

Supporting Information:

Daughters Do Not Affect Political Beliefs in a New Democracy

CONTENTS

|          |   |           |
|----------|---|-----------|
| <b>A</b> | <b>Data Collection Instrument</b>                                 | <b>3</b>  |
| <b>B</b> | <b>Outcome Question Wording</b>                                   | <b>5</b>  |
| <b>C</b> | <b>Covariate Balance</b>  | <b>7</b>  |
| <b>D</b> | <b>Main Results: Ordinary Least Squares</b>                       | <b>9</b>  |
|          | D.A Removing Survey Fixed Effects . . . . .                       | 11        |
| <b>E</b> | <b>Alternative Estimation Approach: Generalized Linear Models</b> | <b>12</b> |
| <b>F</b> | <b>Alternate Research Designs</b>                                 | <b>14</b> |
|          | F.A Subsetting to Single-Child Homes . . . . .                    | 14        |
|          | F.B Any Daughter Specification . . . . .                          | 16        |
| <b>G</b> | <b>Separating Respondents by Gender</b>                           | <b>18</b> |
| <b>H</b> | <b>Urban v. Rural Respondents</b>                                 | <b>21</b> |
| <b>I</b> | <b>Changing the Age Cut-point</b>                                 | <b>24</b> |
| <b>J</b> | <b>Reporting Standards</b>  | <b>26</b> |

## A. DATA COLLECTION INSTRUMENT

Figure A.1: Household Schedule (2011 Survey).

Note: The data collection instrument used by the HSRC to gather household structure information for the specific respondent. Note that the 2004 and 2005 surveys do not include the words “step-child/adopted child” at all in their response block.

| <b>INTERVIEWER: PLEASE CIRCLE APPROPRIATE CODES</b>   |   |               |   |  |  |   |
|---|---|---------------|---|--|--|---|
| <b>Household schedule</b>   | Write in from oldest (top) to youngest (bottom) | Person number | How old is [name]? (in completed years; less than 1 year =00) | Is [name] a male or a female?<br>M=1 F=2 | What population group does [name] belong to? | What is [name]'s relationship to the respondent |
| <p><i>Please list all persons in the household who eat from the same cooking pot and who were resident 15 out of the past 30 days</i></p> <p><i>Note: Circle the number next to the name of the household head.</i></p> |   | 01            |   |  |  |   |
|   |   | 02            |   |  |  |   |
|   |   | 03            |   |  |  |   |
|   |   | 04            |   |  |  |   |
|   |   | 05            |   |  |  |   |
|   |   | 06            |   |  |  |   |
|   |   | 07            |   |  |  |   |
|   |   | 08            |   |  |  |   |
|   |   | 09            |   |  |  |   |
|   |   | 10            |   |  |  |   |
|   |   | 11            |   |  |  |   |
|   |   | 12            |   |  |  |   |
|   |   | 13            |   |  |  |   |
|   |   | 14            |   |  |  |   |
|   |   | 15            |   |  |  |   |
|   |   | 16            |   |  |  |   |
|   |   | 17            |   |  |  |   |
|   |   | 18            |   |  |  |   |
|   |   | 19            |   |  |  |   |
|   |   | 20            |   |  |  |   |
|   |   | 21            |   |  |  |   |
|   |   | 22            |   |  |  |   |
|   |   | 23            |   |  |  |   |
|   |   | 24            |   |  |  |   |
|   |   | 25            |   |  |  |   |

| <b>Population Group</b>      |
|------------------------------|
| 1 = Black African            |
| 2 = Coloured                 |
| 3 = Indian or Asian          |
| 4 = White                    |
| 5 = Other ( <i>specify</i> ) |

| <b>Relationship to respondent codes</b>     |
|---|
| 1 = Respondent                              |
| 2 = Wife or husband or partner              |
| 3 = Son/daughter/stepchild/adopted child    |
| 4 = Father/mother/ step father/step mother  |
| 5 = Brother/sister/step brother/step sister |
| 6 = Grandchild/great grandchild             |
| 7 = Grandparent/great grandparent           |
| 8 = Mother- or father-in-law                |
| 9 = Son- or daughter-in-law                 |
| 10 = Brother- or sister-in-law              |
| 11 = Other relation (e.g. aunt/uncle)       |
| 12 = Non-relation                           |

## B. OUTCOME QUESTION WORDING

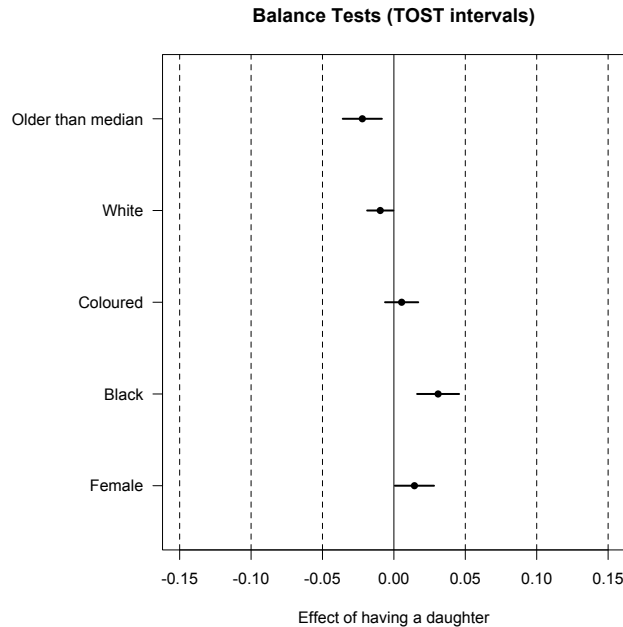
We use five outcome variables to measure gender progressive attitudes and partisan support. The question wording, response options, and scale transformations are as follows:

**Question wording of progressive gender attitude and partisan support.**

| Question  | Responses  | Transformation   |
|---|--|--|
| To what extent do you agree or disagree that there should be preferential hiring and promotion of women in employment?  | Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree | Strongly agree and agree coded as 1, other responses coded as 0  |
| Do you personally think it is wrong or not wrong for a woman to have an abortion if there is a strong chance of serious defect in the baby  | Not at all wrong, wrong only sometimes, almost always wrong, always wrong      | Not at all wrong or wrong only sometimes coded as 1, other response coded as 0   |
| Do you personally think it is wrong or not wrong for a woman to have an abortion if the family has a low income and cannot afford any more children   | Not at all wrong, wrong only sometimes, almost always wrong, always wrong      | Not at all wrong or wrong only sometimes coded as 1, other response coded as 0   |
| For which party did you vote in the last national election?   | List of all political parties  | ANC coded as 1, all other parties coded as 0   |
| <p>Please tell me to what extent do you agree or disagree with the following statements?</p> <ol style="list-style-type: none"> <li>1. A working mother can establish just as warm and secure a relationship with her children as a mother who does not work.</li> <li>2. A child younger than 5 years is likely to suffer if his or her mother works.</li> <li>3. All in all, family life suffers when the woman has a full-time job.</li> <li>4. A job is alright, but what most women really want is a home and children.</li> <li>5. Being a housewife is just as fulfilling as working for pay.</li> <li>6. A man's job is to earn money, a woman's job is to look after the home and family.</li> </ol> | Strongly agree, agree, neither agree nor disagree, disagree, strongly disagree | <p>For first question: Strongly agree and agree coded as 1, other responses coded as 0;</p> <p>For remaining questions: Strongly disagree and disagree coded as 1, other responses coded as 0. The total number of agreements with progressive statements are summed to create a 0 - 6 scale. The scale is dichotomized such that agreeing with zero to three progressive statements is coded as 0, and agreeing with four or more progressive statements is coded as 1.</p> |

Figure C.2: Balance on Pre-Treatment Covariates.

Note: The difference between first-child-female and first-child-male respondents on several demographics. The difference in the proportion Black is statistically distinguishable from zero. The difference in age is statistically different from zero but also statistically equivalent given  $\lambda > .5$  (Lakens, 2017). For all other variables, we can reject the null that the difference is greater than five percentage points, indicated by the vertical dotted line closest to zero.



### C. COVARIATE BALANCE

The most common method employed when conducting covariate balance tests is a standard null hypothesis significance test. This approach can obscure imbalance in the data, and give rise to overconfidence in the validity of the design (Blackwelder, 1982). To avoid this problem, we follow the recommendations of Hartman and Hidalgo (2018) and conduct instead an equivalence test and show the resulting confidence interval.

The results are shown in Figure C.2, for  $\pm 5$ ,  $\pm 10$  and  $\pm 15$  percentage point differences shown as vertical dotted lines.<sup>1</sup> Each pre-treatment covariate is listed on the y-axis, and the magnitude of the estimated difference between the treated and untreated groups is shown on the x-axis. 95% confidence intervals are reported. Interpreting the statistical significance of the results is as simple as visually checking whether the 95% confidence interval overlaps the vertical dotted lines. Figure C.2 suggests that while the treatment and control groups are well balanced along most variables, being a Black African appears to be slightly correlated

<sup>1</sup>This approach requires choosing a value that we consider sufficiently small so as to be substantively similar to zero – for these tests, we choose 5, 10, and 15 percentage points as reasonable thresholds.

with the treatment assignment. Likewise, while there is no statistically significant imbalance, being older than the median age in the sample appears to be somewhat negatively correlated with treatment.



## D. MAIN RESULTS: ORDINARY LEAST SQUARES

For completeness, Table D.1 shows the full set of coefficients estimated in our ordinary least squares (OLS) models. The top row corresponds to the results shown in the main paper.

Table D.1: The effect of having a daughter on dichotomous outcomes, linear probability models

|                     | Model 1             | Model 2             | Model 3              | Model 4              | Model 5              | Model 6              | Model 7             | Model 8             | Model 9             | Model 10             |
|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|----------------------|
| (Intercept)         | 0.674***<br>(0.021) | 0.349***<br>(0.058) | 0.388***<br>(0.021)  | 0.262***<br>(0.059)  | 0.196***<br>(0.016)  | 0.081<br>(0.046)     | 1.717***<br>(0.061) | 1.563***<br>(0.336) | 0.566***<br>(0.023) | -0.554***<br>(0.056) |
| first_daughter      | -0.002<br>(0.014)   | -0.008<br>(0.014)   | -0.029*<br>(0.014)   | -0.027<br>(0.014)    | -0.020<br>(0.011)    | -0.021<br>(0.011)    | 0.072<br>(0.085)    | 0.046<br>(0.085)    | 0.011<br>(0.016)    | -0.011<br>(0.014)    |
| surveysas04_2       | -0.003<br>(0.029)   | 0.007<br>(0.028)    | 0.047<br>(0.029)     | 0.046<br>(0.028)     | -0.000<br>(0.022)    | 0.001<br>(0.022)     |                     |                     | 0.016<br>(0.031)    | 0.035<br>(0.027)     |
| surveysas05_2       | 0.025<br>(0.028)    | 0.029<br>(0.027)    | -0.040<br>(0.028)    | -0.041<br>(0.028)    | -0.038<br>(0.022)    | -0.034<br>(0.022)    |                     |                     | -0.007<br>(0.031)   | 0.006<br>(0.026)     |
| surveysas07         | 0.024<br>(0.028)    | 0.030<br>(0.027)    | 0.016<br>(0.028)     | 0.019<br>(0.028)     | -0.023<br>(0.021)    | -0.015<br>(0.022)    |                     |                     | -0.076*<br>(0.030)  | -0.052*<br>(0.026)   |
| surveysas08         | 0.076**<br>(0.028)  | 0.075**<br>(0.027)  | 0.047<br>(0.028)     | 0.047<br>(0.028)     | -0.014<br>(0.022)    | -0.012<br>(0.022)    |                     |                     | -0.090**<br>(0.031) | -0.077**<br>(0.026)  |
| surveysas09         | -0.004<br>(0.028)   | -0.010<br>(0.028)   | 0.008<br>(0.028)     | 0.012<br>(0.028)     | -0.050*<br>(0.022)   | -0.046*<br>(0.022)   |                     |                     | -0.056<br>(0.031)   | -0.065*<br>(0.027)   |
| surveysas10         | 0.021<br>(0.029)    | 0.032<br>(0.028)    | -0.373***<br>(0.029) | -0.377***<br>(0.029) | -0.187***<br>(0.022) | -0.184***<br>(0.022) |                     |                     | -0.088**<br>(0.032) | -0.058*<br>(0.027)   |
| surveysas11         | 0.033<br>(0.030)    | 0.032<br>(0.029)    | 0.023<br>(0.030)     | 0.032<br>(0.030)     | 0.019<br>(0.023)     | 0.025<br>(0.023)     |                     |                     | -0.023<br>(0.033)   | -0.041<br>(0.028)    |
| black               |                     | 0.360***<br>(0.028) |                      | -0.064*<br>(0.028)   |                      | 0.048*<br>(0.022)    |                     | 0.086<br>(0.184)    |                     | 0.679***<br>(0.027)  |
| coloured            |                     | 0.162***<br>(0.031) |                      | -0.021<br>(0.032)    |                      | 0.040<br>(0.025)     |                     | -0.357<br>(0.199)   |                     | 0.299***<br>(0.030)  |
| indian              |                     | 0.181***<br>(0.034) |                      | 0.007<br>(0.035)     |                      | -0.000<br>(0.027)    |                     | -0.146<br>(0.219)   |                     | 0.129***<br>(0.033)  |
| age                 |                     | -0.000<br>(0.001)   |                      | 0.004**<br>(0.001)   |                      | 0.002<br>(0.001)     |                     | 0.001<br>(0.009)    |                     | 0.022***<br>(0.001)  |
| sex                 |                     | 0.067***<br>(0.017) |                      | 0.020<br>(0.017)     |                      | -0.008<br>(0.013)    |                     | 0.141<br>(0.107)    |                     | 0.021<br>(0.016)     |
| urban               |                     | 0.001<br>(0.016)    |                      | 0.057***<br>(0.016)  |                      | 0.040**<br>(0.012)   |                     | 0.059<br>(0.096)    |                     | -0.044**<br>(0.015)  |
| R <sup>2</sup>      | 0.003               | 0.073               | 0.072                | 0.085                | 0.027                | 0.031                | 0.001               | 0.033               | 0.006               | 0.269                |
| Adj. R <sup>2</sup> | 0.001               | 0.069               | 0.070                | 0.082                | 0.025                | 0.028                | -0.001              | 0.020               | 0.004               | 0.267                |
| Num. obs.           | 4042                | 4042                | 4042                 | 4042                 | 4042                 | 4042                 | 521                 | 520                 | 4018                | 4018                 |

\*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$

D.A. REMOVING SURVEY FIXED EFFECTS

Table D.2: OLS specification, no covariates or survey fixed effects included

|                     | Model 1             | Model 2             | Model 3             | Model 4             | Model 5             |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| (Intercept)         | 0.695***<br>(0.010) | 0.356***<br>(0.011) | 0.161***<br>(0.008) | 0.525***<br>(0.011) | 1.717***<br>(0.061) |
| first_daughter      | -0.002<br>(0.014)   | -0.028<br>(0.015)   | -0.020<br>(0.011)   | 0.011<br>(0.016)    | 0.072<br>(0.085)    |
| R <sup>2</sup>      | 0.000               | 0.001               | 0.001               | 0.000               | 0.001               |
| Adj. R <sup>2</sup> | -0.000              | 0.001               | 0.001               | -0.000              | -0.001              |
| Num. obs.           | 4042                | 4042                | 4042                | 4018                | 521                 |

\*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$

## E. ALTERNATIVE ESTIMATION APPROACH: GENERALIZED LINEAR MODELS

In the main text, we estimated the effect of the first child being a daughter on dichotomized outcomes using OLS. Table E.3 shows the results of replicating these analyses using instead ordered probit generalized linear model (GLM) for ordinal dependent variables and a logit regression for the dichotomous outcome of ANC support. Again, we find either null results, or in the case of support for abortion, we find having a first daughter is associated with more conservative attitudes.

Table E.3: GLM model specifications

|                | Model 1<br>Pref. hiring 1<br>Ord. probit 1 | Model 2<br>Abortion 1<br>Ord. probit | Model 3<br>Abortion 2<br>Ord. probit | Model 4<br>ANC support<br>Logit | Model 5<br>Gender scale<br>Ord. probit |
|----------------|--|--------------------------------------|--------------------------------------|---------------------------------|--|
| (Intercept)    |  |                                      |                                      | -6.381***<br>(0.400)            |  |
| first_daughter | 0.081<br>(0.064)                           | -0.132*<br>(0.065)                   | -0.152*<br>(0.076)                   | -0.058<br>(0.074)               | 0.101<br>(0.155)                       |
| black          | 1.572***<br>(0.137)                        | -0.256*<br>(0.127)                   | 0.386*<br>(0.157)                    | 4.221***<br>(0.283)             | 0.156<br>(0.325)                       |
| coloured       | 0.602***<br>(0.149)                        | -0.030<br>(0.141)                    | 0.333<br>(0.175)                     | 2.493***<br>(0.290)             | -0.634<br>(0.353)                      |
| indian         | 0.618***<br>(0.166)                        | 0.129<br>(0.158)                     | 0.029<br>(0.197)                     | 1.494***<br>(0.313)             | -0.210<br>(0.394)                      |
| age            | -0.004<br>(0.007)                          | 0.021**<br>(0.007)                   | 0.024**<br>(0.008)                   | 0.116***<br>(0.008)             | 0.002<br>(0.016)                       |
| sex            | 0.386***<br>(0.078)                        | 0.089<br>(0.079)                     | -0.069<br>(0.091)                    | 0.130<br>(0.092)                | 0.289<br>(0.198)                       |
| urban          | 0.063<br>(0.071)                           | 0.309***<br>(0.073)                  | 0.267**<br>(0.085)                   | -0.241**<br>(0.080)             | 0.114<br>(0.175)                       |
| 0—1            |  |                                      |                                      |                                 | -2.205***<br>(0.619)                   |
| 1—2            | -1.151***<br>(0.271)                       | 0.777**<br>(0.268)                   | 1.847***<br>(0.319)                  |                                 | -0.922<br>(0.606)                      |
| 2—3            | 0.149<br>(0.268)                           | 1.088***<br>(0.268)                  | 2.388***<br>(0.320)                  |                                 | -0.142<br>(0.605)                      |
| 3—4            | 2.181***<br>(0.271)                        | 1.693***<br>(0.269)                  | 3.044***<br>(0.323)                  |                                 | 0.684<br>(0.605)                       |
| 4—5            |  |                                      |                                      |                                 | 1.646**<br>(0.609)                     |
| 5—6            |  |                                      |                                      |                                 | 2.857***<br>(0.622)                    |
| Survey F.E.    | ✓  | ✓                                    | ✓                                    | ✓                               |  |
| AIC            | 7898.175                                   | 7969.691                             | 6037.092                             | 4360.585                        | 1972.361                               |
| BIC            | 8002.807                                   | 8068.260                             | 6135.665                             | 4455.063                        | 2027.661                               |
| Log Likelihood | -3932.088                                  | -3968.846                            | -3002.546                            | -2165.292                       | -973.180                               |
| Deviance       | 7864.175                                   | 7937.691                             | 6005.092                             | 4330.585                        | 1946.361                               |
| Num. obs.      | 3480                                       | 3500                                 | 3501                                 | 4018                            | 520                                    |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

## F. ALTERNATE RESEARCH DESIGNS

### F.A. SUBSETTING TO SINGLE-CHILD HOMES

Our null results are generally robust, though somewhat more noisy as statistical power declines, to focusing only on those families who have one child. Of course, this is not an ideal approach as parents may use specific stopping rules, but if the error introduced by this potential confounding is minimal, it offers another robustness check.

Table F.4: The Effect of Having a Daughter on Attitudes and Partisanship. Subsetting to single-child homes.  
 Note: OLS linear probability models. Robust standard errors in parentheses.

|                     | Model 1             | Model 2             | Model 3             | Model 4             | Model 5             | Model 6            | Model 7             | Model 8             | Model 9             | Model 10             |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|----------------------|
| (Intercept)         | 0.691***<br>(0.030) | 0.380***<br>(0.081) | 0.365***<br>(0.030) | 0.118<br>(0.084)    | 0.207***<br>(0.023) | 0.016<br>(0.066)   | 1.833***<br>(0.086) | 1.678***<br>(0.470) | 0.546***<br>(0.033) | -0.678***<br>(0.081) |
| first_daughter      | -0.008<br>(0.020)   | -0.014<br>(0.020)   | -0.040<br>(0.021)   | -0.043*<br>(0.020)  | -0.006<br>(0.016)   | -0.008<br>(0.016)  | -0.001<br>(0.120)   | -0.036<br>(0.121)   | -0.007<br>(0.022)   | -0.021<br>(0.020)    |
| black               |                     | 0.320***<br>(0.042) |                     | -0.061<br>(0.043)   |                     | 0.035<br>(0.034)   |                     | 0.084<br>(0.253)    |                     | 0.653***<br>(0.042)  |
| coloured            |                     | 0.115*<br>(0.048)   |                     | -0.066<br>(0.049)   |                     | 0.009<br>(0.039)   |                     | -0.423<br>(0.293)   |                     | 0.307***<br>(0.048)  |
| indian              |                     | 0.159**<br>(0.055)  |                     | 0.041<br>(0.056)    |                     | -0.011<br>(0.044)  |                     | 0.084<br>(0.342)    |                     | 0.141**<br>(0.054)   |
| age                 |                     | -0.001<br>(0.002)   |                     | 0.008***<br>(0.002) |                     | 0.004**<br>(0.002) |                     | -0.003<br>(0.013)   |                     | 0.026***<br>(0.002)  |
| sex                 |                     | 0.088***<br>(0.024) |                     | 0.028<br>(0.025)    |                     | 0.018<br>(0.019)   |                     | 0.198<br>(0.152)    |                     | 0.046<br>(0.024)     |
| urban               |                     | -0.005<br>(0.022)   |                     | 0.091***<br>(0.022) |                     | 0.050**<br>(0.018) |                     | 0.117<br>(0.134)    |                     | -0.055*<br>(0.022)   |
| Survey F.E.         | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   | ✓                  | ✓                   | ✓                   | ✓                   | ✓                    |
| R <sup>2</sup>      | 0.005               | 0.067               | 0.073               | 0.098               | 0.029               | 0.037              | 0.000               | 0.036               | 0.012               | 0.242                |
| Adj. R <sup>2</sup> | 0.001               | 0.061               | 0.069               | 0.092               | 0.025               | 0.030              | -0.004              | 0.010               | 0.008               | 0.236                |
| Num. obs.           | 1987                | 1987                | 1987                | 1987                | 1987                | 1987               | 267                 | 266                 | 1977                | 1977                 |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

#### F.B. ANY DAUGHTER SPECIFICATION

We also include a specification of whether the respondent has any daughter among his / her children. Again, this is not the preferred specification as individuals may chose to stop having children based on the gender composition of their current children. However, given that this approach is often used in the study of daughter effects, we present the results here.



Table F.5: The Effect of Having a Daughter on Attitudes and Partisanship. Respondents coded as having a daughter if any of their children are daughters.

Note: OLS linear probability models. Robust standard errors in parentheses.

|                     | Model 1             | Model 2             | Model 3             | Model 4             | Model 5             | Model 6            | Model 7             | Model 8             | Model 9             | Model 10             |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|----------------------|
| (Intercept)         | 0.676***<br>(0.022) | 0.346***<br>(0.058) | 0.395***<br>(0.022) | 0.262***<br>(0.059) | 0.193***<br>(0.017) | 0.076<br>(0.046)   | 1.807***<br>(0.073) | 1.633***<br>(0.335) | 0.560***<br>(0.024) | -0.557***<br>(0.056) |
| any_daughters       | -0.004<br>(0.015)   | -0.003<br>(0.015)   | -0.032*<br>(0.015)  | -0.040**<br>(0.015) | -0.009<br>(0.012)   | -0.012<br>(0.012)  | -0.082<br>(0.090)   | -0.099<br>(0.090)   | 0.018<br>(0.016)    | -0.004<br>(0.014)    |
| black               |                     | 0.360***<br>(0.028) |                     | -0.064*<br>(0.028)  |                     | 0.048*<br>(0.022)  |                     | 0.086<br>(0.184)    |                     | 0.679***<br>(0.027)  |
| coloured            |                     | 0.163***<br>(0.031) |                     | -0.021<br>(0.032)   |                     | 0.041<br>(0.025)   |                     | -0.366<br>(0.199)   |                     | 0.299***<br>(0.030)  |
| indian              |                     | 0.181***<br>(0.034) |                     | 0.009<br>(0.035)    |                     | 0.000<br>(0.027)   |                     | -0.143<br>(0.219)   |                     | 0.129***<br>(0.033)  |
| age                 |                     | -0.000<br>(0.001)   |                     | 0.005**<br>(0.002)  |                     | 0.002<br>(0.001)   |                     | 0.002<br>(0.009)    |                     | 0.022***<br>(0.001)  |
| sex                 |                     | 0.067***<br>(0.017) |                     | 0.021<br>(0.017)    |                     | -0.008<br>(0.013)  |                     | 0.147<br>(0.107)    |                     | 0.021<br>(0.016)     |
| urban               |                     | 0.001<br>(0.016)    |                     | 0.057***<br>(0.016) |                     | 0.040**<br>(0.012) |                     | 0.049<br>(0.096)    |                     | -0.044**<br>(0.015)  |
| Survey F.E.         | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   | ✓                  | ✓                   | ✓                   | ✓                   | ✓                    |
| R <sup>2</sup>      | 0.003               | 0.073               | 0.072               | 0.085               | 0.027               | 0.031              | 0.002               | 0.035               | 0.007               | 0.269                |
| Adj. R <sup>2</sup> | 0.001               | 0.069               | 0.070               | 0.082               | 0.025               | 0.027              | -0.000              | 0.021               | 0.005               | 0.266                |
| Num. obs.           | 4042                | 4042                | 4042                | 4042                | 4042                | 4042               | 521                 | 520                 | 4018                | 4018                 |

\*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$

## G. SEPARATING RESPONDENTS BY GENDER

Table G.6: The Effect of Having a Daughter on Attitudes and Partisanship. Men respondents only.  
 Note: OLS linear probability models. Robust standard errors in parentheses.

|                     | Model 1             | Model 2             | Model 3             | Model 4           | Model 5             | Model 6           | Model 7             | Model 8           | Model 9             | Model 10             |
|---------------------|---------------------|---------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|----------------------|
| (Intercept)         | 0.631***<br>(0.045) | 0.411***<br>(0.122) | 0.332***<br>(0.042) | 0.204<br>(0.116)  | 0.202***<br>(0.033) | 0.045<br>(0.092)  | 1.552***<br>(0.141) | 0.543<br>(0.644)  | 0.556***<br>(0.045) | -0.325**<br>(0.108)  |
| first_daughter      | -0.004<br>(0.033)   | -0.003<br>(0.032)   | -0.033<br>(0.030)   | -0.036<br>(0.030) | -0.046<br>(0.024)   | -0.043<br>(0.024) | 0.155<br>(0.196)    | 0.109<br>(0.201)  | -0.069*<br>(0.033)  | -0.069*<br>(0.028)   |
| black               |                     | 0.254***<br>(0.052) |                     | -0.067<br>(0.050) |                     | 0.073<br>(0.040)  |                     | 0.018<br>(0.309)  |                     | 0.629***<br>(0.047)  |
| coloured            |                     | 0.031<br>(0.061)    |                     | -0.042<br>(0.058) |                     | 0.092*<br>(0.046) |                     | -0.132<br>(0.365) |                     | 0.292***<br>(0.054)  |
| indian              |                     | 0.113<br>(0.067)    |                     | -0.043<br>(0.064) |                     | 0.075<br>(0.051)  |                     | -0.589<br>(0.376) |                     | 0.153*<br>(0.059)    |
| age                 |                     | 0.003<br>(0.003)    |                     | 0.005<br>(0.003)  |                     | 0.002<br>(0.003)  |                     | 0.035<br>(0.019)  |                     | 0.016***<br>(0.003)  |
| urban               |                     | -0.059<br>(0.035)   |                     | 0.069*<br>(0.034) |                     | 0.021<br>(0.027)  |                     | 0.148<br>(0.234)  |                     | -0.118***<br>(0.031) |
| Survey F.E.         | ✓                   | ✓                   | ✓                   | ✓                 | ✓                   | ✓                 | ✓                   | ✓                 | ✓                   | ✓                    |
| R <sup>2</sup>      | 0.005               | 0.062               | 0.085               | 0.097             | 0.039               | 0.045             | 0.006               | 0.073             | 0.032               | 0.310                |
| Adj. R <sup>2</sup> | -0.004              | 0.048               | 0.077               | 0.084             | 0.030               | 0.031             | -0.004              | 0.017             | 0.023               | 0.300                |
| Numb. obs.          | 904                 | 904                 | 904                 | 904               | 904                 | 904               | 107                 | 107               | 899                 | 899                  |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

Table G.7: The Effect of Having a Daughter on Attitudes and Partisanship. Women respondents only.  
 Note: OLS linear probability models. Robust standard errors in parentheses.

|                     | Model 1             | Model 2             | Model 3             | Model 4             | Model 5             | Model 6            | Model 7             | Model 8             | Model 9             | Model 10             |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|---------------------|---------------------|----------------------|
| (Intercept)         | 0.688***<br>(0.024) | 0.375***<br>(0.063) | 0.406***<br>(0.024) | 0.298***<br>(0.066) | 0.195***<br>(0.019) | 0.088<br>(0.051)   | 1.758***<br>(0.067) | 1.948***<br>(0.397) | 0.571***<br>(0.027) | -0.607***<br>(0.062) |
| first_daughter      | -0.001<br>(0.016)   | -0.012<br>(0.016)   | -0.027<br>(0.016)   | -0.025<br>(0.016)   | -0.013<br>(0.013)   | -0.014<br>(0.013)  | 0.052<br>(0.095)    | 0.022<br>(0.095)    | 0.032<br>(0.018)    | 0.003<br>(0.015)     |
| black               |                     | 0.414***<br>(0.033) |                     | -0.061<br>(0.035)   |                     | 0.031<br>(0.027)   |                     | 0.141<br>(0.241)    |                     | 0.696***<br>(0.033)  |
| coloured            |                     | 0.222***<br>(0.036) |                     | -0.011<br>(0.038)   |                     | 0.015<br>(0.029)   |                     | -0.355<br>(0.255)   |                     | 0.300***<br>(0.036)  |
| indian              |                     | 0.221***<br>(0.041) |                     | 0.026<br>(0.043)    |                     | -0.035<br>(0.033)  |                     | 0.068<br>(0.280)    |                     | 0.119**<br>(0.040)   |
| age                 |                     | -0.001<br>(0.002)   |                     | 0.004*<br>(0.002)   |                     | 0.002<br>(0.001)   |                     | -0.009<br>(0.010)   |                     | 0.023***<br>(0.002)  |
| urban               |                     | 0.020<br>(0.018)    |                     | 0.052**<br>(0.018)  |                     | 0.044**<br>(0.014) |                     | 0.039<br>(0.105)    |                     | -0.021<br>(0.017)    |
| Survey F.E.         | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   | ✓                  | ✓                   | ✓                   | ✓                   | ✓                    |
| R <sup>2</sup>      | 0.004               | 0.074               | 0.073               | 0.086               | 0.027               | 0.032              | 0.001               | 0.039               | 0.006               | 0.265                |
| Adj. R <sup>2</sup> | 0.001               | 0.070               | 0.071               | 0.082               | 0.024               | 0.028              | -0.002              | 0.025               | 0.004               | 0.262                |
| Num. obs.           | 3138                | 3138                | 3138                | 3138                | 3138                | 3138               | 414                 | 413                 | 3119                | 3119                 |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

H. URBAN V. RURAL RESPONDENTS

Table H.8: The Effect of Having a Daughter on Attitudes and Partisanship. Urban respondents only.  
 Note: OLS linear probability models. Robust standard errors in parentheses.

|                     | Model 1             | Model 2             | Model 3             | Model 4             | Model 5             | Model 6           | Model 7             | Model 8             | Model 9             | Model 10             |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-------------------|---------------------|---------------------|---------------------|----------------------|
| (Intercept)         | 0.631***<br>(0.027) | 0.267***<br>(0.073) | 0.434***<br>(0.026) | 0.339***<br>(0.074) | 0.217***<br>(0.020) | 0.126*<br>(0.058) | 1.749***<br>(0.073) | 1.642***<br>(0.374) | 0.473***<br>(0.028) | -0.581***<br>(0.066) |
| first_daughter      | -0.008<br>(0.019)   | -0.019<br>(0.018)   | -0.034<br>(0.019)   | -0.033<br>(0.019)   | -0.014<br>(0.015)   | -0.016<br>(0.015) | -0.014<br>(0.106)   | -0.055<br>(0.105)   | 0.028<br>(0.020)    | -0.002<br>(0.017)    |
| black               |                     | 0.361***<br>(0.030) |                     | -0.044<br>(0.031)   |                     | 0.054*<br>(0.024) |                     | 0.106<br>(0.185)    |                     | 0.688***<br>(0.028)  |
| coloured            |                     | 0.163***<br>(0.034) |                     | -0.019<br>(0.034)   |                     | 0.040<br>(0.027)  |                     | -0.348<br>(0.206)   |                     | 0.273***<br>(0.031)  |
| indian              |                     | 0.175***<br>(0.036) |                     | 0.011<br>(0.037)    |                     | -0.003<br>(0.029) |                     | -0.140<br>(0.218)   |                     | 0.131***<br>(0.033)  |
| age                 |                     | 0.001<br>(0.002)    |                     | 0.004<br>(0.002)    |                     | 0.002<br>(0.002)  |                     | 0.002<br>(0.011)    |                     | 0.020***<br>(0.002)  |
| sex                 |                     | 0.084***<br>(0.022) |                     | 0.018<br>(0.023)    |                     | -0.005<br>(0.018) |                     | 0.112<br>(0.134)    |                     | 0.046*<br>(0.020)    |
| Survey F.E.         | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   | ✓                 | ✓                   | ✓                   | ✓                   | ✓                    |
| R <sup>2</sup>      | 0.006               | 0.085               | 0.090               | 0.094               | 0.033               | 0.037             | 0.000               | 0.037               | 0.008               | 0.313                |
| Adj. R <sup>2</sup> | 0.002               | 0.080               | 0.087               | 0.089               | 0.030               | 0.032             | -0.003              | 0.020               | 0.004               | 0.309                |
| Num. obs.           | 2443                | 2443                | 2443                | 2443                | 2443                | 2443              | 337                 | 337                 | 2425                | 2425                 |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

Table H.9: The Effect of Having a Daughter on Attitudes and Partisanship. Rural respondents only.  
 Note: OLS linear probability models. Robust standard errors in parentheses.

|                     | Model 1             | Model 2             | Model 3             | Model 4            | Model 5             | Model 6           | Model 7             | Model 8          | Model 9             | Model 10             |
|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|-------------------|---------------------|------------------|---------------------|----------------------|
| (Intercept)         | 0.762***<br>(0.034) | 0.459***<br>(0.112) | 0.295***<br>(0.035) | 0.350**<br>(0.116) | 0.152***<br>(0.027) | 0.080<br>(0.088)  | 1.646***<br>(0.110) | 0.984<br>(0.557) | 0.751***<br>(0.037) | -0.494***<br>(0.117) |
| first_daughter      | 0.004<br>(0.022)    | 0.008<br>(0.022)    | -0.017<br>(0.022)   | -0.018<br>(0.022)  | -0.025<br>(0.017)   | -0.026<br>(0.017) | 0.226<br>(0.147)    | 0.236<br>(0.149) | -0.022<br>(0.024)   | -0.027<br>(0.022)    |
| black               |                     | 0.374***<br>(0.084) |                     | -0.209*<br>(0.087) |                     | 0.031<br>(0.066)  |                     | 0.454<br>(0.254) |                     | 0.613***<br>(0.088)  |
| coloured            |                     | 0.171<br>(0.091)    |                     | -0.116<br>(0.094)  |                     | 0.039<br>(0.072)  |                     |                  |                     | 0.331***<br>(0.095)  |
| indian              |                     | 0.294<br>(0.195)    |                     | 0.178<br>(0.201)   |                     | 0.237<br>(0.153)  |                     |                  |                     | -0.053<br>(0.202)    |
| age                 |                     | -0.003<br>(0.002)   |                     | 0.005*<br>(0.002)  |                     | 0.002<br>(0.002)  |                     | 0.003<br>(0.015) |                     | 0.024***<br>(0.002)  |
| sex                 |                     | 0.038<br>(0.026)    |                     | 0.025<br>(0.027)   |                     | -0.015<br>(0.021) |                     | 0.206<br>(0.182) |                     | -0.008<br>(0.028)    |
| Survey F.E.         | ✓                   | ✓                   | ✓                   | ✓                  | ✓                   | ✓                 | ✓                   | ✓                | ✓                   | ✓                    |
| R <sup>2</sup>      | 0.003               | 0.036               | 0.056               | 0.069              | 0.028               | 0.031             | 0.013               | 0.039            | 0.014               | 0.123                |
| Adj. R <sup>2</sup> | -0.002              | 0.028               | 0.052               | 0.061              | 0.023               | 0.023             | 0.007               | 0.017            | 0.009               | 0.116                |
| Num. obs.           | 1599                | 1599                | 1599                | 1599               | 1599                | 1599              | 184                 | 183              | 1593                | 1593                 |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

## I. CHANGING THE AGE CUT-POINT

Our results are unchanged when including all respondents age 45 and under.



Table I.10: The Effect of Having a Daughter on Attitudes and Partisanship. All parents under 45.  
 Note: OLS linear probability models. Robust standard errors in parentheses.

|                     | Model 1             | Model 2             | Model 3             | Model 4              | Model 5             | Model 6             | Model 7             | Model 8             | Model 9             | Model 10             |
|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| (Intercept)         | 0.659***<br>(0.016) | 0.377***<br>(0.037) | 0.386***<br>(0.016) | 0.413***<br>(0.037)  | 0.190***<br>(0.012) | 0.147***<br>(0.028) | 1.647***<br>(0.044) | 1.884***<br>(0.212) | 0.581***<br>(0.017) | -0.239***<br>(0.035) |
| first_daughter      | 0.002<br>(0.011)    | -0.005<br>(0.010)   | -0.016<br>(0.011)   | -0.012<br>(0.010)    | -0.012<br>(0.008)   | -0.013<br>(0.008)   | 0.059<br>(0.063)    | 0.045<br>(0.063)    | 0.009<br>(0.011)    | -0.008<br>(0.010)    |
| black               |                     | 0.344***<br>(0.018) |                     | -0.105***<br>(0.018) |                     | 0.041**<br>(0.014)  |                     | -0.007<br>(0.115)   |                     | 0.691***<br>(0.017)  |
| coloured            |                     | 0.122***<br>(0.021) |                     | -0.069***<br>(0.021) |                     | 0.019<br>(0.016)    |                     | -0.335*<br>(0.132)  |                     | 0.292***<br>(0.019)  |
| indian              |                     | 0.163***<br>(0.023) |                     | -0.015<br>(0.023)    |                     | -0.001<br>(0.017)   |                     | -0.233<br>(0.139)   |                     | 0.166***<br>(0.021)  |
| age                 |                     | -0.001<br>(0.001)   |                     | 0.000<br>(0.001)     |                     | -0.000<br>(0.001)   |                     | -0.008<br>(0.004)   |                     | 0.010***<br>(0.001)  |
| sex                 |                     | 0.065***<br>(0.012) |                     | 0.018<br>(0.012)     |                     | -0.002<br>(0.009)   |                     | 0.072<br>(0.073)    |                     | 0.014<br>(0.011)     |
| urban               |                     | 0.012<br>(0.012)    |                     | 0.048***<br>(0.012)  |                     | 0.040***<br>(0.009) |                     | 0.126<br>(0.074)    |                     | -0.043***<br>(0.011) |
| Survey F.E.         | ✓                   | ✓                   | ✓                   | ✓                    | ✓                   | ✓                   | ✓                   | ✓                   | ✓                   | ✓                    |
| R <sup>2</sup>      | 0.002               | 0.078               | 0.074               | 0.087                | 0.027               | 0.030               | 0.001               | 0.023               | 0.003               | 0.288                |
| Adj. R <sup>2</sup> | 0.001               | 0.077               | 0.073               | 0.085                | 0.026               | 0.028               | -0.000              | 0.016               | 0.002               | 0.287                |
| Num. obs.           | 7558                | 7558                | 7558                | 7558                 | 7558                | 7558                | 1008                | 1006                | 7518                | 7518                 |

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

## J. REPORTING STANDARDS

### A. Hypotheses:

- This study seeks to test whether having first-born daughter changes parents' gender and partisan attitudes in South Africa.

### B. Subjects and Context

- The data used for this study was not collected by the researchers, but rather by 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. All South African adults (over 18 years of age) were eligible to participate in the survey. More information on sampling frames can be found here: <http://www.hsrc.ac.za/en/departments/sasas>

### C. Allocation Method

- This study takes advantage of a natural experiment, not controlled by the researchers: the sex of one's first child.

### D. Treatments

- The treatment is when a sperm fertilizes an egg and either produces two X chromosomes or an X and a Y chromosome. The treatment group is those whose first child is daughter (fertilization results in two X chromosomes). The control group is those whose first child is a son (fertilization results in an X and Y chromosome).

### E. Results

- The outcome measures original question and recoding values can be found in SI B. The household schedule from the survey instrument can be found in SI A.
- We use the following covariates in some specifications, which were all self-reported or coded by the survey enumerator from the SASAS survey:
  - Age
  - Dummy for race: Black, colored, Indian, white
  - Survey year fixed effects: 2007 - 2012

- Urban v. rural residence (coded by the survey enumerator)
- Sex of respondent (coded by the survey enumerator)
- The authors created an internal PAP, but did not pre-register it.
- CONSORT Participant Flow Diagram: not applicable when using publicly available survey data that the researchers did not collect
- Table 2 in the manuscript reports sample means with confidence intervals for both treatment and control groups across all outcome variables

#### F. Other information

- No IRB approval was sought for this project. The authors did not engage in any original data collection. The data used was 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 is free and available to the public, see: <http://www.hsrc.ac.za/en/departments/sasas>
- No funding was sought for this project
- The replication code and data can be found here:  
<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/1RAQVF>

#### REFERENCES

- Blackwelder, W. C. (1982). 'proving the null hypothesis' in clinical trials. *Controlled clinical trials* 3(4), 345–353.
- Hartman, E. and F. D. Hidalgo (2018). An equivalence approach to balance and placebo tests. *American Journal of Political Science* 62(4), 1000–1013.
- Lakens, D. (2017). Equivalence tests: a practical primer for t tests, correlations, and meta-analyses. *Social Psychological and Personality Science* 8(4), 355–362.