

## Female Socialization: How Daughters Affect Their Legislator Fathers' Voting on Women's Issues

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*Parenting daughters, sociologists have shown, increases feminist sympathies. I test the hypothesis that children, much like neighbors or peers, can influence parental behavior. I demonstrate that conditional on total number of children, each daughter increases a congressperson's propensity to vote liberally, particularly on reproductive rights issues. The results identify an important (and previously omitted) explanatory variable in the literature on congressional decision making. Additionally the paper highlights the relevance of child-to-parent behavioral influence. (JEL D72, D83, J16)*

By the early 1980s, after nearly two terms in Congress, Senator Pete W. Domenici (R-NM) had made a name for himself. "He was a gray, pragmatic fiscal and social conservative who opposed abortion, gun control and same-sex marriage and supported school vouchers, tax cuts and mandatory three-strikes sentencing. He was no bleeding heart, no cause pleader."<sup>1</sup>

That is until the withdrawn, indecisive, and confused behavior of his daughter Clare was diagnosed as atypical schizophrenia.

Now Domenici is Congress's leading advocate for health insurance parity for mental illness. He is not alone. Domenici built a multiparty coalition that has included five legislators, all of whose lives have been touched by mental illness. Senator Paul D. Wellstone's (D-MN) older brother was severely mentally ill. Senator Alan K. Simpson's (R-WY) niece and Senator Harry Reid's (D-NV) father committed suicide. Representative Patrick J. Kennedy (D-RI) has battled depression. Senator Edward M. Kennedy (D-MA) is Patrick's father.

While the coalition failed in passing legislation, their union did succeed in illustrating that a legislator's family members may influence his legislative decision making. The idea that family, in particular children like Domenici's daughter Clare, can influence parental behavior seems to accord with common sense. Yet, it is a concept that has been neglected by the literature on congressional voting behavior. This literature has established that political party, constituent preferences, and a legislator's personal preferences and/or characteristics are all significant predictors of a legislator's voting pattern. (See, for example, Steven D. Levitt 1996.) Personal preferences or characteristics are particularly important in explaining voting on moral issues. Stephen Ansolabehere, James M. Snyder, and Charles H. Stewart (2001) and Snyder and Tim Groseclose (2000) have found that members of the United States Congress are subject to less party pressure and are therefore more free to vote their own views on issues of civil rights, gun control, and abortion. In Britain, John R. Hibbing and David Marsh (1987) show that partisan forces are much weaker on so called "free votes," which "frequently deal with controversial issues, such as

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<sup>1</sup> Sontag, Deborah. 2002. "When Politics is Personal." *The New York Times*. September 15, E90.

abortion, capital punishment, homosexuality, and the like" (276). More influential on these controversial decisions are legislator personal characteristics such as religion, age, and education. However, the potential impact of family, in particular the gender mix of a legislator's children, on his or her decision making has not been explored.<sup>2</sup>

This paper begins to fill this hole in the literature, asking whether children influence their congressional parent's behavior, just as previous work has shown that neighbors, peers, parents, and siblings have an impact on behavior, from educational attainment<sup>3</sup> to welfare receipt (Marianne Bertrand, Erzo F. P. Luttmer, and Sendhil Mullainathan 2000) to wedding a working woman (Raquel Fernandez, Alessandra Fogli, and Claudia Olivetti 2004).

Sociologists have demonstrated a link between offspring gender and parental beliefs on not only parenting issues (Charles J. Brody and Lala C. Steelman 1985; Douglas B. Downey, Pamela B. Jackson, and Brian Powell Downey, 1994) but also on issues of political significance. Rebecca L. Warner (1991) examines the impact, in Detroit and Toronto, of daughters on parental attitudes toward women. She divides parents into three groups: those who parent only daughters, those who parent both daughters and sons, and those who parent only sons. She finds that, in both the United States and Canada, women who parent only daughters and, in Canada, men who parent only daughters are significantly more likely to hold feminist views than those who parent only sons. Warner and Brent S. Steel (1999) find that US parents who parent only daughters have increased support for feminist policies (pay equity, comparable worth, affirmative action in regards to gender and Title IX of the Educational Amendments of 1972 to the Civil Rights Act of 1964) over those who parent a mixture of daughters and sons. US fathers who parent both daughters and sons show increased feminist sympathies over those fathers who parent only sons.<sup>4</sup>

The shift in fathers' attitudes is particularly interesting given the "gender gap" in political beliefs in this country: a larger fraction of women than men favor the Democratic Party (Lena C. Edlund and Rohini Pande 2002).<sup>5</sup> Further, women appear more liberal based on their responses to survey questions. Women are slightly more likely to believe abortion should be legally available (44 percent of women and 42 percent of men agree with that statement). Among adults in the top third of the income distribution, the gender difference grows to 9 percentage points (55 percent versus 46 percent). Among college graduates, the gap is 12 percentage points (60 percent versus 48 percent). Outside of reproductive rights, we see large gender differences in political views in the aggregate.<sup>6</sup> Women are 4 percentage points more likely to favor more crime spending (61 percent versus 57 percent), 5 percentage points less likely to favor increased defense spending (20 percent versus 25 percent) and 11 percentage points more likely to support laws protecting homosexuals from discrimination (68 percent versus 57 percent) and to believe that there should be more government services (41 percent versus 30 percent).<sup>7</sup>

<sup>2</sup> Note that there is an extensive literature considering the impact of parents' political attitudes on their offspring. See, for example, M. Kent Jennings and Richard Niemi (1974).

<sup>3</sup> Recent examples are Sandra E. Black, Paul J. Devereux, and Kjell G. Salvanes (2005); Gordon Dahl and Lance J. Lochner (2005); Eric A. Hanushek et al. (2003); Caroline M. Hoxby (2000); Christopher J. Ruhm (2004); and Bruce I. Sacerdote (2007).

<sup>4</sup> Two recent papers demonstrate that child gender can affect parental decisions surrounding marriage, divorce, and custodial arrangements (Elizabeth O. Ananat and Guy Michaels 2006; Dahl and Enrico Moretti 2004).

<sup>5</sup> The "gender gap" in Edlund and Pande (2002) terminology has been increasing since the late 1960s. Before this time, women voted more conservatively than men.

<sup>6</sup> Significant gender differences on these political beliefs also exist within the highly educated and high-income subgroups.

<sup>7</sup> Author's calculations using the 1992–2000 National Election Studies. T-tests show that the gender differences on views on crime, defense, protection of homosexuals, public services, and abortion (for the highly educated and high-income groups) are significant at the 1 percent level. Gender differences on abortion for the aggregate adult population are significant at the 10 percent level.

I take the sociological evidence of parental attitudinal shift on women's issues resulting from raising daughters (versus sons) to the political arena to ask whether parenting females increases a US representative's propensity to vote liberally on bills regarding women's issues. The answer is yes. Using congressional voting record scores compiled by the American Association of University Women (AAUW) and the National Organization of Women (NOW), I find that, conditional on total children parented, each female child parented is associated with a score increase that is approximately one-quarter of the difference in score accounted for by a legislator's own gender. By turning to the universe of roll call votes, I demonstrate that the realm of influence of female children extends across a variety of issues, but is most consistent and most prevalent with regards to reproductive rights.

As stated previously, there are large gender differences among the high-income and highly educated subgroups on this issue. But why reproductive rights more so than other issues on which elite men and women differ? Past research has demonstrated a link between parenting daughters and liberal beliefs on women's issues. Reproductive rights is an issue that is thought of as uniquely female; for those voting on reproductive rights, the females in their lives would be particularly salient. Additionally, reproductive rights is a moral issue. As stated previously, legislators have more freedom to vote their own views on such issues.

This paper will not address the mechanism by which children shape their parent's voting behavior. While the study is motivated by research that suggests an attitudinal shift arises from parenting daughters, alternative explanations are possible. For example, parenting daughters may increase the cost of voting conservatively on reproductive rights legislation. The increased cost could stem from the embarrassment of a visibly pregnant daughter (due to lesser access to abortion) or the monetary hardship of an unwanted grandchild.<sup>8</sup> Separating a "true" preference shift from a cost-based change in voting patterns is beyond the scope of this study. And, in fact, the distinction does not seem particularly meaningful given the evidence of the applicability of cognitive dissonance to the political arena, where it has been shown that the act of voting influences political beliefs (Mullainathan and Washington 2005).

The remainder of the paper proceeds as follows. In Section I, I summarize the data and methods. In Section II, I present results demonstrating the impact of child gender on legislator parents' voting behavior. Section III concludes.

## I. Data and Methodology

### A. Data

I examine the voting behavior of members of four Congresses of the United States House of Representatives.<sup>9</sup> These are the 105<sup>th</sup> through 108<sup>th</sup> Congresses, which span the years 1997 through 2004. My analysis is cross sectional in nature because of the infrequency with which representatives augment their family size.<sup>10</sup> The mean representative was 52 years of age at the beginning of the 105<sup>th</sup> Congress. For the most part, these men and women have completed their reproductive lives before they enter Congress. Of the individuals who served in the House

<sup>8</sup> This explanation would have to be combined with some cost for inconsistency (either dissonance or lower probability of reelection) to explain the significant daughter coefficient effect on votes that concern abortion overseas and in federal prisons.

<sup>9</sup> These were the four most recently completed Congresses at the time of analysis.

<sup>10</sup> Further, the infrequency with which there is turnover in the representative/district yields even a synthetic panel—tracking the gender of the children of the representative of the district over time—uninformative.

between 1991 and 2004, only 9 percent saw some change to their number of children during the 14-year time period.<sup>11</sup>

Following the literature on legislative voting behavior, I examine two types of outcomes: voting record scores constructed by interest groups and patterns of voting behavior from the entire roll call of votes in each of the four Congresses.

I rely on voting record scores compiled by three interest groups: NOW, AAUW, and the National Right to Life Coalition (NRLC). Both NOW and AAUW are liberal groups that concern themselves with issues of interest to women. While AAUW and NOW share a similar agenda—the groups selected seven pieces of legislation in common as the most important of the 105<sup>th</sup> Congress—their voting record scores have varying strengths.

The great advantage of the NOW data, available only for the 105<sup>th</sup> Congress, is the wide variety of topics with which the organization concerns itself. To create its scores, NOW chose 20 pieces of legislation that it considered critical for women. For each vote in accordance with the NOW position,<sup>12</sup> the organization awarded 5 points to produce a score that ranges from 0 to 100 with a mean of 74 for Democrats and 12 for Republicans. The legislation included in the calculation encompasses a variety of issues, including equality, economic security, women's safety, education, lesbian rights, health, and reproductive rights. By decomposing the NOW score, I can determine on which issues daughters have an impact on the voting of their legislative parents.

The advantage of the AAUW data is its longitudinal nature. The organization has produced voting record scores not only for the 105<sup>th</sup> Congress, but also for each Congress thereafter. For each Congress, AAUW selects eight to ten pieces of legislation in the areas of education, equality, and abortion rights. Each House member's rating is simply the percentage of those pieces of legislation on which the member votes in accordance with the AAUW position, for a score that ranges from 0 to 100, with a mean of 86 for Democrats and 12 for Republicans for the 105<sup>th</sup> Congress.

A limitation of both the NOW and the AAUW scores is the interest groups' liberal leaning. After establishing that the impact of female children on legislative voting is driven primarily through voting on reproductive rights legislation, I check that the results are robust to a change in political leaning by moving to voting scores composed by the National Right to Life Committee (NRLC). The NRLC chooses ten to twenty pieces of legislation each session, scoring each legislator on the percentage of votes in accordance with the interest group's position. Subtracting the NRLC score from 100 so that a higher score indicates more liberal voting, as is true for the NOW and AAUW scores, the average score is 73 for Democratic members and 12 for Republican members of the 105<sup>th</sup> Congress. NRLC data are available for all four Congresses.

Voting record scores compiled by interest groups have been criticized for including only the most polarizing votes in their calculations (see, for example, Snyder 1992). Further, it is obvious that interest groups choose only votes that fall within their area of interest. For this reason, I perform the decomposition exercise, again using the entire roll call of votes for the four Congresses to uncover all of the areas in which female children influence voting, and in which area daughters seem to have the most influence.

<sup>11</sup> Of the 867 people who served in the House of Representatives in the time period, I have child data for 828. As a result of birth, adoption, or marriage (stepchildren), 69 of the 828 saw an increase in their number of children. As a result of death or divorce (stepchildren), five saw a decrease. And one, Rep. Deborah Pryce (R-OH), experienced child death, divorce, and adoption for both an increase and a decrease to her family size in the time period.

<sup>12</sup> In four of the twenty cases in which legislation important to NOW did not reach a floor vote, the organization awarded five points for sponsorship.

### B. Theoretical Foundation for Empirical Strategy

From the work of Warner and Steel (1999), we know that child gender affects parental support for feminist policies. Moving to the congressional arena, I hypothesize that this shift in beliefs translates to a shift in behaviors. Parenting daughters (versus sons) shifts voting behavior on women's issues in a more liberal direction.

The experiment implied by the theory is the following. A member of Congress has a child; nature randomly assigns the child gender. The comparison is between two legislators, each with one additional child; nature assigns the first a boy and nature assigns the second a girl. The difference in voting behavior between the two legislators would yield an estimate of the daughter effect.

To approximate this experiment in the data, I run

$$(1) \quad Y_i = \alpha + \beta_1 \text{GIRLS}_i + \gamma_i + \varepsilon_i$$

where  $Y$  is a legislator's voting record score or a dummy for an individual's liberal roll call vote.  $\text{GIRLS}$  is the number of daughters that the individual legislator parents and  $\gamma$  is a set of fixed effects for total number of children.<sup>13 14 15</sup> Assuming parents are not following a gender-biased stopping rule for fertility as I argue below,  $\beta_1$  identifies the impact on voting of parenting an additional daughter (as compared to an additional son). Conditioning on total number of children is crucial for identifying this parameter of interest. Failure to include these child fixed effects would yield an estimate of  $\beta_1$  which combines both the impact of parenting an additional daughter and the impact of parenting an additional child. Just as in the educational peer effects literature where quality and quantity of children in the classroom have differing effects on educational attainment, the act of parenting an additional child may have its own impact on congressional voting behavior.<sup>16</sup>

Conditioning on total number of children, the number of female children and the number of male children are linearly dependent. Therefore, I cannot discern whether voting behavior is driven by more contact with daughters or less contact with sons, or a combination of the two. Therefore,  $\beta_1$  should be interpreted as the relative impact of daughters, as compared to sons.

I expand equation (1) to include controls that previous literature has shown to be associated with legislative voting. Thus, using any one of the four outcomes outlined above, I run regressions of the form

$$(2) \quad Y_i = \alpha + \beta_1 \text{GIRLS}_i + \beta_2 \text{FEMALE}_i + \beta_3 \text{RACE}_i + \beta_4 \text{PARTY}_i \\ + \beta_5 \text{SERVICELENGTH}_i + \beta_6 (\text{SERVICELENGTH}_i)^2 + \beta_7 \text{AGE}_i + \beta_8 (\text{AGE}_i)^2 \\ + \beta_9 \text{RELIGION}_i + \beta_{13} \text{DEMPRESVOTE}_i + \gamma_i + \phi_i + \varepsilon_i.$$

<sup>13</sup> The number of children ranges from 0 to 12. Results are robust to the exclusion of members of Congress without children. Of all representatives, 12 to 14 percent of legislators have no children.

<sup>14</sup> I have also tried entering the number of female children nonlinearly. I present the linear specification because of its better fit. Results presented are robust to entering total number of children linearly.

<sup>15</sup> The names of legislators' children are published in the *Congressional Directory*. In cases where the names of the children are ambiguous (with regard to gender) or omitted, I consulted Internet resources, phoned the member's office (if s/he were still in office), or phoned a newspaper in the member's district.

<sup>16</sup> For example, as they learn more about children's needs, parenting additional children may encourage adults to support more liberal education, health, and welfare policies. Or, as they learn more about children's vulnerabilities, parenting additional children may encourage adults to support more conservative crime policies.

TABLE 1—SAMPLE MEANS FOR 105<sup>TH</sup> CONGRESS

Variable	Full sample	Democrats <sup>a</sup>	Republicans
<i>Independent variables</i>			
Legislator's children			
Any female children	0.73	0.71	0.74
Number of female children	1.27	1.19	1.35
Number of children	2.49	2.23	2.73
Total number of children			
Zero	0.14	0.15	0.13
One	0.09	0.13	0.06
Two	0.32	0.34	0.30
Three	0.22	0.20	0.23
Four	0.13	0.10	0.16
Five or more	0.10	0.08	0.12
Legislator characteristics			
White	0.87	0.75	0.98
Female	0.11	0.16	0.06
Mean age	52	53	51
Service length (years)	9	10	8
Protestant	0.60	0.49	0.69
Catholic	0.30	0.37	0.23
Other Christian	0.04	0.00	0.07
Other religion	0.06	0.11	0.01
None	0.01	0.03	0.00
Democratic vote share	0.50	0.59	0.43
<i>Dependent variables</i>			
NOW score (N = 430) <sup>b</sup>	41	74	12
(standard deviation)	(37)	(22)	(17)
AAUW score	47	86	12
(standard deviation)	(42)	(20)	(20)
NRLC score	41	73	12
(standard deviation)	(42)	(33)	(24)
N	434 <sup>c</sup>	207	227 <sup>c</sup>

<sup>a</sup> Including Representative Bernard Sanders (I-VT).

<sup>b</sup> NOW did not calculate scores for four individuals who did not complete the term.

<sup>c</sup> Michael Pappas (D-NJ) is not included in this analysis because I was unable to obtain information on the gender of his child.

As shown in Table 1, in the 105<sup>th</sup> Congress, the average legislator has 2.49 children, 51 percent of whom are female. Republicans have a slightly smaller proportion of girls than their Democratic counterparts.<sup>17</sup> Party, individual preferences, and constituency preferences are factors that have been shown repeatedly to be significant and important predictors of legislative voting. Pande (2003) and Raghavendra Chattopadhyay and Esther Duflo (2004) have shown that race and gender have a causal impact on elected officials' actions. In addition, service length, age, and religion<sup>18</sup> have been shown to be correlated with voting decisions (see, for example, Hibbing and Marsh

<sup>17</sup> When measured as either the proportion of means or the mean of the proportions, this difference is not statistically significant.

<sup>18</sup> Party, service length, and age can all be found in the *Congressional Directory*. Religion data come from three sources: the *Congressional Directory*, Michael Barone (various years), and [http://www.adherents.com/adh\\_Congress.html](http://www.adherents.com/adh_Congress.html).



1987; Thomas Stratmann 2000). I include the share of the major party presidential votes cast in favor of the Democratic candidate (in the most recent election) and census region fixed effects ( $\phi$ ) as measures of constituents' liberal leaning. (Stratmann (2000) shows that as a district's residents become increasingly liberal, so too does the voting record of its representative.)<sup>19</sup>

### *C. Identifying Assumptions*

The identification strategy is predicated on the assumption that, conditional on number of children, the number of female children is a random variable. This assumption must be defended. While it is unlikely that a representative could choose the gender of any individual child,<sup>20</sup> it is possible that a representative could follow a fertility stopping rule that would have an impact on the proportion of female children he or she parents. For example, as laid out in Shelley D. Clark (2000), consider a society with two types of couples. Couples of Type I have strong son preferences. They ideally would like three children, but will continue having children until they have at least three children and at least two sons. Couples of Type II also ideally would like three children. They have no gender preference. So they will continue having children until they have three children.<sup>21</sup> In such a society, there will be a correlation between son preference and child gender mix, conditional on number of children. Among couples with three children, for example, those with one boy will be those without a gender preference, while those with two or three boys will be a mixture of those with and without a male preference. Hence, if legislators who vote liberally on women's issues are the same representatives who have female child preferences, then the identification strategy would be invalid.

The evidence suggests, however, that representatives are not following such stopping rules. Using newspaper and Internet resources, I was able to identify the gender of the first-born child for 227 of the 381 members of the 108<sup>th</sup> Congress who have children. Having a first-born daughter strongly predicts the gender mix of total children in this sample. But having a first-born daughter does not predict the total number of children parented. Both findings are true for the Congress as a whole and for each party. In fact, contrary to what we would observe if the same member of Congress who favored more liberal policies on women's issues followed a male preference fertility stopping rule, results indicate that for Republicans a first-born daughter is associated with fewer children, and for Democrats an eldest daughter is associated with a greater number of children, although neither association is significant (see Appendix Table 1).<sup>22</sup>

Thus, I rely on the premise that legislators are not practicing some type of sex selection.<sup>23</sup> The issue of whether constituents are selecting representatives in a manner correlated with child

<sup>19</sup> Results are robust to the inclusion of marital status dummies. However, I do not include these controls in my basic specification for three reasons: there is no theoretical foundation from previous literature for such an inclusion; endogeneity of the marital decision would result in a biased coefficient; and there is little variation in marital status.

<sup>20</sup> With a mean age of 52 in 1997, these individuals on average did not have access to technology for fetal sex selection at the time of the gestation of their children. There are no natural methods of intercourse timing that have a significant impact on child sex (Allen J. Wilcox, Clarice R. Weinberg, and Donna D. Baird 1995). The possibility of selecting sex through adoption does remain, however.

<sup>21</sup> Or more than three children, assuming a multiple birth.

<sup>22</sup> Using the gender of the first born to instrument for the final gender mix proves uninformative due to large standard errors that are the result, at least in part, of the reduction in sample size, in the case of the 108th Congress, from 433 members (for whom I can establish the gender of all children) to 227 members (for whom I can establish the gender of the first-born child).

<sup>23</sup> There does remain the possibility that a legislator with male preferences may distance himself from his female children, mentally or even physically, as suggested by recent work documenting the correlation between marital dissolution and female children (Ananat and Michaels 2006; Kelly Bedard and Olivier Deschenes 2005; and Dahl and Moretti 2004). However, such behavior would merely bias my findings toward zero, as a portion of the "treated" sample would not actually be receiving the treatment.

gender is addressed in Appendix Table 2, and also in Section II. The results of Appendix Table 2 provide no evidence of constituent selection of legislators in the 105<sup>th</sup> and 107<sup>th</sup> Congresses based on child gender mix. In the 106<sup>th</sup> Congress, of the seven district demographic characteristics (presidential voting, income, race, gender, education, urban, and religion)<sup>24</sup> and five state opinion measures (abortion, defense spending, crime spending, social services spending, and protection of homosexuals)<sup>25</sup> only two—crime spending and defense spending—significantly predict the proportion of female children of the district representative. The coefficient on federal crime spending is negative, suggesting that those who desire more crime spending (an opinion expressed more by women than men) select representatives with a smaller proportion of female children, which would bias the analysis against finding a child gender effect on legislative voting. The coefficient on defense spending is positive, suggesting that those who desire more defense spending (an opinion expressed by more men than women) select representatives with a larger proportion of female children. Again, this would serve only to bias against finding a child gender effect on voting. For the 108<sup>th</sup> Congress, four district demographics significantly predict legislator child gender mix. But once again, coefficient signs are not in keeping with a consistent story of more liberal districts selecting representatives with more daughters. While the Democratic vote is positively related to proportion daughters, fraction female is associated with a smaller proportion of daughters, making the results seem spurious. Nonetheless, I do examine the robustness of results to the inclusion of district characteristics to understand the extent to which the correlation between constituent views and legislator views (as proxied by child gender) explains the relationship between child gender and legislative voting.

Even in specifications controlling for district characteristics, there remains the possibility of selection on unobserved variables. This seems unlikely, however, given that for selection to bias results, it would have to be the case that candidates who assume a liberal stance on reproductive rights are more likely to be elected if they have more daughters (or candidates with more daughters are more likely to be elected if they take a more liberal stance on reproductive rights), whereas candidates who assume a conservative stance on reproductive rights are more likely to be elected if they have more sons (or candidates with more sons are more likely to be elected if they take a more conservative stance on reproductive rights).

Thus, I assume that child gender can be thought of as random and estimate models of the form of equation (2) to identify the impact of child gender on parental voting behavior.

## II. Results

A legislator's propensity to vote liberally on women's issues is increasing in the number of female children parented. This relationship can be seen clearly in graphical form using the voting record scores of either of the women's interest groups: NOW or AAUW (for any of the four Congresses). Figure 1 presents the mean NOW score, by party and number of female children. (NOW data are chosen for presentation because of the organization's reliance on a larger number of votes to create its score.) The top half of the figure shows the relationship for politicians with two children (two is the modal number of children in the sample). The far-left portion of the graph depicts legislators with two children. Those with one daughter earn an average NOW score that is nine points higher than those with no daughters. Those with two daughters have an average score that is an additional 18 points higher than those with one. Democrats are pictured to the right of all legislators. While their NOW scores are higher than average, the basic pattern

<sup>24</sup> Demographic information is from the American Fact Finder Web site, Barr A. Kosmin and Egon Mayer (2001), and David Lublin (1997).

<sup>25</sup> Opinion measures are from the National Election Studies, 1992–2000.



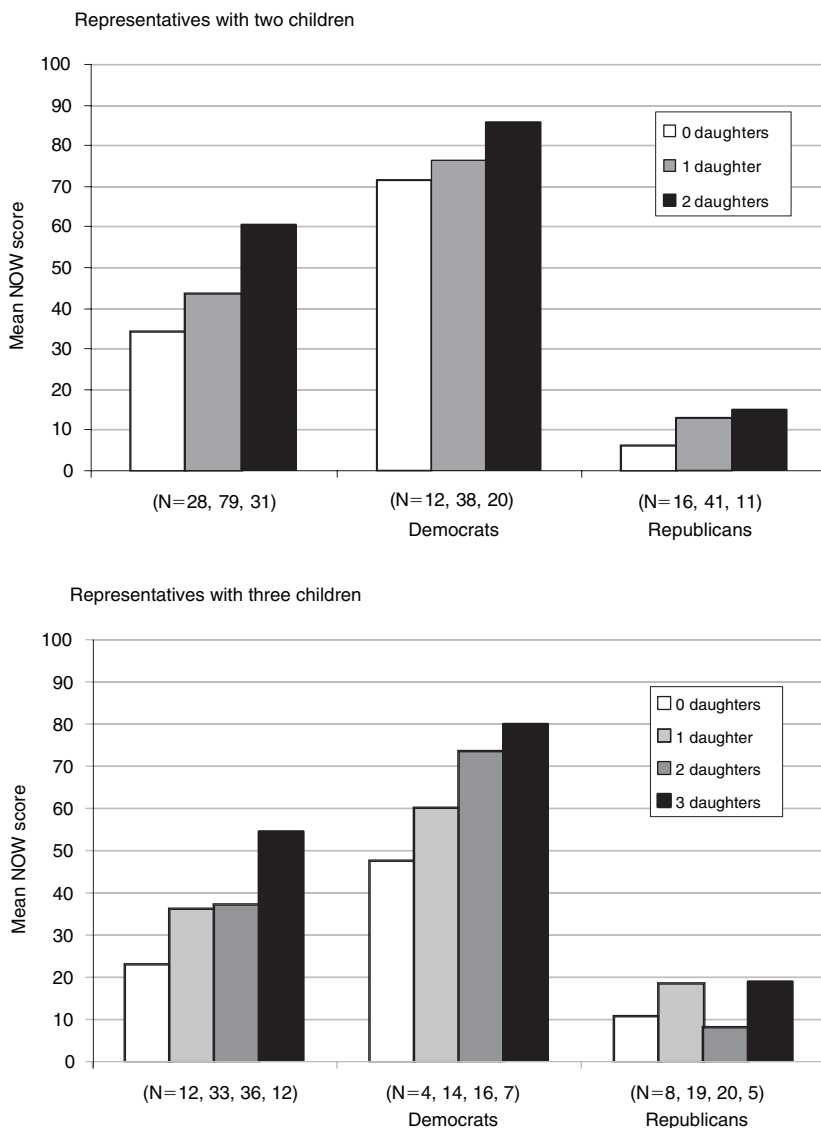


FIGURE 1. MEAN NOW SCORE, BY NUMBER OF FEMALE CHILDREN, 105TH CONGRESS

still holds. The increase for one daughter over none is four points and for two daughters over one is ten points. Republicans, with lower NOW scores than average, again show a similar pattern. The average NOW score is seven points higher for one daughter, compared to those with none. The marginal increase for the second daughter is two points.<sup>26</sup>

Three is the second most popular number of children for this population. The bottom half of the figure presents the analysis for legislators with three children. Once again, for legislators overall and for Democrats, the mean NOW score increases with each additional female child. For Republicans, the pattern is not quite as clear. The mean score is greatest for those with

<sup>26</sup> The differences in mean NOW scores in all figures are not statistically significant.

TABLE 2—IMPACT OF FEMALE CHILDREN ON LEGISLATOR VOTING ON WOMEN'S ISSUES

	NOW	AAUW			
	105th (1)	105th (2)	106th (3)	107th (4)	108th (5)
Number of female children	2.3** (1.04)	2.38** (1.12)	1.69 (1.14)	2.42** (1.09)	2.25** (1.15)
<i>Other legislator characteristics</i>					
Female	10.83*** (2.69)	9.19*** (2.91)	10.44*** (2.88)	7.56*** (2.62)	6.91** (2.73)
White	1.86 (3.45)	0.14 (3.68)	2.59 (3.83)	−2.63 (3.15)	1.94 (3.21)
Republican	−44.9*** (2.11)	−60.47*** (2.28)	−55.93*** (2.34)	−63.22*** (2.12)	−63.93*** (2.44)
Age	0.66 (0.80)	0.85 (.86)	2.03** (0.9)	1.3 (0.8)	2.3*** (0.86)
Age squared	−0.01 (0.01)	−0.01 (0.01)	−0.02** (0.01)	−0.01 (0.01)	−0.02*** (0.01)
Service length	0.24 (0.30)	−0.21 (0.32)	−0.73* (0.38)	−0.1 (0.35)	−0.14 (0.33)
Service length squared	−0.01 (0.01)	0.00 (0.01)	0.02* (0.01)	−0.00 (0.01)	0.00 (0.01)
No religion	7.26 (7.02)	5.67 (7.61)	5.35 (7.79)	7.03 (7.18)	−7.14 (7.5)
Catholic	−3.97** (1.94)	−4.5** (2.09)	−2.28 (2.13)	−4.02** (1.99)	−5.47*** (2.08)
Other Christian	0.77 (4.60)	3.2 (4.98)	1.69 (4.91)	1.65 (4.49)	3.87 (4.68)
Other religion <sup>a</sup>	10.87** (3.75)	9.68** (4.05)	11.89*** (4.34)	10.29*** (3.79)	3.16 (3.96)
Democratic vote share in district (most recent presidential election)	84.16*** (10.87)	62.15*** (11.57)	57.44*** (12.02)	56.21*** (9.09)	66.95*** (10.89)
N <sup>b</sup>	430	434	434	434	433

Note: All specifications include region and number of children fixed effects. Standard errors in parentheses.

\* Significant at the 10 percent level.

\*\* Significant at the 5 percent level.

\*\*\* Significant at the 1 percent level.

<sup>a</sup> The omitted religious category is Protestant.

<sup>b</sup> Sample size varies due to missing child gender and voting score information.

three daughters, lower for those with one daughter, and lower still for those with no daughters. However, those with two daughters break the trend. Among Republicans with three children, this group has the lowest mean NOW score.<sup>27</sup>

The positive relationship between parenting daughters and voting liberally on women's issues is robust to the inclusion of additional controls. Table 2 presents results from regressions of the form of equation (2) with five different outcomes: the NOW score for the 105<sup>th</sup> Congress, and the four AAUW scores for the 105<sup>th</sup> through 108<sup>th</sup> Congresses. In all five specifications, the score increases by about two points with each additional daughter parented. For all but the 106<sup>th</sup> Congress, the number of female children coefficient is significantly different from zero at conventional levels. While that two-point increase may seem small relative to the standard deviations of these scores, note that the female legislators, on average, score a significant seven to ten

<sup>27</sup> This trend break among Republicans with three children is robust to a change to the AAUW voting score in the 105<sup>th</sup>, 106<sup>th</sup>, 107<sup>th</sup>, or 108<sup>th</sup> Congresses.

points higher on these rating scores. In other words, the child gender effect is 25 percent of the size of the own gender “effect.”

Across specifications, coefficients on control variables have the expected signs. Consistent with the previous literature on congressional decision making, I find that both the party of the representative and the political leanings of his/her constituency are significant predictors of voting record. Republicans vote less liberally on these metrics. A legislator’s propensity to vote liberally is increasing in the share of the constituency who voted Democratic in the most recent presidential election. Religion also is an important predictor of score. Catholics have significantly lower voting record scores than Protestants (the omitted group); those of other religions have significantly higher scores.<sup>28</sup>

More children are generally associated with more conservative voting (see the (A) columns of Appendix Table 3 for the coefficients on the child fixed effects). While, to my knowledge, this relationship has not been shown in previous literature, it is not surprising, given that members of Congress from districts that voted Republican in the most recent presidential election have significantly more children, on average, than those from districts that voted Democratic. In the (B) columns of Appendix Table 3, I show results from models of equation (2) where I fail to control for number of children and conflate the influence of an additional child with that of an additional daughter. This combined daughter/child coefficient is not significantly related to legislative voting, suggesting that number of daughters and number of children may have equal and opposite impacts. However, we cannot interpret the coefficient from this specification causally, as number of children is an endogenous choice variable.

Turning attention to subgroups of representatives, I demonstrate in columns 2 and 3 of Table 3 that male legislators show an increase in voting record score for each female child, an effect that is significant in four of five specifications; female representatives, in four of five specifications, show an insignificant decrease. (In Table 3, each cell presents the coefficient on the variable “number of female children” from a different regression.) However, due to the imprecise nature of the female children coefficient in the female representative regressions, no conclusions can be drawn about the impact of female children on the voting behavior of female representatives. For this reason, in the remainder of the paper, I will, at times, refer to the influence of daughters on their legislator “fathers” rather than their legislator “parents.”

Female children increase the scores of both Democratic and Republican House members. However, the difference is not statistically significant. In fact, comparing coefficients from decile regressions, one cannot reject the null hypothesis that the impact of female children on women’s issue voting is the same throughout the voting record score distribution.

### A. *Decomposition of Results*

The term “women’s issues” is vague. For example, the NOW score is composed of issues in seven topic areas: equality, reproductive rights, safety, economic security, education, lesbian rights, and health. On which issues is there a connection between parenting daughters and legislative voting? To begin to address this question, I decompose the NOW voting record score into its 20 component votes in order to investigate on which issue we see the greatest association between female children and voting patterns.<sup>29</sup> The answer, shown in Table 4, is reproductive rights. In this table, each row presents the coefficient on “number of female children” from a regression of the form of equation (2) in which the outcome variable is a dummy indicating whether the legislator voted in accordance with the NOW position on this piece of legislation. The largest contributors

<sup>28</sup> Both results are consistent across four of five specifications.

<sup>29</sup> Again, the NOW decomposition is shown because of the greater number of votes on which the score is based.

TABLE 3—IMPACT OF FEMALE CHILDREN ON LEGISLATOR VOTING ON WOMEN'S ISSUES, BY LEGISLATOR GENDER AND PARTY

*(Each cell presents the coefficient on number of daughters from a different regression)*

Data source	All legislators	Gender		Party	
		Men	Women	Democrats <sup>a</sup>	Republicans
NOW, 105 <sup>th</sup> Congress	2.3** (1.04) [430]	2.48** (1.09) [382]	−1.67 (5.64) [48]	2.93* (1.6) [204]	1.28 (1.32) [226]
AAUW, 105 <sup>th</sup> Congress	2.38** (1.12) [434]	2.49** (1.17) [386]	−3.9 (6.41) [48]	2.22 (1.44) [207]	1.83 (1.56) [227]
AAUW, 106 <sup>th</sup> Congress	1.69 (1.14) [434]	1.02 (1.21) [381]	3.68 (4.02) [53]	1.04 (1.4) [210]	1.59 (1.64) [224]
AAUW, 107 <sup>th</sup> Congress	2.42** (1.09) [434]	2.23* (1.17) [377]	−2.67 (3.75) [57]	1.78 (1.74) [213]	2.24* (1.27) [221]
AAUW, 108 <sup>th</sup> Congress	2.25** (1.15) [433]	2.32* (1.25) [378]	−2.11 (3.59) [55]	2.33 (1.84) [207]	0.82 (1.32) [226]

*Notes:* All specifications include legislator race, gender, party, service length (and its square), age (and its square), religion, region and number of children fixed effects, and percent of two-party district votes in favor of the most recent Democratic presidential candidate. Standard errors in parentheses. Samples size in brackets.

\* Significant at the 10 percent level.

\*\* Significant at the 5 percent level.

\*\*\* Significant at the 1 percent level.

<sup>a</sup> Including Representative Bernard Sanders (I-VT) and Virgil Goode Jr. (I-VA).

to the 2.3 point increase in voting record associated with each female child are the votes on reproductive rights. The average propensity to vote along with the NOW position on these bills increases from 3.0 percentage points (for a bill to withhold funds from the FDA to review drugs that induce medical abortions) to 4.9 percentage points (for a bill requiring parental consent for teens to obtain prescription contraception). The propensity to vote with NOW on each reproductive issue increases an average of 3.8 percentage points with each female child. The average increase across the remaining votes is only 1.5 percentage points. While more than half of reproductive rights legislation voting is significantly correlated with number of daughters, only two pieces of legislation outside of the reproductive rights area show significant correlations. (Descriptions of the legislation that comprise the NOW score are found in Appendix Table 4.)

Further evidence that the effect is a result of reproductive rights legislation, as well as evidence that findings are not driven by the liberal agenda of NOW and AAUW, comes from examining the impact of daughters on a legislator's National Right to Life Committee voting record score. In specifications akin to those in Table 2, I find that parenting daughters has a significant impact on NRLC scores for all four focal Congresses.<sup>30</sup> Each additional daughter is associated with about a two- to four-point movement in a more liberal direction. This effect is significant in three of four Congresses. And, once again, the child gender effect is 25 percent of the magnitude of own gender "effect."

To create their voting record scores, NOW, AAUW, and NRLC selected only a tiny fraction of the hundreds of roll call votes taken each Congress. While it is unlikely that selection methods

<sup>30</sup> The coefficients are: 105th: 3.35(1.53); 106th: 3.44(1.67); 107th: 4.4(1.65); and 108th: 1.77(1.34)

TABLE 4—DECOMPOSITION OF IMPACT OF CHILD GENDER MIX ON NOW VOTING RECORD  
SCORE, 105<sup>TH</sup> CONGRESS  
(Dependent variable equals one if the legislator voted with the NOW position)

Bill	Coefficient on number of girls	Standard error
<i>Equality</i>		
Equal Rights Amendment	−0.002	(0.019)
Pay equity	0.003	(0.021)
<i>Reproductive rights</i>		
Abortion ban	0.035	(0.02)*
Teen access to abortion	0.037	(0.02)*
Contraceptives for federal employees	0.032	(0.024)
RU-486	0.03	(0.023)
Teen access to contraceptives	0.049	(0.023)**
International family planning	0.034	(0.022)
Contraceptive use	0.047	(0.025)*
<i>Women's safety</i>		
Violence against women	0.034	(0.021)
Hate crimes	0.027	(0.022)
<i>Economic security</i>		
Affirmative action in federal contracts	0.016	(0.023)
Working families flexibility	0.030	(0.018)*
Bankruptcy	−0.007	(0.02)
<i>Education</i>		
Private and religious schools	0.011	(0.02)
Affirmative action in higher education	0.017	(0.023)
Tax-free education	0.033	(0.015)**
<i>Lesbian rights</i>		
Discrimination in federal employment	0.025	(0.022)
Equal health care benefits	0.013	(0.021)
<i>Health</i>		
Patients' rights	−0.006	(0.015)
	0.459	x5 <sup>a</sup> = 2.3

*Note:* All specifications include legislator race, gender, party, service length (and its square), age (and its square), religion, region and number of children fixed effects, and percent of two-party district vote in favor of the most recent Democratic presidential candidate.

\* Significant at the 10 percent level.

\*\* Significant at the 5 percent level.

\*\*\* Significant at the 1 percent level.

<sup>a</sup> NOW awards five points per vote/sponsorship in agreement with their position.

are a function of the degree to which legislators with daughters voted in accordance with their position, it is possible that their methods were based on a function of some other characteristic of the legislation. Snyder (1992) argues that interest groups choose a disproportionate number of close votes, exaggerating the degree of extremism and bipolarity in Congress. And, in fact, while 75 percent of votes chosen by NOW were close,<sup>31</sup> only 45 percent of all votes taken in that Congress were close.<sup>32</sup> Further, we know that interest groups select only legislation that falls within their area of interest. It is possible that daughters are associated with voting on issues that are not covered by any of the three scores. Such selection concerns motivate an investigation of how daughters correlate with voting across vote types.

<sup>31</sup> This relates to the 16 bills that were voted on, as opposed to the 4 bills that never made it to a vote. For these bills, NOW awarded points for sponsorship.

<sup>32</sup> Lopsided (close) are defined as more (less) than 65 percent on the winning side, as in Snyder and Groseclose (2000).

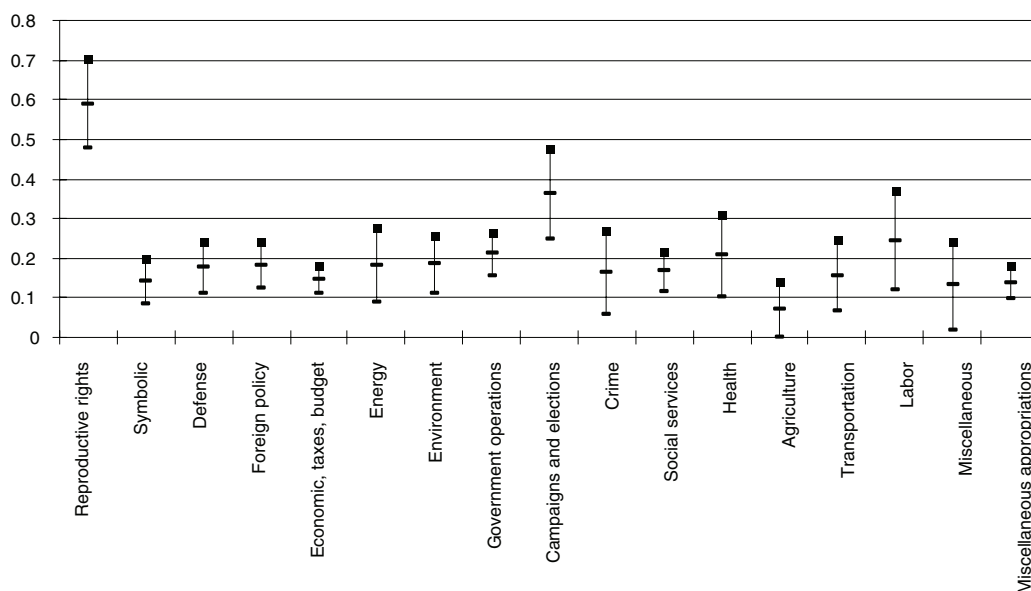


FIGURE 2: DAUGHTERS' LIBERAL VOTING INFLUENCE ON LEGISLATIVE VOTING BY ISSUE TYPE, ALL CONGRESSES  
(Fraction of votes in which daughters significantly predict a liberal vote with 95 percent confidence interval)

To this end, I turn attention to the entire roll call of votes for the 105<sup>th</sup>, 106<sup>th</sup>, 107<sup>th</sup>, and 108<sup>th</sup> Congresses<sup>33</sup> in an examination of the influence of daughters by issue type, which follows the methodology of Ansolabehere, Snyder, and Stewart (2001) and Snyder and Groseclose (2000), who investigate the influence of party by issue. I run regressions of the form of equation (2) in which the outcome is whether the legislator voted liberally on a particular piece of legislation. A liberal vote is defined as siding with the Democratic Party on a vote in which the majority of Democrats opposed the majority of Republicans.<sup>34</sup> Figure 2 summarizes the results by issue type.<sup>35</sup> The boxes show the fraction of votes in which daughters positively and significantly<sup>36</sup> predict a liberal vote, by substantive area. The bounds around these fractions provide the 95 percent confidence interval. (The exact fraction significant, standard error, and sample size can be found in Table 5.) Two facts immediately stand out. First, daughters predict liberal voting on reproductive rights far more often than for any other category, a difference that is significant relative to all other categories. Second, daughters predict liberal voting for the majority of voting categories more often than the 10 percent we would ascribe to chance. The fraction significant is significantly different from 0.10 for reproductive rights, defense, foreign policy, economic, taxes, and budget, environment, government operations, campaigns and elections, social services, health, and labor. The fraction is not significantly different from 0.10 for symbolic, energy,

<sup>33</sup> Roll call voting data for all Congresses are available at <http://voteview.com/dwnl.htm>.

<sup>34</sup> There were 4,583 roll call votes taken during these four years. This definition requires restricting attention to only those votes in which the majority of Democrats opposed the majority of Republicans, only 2,180 votes. However, the basic pattern of results is robust to a focus on all votes that were not near-unanimous (90 percent or more voting on one side).

<sup>35</sup> Coding of roll call votes comes from David W. Rohde (2004). I altered his coding in the following manner: (a) I collapsed categories; (b) I used the *Congressional Quarterly Weekly* Web site to recode as reproductive rights those votes that contained the keywords abortion, birth control, contraceptive, family values, or fetus in the description of the primary issue that the legislation concerned; and (c) appropriations were moved from the appropriations category to the substantive category when they fit in one substantive category.

<sup>36</sup> At the 90 percent confidence level or better.



TABLE 5—DAUGHTERS' LIBERAL VOTING INFLUENCE ON LEGISLATIVE VOTING BY ISSUE TYPE, ALL CONGRESSES

Issue	Basic specification			Additional controls			N
	(1A)	(1B)	(1C)	(2A)	(2B)	(2C)	
	Fraction significant (standard error)	Test of equality with 0.10	Test of equality with repr. rights	Fraction significant (standard error)	Test of equality with 0.10	Test of equality with repr. rights	
Reproductive rights	0.59 (0.06)	***	—	0.40 (0.06)	***	—	78
Symbolic, internal, procedural	0.14 (0.03)		***	0.14 (0.03)		***	148
Defense	0.18 (0.03)	**	***	0.18 (0.03)	**	***	131
Foreign policy	0.18 (0.03)	***	***	0.15 (0.03)	*	***	159
Economic, taxes, budget	0.15 (0.02)	***	***	0.16 (0.02)	***	***	412
Energy	0.18 (0.05)	*	***	0.14 (0.04)		***	66
Environment	0.18 (0.04)	**	***	0.13 (0.03)		***	114
Government operations, civil rights	0.21 (0.03)	***	***	0.22 (0.03)	***	***	213
Campaigns and elections	0.36 (0.06)	***	***	0.26 (0.05)	***	*	69
Crime	0.16 (0.05)		***	0.24 (0.06)	**	*	49
Social services	0.17 (0.03)	**	***	0.19 (0.03)	***	***	210
Health	0.21 (0.05)	**	***	0.24 (0.05)	**	**	63
Agriculture	0.07 (0.04)		***	0.11 (0.04)		***	55
Transportation	0.16 (0.05)		***	0.17 (0.05)		***	64
Labor	0.24 (0.06)	**	***	0.18 (0.06)		**	49
Miscellaneous (consumer affairs, arts)	0.13 (0.06)		***	0.11 (0.05)		***	38
Miscellaneous appropriations	0.14 (0.02)	*	***	0.16 (0.02)	***	***	262

*Notes:* The (A) columns show the fraction of votes for which a regression of liberal voting on number of daughters and covariates yields a positive significant coefficient (at the 10 percent level or lower) on daughters. Standard error is shown in parentheses. The (B) columns provide the results of a test of equality of the fraction in column (A) and 0.10. The (C) columns provide the results of a test of equality of the row fraction with the fraction for reproductive rights. Specification 1 includes legislator race, gender, party, service length (and its square), age (and its square), religion, region and number of children fixed effects, and percent of two party district vote in favor of the most recent Democratic presidential candidate. Specification 2 includes all covariates in specification 1, as well as district median income, percent college graduates, percent white, percent female, percent urban, and state fixed effects.

\* Significant at the 10 percent level.

\*\* Significant at the 5 percent level.

\*\*\* Significant at the 1 percent level.

crime, agriculture, transportation, miscellaneous, and miscellaneous appropriations.<sup>37</sup> Hence, Figure 2 demonstrates that parenting daughters increases liberal voting generally, but has the most impact on issues concerning reproductive rights.

<sup>37</sup> This is at the 5 percent level as shown in Figure 1. Energy and miscellaneous appropriations do differ from 0.10 at the 10 percent level.

Table 6 performs the same decomposition exercise, by Congress. The (A) columns show the fraction of votes for which a regression of liberal voting on number of daughters and covariates yields a positive significant coefficient (at the 10 percent level) on number of daughters (standard errors are shown in parentheses). The (B) columns provide the results of a test of equality of the fraction in column (A) and 0.10. The (C) columns provide the results of a test of equality of the row fraction with the fraction for reproductive rights. In the 105<sup>th</sup> through 107<sup>th</sup> Congresses, reproductive rights is the category in which daughters most frequently positively and significantly predicts a liberal vote. (In the 108<sup>th</sup> this is not true.) Across Congresses, reproductive rights is not the only issue in which the fraction of significant daughters' coefficients significantly differs from 10 percent. However, for only one other issue category—government operations/civil rights—is the pattern as consistent as for reproductive rights. For both issue groups, the number of daughters positively and significantly predicts a liberal vote more often than we would expect by chance in three of four Congresses. (However, the fraction significant for reproductive rights is two to three times that for government operations/civil rights for the 105<sup>th</sup> to 107<sup>th</sup> Congresses.) Across Congresses, parenting daughters increases liberal voting generally, but has the most impact on issues concerning reproductive rights.

Why are votes on reproductive rights particularly influenced by parenting female children? For two reasons, I hypothesize. First, reproductive rights is generally thought of as specifically a women's issue. Unlike lesbian rights, which focuses on a subset of the female population, or economic security, which focuses on a group that includes females and males, the focus of reproductive rights is exactly the female population. It is likely when a legislator confronts a vote on reproductive rights, he or she thinks that this is a vote that will have an impact on females. For parents of daughters, the issue then takes on "increased salience" (Warner and Steel 1999).

A second reason that reproductive rights voting is more greatly tied to daughters than other legislative issues is that reproductive rights is a moral issue. Ansolabehere, Snyder, and Stewart (2001) and Snyder and Groseclose (2000) find that political parties in the United States exhibit less influence on a legislator's voting on moral and religious matters (in comparison with other issues). Hibbing and Marsh (1987) show that in Britain partisan forces are much weaker in so-called "free votes," which "frequently deal with controversial issues, such as abortion, capital punishment, homosexuality, and the like" (276). More influential on these controversial decisions are legislators' personal characteristics, such as religion, age, and education. The decomposition results suggest that the relevant characteristics extend to the familial.<sup>38</sup>

The fact that a legislator's propensity to vote liberally is increasing in number of daughters, particularly in the area of reproductive rights, speaks to the importance of children in shaping parents' behavior, much in the way we have come to understand that peers, neighbors, parents, and siblings affect an individual's attitudes and actions. The question remains, however, as to what extent this propensity is captured by the constituency. Given that 60 percent of self-reported voters failed to identify even one of their districts' candidates for the House of Representatives just weeks after the election,<sup>39</sup> it seems unlikely that voters are aware of the gender composition of candidates' children. Nonetheless, there exists the possibility that voters are aware of a candidate's liberal leanings and select their representatives accordingly.

Table 5, columns (2A–2C), examines the extent of the capture. Here, I run regressions of the form of equation (2) with the additional district covariates median income, percent college

<sup>38</sup> Given party and other political pressures, the attitudinal shifts caused by raising daughters may be more widespread than the behavioral shifts measured here.

<sup>39</sup> Author's calculations using National Election Study data for the years 1992–2000.

TABLE 6—DAUGHTERS' LIBERAL VOTING INFLUENCE ON LEGISLATIVE VOTING BY ISSUE TYPE

Issue	105 <sup>th</sup> Congress			106 <sup>th</sup> Congress			107 <sup>th</sup> Congress			108 <sup>th</sup> Congress		
	(1A)	(1B)	(1C)	(2A)	(2B)	(2C)	(3A)	(3B)	(3C)	(4A)	(4B)	(4C)
Reproductive rights	0.52 (0.09) [33]	***	—	0.65 (0.10) [23]	***	—	0.86 (0.10) [14]	***	—	0.25 (0.16) [8]	—	—
Symbolic, internal, procedural	0.16 (0.04) [86]		***	0.16 (0.07) [25]		***	0.2 (0.11) [15]		***	0 (0) [22]	—	**
Defense	0.16 (0.07) [31]		***	0.06 (0.04) [34]		***	0.21 (0.1) [19]		***	0.26 (0.06) [47]	**	
Foreign policy	0.30 (0.07) [46]	***	*	0.2 (0.09) [20]		***	0.08 (0.04) [40]		***	0.15 (0.05) [53]		
Economic, taxes, budget	0.21 (.05) [84]	**	***	0.13 (0.03) [98]		***	0.14 (0.03) [100]		***	0.12 (0.03) [130]		
Energy	0 (0) [4]	—	*	0.17 (0.11) [12]		***	0.18 (0.10) [17]		***	0.21 (0.07) [33]		
Environment	0.17 (0.06) [42]		***	0.09 (0.04) [43]		***	0.33 (0.21) [6]		**	0.35 (0.10) [23]	**	
Government operations, civil rights	0.22 (0.06) [58]	**	***	0.18 (0.05) [62]		***	0.26 (0.07) [35]	**	***	0.21 (0.05) [58]	*	
Campaigns and elections	0.16 (0.07) [31]		***	0.5 (0.15) [12]	**		0.68 (0.11) [19]	***		0.14 (0.14) [7]		
Crime	0.09 (0.09) [11]		**	0.27 (0.10) [22]	*	***	0 (0) [2]	—	***	0.07 (0.07) [14]		
Social Services	0.32 (0.06) [57]	***	*	0.09 (0.04) [53]		***	0.09 (0.04) [46]		***	0.15 (0.05) [54]		
Health	0.45 (0.16) [11]	**		0.11 (0.08) [18]		***	0.27 (0.12) [15]		***	0.11 (0.07) [19]		
Agriculture	0 (0) [20]	—	***	0 (0) [15]	—	***	0.17 (0.11) [12]		***	0.25 (0.16) [8]		
Transportation	0.23 (0.12) [13]		*	0.17 (0.17) [6]		**	0.12 (0.08) [17]		***	0.14 (0.07) [28]		
Labor	0.5 (0.15) [12]	**		0.22 (0.15) [9]		**	0.14 (0.14) [7]		***	0.14 (0.08) [21]		
Miscellaneous (consumer affairs, arts)	0.25 (0.16) [8]			0.09 (0.09) [11]		***	0 (0) [3]	—	***	0.13 (0.09) [16]		
Miscellaneous appropriations	0.16 (0.04) [70]		***	0.07 (0.03) [84]		***	0.27 (0.07) [45]	**	***	0.11 (0.04) [63]		

*Notes:* The (A) columns show the fraction of votes for which a regression of liberal voting on number of daughters and covariates yields a positive significant coefficient (at the 10 percent level or lower) on daughters. Standard error is shown in parentheses. Sample size is in brackets. The (B) columns provide the results of a test of equality of the fraction in column (A) and 0.10. The (C) columns provide the results of a test of equality of the row fraction with the fraction for reproductive rights. All regressions include legislator race, gender, party, service length (and its square), age (and its square), religion, region and number of children fixed effects, and percent of two-party district vote in favor of the most recent Democratic presidential candidate.

\* Significant at the 10 percent level.

\*\* Significant at the 5 percent level.

\*\*\* Significant at the 1 percent level.

graduates, percent white, percent female, percent urban, as well as state fixed effects.<sup>40</sup> The fraction of votes on which daughters have a significant liberal influence falls from 59 percent to 40 percent in the reproductive rights category, suggesting that constituency views and representative views (as proxied by child gender) are correlated. However, this capture by constituency is not complete. Two facts remain: First, the fact that in 9 of 16 categories we see a larger fraction of significant daughters coefficients than we would expect due to chance tells us that the propensity to vote liberally on a variety of issue types is increasing in number of daughters. Second, the fact that for reproductive rights, the fraction significant is significantly larger than any other category tells us that the daughters' influence is greatest in the reproductive rights arena. The evidence suggests that family, more specifically child gender, is a significant influence in legislator voting behavior.

### III. Conclusion

While the notion that a legislator's children influence his/her voting behavior appears to be obvious, there has been, to this point and to my knowledge, no evidence to quantitatively substantiate this intuition. This paper begins to fill this gap in the literature. I find that parenting an additional female child increases a representative's propensity to vote liberally, particularly on reproductive rights. Such a voting pattern does not seem to be explained away by constituency preferences, suggesting not only that parenting daughters affects preferences, but also that personal preferences affect legislative behavior.

Consequently, this paper speaks to two literatures. First, it uncovers an omitted factor in the literature explaining congressional decision making. Personal characteristics have been shown to be particularly salient in voting on moral issues. This paper demonstrates that family, at least child gender, needs to be included among these characteristics. Second, more generally, this work suggests that to the realm of environmental effects, such as peers and neighborhoods, we should add offspring effects. Not only should we consider the influence that parents have on children's behavior, but we should also acknowledge that influence may flow from child to parent as well.

### APPENDIX

APPENDIX TABLE 1: EVIDENCE ON LEGISLATOR CHILD GENDER MIX SELECTION, 108<sup>TH</sup> CONGRESS

	Full Congress		Democrats		Republicans	
	Number of daughters	Number of children	Number of daughters	Number of children	Number of daughters	Number of children
First child	1.36***	-0.09	1.39***	0.07	1.23***	-0.28
female	(0.08)	(0.15)	(0.11)	(0.18)	(0.11)	(0.23)
N	227	227	105	105	122	122

*Notes:* The sample includes the 227 of the 381 parent members of the 108<sup>th</sup> Congress, for whom gender of the first born could be established. Number of children regressions include controls for legislator race, gender, party, age, age squared, service length and its square, religion, and region. Number of daughters regressions include the preceding covariates, as well as fixed effects for total number of children. Standard errors in parentheses.

\* Significant at the 10 percent level.

\*\* Significant at the 5 percent level.

\*\*\* Significant at the 1 percent level.

<sup>40</sup> The basic pattern of results is robust to replacing state fixed effects with state opinions (from the NES) on abortion, crime, defense, gay rights, and social services.

APPENDIX TABLE 2—EVIDENCE ON CONSTITUENT SELECTION FOR REPRESENTATIVES' PROPORTION GIRLS  
(Dependent Variable: Proportion Daughters)

	105th	106th	107th	108th
<i>District characteristics</i>				
Democratic vote share (most recent presidential election)	0.15 (0.27)	0.22 (0.28)	0.25 (0.23)	0.43* (0.25)
Median income	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.01* (0.01)
Fraction white	-0.01 (0.19)	0.01 (0.19)	-0.04 (0.18)	0.07 (0.2)
Fraction female	-1.29 (1.58)	-1.24 (1.65)	0.48 (1.64)	-3.32* (1.74)
Fraction college graduates	-0.58 (0.41)	-0.38 (0.43)	-0.5 (0.43)	-0.88** (0.4)
Fraction urban	0.07 (0.13)	-0.03 (0.14)	-0.06 (0.14)	0.01 (0.16)
Constituent religion variables, state level (test of joint significance, P>F)	0.34	0.82	0.62	0.54
<i>Opinions</i>				
Fraction of state population who believe ...				
Abortion should always be legal	0.41 (0.44)	0.51 (0.45)	0.33 (0.45)	0.55 (0.46)
Defense spending should be increased	0.34 (0.47)	0.86* (0.47)	0.39 (0.47)	0.31 (0.48)
Federal crime spending should be increased	-0.53 (0.34)	-0.74** (0.34)	-0.58 (0.34)	-0.49 (0.34)
Government should spend more on services (health, education)	-0.23 (0.28)	-0.46 (0.29)	-0.33 (0.29)	-0.12 (0.29)
There should be laws to protect homosexuals from discrimination	0.13 (0.45)	0.37 (0.45)	0.17 (0.45)	-0.11 (0.46)
N	344	350	351	353

Notes: Median income, fraction white, fraction female, fraction college grads, and fraction urban come from Lublin (1997) and the American FactFinder Web site. Constituent religion comes from Kosmin and Mayer (2001). Opinion data come from the National Election Studies 1992–2000. Representatives from Connecticut, Delaware, Hawaii, Idaho, Kentucky, Maine, Mississippi, Montana, North Dakota, Nevada, Rhode Island, South Dakota, and Vermont are excluded due to lack of NES data. Alaska is excluded because of lack of state religion data. All specifications include region fixed effects. Standard errors in parentheses.

\* Significant at the 10 percent level.

\*\* Significant at the 5 percent level.

\*\*\* Significant at the 1 percent level.

APPENDIX TABLE 3—IMPACT OF FEMALE CHILDREN ON LEGISLATOR VOTING ON WOMEN'S ISSUES, WITH AND WITHOUT  
CONTROLS FOR NUMBER OF CHILDREN, DEPENDENT VARIABLE = AAUW SCORE

	105 <sup>th</sup>		106 <sup>th</sup>		107 <sup>th</sup>		108 <sup>th</sup>	
	(A)	(B)	(A)	(B)	(A)	(B)	(A)	(B)
Number of female children	2.38** (1.12)	-0.47 (0.79)	1.69 (1.14)	-0.54 (0.81)	2.42** (1.09)	0.27 (0.74)	2.25** (1.15)	-0.56 (0.77)
Number of children <sup>1</sup>								
1	-3.5 (3.74)		-5.47 (3.75)		-1.61 (3.38)		-7.45** (3.63)	
2	-4.41 (3.04)		-5.4* (3.15)		-3.25 (2.94)		-8.89*** (3.12)	
3	-7.4** (3.53)		-6.65* (3.65)		-6.31* (3.47)		-14.09*** (3.62)	
4	-10.87** (4.06)		-10.65** (4.34)		-8.22** (4.03)		-10.66** (4.32)	
5	-13.04** (5.09)		-11.57** (5.11)		-9.64** (4.84)		-16.51** (5.32)	
6	-17.87** (8.95)		-20.39** (10.26)		-21.21** (9.43)		-24.94** (9.86)	
7	-11.86 (10.38)		-10.53 (10.15)		-1.00 (10.53)		-2.56 (11.02)	
8	-43.7*** (12.23)		-29.26* (12.75)		-20.79* (11.97)		-25.53 (12.55)	
9	-15.93 (19.12)		Na		-24.67 (19.28)		-42.55 (20.18)	
10	-26.66 (18.65)		-13.98 (19.16)		-15.59 (17.78)		-14.67 (18.64)	
11	NA		NA		NA		NA	
12	NA		NA		NA		-26.44 (19.53)	
N <sup>2</sup>	434	434	434	434	434	434	433	433

Note: All specifications include legislator characteristics (race, party, age, age squared, service length, service length square, and religion fixed effects), district Democratic vote share in most presidential elections, and regional dummies. Standard errors in parentheses.

\* Significant at the 10 percent level.

\*\* Significant at the 5 percent level.

\*\*\* Significant at the 1 percent level.

<sup>1</sup> The omitted category is no children. "NA" indicates no members of Congress have that number of children.

<sup>2</sup> Sample size varies due to missing child gender and voting score information.

APPENDIX TABLE 4—DESCRIPTION OF NOW HOUSE VOTES

Description of bill	Percent voting with NOW
<i>Women's equality</i>	
<b>Equal Rights Amendment:</b> Allows additional time for three more states to ratify ERA, which would meet constitutional requirement. Never voted on. (Sponsorship = +) <sup>1</sup>	29
<b>Pay equity:</b> Two bills never voted on. The first amends the Fair Labor Standards Act of 1938 to prohibit discrimination (sex, race, national origin) in wages in comparable jobs within a workplace. The second provides additional remedies for women who are not paid equal wages for equal work. (Sponsorship = +)	24
<i>Reproductive rights</i>	
<b>Abortion ban:</b> Overrides Clinton's veto of "partial-birth" abortion ban. (N = +)	30
<b>Teen access to abortion:</b> Makes it a federal crime to transport or accompany a minor across state lines for an abortion without parental notification. (N = +)	34
<b>Contraceptives for federal employees:</b> Requires FEHBP plans to treat five contraceptives with parity with other prescription drugs. (Y = +)	51
<b>RU-486:</b> Withholds funds from the FDA to review and approve drugs that induce medical abortions. (N = +)	46
<b>Teen access to contraceptives:</b> Requires teens seeking prescription contraception at Title X clinics to have parental consent. (N = +)	46
<b>International family planning:</b> Denies funding for family planning and population assistance to foreign organizations that perform or promote abortions. (N = +)	45
<b>Contraceptive use:</b> Defines certain contraceptives as abortifacients, thus prohibiting their use under FEHBP plans. (N = +)	51
<i>Safety</i>	
<b>Violence against women:</b> Addresses problems of domestic violence, rape, and sexual assault through community-based programs. Never voted on. (Sponsorship = +)	33
<b>Hate crimes:</b> Permits federal prosecution of violent bias crimes based on sex, sexual orientation, and disability. Never voted on. (Sponsorship = +)	31
<i>Economic security</i>	
<b>Affirmative action in federal contracts:</b> Repeals affirmative action programs in awarding federal transportation contracts. (N = +)	18
<b>Working families flexibility:</b> Gives employers more discretion as to when to provide comp time instead of paid overtime to employees. (N = +)	49
<b>Bankruptcy:</b> Treats credit card debt and child support/alimony in a similar manner when a debtor files for bankruptcy. (N = +)	27
<i>Education</i>	
<b>Private and religious schools:</b> Provides federal monies for a voucher program. (N = +)	53
<b>Affirmative action in higher education:</b> Prohibits affirmative action for women and minorities in admission. (N = +)	57
<b>Education IRA:</b> Allows individuals to use IRAs for elementary and secondary school. (N = +)	45
<i>Lesbian rights</i>	
<b>Discrimination in federal employment:</b> Overturns Clinton's Executive Order banning discrimination based on sexual orientation. (N = +)	58
<b>Equal health care benefits:</b> Prohibits federal funds from being distributed to a locality that mandates that its contractors provide health care benefits to unmarked domestic partners of employees. (N = +)	49
<i>Health</i>	
<b>Patients' rights:</b> Provides patient protections under HMOs. Doesn't allow for individuals to sue health plans for personal injury or wrongful death or to see outside specialists. (N = +)	48

<sup>1</sup> Y/N/Sponsorship=+ indicates on what basis a legislator was awarded points by NOW with regard to the piece of legislation. "Y"/"N" indicates a vote in favor/against. In some cases in which legislation never came to the floor for a vote, NOW awarded points for bill sponsorship.



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