic, Michael.

I would [ask] Janice rather than Joan because Joan is excitable.

Mothers' explanations for their choices of last-born children as those children to whom they were most emotionally close also often focused on birth order:

Probably Will, because he's the baby.

I choose her because she is my baby. . . . I feel close to all of them, I just only feel like putting my arm around her.

'Cause he's the baby and somehow smallest and I was more mature when I had him.

It is interesting to note that mothers' explanations for their choices of their youngest children as those to whom they were most emotionally close differed from their explanations of the children they chose as sources of support when facing crises or personal problems. When discussing emotional closeness, mothers who chose their last-born children often stated that they chose these children simply because they were the youngest. However, when discussing why they chose firstborn children as supporters during crises or personal problems, mothers generally went beyond merely the issue of birth order to explain what specific birth-order-related attributes led them to select those children.

Taken together, the responses to open-ended questions suggested that many mothers were aware that birth order played a role in their choices of children to whom they were most close and to whom they turned for support. Future research using in-depth qualitative approaches may shed additional light on the processes by which birth order affects parent–adult child relations.

# **Discussion and Conclusions**

The present study is the first within-family investigation to address the question of how birth order may affect parental favoritism in later life. The findings demonstrate that birth order plays an important role in explaining mothers' favoritism, even when controlling for other factors that influence parent–adult child relationship quality. In this study, last-born adult children were substantially more likely to be named as those to whom their mothers were most emotionally close, and firstborn children were most likely to be chosen as those to whom their mothers would turn in crises or when facing personal problems. Furthermore, analyzing the data separately by family size, race, and child spacing indicated that these effects of birth order are, with only minor variations, common across family types. Qualitative data collected as part of the study suggest that in many cases mothers were aware of the role that birth order played in their choices.

One of the most interesting patterns revealed by the analyses was the underrepresentation of middle-born children in mothers' choices. This pattern is particularly striking given that the actual number of middle-born children far exceeded that of firstborn and last-born children. Thus, consistent with studies of families in the earlier years of the life course (Jenkins et al. 2003; Kidwell 1981; Salmon and Daly 1998), adult children who are neither firstborn nor last born appear to be at a disadvantage in terms of their mothers' interpersonal preferences. However, it is worth noting that such underrepresentation may not be entirely disadvantageous to those children. Children on whom mothers rely for emotional and instrumental support may find it difficult to negotiate conflicting demands from other role partners. Furthermore, even being the child to whom a mother is most close may be disadvantageous to the extent that it imposes greater affective and support demands. Thus, although being a middle child may reduce interpersonal resources, it also may reduce the constraints placed on adult children by their mothers.

There are possible implications of the findings for the provision of care and support to parents. Although there has been some interest in how caregivers are selected from among siblings (cf. Lawrence et al. 2002), no study has examined systematically the relationship between support and birth order. The present study suggests that this relationship depends to some degree on the type of help under consideration. Mothers prefer assistance from firstborn children for confiding and crisis support and are much less likely to expect such help from middle-born children. This suggests that patterns of interaction and exchange established early in life may persist regarding mothers' expectations.

Further research is needed, however, regarding the degree to which expectations for care play a role in actual care provision. Most important, it is not clear that such expectations for care will be fulfilled. Eggebeen and Davey (1998) found that expectations of help from one's children do not necessarily predict children's actual responsiveness to parental needs. However, such expectations may have an impact on anticipated care by adult children. Research by Neuharth and Stern (2002) found that if one child in a family is expected to provide care, the other siblings reduce their caregiving commitments. Although mothers may expect care from firstborn children who have received greater shares of resources, data do not exist to determine whether such expectations are likely to be met (Pillemer and Suitor forthcoming). Future studies should use longitudinal designs to determine the degree to which birth order and prior patterns of exchange affect differential assistance from adult children in a family.

Finally, the findings we have presented regarding birth order have two important theoretical implications for the study of later-life families. First, we have provided evidence that birth order affects multiple dimensions of parent-child relations in later life, an issue that has been largely overlooked in dominant theories of intergenerational relations (Bengtson and Roberts 1991; Lawton, Silverstein, and Bengtson 1994; Parrott and Bengtson 1999). Second, the consistency between the present findings regarding parental favoritism in the later years and those shown by studies of younger families further justifies integration of concepts used to study families at different points across the life course (Bedford 1992; Pillemer and McCartney 1991; Rossi and Rossi 1990). Thus, for example, the resource dilution argument regarding firstborn and last-born children's advantage over middle-born children complements the exchange perspective that so commonly frames work on intergenerational support.

#### **Study Limitations and Directions for Future Research**

The present study points toward several directions for future research. First, we concentrated on mothers' reports of favoritism. It would be useful, however, to contrast mothers' reports of favoritism with those of children. In addition, comparisons between mothers and fathers may reveal variations in the patterns of favoritism, given gender differences in parent–adult child relations (Putney and Bengtson 2001; Silverstein and Bengtson 1997; Vitulli and Holland 1993).

Second, the study was conducted in the greater Boston area; replication using nationally representative data would be useful, given the possibility of regional differences. For example, recent work on regional differences in attitudes, behaviors, and interpersonal relationship processes suggests that the American South continues to retain a distinctive culture (Powers et al. 2003; Suitor and Carter 1999). Such distinctiveness may affect parent–adult child relations as well as other dimensions of interpersonal interaction.

Third, as already noted, we do not have life-course data on these motherchild relationships; this means that we cannot adequately test some aspects of the conceptual framework that we have developed. For example, drawing on principles of exchange theory, we have suggested that mothers may look for support from firstborn children in response to the greater investment made in these offspring in childhood; however, because we do not have data on family relations in the early stages of the life course, we cannot be certain that these factors affected mothers' reliance on firstborn children in the later years. Additional qualitative data might also help reveal the processes by which parent-child interaction patterns established in childhood change or are maintained across the life course. Furthermore, although we included both mothers' and children's marital statuses and children's health and deviant behaviors in adulthood, we do not know precisely when these problems occurred, limiting our understanding of at what point in the life course these problems affect the quality of the mother-child relationship.

Fourth, it is possible to question whether the findings we have presented regarding birth order are relevant in an era in which families are becoming smaller, particularly given that some authors have found other effects of birth order to be weaker in smaller families (cf. Conley 2004). It is not possible to predict whether cohort differences will lead to the patterns we found not being replicated in future years. However, the fact that the findings in two-child families mirrored those in families of three or more children indicates that the patterns we found are not specific to larger families.

Finally, it is important to explore whether the patterns uncovered in this article exist outside of North America. For example, within nonindustrialized patriarchal societies, culture may demand preference for the firstborn son (Andeweg and Van Den Berg 2003). In such cases, it would not be surprising if mothers in many other societies felt greater closeness to firstborn than last-born children. In sum, the findings we have presented indicate that birth order influences parental favoritism in the later years, thus confirming that the effects of sibship structure on family relationships do not end when children become adults. Although birth order is only one of many factors affecting parent-child relations across the life course (cf. Conley 2004), these findings suggest the importance of taking this dimension of family structure into consideration in studies of exchanges between parents and adult children.

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