Daughters Do Not Affect Political Beliefs in a New Democracy

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Abstract
A consistent finding in industrialized democracies is that having a daughter shapes parents’ attitudes and behaviors in gender-egalitarian ways. We test whether this finding travels to a young middle-income democracy where women’s rights are more tenuous: South Africa. Using a dataset of over 7,500 respondents with information on family structure, we find no discernible effect on attitudes about women’s rights or on partisan identification. We speculate that our null findings relate to opportunity: daughter effects are more likely when parents perceive economic, social, and political opportunities for women. When women’s customary status and de facto opportunities are low, as in South Africa, having a daughter may have no effect on parents’ political behavior. Our results demonstrate the virtues of diversifying case selection in political behavior beyond economically wealthy democracies.

Keywords: Daughter effects; comparative political behavior; family; gender; political development

Introduction
Families shape political beliefs (Elder and Greene 2012). The effect of one family feature, the sex of children, has been documented among political elites including US representatives (Washington 2008), US judges (Glynn and Sen 2015), delegates to the US Constitutional Convention (Pope and Schmidt 2021), and in the general public in Australia, Canada, the U.K., and the United States (Greenlee et al. 2020; Oswald and Powdthavee 2010; Perales et al. 2018; Prokos et al. 2010; Shafer and Malhotra 2011; Sharrow et al. 2018; Warner 1991; Warner and Steel 1999). Table 1 summarizes past empirical work on this topic. Eleven of the fourteen existing studies in Western
### Table 1
**Prior Empirical Work on Political and Social ‘Daughter Effects’**

<table>
<thead>
<tr>
<th>Study</th>
<th>Primary Population</th>
<th>Dependent Variable</th>
<th>General Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudes:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perales et al. (2018)</td>
<td>Australian Parents</td>
<td>Conservative gender roles support</td>
<td>+</td>
</tr>
<tr>
<td>Prokos et al. (2010)</td>
<td>US Parents</td>
<td>Affirmative action policies</td>
<td>+(W), −(M)</td>
</tr>
<tr>
<td>Shafer and Malhotra (2011)</td>
<td>US Parents</td>
<td>Progressive gender roles support</td>
<td>∅(W), +(M)</td>
</tr>
<tr>
<td>Sharrow et al. (2018)</td>
<td>US Parents</td>
<td>Gender equity policies support</td>
<td>+</td>
</tr>
<tr>
<td>Sun and Lai (2017)</td>
<td>Chinese Parents</td>
<td>Progressive gender roles support</td>
<td>∅</td>
</tr>
<tr>
<td>Warner and Steel (1999)</td>
<td>US Parents</td>
<td>Gender equity policies support</td>
<td>+</td>
</tr>
<tr>
<td><strong>Partisan ideology:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conley and Rauscher (2013)</td>
<td>US Citizens</td>
<td>Left-wing ideology/partisanship</td>
<td>−</td>
</tr>
<tr>
<td>Lee and Conley (2016)</td>
<td>US and European Parents (36 countries)</td>
<td>Left-wing ideology/partisanship</td>
<td>∅</td>
</tr>
<tr>
<td><strong>General Public Behaviors:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenlee et al. (2020)</td>
<td>US Fathers</td>
<td>Voting for Hillary Clinton</td>
<td>+</td>
</tr>
<tr>
<td>Oswald and Powdthavee (2010)</td>
<td>U.K. Parents</td>
<td>Left-wing voting (electoral)</td>
<td>+</td>
</tr>
<tr>
<td><strong>Elite Behaviors:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa et al. (2019)</td>
<td>US Representatives</td>
<td>Pro-women’s issues voting (roll-call)</td>
<td>∅</td>
</tr>
<tr>
<td>Glynn and Sen (2015)</td>
<td>US Court of Appeals Judges</td>
<td>Feminist voting (judicial decisions)</td>
<td>+</td>
</tr>
<tr>
<td>Washington (2008)</td>
<td>US Representatives</td>
<td>Pro-women’s issues voting (roll-call)</td>
<td>+</td>
</tr>
<tr>
<td>Pope and Schmidt (2021)</td>
<td>US Constitutional Delegates</td>
<td>Pro-women’s political inclusion (in favor of decentralized government)</td>
<td>+</td>
</tr>
</tbody>
</table>

*Note: + a positive statistically significant effect. − a negative statistically significant effect. ∅ a “null effect” as interpreted by the original study’s authors. Effect heterogeneity is indicated by subgroup in parentheses, W for women, M for men.*
cases report that having a daughter moves mothers’ and/or fathers’ political attitudes and behaviors in a more feminist direction, toward the political left.1

We ask whether daughters change parents’ beliefs in a young middle-income democracy where women’s rights remain tenuous: South Africa. On issues of gender rights, South Africa is de jure progressive, but de facto not. This provides an opportunity to study how national context may (fail to) influence public opinions about gender. Our unique data, which includes 7,500 respondents and, crucially, data on family structure for each respondent, allow us to test for daughter effects on both gender attitudes and partisan ideological identification. Contrary to most prior research, across multiple specifications, we find null effects.

These null effects are empirically important and theoretically informative. Contextual differences between South Africa and more established democracies provide an opportunity to learn about when familial effects may, or may not, apply. We speculate that one important feature is opportunity: Having a daughter may be more likely to affect parents when they perceive that economic, social, and political opportunities exist for women. Although women’s legal, economic, and family rights are codified in South African law, women’s de facto status tends to fall short of these ideals. When women’s customary status and de facto opportunities are low, having a daughter may not cause parents to reevaluate their views. While we resist drawing definitive conclusions about cross-national differences, our null findings demonstrate the virtues of diversifying case selection in the study of political behavior beyond economically wealthy and well-established democracies.

Daughter effects in a changing society

Like many emerging democracies, women’s rights in South Africa are well protected in law, but less so in practice. Following the 1994 election, the African National Congress (ANC)-led government made constitutional and voluntary governance changes to advance women’s equality. Legislative advances included expanded access to abortion and increased protection against domestic violence. In Htun and Weldon’s (2012) index of government responsiveness to violence against women (including legal protections for victims and funding for violence prevention programs), South Africa moved from fulfilling one out of ten possible provisions in 1995 to eight of ten in 2005. A World Bank measure of legal provisions about women’s de jure economic rights shows a move from none before 1993 to thirteen out of a possible fourteen by 2000 (World Bank 2017). The ANC also adopted a “zebra-list” quota in which men and women candidates are alternated on party lists, making the country a world leader in women’s parliamentary representation (Hassim 2003).2


2Importantly, critics of the ANC might argue that party is also de jure progressive, but de facto not. Women party activists have become increasingly sidelined since the transition to democracy, and most notoriously under the presidency of Jacob Zuma, the party’s leadership has often expressed explicitly anti-feminist views (Walsh 2010).
Despite legal gains, many South African women experience low *de facto* status. Women are more likely than men to be employed in the informal sector and contribute more than twice the amount of unpaid household work.\(^3\) These dynamics are borne out in social expectations about gender roles. In the 2010 - 2014 World Values Survey, more respondents agreed than disagreed that a woman earning more money than her husband would “cause problems in the home” and over half of respondents agreed that “when a mother works for pay, the children suffer” (Inglehart et al. 2014). Violence against women remains acute, with an estimated 50.3 percent of female homicides due to intimate partner violence (IPV) (Abrahams et al. 2009).

In the 2014 World Values Survey, 60 percent of respondents reported that it is at least sometimes justifiable for a man to beat his wife (Inglehart et al. 2014). In short, South African women’s *de facto* status falls far short of their *de jure* rights.

This discrepancy between *de jure* and *de facto* rights makes South Africa an important case to test for the existence of daughter effects. If women’s *de jure* rights are important in shaping parents’ beliefs, daughter effects should appear in our case. Research suggests parents change their assessment of daughters based on their future potential. For instance, in India, the election of female village leaders appears to change parents’ career and educational aspirations for their daughters (Beaman et al. 2012). And, in China, higher tea prices, a crop traditionally picked by women, appear to change parents’ assessments of women’s economic value (Qian 2008). In cases of increased *de jure* rights for women, having a daughter may cause parents to become more progressive on gender issues if they think their daughters will be able to take advantage of these increasing opportunities in the future.\(^4\)

That is, if the presence of women’s *de jure* rights shape parents’ future expectations for their daughters, we should observe daughter effects in South Africa.

However, changes to women’s *de jure* rights may not affect how parents experience having a daughter if these rights are slow to translate to *de facto* changes in women’s day-to-day experiences of discrimination. To begin, it is possible that parents are not aware of changes in women’s *de jure* rights. While some advancements in women’s rights have been well-publicized in South Africa, such as the ANC’s commitment to gender parity in parliament, others may be less visible, particularly if they are loosely enforced (such as anti-discrimination laws). We speculate that if women continue to face *de facto* discrimination in practice, parents may be unlikely to update conservative gender attitudes. This may be the case, for instance, if parents do not foresee their daughters as having increased social and economic opportunities, or they may see these new opportunities as dangerous if women working outside the home are subject to harassment or violence.

While the survey data that we employ below do not ask respondents about their perceptions of women’s *de facto* discrimination, we do have some evidence that such perceptions are widespread. In the 2013 Afrobarometer survey, 71% of respondents

\(^3\)Based on ILO time-use survey data, South African women contributed 70% of the household’s unpaid care work, compared to men’s 30%. By way of comparison, in the most equal country in the ILO sample (Sweden), women contribute 55% of the household’s unpaid care work, and in the most unequal country (Mali), women contribute 92% (Charmes 2018).

\(^4\)In their historical analysis of the US case, Pope and Schmidt (2021) make a somewhat similar argument: fathers may react to the anticipated future rights of their daughters.
reported that women are treated unequally by traditional authorities at least some of the time. A similar percentage of respondents reported that women are treated unequally by employers (71%) and by the police and courts (68%). In short, despite progressive gains in *de jure* rights, discrimination against women is still widely recognized. As South Africa is a transitioning case on the issue of women’s rights, the absence of daughter effects in this case would suggest that they may be even less likely in societies with higher levels of gender inequality.

**Data and research design**

To test whether daughter effects are present in South Africa, we use data from the South African Social Attitudes Survey (SASAS), collected by the Human Sciences Research Council (HSRC), South Africa’s statutory research agency for the social sciences and humanities (HSRC 2011). The data are yearly cross-sections of a nationally representative sample of South Africans, surveying views on a range of political, social, and economic issues. We pool data collected from 2004 through 2012, for a total of 43,948 respondents. SASAS collects a household schedule, which includes a small amount of data on all household members and their relationship to the respondent. From this, we can establish the household-dwelling family structure of each respondent. The data collection instrument is included in SI § A. We code a respondent as having a daughter if the household schedule reflects that the respondent has a biological daughter, female stepchild, or female adopted child living in the household. The collection of the household schedule sets SASAS apart among political attitude surveys in Africa; for example, Afrobarometer, the most widely used survey on the continent, collects no systematic information on family structure.

We focus on the effect of the sex of the first child, the strongest possible design in this setting (see Lee and Conley 2016; Oswald and Powdthavee 2010). This avoids bias introduced by “differential stopping rules” where decisions about future children are affected by the sex of the first child. As the sex of the first child is as-if random at conception, and sex-selective abortion in South Africa is rare (Garenne 2002), those whose first child is male should be good counterfactuals for those whose first child is female. In our primary specification, we restrict our sample to respondents aged 35 and younger. This helps to ensure that we focus only on those who do not have adult children outside of the home, which would not be captured in the survey. In SI § C, to evaluate the possibility of any residual potential confounding, we compare “treated” (those with first-born female child) and “untreated” (those with a first-born male child) respondents across pre-treatment covariates – race, sex, and age of the respondent – all of which are correlated with gender attitudes and partisanship in South Africa. Imbalance is relatively small in

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5Household is defined in the survey as “all persons who eat from the same cooking pot and who were resident 15 out of the past 30 days.”

6These various relationships are not separated in the household schedule, so we cannot distinguish biological from non-biological children.

7In SI I, we show that we get similar results when we restrict the sample to only include those under the age of 45.
magnitude, but to be conservative we estimate all effects both with and without controlling for these same covariates.

**Results**

We examine the effect of the sex of one’s first child on five outcomes: attitudes towards preferential hiring of women, views on abortion in two cases (birth defects in the fetus and low-income mothers), a scale we create from a series of questions on gender equality (only available in 2008), and partisan support of the dominant political party, the center-left ANC. SI § B lists each question’s wording and complete response options. For ease of comparison across outcomes, we dichotomize each variable to indicate that the respondent is supportive of progressive gender policies. For the question on attitudes towards preferential hiring and the two questions on abortion rights, positive values indicate that the respondent supports preferential hiring or is supportive of abortion in each circumstance. We create the “gender scale” variable by summing the number of gender equality statements that the respondent agrees with (e.g. “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work.” See SI § B). We then dichotomize the scale such that “1” indicates that the respondent agreed with four or more gender equality statements, and “0” indicates that the respondent agreed with less than four. ANC support is constructed based on whether the respondent indicated that s/he voted for the ANC in the last national election. Figure 1 visualizes the five key outcomes split by the sex of the respondent’s first child. Two-tailed t-tests indicate that no difference achieves traditional statistical significance levels (p ≤ 0.05 level). Moreover, the small and insignificant differences that we observe are not in a consistent direction: having a daughter is associated with slightly less support for abortion, but slightly higher scores on our gender attitude index.

Next, we parametrically test for treatment effects using the ordinary least squares regression:

\[ Y_i = \alpha_t + D_i \beta + X_i^T \gamma + \epsilon_i \]

where \( \alpha_t \) represents a survey-year fixed-effect for a survey in time \( t \), \( D_i \) is a dummy variable indicating that the first child was a girl (\( D_i = 1 \)) or a boy (\( D_i = 0 \)), and \( \beta \) is the estimate of the causal effect of first-child sex on \( Y_i \), a variety of outcomes. \( X_i^T \gamma \) represents a set of optional linear controls for a variety of pre-treatment covariates, and \( \epsilon_i \) is an individual-level error.

Table 2 shows that the effect of having a daughter is largely indistinguishable from zero. For only one of the five outcome variable, support for abortion in the case of birth defect, do we see a coefficient that is significantly below \( p \leq 0.10 \).

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\(^8\)ANC support is likely the hardest test for daughter effects given the prominent role of race and ethnicity in South African voting patterns (Ferree 2006) as well as the electoral dominance of the ruling party. Nevertheless, while the ANC is dominant in the study period, it is not the only party in town. It captured roughly 60% of votes in the period of study, which leaves a good portion of variation to explore.

\(^9\)Data and replication code can be found on the JEPS dataverse (Clayton et al. 2022).

\(^10\)We find similar null results when pooling the sample across survey years (i.e. when excluding survey fixed effects, see SI D).
And, confirming the descriptive patterns in Figure 1, the sign of the coefficient suggests that having a first-born daughter is associated with more conservative gender attitudes. The magnitude of this coefficient is substantively small: respondents with first-born daughters are three percentage points less supportive of abortion (from a sample average of 33%).

We run several robustness tests to further interrogate the durability of our null findings. In SI § E, we offer several alternative specifications, including appropriate GLM analyses for each outcome variable (ordered probit and logit). In SI § G, we estimate the results separately by the sex of the respondent, given that prior research has found heterogeneous effects for fathers and mothers, and in SI § H, we run separate regressions for urban and rural South Africans.\textsuperscript{11} For all groups (mothers and fathers, urban and rural), we find results statistically indistinguishable from zero or, if anything, effects in a slightly conservative direction.\textsuperscript{12} SI § F contains several other

\textsuperscript{11}We also employ a two one-sided test approach which allows us to reject the null hypothesis of an effect size of five percentage points or greater at conventional statistical significance levels for each outcome variable.

\textsuperscript{12}The results from the urban v. rural specification suggest to us that women’s low de facto status is present in both settings. For instance, the 2011 Afro-Barometer (current at the time of our data), indicates that 80% of respondents in urban areas indicated that women are treated unfairly by employers at least some of the time (compared to 70% of respondents in rural areas).
Table 2
The Effect of Having a Daughter on Attitudes and Partisanship

<table>
<thead>
<tr>
<th></th>
<th>Preferential hiring</th>
<th>Abortion (1)</th>
<th>Abortion (2)</th>
<th>Gender scale</th>
<th>ANC support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Daughter</td>
<td>-0.002</td>
<td>-0.008</td>
<td>-0.029*</td>
<td>-0.027</td>
<td>-0.020</td>
</tr>
<tr>
<td>Covariates</td>
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<tr>
<td>R²</td>
<td>0.003</td>
<td>0.073</td>
<td>0.072</td>
<td>0.085</td>
<td>0.027</td>
</tr>
<tr>
<td>Adj. R²</td>
<td>0.001</td>
<td>0.069</td>
<td>0.070</td>
<td>0.082</td>
<td>0.025</td>
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<tr>
<td>Num. obs.</td>
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<td>4042</td>
<td>4042</td>
<td>4042</td>
<td>521</td>
</tr>
</tbody>
</table>

*p < 0.1; **p < 0.05; ***p < 0.01

Note: OLS linear probability models. Sample includes parents who are 35 years and younger. Covariates used: race dummies, linear age, sex dummy, urban dummy. Robust standard errors in parentheses. See SI for replication using appropriate generalized linear models (GLM).
specifications, including subsetting to parents with only one child or using a specification that indicates whether the respondent has any daughters (rather than sex of the first child). Results never substantively change.

Discussion
Personal experiences and circumstances shape political socialization, attitudes, and behavior. In industrialized democracies, most prior research suggests having a daughter substantively alters parents’ attitudes and behaviors. Yet this finding does not travel to South Africa, a young middle-income democracy where women’s rights are tenuous. Having a daughter as opposed to a son does not change parents’ gender attitudes or partisanship.

Others have argued that parents may see the formalization of women’s rights as a signal that their daughter will have opportunities, providing incentives to treat their sons and daughters equally. We speculate that in South Africa, this process is slow to unfold because women’s de jure status remains stubbornly low. South African women fare significantly worse than men in terms of access to education, formal labor force participation, and freedom from violence. Parents may not see the increase in women’s de facto rights as meaningful in terms of real opportunities and thus have little reason to update their beliefs. We thus speculate a potential pre-condition for daughter effects: men and women may need to have relative de jure equality before having a daughter changes parents’ attitudes. In the only other existing study we are aware of in a non-Western context, Sun and Lai (2017) report null effects in China, where women’s customary status is also low. Past work suggests that gender attitudes may only change when people are exposed to women in counter-stereotypical roles for many years or even decades (Clayton 2018). Advancements in women’s legal rights may be slow to translate to public opinion toward gender equality, and therefore, it may take some time for family experiences to act as a conduit for these new beliefs.

While we speculate that our results may reveal a potential contextual scope condition for daughter effects, we also acknowledge that our results add to recent evidence that casts doubt on the existence of daughter effects even in Western democracies. While the bulk of research in this area points to significant and positive effects, two recent studies report null effects among the general public in a large sample of European countries and the United States (Lee and Conley 2016) and among US Representatives (Costa et al. 2019). We see evidence from the South African case as adding an important data point to an increasingly contested empirical finding.

Data Availability Statement. The data, code, and any additional materials required to replicate all analyses in this article are available at the Journal of Experimental Political Science Dataverse within the Harvard Dataverse Network, at doi: https://doi.org/10.7910/DVN/1RAQVF

Conflicts of Interest. The authors declare no conflicts of interest.

Ethics Statement. No IRB approval was sought for this project. The authors did not engage in any original data collection. The data used were the Social Attitudes Survey (SASAS), collected by the Human Sciences Research Council (HSRC), South Africa’s statutory research agency for the social sciences and humanities. The data are free and available to the public, see: http://www.hsrc.ac.za/en/departments/sasas
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