

## Supplementary Material

### “Fathers’ Leave Reduces Sexist Attitudes”

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February 2023

This Supplementary Material file includes the following information:

- SM1 (p. 1-3): Additional information about Study 1
- SM2 (p. 4-8): Descriptive statistics, strategic pregnancy planning, balance tests
- SM3 (p. 9-20): Manipulation checks, additional analyses, placebo test
- SM4 (p. 21-25): Study 2 – Survey experiment

## SM1 Additional information about Study 1

We fielded the survey of new and expecting parents (Study 1) with the help of Kantar Emor, a leading Estonian survey firm with extensive experience conducting survey research for public and private sector clients, including the Eurobarometer Survey (since 2004). Our study’s universe includes individuals, 18 or older, who had had or expected to have a baby in 2020. This is a relatively small population – according to Statistics Estonia, only about 13,000 babies were born in Estonia in 2020 – and recruiting a sizeable sample was therefore challenging. Our goal was to recruit a total of 1000 new or expecting parents – 500 of whom qualified for the new fathers’ leave and 500 who did not. We also aspired to recruit an equal number of mothers and fathers. To achieve this, the survey firm recruited subjects from their own subject pool and from the general population by advertising the study in outlets (including social media) targeted to new and expecting parents and using the snowball method, i.e., asking participants to help recruit their partners and other new/expecting parents they may know. In order to achieve the desired gender balance, the survey firm did additional outreach to new/expecting fathers through social media.

The Institutional Review Board at Washington University in St. Louis (IRB ID #202001152) determined the study exempt from further review, and neither documentation nor waiver of informed consent was required. Respondents were able to opt out of participation at any time after starting the survey. Kantar Emor compensated the respondents.

In order to maximize the sample size, we started fielding the survey in the beginning of 2020 and kept it in the field for almost all of the year. The recruitment took place in two waves. Wave 1 included new and expecting parents whose baby was born in January through June of 2020 and was conducted during that same time period. Wave 2 included new and expecting parents whose baby was born in July through December 2020 and was, again, conducted during the corresponding time period. All interviews were conducted online.

Eligible subjects were identified via responses to a set of questions about new parent status and the birth month of the baby. Specifically, respondents in Wave 1 were asked, “Have you recently become a new parent (with the baby born on or after January 1, 2020) or do you expect to become a new parent before December 31, 2020?” with response options as follows: (1) “Yes, I have recently become a new parent, with the baby born on or after January 1, 2020.” (2) “Yes, I expect to become a new parent, with the baby expected to be born before December 31, 2020.” (3) “No.” If the respondent chose option (3), the interview was terminated.

For those who picked (1) or (2), the next question inquired, “In which month was the baby born or is the baby expected to be born?” listing all months as the response options. All respondents who picked June or earlier qualified for the survey for Wave 1 and continued with the survey. Respondents, who picked July or later did not qualify for Wave 1 but would qualify for our Wave 2. We therefore excluded them from the Wave 1 survey but requested permission to contact them again “for a survey that is fielded after July 1, 2020.”

Eligible subjects for Wave 2 were identified using a similar process. First, potential subjects were asked, “Have you recently become a new parent (with the baby born on or after July 1, 2020) or do you expect to become a new parent before December 31, 2020?” Those who answered “yes” qualified for the second wave and were then directed to a follow-up question inquiring, “In which month was the baby born or is the baby expected to be born?” with months from July through December as response options.

Our final sample consists of 1362 new parents, 614 from Wave 1 and 748 from Wave 2. We also achieved a relatively good gender balance with 750 new mothers and 612 new fathers included in the data.

After passing the screening questions described above, the respondents in both waves proceeded with the rest of the questionnaire. Our survey items in both studies were designed in English by all authors, and translated into Estonian and Russian by Kantar Emor in collaboration with one author.

## **Attitudinal measures of gender equality**

Our survey included a number of outcome questions measuring subjects’ attitudes toward women and their role in society and politics. We rely on existing measures of gender-equal attitudes that are appropriate for our research context, including items employed in the World Values Study and in prior work conducted in the Estonian context (Pérez and Tavits 2019, 2022). The outcomes assess attitudes toward gender equality (a) in the social and economic sphere, (b) in the political sphere, and (c) in terms of support for positive action policies aimed at increasing the representation of women in political leadership roles to redress the preponderance of men. Specifically, the following serve as measures of our dependent variables (where necessary, we reverse the coding of items such that higher values

indicate more equal attitudes on all variables and scales).

*Working mothers* and *Promotions* are two items that measure stereotypical views of women in the social and economic sphere. They asked whether respondents strongly disagreed (coded “4”), somewhat disagreed (“3”), somewhat agreed (“2”), or strongly agreed (“1”) with the following statements: “A preschool child is likely to suffer if his or her mother works” (*Working mothers*) and “These days, a man won’t get a job or promotion while an equally or less qualified woman gets one instead” (*Promotions*). Based on these two items we created a *Socio-economic Equality Scale* using the first component of a principal component analysis of both outcomes.<sup>1</sup>

Turning to the political sphere, *Female Defense Minister* asked new parents “If the party that you normally like nominated a generally well-qualified woman to be Minister of Defense, would you support that choice?,” with support coded as “1” and opposition as “0.” *Party encouragement* and *Female leaders* asked agreement or disagreement (using the same 4-point scale as in the case of the socio-economic equality items described above) with the following statements: “Political parties should do more to encourage qualified women to run for political office” (*Party encouragement*) and “On the whole, men make better political leaders than women do” (*Female leaders*). Based on these three items we created a *Political Equality Scale* using the first component of a principal component analysis of the three outcomes.

The last two items inquired whether one strongly disagreed, somewhat disagreed, somewhat agreed, or strongly agreed with the following “proposals to address issues of representation”: (a) “Require political parties to reserve some space on their lists of candidates for women, even if they have to exclude some men” (*Reserved list position*) and (b) “Recruit more women to top-level government positions” (*Top level recruitment*). As before, using the first component of a principal component analysis, we combine these variables into a *Positive Action Policies Scale*.

Note that these two items are somewhat different in focus from the other five: while the first five items tap into attitudes toward gender parity, the last two items measure support for positive action to improve the representation of women at the expense of men. The difference is subtle, but potentially relevant because the former envisions female gains in society and politics as unrelated (or weakly related) to men’s fortunes in these areas, while the latter, in contrast, captures support for pro-female interventions that entail male displacement.

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<sup>1</sup>This is an accepted practice in studies of gender-related (and other) attitudes: because no single item is likely to capture holistically the concept of gender bias (which is latent in nature), scholars use multiple items, all capturing somewhat different aspects of the underlying latent concept of interest to measure the extent to which a respondent expresses bias (e.g., Campbell, Childs, and Lovenduski 2010). Note that attitudinal gender bias manifests both in perceptions of how the world works (i.e., descriptive views), and in views about how it should work (i.e., prescriptive views; see for example Bauer 2013, Heilman 2012).

## SM2 Descriptive statistics, strategic pregnancy planning, and balance tests

Figure SM2.1 complements the section of the main manuscript that describes absence of **strategic pregnancy planning** by providing more detailed information on the number of births by month in Estonia in 2020. To reiterate, our empirical approach relies on the assumption that parents did not plan pregnancies strategically to benefit from the new policy. Since the policy change was initially adopted in December 2017, with final implementation announced in June 2019,<sup>2</sup> strategic pregnancy planning was in principle possible and would be evidenced by depressed birth rates before the July 1, 2020 cut-off date, and inflated birth rates thereafter. However, while Figure SM2.1 indicates that there were more births in July 2020 than in any other month, the difference between June (1,211) and July (1,287) is not sizable or statistically significant ( $p=0.13$ ) and the monthly birth rates are relatively similar in the first and second half of the year. Comparing our data to previous years, we also find that (i) the difference in births between June 2020 and June 2019 is insignificant, (ii) July 2020 saw slightly *fewer* births than July 2019 ( $p=0.05$ ), (iii) the difference between births in July 2020 and the average number of births during July 2010-2019 is insignificant, and (iv) the difference between births in June 2020 and the average of June 2010-2019 is insignificant. In other words, birth records from 2010-2020 do not suggest a widespread strategic choice to opt into the treatment.

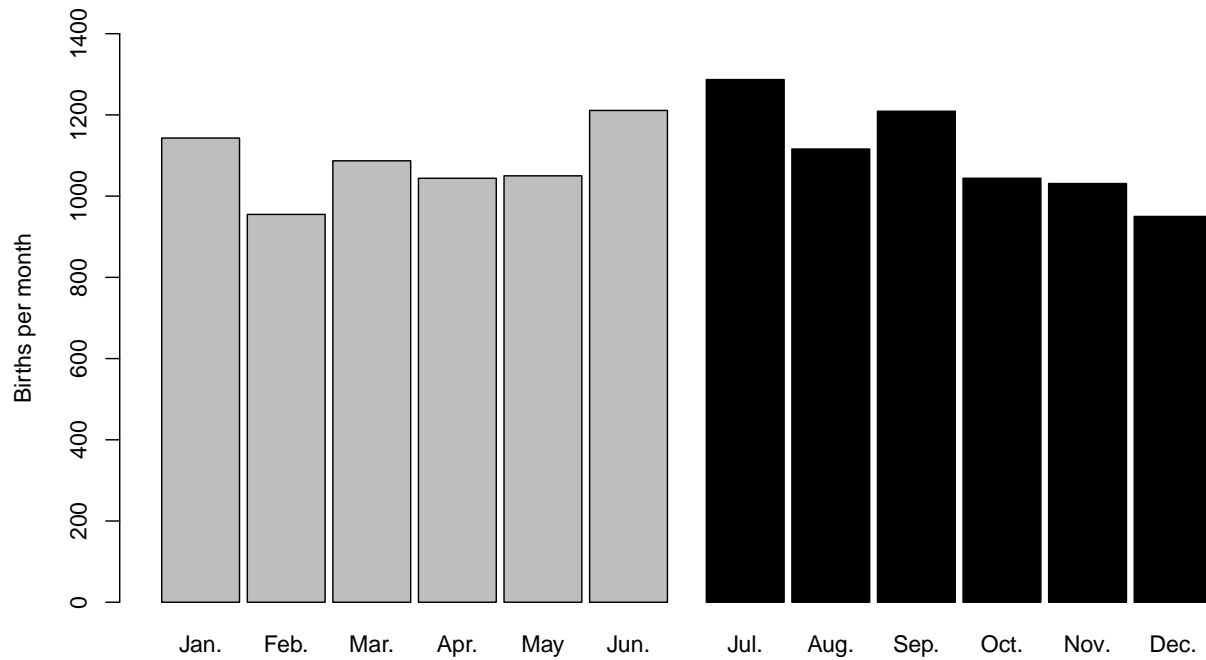
Tables SM2.1 and SM2.2 present **descriptive statistics** for our full sample and for respondents who had a baby between April and September respectively.

Tables SM2.3 and SM2.4 present the **balance checks** for our full sample and for respondents who had a baby between April and September respectively. We see some imbalances in socio-demographic and other background characteristics across treated and control parents in our sample (e.g., we interviewed more women post-reform and had more post-birth interviews before the reform). As we explain in the main text, our estimation strategy accounts for these in two different ways: (1) by including all our socio-demographic covariates as control variables, and (2) by employing a Lasso-based post-double-selection method. We also present models without any covariate adjustment in SM3.

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<sup>2</sup>Ots, Makt. 2019. "Isapuhkuse aeg kolmekordistub ja hüvitise saamine lihtsustub." *Estonian National Broadcasting*, August 6. <https://www.err.ee/968232/isapuhkuse-aeg-kolmekordistub-ja-huvitise-saamine-lihtsustub>

**Figure SM2.1:** Births in Estonia by Month (2020)



*Note:* Plot depicts the number of births in Estonia in 2020 by month based on data from Statistics Estonia (RV061). The difference between June (1,211) and July (1,287) is not statistically significant ( $p=0.13$ ).

**Table SM2.1:** Descriptive statistics – full sample

	N	Mean	SD	Min	Max
<i>Outcome variables</i>					
Socio-economic equality scale	1359	0	1	-2.70	1.69
Political equality scale	1359	0	1	-3.72	1.29
Positive action scale	1359	0	1	-2.05	1.72
<i>Treatment variable</i>					
Post-reform birth	1362	0.55	0.50	0	1
<i>Control variables</i>					
Age	1362	31.28	5.36	18	53
Age <sup>2</sup>	1362	1007	350.10	324	2809
Female	1362	0.55	0.50	0	1
Interview language: Russian	1362	0.10	0.31	0	1
Education: University	1362	0.42	0.49	0	1
Education: Vocational	1362	0.29	0.45	0	1
Left-right position	1246	5.68	2.08	0	10
Married	1362	0.43	0.50	0	1
Residence type: City	1362	0.49	0.50	0	1
Children	1360	1.14	1.15	0	8
Post-birth interview	1362	0.62	0.49	0	1
Birth month	1362	6.27	3.25	1	12

**Table SM2.2:** Descriptive statistics – April-September births

	N	Mean	SD	Min	Max
<i>Outcome variables</i>					
Socio-economic equality scale	800	-0.05	1	-2.70	1.69
Political equality scale	799	-0.01	1.03	-3.72	1.29
Positive action scale	799	-0.01	0.97	-2.05	1.72
<i>Treatment variable</i>					
Post-reform birth	802	0.65	0.48	0	1
<i>Control variables</i>					
Age	802	31.47	5.41	18	50
Age <sup>2</sup>	802	1019.44	353.65	324	2500
Female	802	0.53	0.50	0	1
Interview language: Russian	802	0.14	0.35	0	1
Education: University	802	0.39	0.49	0	1
Education: Vocational	802	0.30	0.46	0	1
Left-right position	733	5.76	2.10	0	10
Married	802	0.42	0.49	0	1
Residence type: City	802	0.50	0.50	0	1
Children	800	1.19	1.21	0	8
Post-birth interview	802	0.63	0.48	0	1
Birth month	802	6.84	1.65	4	9

**Table SM2.3:** Balance checks – full sample

	Pre-reform	Post-reform	Difference	p-value
Age	31.50	31.09	-0.41	0.16
Age <sup>2</sup>	1018.51	997.55	-20.96	0.27
Female	0.51	0.58	0.07	0.02
Interview language: Russian	0.08	0.12	0.04	0.02
Education: University	0.44	0.40	-0.04	0.13
Education: Vocational	0.28	0.30	0.02	0.54
Left-right position	5.74	5.63	-0.11	0.34
Married	0.46	0.41	-0.05	0.08
Residence type: City	0.50	0.49	-0.01	0.82
Children	1.16	1.13	-0.03	0.58
Post-birth interview	0.69	0.57	-0.12	0.00

*Note:* Entries for pre-reform and post-reform are mean values. The Difference column reports the differences in means and the final column corresponding p-values according to t-tests.

**Table SM2.4:** Balance checks – April-September births

	Pre-reform	Post-reform	Difference	p-value
Age	31.65	31.37	-0.29	0.46
Age <sup>2</sup>	1027.65	1015.08	-12.57	0.62
Female	0.47	0.56	0.10	0.01
Interview language: Russian	0.11	0.15	0.05	0.06
Education: University	0.40	0.39	-0.01	0.86
Education: Vocational	0.32	0.29	-0.03	0.45
Left-right position	5.84	5.71	-0.13	0.39
Married	0.44	0.41	-0.03	0.41
Residence type: City	0.51	0.50	-0.01	0.73
Children	1.15	1.22	0.07	0.40
Post-birth interview	0.36	0.77	0.41	0.00

*Note:* Entries for pre-reform and post-reform are mean values. The Difference column reports the differences in means and the final column corresponding p-values according to t-tests.



# SM3 Manipulation check, additional analyses, placebo test

SM3 presents additional results that complement the analyses of Study 1 in the manuscript.

## Manipulation checks

Before we presented the subjects in our survey with a set of outcome questions about attitudes toward gender equality, the survey included three questions that serve as manipulation checks. These allow us to measure subjects' response to the reform in terms of awareness and uptake of fathers' leave (i.e., the treatment). Specifically, we asked respondents how many days of paid fathers' leave (i) they thought a father was currently entitled to take (*Entitlement*), (ii) they thought an average new father would take (*Average use*), and (iii) how much paid parental leave they were planning on taking with their new baby (*Uptake*).<sup>3</sup> In devising these questions we paid special attention to capturing both beliefs (*Entitlement* and *Average use*) as well as behavior (*Uptake*) regarding the changes in paid parental leave.

For the analysis in the main text, we used the full sample and truncated answers for fathers' entitlement, average use, and uptake such that all answers larger than 100 days were recoded to 100 in order to minimize the risk that a few outlier observations could heavily influence our inferences (see Table SM3.1). Tables SM3.2-SM3.4 show that we find the same patterns including only April-September births, without truncation of outlier values, and including only April-September births while also not truncating outlier values.

## Full results and additional models for the main analyses

Table SM3.5 presents the full regression results for our main model specifications including no covariates, all covariates, and the LASSO covariates respectively. Figure SM3.1 shows the results for the three outcome scales and all individual items. Table SM3.6 presents the results of interaction models that estimate different treatment effects for mothers and fathers.

Tables SM3.7-SM3.11 present our main results using different bandwidths than the analysis presented in the main manuscript (January-December, February-November, March-October, May-August, and June-July).

The extension of fathers' leave does not alter the social role of single parents. Because of this, Table SM3.12 presents the results excluding singles. The share of singles is very small and the substantive results remain unchanged.

Tables SM3.13 and SM3.14 present interaction models that estimate different effects for parents vs. expecting parents (SM3.13) as well as first-time vs. experienced parents (SM3.14). These additional analyses are exploratory, with no clear theoretical expectations. We include them only as robustness tests, i.e., to make sure that the results reported in the main text are not driven by some sub-populations of the sample. Interestingly, neither

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<sup>3</sup>The phrasing of our manipulation check questions in Estonian refers unambiguously to fathers' leave, not parental leave. The exact wording of the two manipulation check questions referring to fathers' leave are as follows: (*Entitlement*) – “Mis Te arvate, mitu päeva tasustatud isapuhkust on värskest isaks saanutel praegu seadusega õigus võtta?”; (*Average use*) – “Mis Te arvate, mitu päeva tasustatud isapuhkust keskmine värskest isaks saanu võtab?”

of these analyses reveal significant sub-group heterogeneity in responses to the treatment. Stronger treatment effects might have been expected among post-birth parents, who are actively engaging in childcare choices (rather than just anticipating them), and among first-time parents who had no established childcare patterns predating the reform. However, our data suggest that no such differences existed. This might be because planning for a new baby is already altering expecting parents' behavior and expectations. We hope future studies can shed further light on this exploratory finding.

### Placebo tests

Finally, Tables SM3.15-SM3.16 present the results of two placebo tests in which we employ two alternative policy reform dates (April 1, 2020 and October 1, 2020) instead of the real date (July 1, 2020). As in our main analysis, we use the data of respondents whose babies were born or due to be born within three months of the placebo treatment dates. The first placebo test focuses on respondents with births between January and June, the second on births between July and December. In each sub-sample, parents with births in the first three months serve as our control group (January-March, July-September), those with births in the second three months as the treatment group (April-June, October-December). As anticipated, the placebo treatment dates, at which no policy change actually occurred, have no significant effect on the gender equality attitudes of new parents. These results provide assurance that the attitudinal effects which we document derive from the increase in fathers' leave rather than other unobserved factors. Note also that the first placebo test places the cutoff (April 1) at about the same time that the government declared state of emergency related to the spread of Covid-19 (March 13). The null effects on that placebo test therefore further suggest that it is unlikely that the coronavirus crisis significantly affected the results of our study.<sup>4</sup>

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<sup>4</sup>For example, some Estonian hospitals limited access for fathers during the beginning of the pandemic (roughly from late March to late May). This limited access might have affected some of our outcome variables. The first placebo test compares parents of babies with birthdates between January-March (pre-restrictions) to parents of babies with birthdates between April-June (period with restrictions). The results in Table SM3.15 are both statistically and substantively insignificant across the board. In other words, restricted access to hospitals does not seem to have affected our outcome variables.

**Table SM3.1:** Manipulation checks – full sample

	Pre-reform (Control)	Post-reform (Treatment)	Difference	N
Entitlement	13.26	29.48	<b>16.22 (p=0.00)</b>	1,359
Average use	9.67	18.50	<b>8.82 (p=0.00)</b>	1,357
Uptake (fathers)	15.56	27.03	<b>11.47 (p=0.00)</b>	610
Uptake (mothers)	334.89	341.00	6.11 (p=0.75)	712

*Note:* Entries for Pre-reform and Post-reform are mean values. The Difference column reports the differences in means and corresponding p-values according to t-tests.

**Table SM3.2:** Manipulation checks – only April-September births

	Pre-reform (Control)	Post-reform (Treatment)	Difference	N
Entitlement	13.09	29.59	<b>16.50 (p=0.00)</b>	800
Average use	10.06	19.86	<b>9.79 (p=0.00)</b>	799
Uptake (fathers)	15.77	27.85	<b>12.09 (p=0.00)</b>	374
Uptake (mothers)	316.10	323.06	6.96 (p=0.79)	407

*Note:* Entries for pre-reform and post-reform are mean values. The Difference column reports the differences in means and corresponding p-values according to t-tests.

**Table SM3.3:** Manipulation checks – no truncation

	Pre-reform (Control)	Post-reform (Treatment)	Difference	N
Entitlement	16.34	29.75	<b>13.41 (p=0.00)</b>	1,359
Average use	9.67	18.67	<b>9.00 (p=0.00)</b>	1,357
Uptake (fathers)	25.17	34.89	<b>9.72 (p=0.07)</b>	610
Uptake (mothers)	334.89	341.00	6.11 (p=0.75)	712

*Note:* Entries for pre-reform and post-reform are mean values. The Difference column reports the differences in means and corresponding p-values according to t-tests.

**Table SM3.4:** Manipulation checks – no truncation, only April-September births

	Pre-reform (Control)	Post-reform (Treatment)	Difference	N
Entitlement	15.90	29.59	<b>13.69 (p=0.00)</b>	800
Average use	10.06	20.11	<b>10.04 (p=0.00)</b>	799
Uptake (fathers)	23.12	36.05	<b>12.93 (p=0.04)</b>	374
Uptake (mothers)	316.10	323.06	6.96 (p=0.79)	407

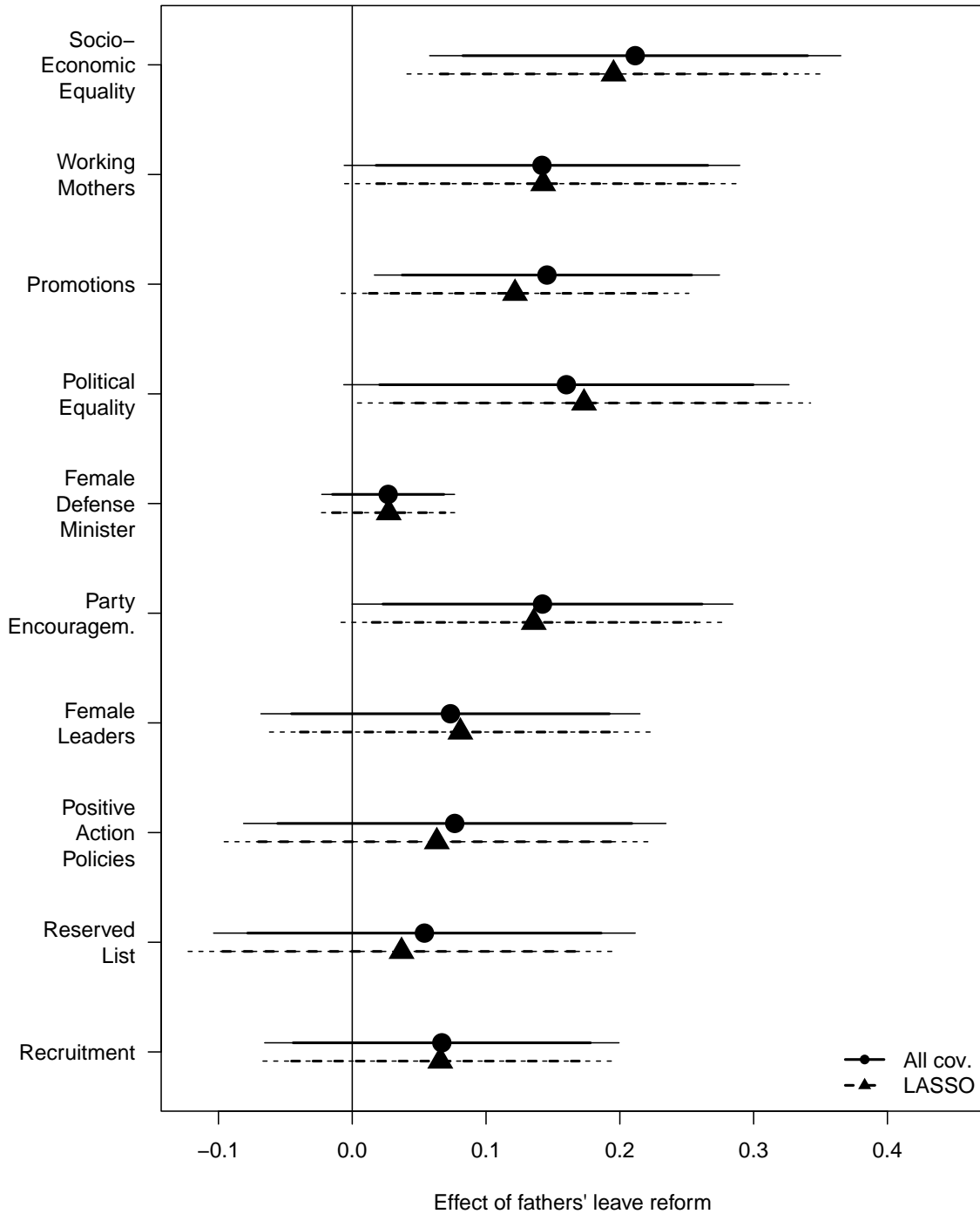
*Note:* Entries for pre-reform and post-reform are mean values. The Difference column reports the differences in means and corresponding p-values according to t-tests.

**Table SM3.5: Full results**

	<i>Outcome variable:</i>								
	SocEconScale			PolScale			PositiveAction		
	(1) No cov.	(2) All cov.	(3) LASSO	(4) No cov.	(5) All cov.	(6) LASSO	(7) No cov.	(8) All cov.	(9) LASSO
postReform	0.15** (0.07)	0.21*** (0.08)	0.20** (0.08)	0.17** (0.08)	0.16* (0.08)	0.17** (0.09)	0.02 (0.07)	0.08 (0.08)	0.06 (0.08)
Age		0.06 (0.05)			0.06 (0.05)			0.06 (0.05)	
Age <sup>2</sup>		-0.001 (0.001)			-0.001 (0.001)			-0.001 (0.001)	
Female		0.19*** (0.07)			0.51*** (0.08)	0.32 (0.36)		0.49*** (0.07)	0.17 (0.30)
Language: Russian		-0.62*** (0.11)			-0.49*** (0.12)			-0.08 (0.11)	
Edu: University		0.47*** (0.09)	0.35*** (0.13)		0.17* (0.09)			-0.13 (0.09)	
Edu: Vocational		-0.10 (0.09)			-0.07 (0.10)			0.01 (0.09)	
Left-right		-0.01 (0.02)			0.0000 (0.02)			-0.01 (0.02)	
Married		0.08 (0.07)			0.07 (0.08)			-0.13* (0.08)	
City		0.15** (0.07)			-0.01 (0.08)			0.001 (0.07)	
Children		-0.12*** (0.03)	0.09 (0.07)		-0.08** (0.03)			0.02 (0.03)	
Post-birth		-0.05 (0.08)	-0.12 (0.11)		0.05 (0.09)	0.08 (0.13)		-0.12 (0.08)	0.15 (0.18)
Age × Edu: Voc.			-0.004 (0.003)						
Age × City			0.002 (0.004)						
Female × Russian			-0.25 (0.19)						
Age × Female						0.005 (0.01)			0.01 (0.01)
Age × Russian						-0.003 (0.01)			
Age × Edu: Uni						0.01 (0.01)			
Female × Edu: Uni			0.33*** (0.12)			-0.02 (0.15)			
Female × Left-right						0.02 (0.03)			
Female × Post-birth			0.04 (0.10)			-0.11 (0.16)			0.02 (0.15)
Russian × Edu: Uni			-0.43** (0.20)						
Russian × Left-right			-0.07*** (0.02)			-0.07 (0.05)			
Edu: Uni × City			0.06 (0.14)						
Edu: Uni × Left-right						-0.01 (0.03)			
Edu: Uni × Post-birth									-0.13 (0.09)
Left-right × Married			0.03** (0.02)			0.01 (0.01)			-0.02** (0.01)
Left-right × Children			-0.02** (0.01)						
Married × Children			-0.12** (0.05)						
Left-right × Post-birth									-0.04 (0.02)
City × Post-birth			0.16 (0.14)			-0.01 (0.10)			-0.03 (0.09)
Constant	-0.15** (0.06)	-1.33 (0.81)	-0.25** (0.11)	-0.13** (0.06)	-1.44* (0.87)	-0.48*** (0.11)	-0.02 (0.06)	-1.12 (0.83)	-0.15 (0.10)
Observations	800	730	730	799	729	729	799	730	730
Adjusted R <sup>2</sup>	0.004	0.18	0.20	0.01	0.10	0.10	-0.001	0.06	0.07

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 4, and 7 account for no covariates; Models 2, 5, and 8 for all covariates; and Models 3, 6, and 9 for the LASSO covariates (standard errors in parentheses). \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Figure SM3.1:** Effect of fathers' leave reform on outcome scales and individual items



*Note:* Plot depicts point estimates with 90% and 95% confidence intervals for the treatment effects (fathers' leave reform) on the three outcome scales and individual response items (described on the *y*-axis). Black (gray) points and bars correspond to the regression specifications using all (LASSO) covariates. Full regression results can be found in Tables DA2.3-DA2.5.

**Table SM3.6:** Effects of post-reform birth on outcome scales for mothers and fathers

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.19*	0.16	0.19*	0.19*	-0.04	-0.08
	(0.10)	(0.10)	(0.11)	(0.11)	(0.10)	(0.11)
Female	0.16	-0.07	0.55***	0.34	0.32**	0.04
	(0.12)	(0.32)	(0.13)	(0.36)	(0.12)	(0.31)
postReform × Female	0.05	0.08	-0.06	-0.03	0.26*	0.34**
	(0.14)	(0.16)	(0.16)	(0.17)	(0.15)	(0.16)
Constant	-1.30	-0.29**	-1.48*	-0.48***	-0.97	-0.09
	(0.81)	(0.14)	(0.88)	(0.11)	(0.83)	(0.10)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	730	730	729	729	730	730
Adjusted R <sup>2</sup>	0.18	0.20	0.10	0.10	0.07	0.08

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). Full results can be found in Table DA2.6. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table SM3.7:** Full results – January-December births

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.13** (0.05)	0.14** (0.05)	0.11** (0.05)	0.12** (0.06)	-0.03 (0.06)	-0.02 (0.06)
Constant	-1.57** (0.64)	-0.31*** (0.10)	-1.71*** (0.65)	-0.28*** (0.09)	-0.40 (0.66)	-0.08 (0.08)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	1,242	1,242	1,242	1,242	1,243	1,243
Adjusted R <sup>2</sup>	0.16	0.17	0.11	0.11	0.07	0.08

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). Parents of children born between January and December are included. Full results can be found in Table DA2.7.  
\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table SM3.8:** Full results – February-November births

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.14** (0.06)	0.14** (0.06)	0.14** (0.06)	0.14** (0.06)	0.03 (0.06)	0.03 (0.06)
Constant	-1.33* (0.68)	-0.21** (0.08)	-1.71** (0.71)	-0.23** (0.09)	-0.99 (0.69)	-0.09 (0.08)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	1,042	1,042	1,041	1,041	1,042	1,042
Adjusted R <sup>2</sup>	0.17	0.18	0.11	0.11	0.08	0.09

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). Parents of children born between February and November are included. Full results can be found in Table DA2.8.  
\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table SM3.9:** Full results – March-October births

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.16** (0.07)	0.16** (0.07)	0.15** (0.07)	0.16** (0.07)	0.04 (0.07)	0.03 (0.07)
Constant	-1.92*** (0.74)	-0.25*** (0.09)	-1.78** (0.78)	-0.30*** (0.09)	-1.03 (0.75)	-0.06 (0.10)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	883	883	882	882	883	883
Adjusted R <sup>2</sup>	0.16	0.18	0.10	0.10	0.07	0.07

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). Parents of children born between March and October are included. Full results can be found in Table DA2.9.  
\*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table SM3.10:** Full results – May-August births

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.17 (0.11)	0.17 (0.11)	0.31*** (0.12)	0.32*** (0.12)	0.07 (0.12)	0.04 (0.12)
Constant	-0.22 (1.01)	-0.24** (0.11)	-1.29 (1.07)	-0.44*** (0.12)	-1.03 (1.05)	-0.09 (0.12)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	490	490	489	489	490	490
Adjusted R <sup>2</sup>	0.16	0.17	0.09	0.10	0.07	0.08

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). Parents of children born between May and August are included. Full results can be found in Table DA2.10.  
\*p<0.1; \*\*p<0.05; \*\*\*p<0.01



**Table SM3.11:** Full results – June-July births

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.21 (0.28)	0.23 (0.28)	0.77** (0.30)	0.81*** (0.30)	0.21 (0.30)	0.18 (0.29)
Constant	1.70 (1.30)	-0.25 (0.15)	-0.35 (1.38)	-0.49*** (0.18)	-0.05 (1.35)	0.12 (0.28)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	262	262	261	261	262	262
Adjusted R <sup>2</sup>	0.13	0.15	0.12	0.12	0.07	0.09

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). Parents of children born between June and July are included. Full results can be found in Table DA2.11. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table SM3.12:** Full results – excluding singles

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.21*** (0.08)	0.20** (0.08)	0.16* (0.08)	0.16* (0.09)	0.09 (0.08)	0.08 (0.08)
Constant	-1.14 (0.83)	-0.17* (0.10)	-1.58* (0.90)	-0.37*** (0.12)	-1.01 (0.85)	-0.16 (0.10)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	711	711	711	711	711	711
Adjusted R <sup>2</sup>	0.19	0.20	0.11	0.10	0.07	0.08

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). *Divorced* and *single, never married* respondents are excluded from the analysis. Full results can be found in Table DA2.12. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table SM3.13:** Effects of post-reform birth on outcome scales for parents and expecting parents

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.22*	0.20*	0.14	0.14	0.12	0.12
	(0.11)	(0.11)	(0.12)	(0.12)	(0.12)	(0.11)
Post-birth	-0.05	-0.12	0.03	0.05	-0.07	0.23
	(0.12)	(0.14)	(0.13)	(0.16)	(0.13)	(0.20)
postReform × Post-birth	-0.01	-0.003	0.03	0.06	-0.08	-0.11
	(0.16)	(0.16)	(0.17)	(0.17)	(0.16)	(0.16)
Constant	-1.33	-0.25**	-1.44	-0.47***	-1.12	-0.17*
	(0.81)	(0.11)	(0.88)	(0.12)	(0.83)	(0.10)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	730	730	729	729	730	730
Adjusted R <sup>2</sup>	0.18	0.20	0.10	0.10	0.06	0.07

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). *postBirth* is coded as “1” for respondents who were interviewed after their baby was born (i.e., parents), and “0” for respondents who were interviewed before their baby was born (i.e., expecting parents). Full results can be found in Table DA2.13. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table SM3.14:** Effects of post-reform birth on outcome scales for first-time and experienced parents

	SocEconScale		<i>Outcome variable:</i>			
	(1)	(2)	PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform	0.25*	0.25*	0.11	0.09	0.21	0.22
	(0.13)	(0.14)	(0.14)	(0.15)	(0.14)	(0.14)
Existing children	-0.02	-0.09	-0.02	-0.15	0.21	0.25
	(0.14)	(0.16)	(0.15)	(0.17)	(0.14)	(0.16)
postReform × Existing children	-0.07	-0.11	0.07	0.13	-0.18	-0.21
	(0.15)	(0.16)	(0.17)	(0.18)	(0.16)	(0.17)
Constant	-1.34*	-0.29*	-1.43	-0.54***	-1.16	-0.38**
	(0.81)	(0.16)	(0.88)	(0.19)	(0.83)	(0.18)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	730	730	729	729	730	730
Adjusted R <sup>2</sup>	0.18	0.20	0.10	0.10	0.06	0.07

*Note:* Entries are estimates of the effect of post-reform birth (treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). *Existing children* is coded as “1” for respondents who already had at least one prior child (i.e., experienced parents), and “0” for respondents who were having their first child (i.e., first-time parents). Full results can be found in Table DA2.14.

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

**Table SM3.15:** Placebo test – January-June births

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform (Placebo)	-0.06 (0.10)	-0.02 (0.11)	-0.05 (0.11)	-0.05 (0.11)	-0.16 (0.11)	-0.14 (0.11)
Constant	-2.69*** (1.01)	-0.32 (0.23)	-1.07 (1.07)	-0.13 (0.21)	0.55 (1.06)	0.04 (0.19)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	566	566	567	567	567	567
Adjusted R <sup>2</sup>	0.19	0.19	0.14	0.13	0.06	0.08

*Note:* Entries are estimates of the placebo effect of post-reform birth (placebo treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). Parents of children born between January and March are coded as control; parents of children born between April and June are coded as (placebo) treated. Full results can be found in Table DA2.15. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

**Table SM3.16:** Placebo test – July-December births

	<i>Outcome variable:</i>					
	SocEconScale		PolScale		PositiveAction	
	(1)	(2)	(3)	(4)	(5)	(6)
postReform (Placebo)	-0.06 (0.10)	-0.05 (0.10)	-0.07 (0.10)	-0.09 (0.10)	-0.15 (0.10)	-0.15 (0.10)
Constant	-0.66 (0.83)	-0.07 (0.11)	-1.92** (0.83)	-0.28*** (0.11)	-0.72 (0.84)	-0.03 (0.17)
Controls	All cov.	LASSO	All cov.	LASSO	All cov.	LASSO
Observations	676	676	675	675	676	676
Adjusted R <sup>2</sup>	0.13	0.15	0.08	0.09	0.08	0.09

*Note:* Entries are estimates of the placebo effect of post-reform birth (placebo treatment) on the different outcomes, described in the column headers. Models 1, 3, and 5 account for all covariates, while Models 2, 4, and 6 account for the LASSO covariates (standard errors in parentheses). Parents of children born between July and September are coded as control; parents of children born between October and December are coded as (placebo) treated. Full results can be found in Table DA2.16. \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

## SM4 Study 2: Survey experiment

As discussed in the main text, we conducted a separate Study 2 (referred to as Parental Leave Survey in the pre-analysis plan) that examined how passive exposure to (as opposed to active experience with) the new policy affected attitudes towards gender equality in the Estonian public at large. This survey experiment allows us to explore whether simple awareness of the reform (as opposed to being directly affected) led to more gender-equal attitudes among the general public.

Study 2 is a national survey of the general population ( $N = 1181$ ) with an embedded experiment conducted in March 2020, i.e., prior to the reform. As was the case with Study 1, the Institutional Review Board at Washington University in St. Louis (IRB ID #202001152) determined the study exempt from further review, and neither documentation nor waiver of informed consent was required. Respondents were able to opt out of participation at any time after starting the survey. Kantar Emor compensated the respondents.

The experiment randomly assigned respondents to treatment (i.e., information about the new leave policy) or a control condition before measuring attitudes toward social and political gender equality. Specifically, respondents in the treatment group were shown the following information, “The parental leave policy will change on July 1, 2020, allowing fathers to take longer paid leave from work in order to stay home with their child. Specifically, a father, whose child is born on or after July 1, 2020 can stay home with the child for 30 days instead of the current 10 days.” The control group, instead, saw the following message, “The current parental leave policy allows fathers to take 10 days of paid leave from work in order to stay home with their child.” The outcome variables and covariates in Study 2 matched those of Study 1.

The analysis of Study 2 follows that of our main study as closely as possible. Table SM4.1 presents descriptive statistics, Table SM4.2 the balance checks, and Table SM4.3 the analysis of the manipulation check question. The question wording followed Study 1 and asked respondents how many days of paid parental leave they thought an average new father would take (*Average use*). As in Study 1, we find a statistically significant difference between the treatment and control groups suggesting that the informational treatment altered respondents’ perceptions of fathers’ leave.

Table SM4.4 presents the full results for the three outcome scales including (i) models without covariates, (ii) models with all covariates, and (iii) models with LASSO covariates; and Figure SM4.1 shows the treatment effects based on the all covariates and LASSO covariates specifications for our three outcome scales as well as for the separate items. The analysis shows that our sample is well-balanced across the treatment and control groups and that we find consistent null effects for our treatment across all scales, individual items, and different modeling strategies.

In short, exposure to information about the upcoming reform allowing fathers to stay home with their children did not alter societal attitudes more broadly. This suggests that a policy intervention can have progressive attitudinal effects among the population that it targets, and whose life choices it alters, but may not have the same effect among the general public, who are only passively and informationally exposed to the reform.

**Table SM4.1:** Descriptive statistics

	N	Mean	SD	Min	Max
<i>Outcome variables</i>					
Socio-economic equality scale	1179	0	1	-2.98	1.61
Political equality scale	1179	0	1	-2.94	1.33
Positive action scale	1180	0	1	-1.91	1.76
<i>Treatment variable</i>					
Treatment	1181	0.51	0.50	0	1
<i>Control variables</i>					
Age	1181	49.15	18.40	16	84
Age <sup>2</sup>	1181	2753.52	1842.70	256	7056
Female	1181	0.55	0.50	0	1
Interview language: Russian	1181	0.17	0.38	0	1
Education: University	1181	0.53	0.50	0	1
Left-right position	1132	5.70	2.14	0	10
Married	1181	0.42	0.49	0	1
Residence type: City	1181	0.50	0.50	0	1
Children	1181	0.47	0.84	0	4

**Table SM4.2:** Balance checks

	Control	Treatment	Difference	p-value
Age	49.03	49.26	0.22	0.83
Age <sup>2</sup>	2742.10	2764.68	22.58	0.83
Female	0.55	0.55	0.01	0.82
Interview language: Russian	0.17	0.18	0.01	0.66
Education: University	0.52	0.54	0.02	0.48
Left-right position	5.73	5.67	-0.06	0.63
Married	0.41	0.43	0.02	0.54
City	0.52	0.48	-0.04	0.17
Children	0.47	0.47	-0.00	0.94

*Note:* Entries for control and treatment are mean values. The Difference column reports the differences in means and the final column corresponding p-values according to t-tests.

**Table SM4.3:** Manipulation check

	Control	Treatment	Difference
Average use	22.96	26.94	<b>3.98 (p=0.00)</b>

*Note:* Entries for Control and Treatment are mean values. The Difference column reports the differences in means and corresponding p-value according to a t-test.

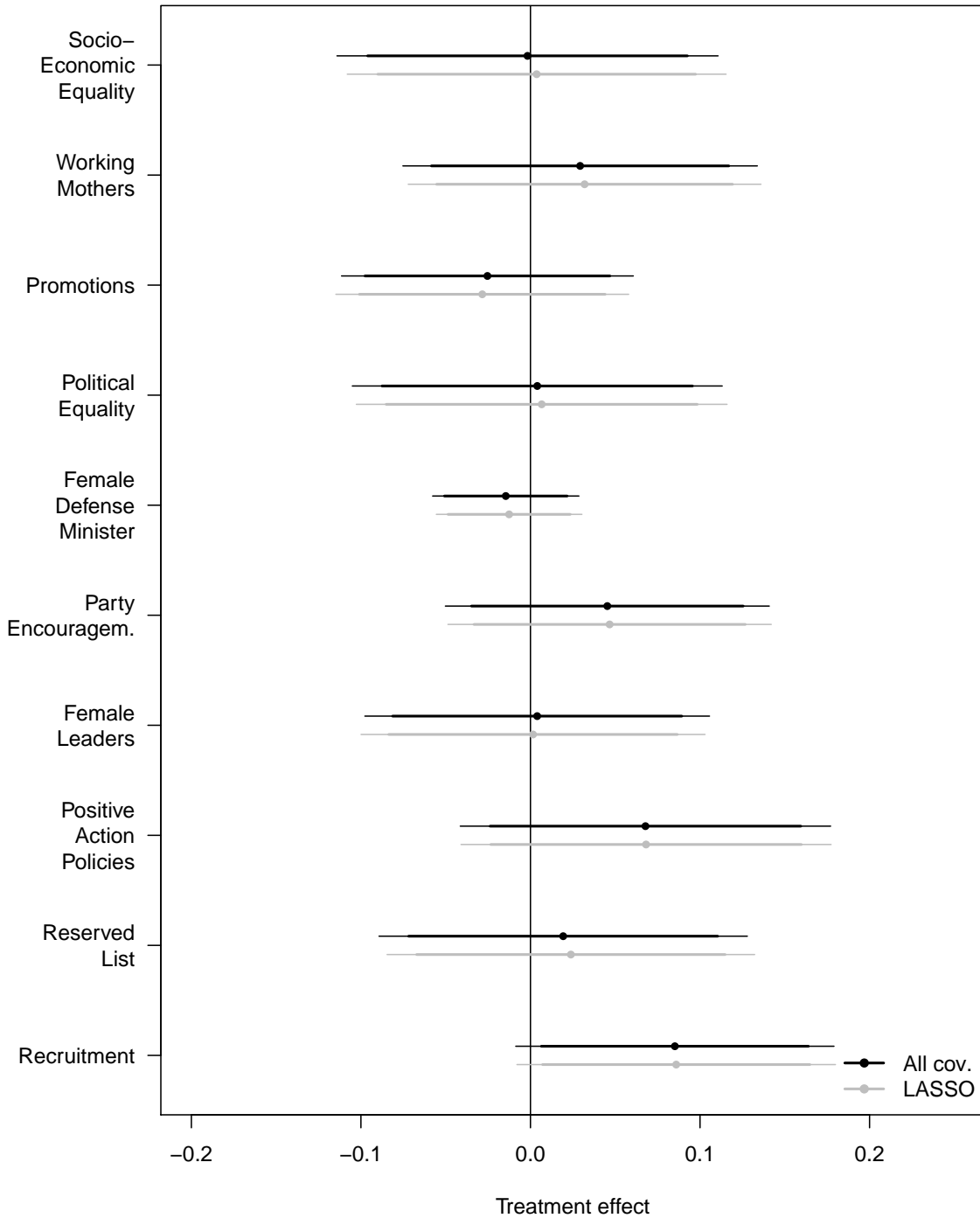
**Table SM4.4: Full results**

	<i>Outcome variable:</i>								
	SocEconScale			PolScale			PositiveAction		
	(1) No cov.	(2) All cov.	(3) LASSO	(4) No cov.	(5) All cov.	(6) LASSO	(7) No cov.	(8) All cov.	(9) LASSO
Treatment	-0.01 (0.06)	-0.002 (0.06)	0.004 (0.06)	0.02 (0.06)	0.004 (0.06)	0.01 (0.06)	0.06 (0.06)	0.07 (0.06)	0.07 (0.06)
Age		-0.01 (0.01)	-0.01*** (0.002)		-0.01 (0.01)	-0.01*** (0.002)		-0.004 (0.01)	
Age <sup>2</sup>		0.0000 (0.0001)			-0.0001 (0.0001)			0.0001 (0.0001)	0.0000** (0.0000)
Female		0.31*** (0.06)	0.36*** (0.09)		0.43*** (0.06)	0.35*** (0.07)		0.60*** (0.06)	0.60*** (0.06)
Language: Russian		-0.43*** (0.09)			-0.22*** (0.08)			-0.16* (0.08)	
Edu: University		0.30*** (0.06)	0.31*** (0.09)		0.12** (0.06)			-0.08 (0.06)	
Left-Right		-0.03* (0.01)			-0.04*** (0.01)	-0.03** (0.02)		-0.05*** (0.01)	-0.07*** (0.02)
Married		0.10 (0.06)			0.12** (0.06)			-0.01 (0.06)	
City		0.15** (0.06)	0.14** (0.06)		-0.07 (0.06)			-0.16*** (0.06)	-0.31* (0.17)
Children		-0.05 (0.04)			-0.04 (0.04)			-0.02 (0.04)	
Female × Russian			-0.44*** (0.12)						
Female × Edu: Uni			0.07 (0.11)			0.13* (0.08)			
Russian × Edu: Uni			-0.33*** (0.13)						-0.17 (0.13)
City × Children			0.08 (0.05)						
Russian × Left-Right						0.0003 (0.03)			
Russian × City						-0.16 (0.16)			-0.05 (0.12)
Russian × Children						-0.11 (0.08)			
Left-Right × City						-0.01 (0.01)			0.03 (0.03)
Married × City									-0.13 (0.08)
Constant	0.01 (0.04)	0.30 (0.24)	0.03 (0.11)	-0.01 (0.04)	0.56** (0.23)	0.64*** (0.12)	-0.03 (0.04)	0.11 (0.23)	0.08 (0.14)
Observations	1,179	1,131	1,131	1,179	1,132	1,132	1,180	1,131	1,131
Adjusted R <sup>2</sup>	-0.001	0.09	0.10	-0.001	0.12	0.11	0.0002	0.12	0.12

*Note:* Entries are estimates of the effect of treatment on the different outcomes, described in the column headers. Models 1, 4, and 7 account for no covariates; Models 2, 5, and 8 for all covariates; and Models 3, 6, and 9 for the LASSO covariates (standard errors in parentheses). \*p<0.1; \*\*p<0.05; \*\*\*p<0.01



**Figure SM4.1:** Treatment effects on outcome scales and individual items



*Note:* Plot depicts point estimates, 90% and 95% confidence intervals for the treatment effects on the three outcome scales and individual response items (described on the *y*-axis). Black (gray) points and bars correspond to the regression specifications using all (LASSO) covariates. Full regression results can be found in Tables DA3.1-DA3.3.