

# Family Matters: Exposure to Gender-Affirming or -Denying Practices Following Gender Identity Milestones.

## Online Appendix

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## **A. Online Appendix – Additional Tables and Figures**

This online appendix includes additional tables and figures for the paper “Family Matters: Exposure to Gender-Affirming or -Denying Practices Following Gender Identity Milestones.” The analysis uses data from the 2015 United States Transgender Survey ([James et al., 2019](#)).

### **References**

**James, Sandy E., Jody Herman, Mara Keisling, Lisa Mottet, and Ma’ayan Anafi.** 2019. “2015 U.S. Transgender Survey (USTS).” Inter-university Consortium for Political and Social Research [distributor], 2019-05-22. <https://doi.org/10.3886/ICPSR37229.v1>.

Table A.1: Pre-intervention Characteristics by Intervention Group and Level of Family Support

	Supportive family		Neutral family		Adverse family	
	Intervention (n = 11,716)	Control (n = 12,539)	Intervention (n = 18,712)	Control (n = 18,995)	Intervention (n = 7,140)	Control (n = 7,316)
Sex assigned at birth, n (%)						
Female	<b>4,067 (34.7)</b>	<b>4,190 (32.0)</b>	<b>8,089 (43.2)</b>	<b>7,836 (38.7)</b>	<b>3,192 (44.7)</b>	<b>3,110 (41.2)</b>
Male	<b>7,649 (65.3)</b>	<b>8,349 (68.0)</b>	<b>10,623 (56.8)</b>	<b>11,159 (61.3)</b>	<b>3,948 (55.3)</b>	<b>4,206 (58.8)</b>
Race/Ethnicity, n (%)						
Black	285 (2.4)	284 (2.3)	610 (3.3)	629 (3.2)	167 (2.3)	175 (2.5)
White	9,564 (81.6)	10,324 (81.7)	14,765 (78.9)	14,989 (78.1)	5,687 (79.6)	5,874 (79.5)
Hispanic	620 (5.3)	649 (5.1)	1,088 (5.8)	1,139 (6.0)	434 (6.1)	429 (6.2)
Other	1,247 (10.6)	1,282 (10.9)	2,249 (12.0)	2,238 (12.7)	852 (11.9)	838 (11.8)
Region of birth, n (%)						
Northeast	2,605 (22.2)	2,813 (22.9)	4,179 (22.3)	4,326 (22.4)	1,335 (18.7)	1,402 (19.2)
Midwest	2,637 (22.5)	2,796 (22.1)	4,248 (22.7)	4,280 (22.2)	1,702 (23.8)	1,760 (23.6)
South	2,787 (23.8)	2,980 (23.3)	4,757 (25.4)	4,838 (25.7)	2,009 (28.1)	2,042 (28.1)
West	3,081 (26.3)	3,310 (26.6)	4,623 (24.7)	4,632 (24.9)	1,677 (23.5)	1,691 (23.3)
Missing	606 (5.2)	640 (5.1)	905 (4.8)	919 (4.8)	417 (5.8)	421 (5.8)
Suicide attempt, n (%)						
Yes	959 (8.2)	987 (7.5)	1,997 (10.7)	2,013 (10.9)	1,008 (14.1)	976 (14.2)
No	10,694 (91.3)	11,492 (91.9)	16,601 (88.7)	16,869 (88.6)	6,078 (85.1)	6,282 (85.1)
Missing	63 (0.5)	60 (0.5)	114 (0.6)	113 (0.6)	54 (0.8)	58 (0.7)
Ranaway, n (%)						
Yes	15 (0.1)	11 (0.1)	156 (0.8)	143 (0.9)	81 (1.1)	68 (1.0)
No	11,695 (99.8)	12,521 (99.9)	18,541 (99.1)	18,835 (99.0)	7,047 (98.7)	7,234 (98.8)
Missing	6 (0.1)	7 (0.0)	15 (0.1)	17 (0.1)	12 (0.2)	14 (0.2)
Conversion therapy, n (%)						
Yes	63 (0.5)	50 (0.5)	326 (1.7)	331 (2.1)	161 (2.3)	158 (2.3)
No	11,653 (99.5)	12,489 (99.5)	18,386 (98.3)	18,664 (97.9)	6,979 (97.7)	7,158 (97.7)
Hormone replacement therapy, n (%)						
Yes	9 (0.1)	5 (0.0)	18 (0.1)	14 (0.1)	2 (0.0)	1 (0.0)
No	11,595 (99.0)	12,423 (99.1)	18,538 (99.1)	18,828 (99.0)	7,046 (98.7)	7,214 (98.5)
Missing	112 (1.0)	111 (0.9)	156 (0.8)	153 (0.9)	92 (1.3)	101 (1.5)

*Notes:* Significant differences ( $p < .05$ ) between study groups are denoted with bolding and were determined through regression with robust standard errors a category-specific indicator as the outcome. The analysis was conducted on the sample constructed for the conversion therapy outcome one year prior to the intervention group initiating the milestone and was pooled across the four gender identity milestones.

Table A.2: Impact of Gender Identity Milestones on Conversion Therapy

Measure	Conversion therapy				
	Supportive family	Neutral family	Adverse family	Overall	Difference
<i>Panel A</i>					
Felt gender was different	0.17 (0.09)	0.19 (0.13)	1.20*** (0.35)	0.37*** (0.10)	-0.30 (0.16)
Pre-treatment average outcome	0.06	0.08	0.13	0.08	
Treated individuals	5,238	7,873	3,031	16,142	
Sample size	56,610	80,302	31,353	168,265	
<i>Panel B</i>					
Thought of self as trans	0.16 (0.13)	0.88*** (0.19)	1.44*** (0.42)	0.77*** (0.13)	-0.88*** (0.22)
Pre-treatment average outcome	0.39	1.30	1.73	1.11	
Treated individuals	4,106	6,762	2,657	13,525	
Sample size	49,984	79,343	31,365	160,692	
<i>Panel C</i>					
Told others that was trans	1.38*** (0.40)	2.90*** (0.58)	7.29*** (1.35)	3.31*** (0.42)	-2.69*** (0.69)
Pre-treatment average outcome	1.06	4.27	6.78	3.84	
Treated individuals	1,698	3,136	1,135	5,969	
Sample size	23,610	41,232	15,226	80,068	
<i>Panel D</i>					
Full time as gender identity	0.39 (1.02)	3.77** (1.41)	5.26* (2.49)	2.84** (0.87)	-3.76* (1.60)
Pre-treatment average outcome	3.86	10.41	10.73	8.18	
Treated individuals	674	941	317	1,932	
Sample size	9,996	14,268	4,734	28,998	

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . This table reports the baseline event study estimates for the impact of gender identity milestones on conversion therapy by family support group. A separate cohort is defined for every combination of age and calendar year of first exposure. The event window includes five years before and one year after each cohort's initiation. For each cohort, the control group includes all individuals who initiated one year after the treated group. Cohorts with less than fifty control units are dropped. All regressions include cohort-individual and cohort-age-calendar year fixed effects as well as cohort-specific controls for the other three social transition steps and are weighted by synthetic unit weights. Robust standard errors are clustered by individual and reported in parenthesis.

Table A.3: Impact of Gender Identity Milestones on Hormone Replacement Therapy

Measure	Hormone replacement therapy				
	Supportive family	Neutral family	Adverse family	Overall	Difference
<i>Panel A</i>					
Felt gender was different	-0.02 (0.00)	0.02 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.03 (0.00)
Pre-treatment average outcome	0.02	0.00	0.00	0.01	
Treated individuals	5,202	7,837	3,005	16,044	
Sample size	56,269	79,938	31,064	167,271	
<i>Panel B</i>					
Thought of self as trans	-0.04 (0.03)	0.05 (0.03)	-0.01 (0.02)	0.01 (0.02)	-0.08* (0.04)
Pre-treatment average outcome	0.05	0.03	0.00	0.03	
Treated individuals	4,074	6,731	2,631	13,436	
Sample size	49,602	78,980	31,052	159,634	
<i>Panel C</i>					
Told others that was trans	0.73** (0.27)	0.12 (0.08)	0.23 (0.13)	0.32*** (0.09)	0.58* (0.28)
Pre-treatment average outcome	0.00	0.10	0.00	0.05	
Treated individuals	1,680	3,122	1,129	5,931	
Sample size	23,388	41,038	15,112	79,538	
<i>Panel D</i>					
Full time as gender identity	6.20*** (1.45)	3.90*** (0.74)	-0.16 (0.47)	4.04*** (0.63)	3.32* (1.55)
Pre-treatment average outcome	0.89	1.39	0.63	1.09	
Treated individuals	672	936	315	1,923	
Sample size	9,960	14,196	4,692	28,848	

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . This table reports the baseline event study estimates for the impact of gender identity milestones on initiating gender-affirming hormone therapy by family support group. A separate cohort is defined for every combination of age and calendar year of first exposure. The event window includes five years before and one year after each cohort's initiation. For each cohort, the control group includes all individuals who initiated one year after the treated group. Cohorts with less than fifty control units are dropped. All regressions include cohort-individual and cohort-age-calendar year fixed effects as well as cohort-specific controls for the other three social transition steps and are weighted by synthetic unit weights. Robust standard errors are clustered by individual and reported in parenthesis.

Table A.4: Impact of Gender Identity Milestones on Conversion Therapy, Assigned Female at Birth

Measure	Conversion therapy				
	Supportive family	Neutral family	Adverse family	Overall	Difference
<i>Panel A</i>					
Felt gender was different	0.21 (0.13)	0.30* (0.15)	1.02* (0.40)	0.39*** (0.11)	-0.28 (0.20)
Pre-treatment average outcome	0.06	0.12	0.00	0.08	
Treated individuals	3,231	4,191	1,577	8,999	
Sample size	35,186	43,945	16,759	95,890	
<i>Panel B</i>					
Thought of self as trans	0.09 (0.19)	0.43 (0.24)	1.52* (0.62)	0.51** (0.17)	-0.64* (0.31)
Pre-treatment average outcome	0.55	1.67	1.30	1.22	
Treated individuals	2,568	3,602	1,380	7,550	
Sample size	31,548	42,768	16,512	90,828	
<i>Panel C</i>					
Told others that was trans	1.19** (0.43)	1.59* (0.66)	5.43** (1.78)	2.15*** (0.48)	-1.39 (0.80)
Pre-treatment average outcome	1.24	4.52	6.57	3.86	
Treated individuals	1,291	2,100	731	4,122	
Sample size	17,956	27,432	9,852	55,240	
<i>Panel D</i>					
Full time as gender identity	4.44* (1.79)	2.73 (1.44)	0.55 (2.68)	2.99** (1.04)	2.29 (2.20)
Pre-treatment average outcome	3.80	9.65	11.11	7.76	
Treated individuals	606	777	279	1,662	
Sample size	8,910	11,652	4,188	24,750	

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . This table reports the event study estimates for the impact of gender identity milestones on conversion therapy by family support group using only respondents who were assigned female at birth. A separate cohort is defined for every combination of age and calendar year of first exposure. The event window includes five years before and one year after each cohort's initiation. For each cohort, the control group includes all individuals who initiated one year after the treated group. Cohorts with less than twenty five control units are dropped. All regressions include cohort-individual and cohort-age-calendar year fixed effects as well as cohort-specific controls for the other three social transition steps and are weighted by synthetic unit weights. Robust standard errors are clustered by individual and reported in parenthesis.

Table A.5: Impact of Gender Identity Milestones on Conversion Therapy, Assigned Male at Birth

Measure	Conversion therapy				
	Supportive family	Neutral family	Adverse family	Overall	Difference
<i>Panel A</i>					
Felt gender was different	0.00 (0.00)	-0.32 (0.00)	0.69 (0.00)	-0.03 (0.00)	0.04 (0.00)
Pre-treatment average outcome	0.05	0.03	0.28	0.08	
Treated individuals	2,007	3,682	1,423	7,112	
Sample size	21,424	36,357	14,288	72,069	
<i>Panel B</i>					
Thought of self as trans	0.38 (0.23)	1.42*** (0.32)	2.24** (0.71)	1.33*** (0.24)	-1.28*** (0.38)
Pre-treatment average outcome	0.13	0.89	2.19	0.97	
Treated individuals	1,538	3,160	1,277	5,975	
Sample size	18,436	36,575	14,853	69,864	
<i>Panel C</i>					
Told others that was trans	2.46* (1.24)	5.01*** (1.14)	7.51*** (1.93)	4.97*** (0.81)	-3.25* (1.58)
Pre-treatment average outcome	0.71	3.84	7.18	3.85	
Treated individuals	423	1,042	404	1,869	
Sample size	5,934	13,872	5,374	25,180	
<i>Panel D</i>					
Full time as gender identity	-4.01 (2.71)	4.10 (4.26)	-3.46 (11.40)	1.08 (2.97)	-7.09 (4.82)
Pre-treatment average outcome	1.64	14.18	23.81	11.57	
Treated individuals	61	134	21	216	
Sample size	1,008	2,172	354	3,534	

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . This table reports the event study estimates for the impact of gender identity milestones on conversion therapy by family support group using only respondents who were assigned male at birth. A separate cohort is defined for every combination of age and calendar year of first exposure. The event window includes five years before and one year after each cohort's initiation. For each cohort, the control group includes all individuals who initiated one year after the treated group. Cohorts with less than twenty five control units are dropped. All regressions include cohort-individual and cohort-age-calendar year fixed effects as well as cohort-specific controls for the other three social transition steps and are weighted by synthetic unit weights. Robust standard errors are clustered by individual and reported in parenthesis.

Table A.6: Impact of Gender Identity Milestones on Hormone Replacement Therapy, Assigned Female at Birth

Measure	Hormone replacement therapy				
	Supportive family	Neutral family	Adverse family	Overall	Difference
<i>Panel A</i>					
Felt gender was different	-0.05 (0.05)	0.01 (0.05)	0.00 (0.00)	-0.01 (0.03)	-0.05 (0.06)
Pre-treatment average outcome	0.03	0.00	0.00	0.01	
Treated individuals	3,210	4,170	1,567	8,947	
Sample size	34,991	43,729	16,628	95,348	
<i>Panel B</i>					
Thought of self as trans	-0.03 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.01 (0.00)	-0.03 (0.00)
Pre-treatment average outcome	0.08	0.00	0.00	0.03	
Treated individuals	2,549	3,586	1,372	7,507	
Sample size	31,314	42,579	16,408	90,301	
<i>Panel C</i>					
Told others that was trans	0.42 (0.27)	0.12* (0.06)	0.17 (0.17)	0.22* (0.09)	0.29 (0.28)
Pre-treatment average outcome	0.00	0.00	0.00	0.00	
Treated individuals	1,280	2,089	730	4,099	
Sample size	17,824	27,283	9,810	54,917	
<i>Panel D</i>					
Full time as gender identity	4.88*** (1.26)	3.43*** (0.73)	0.14 (0.10)	3.41*** (0.57)	2.32 (1.37)
Pre-treatment average outcome	0.50	0.26	0.00	0.30	
Treated individuals	605	774	278	1,657	
Sample size	8,886	11,610	4,170	24,666	

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . This table reports the event study estimates for the impact of gender identity milestones on initiating gender-affirming hormone therapy by family support group using only respondents who were assigned female at birth. A separate cohort is defined for every combination of age and calendar year of first exposure. The event window includes five years before and one year after each cohort's initiation. For each cohort, the control group includes all individuals who initiated one year after the treated group. Cohorts with less than twenty five control units are dropped. All regressions include cohort-individual and cohort-age-calendar year fixed effects as well as cohort-specific controls for the other three social transition steps and are weighted by synthetic unit weights. Robust standard errors are clustered by individual and reported in parenthesis.



Table A.7: Impact of Gender Identity Milestones on Hormone Replacement Therapy, Assigned Male at Birth

Measure	Hormone replacement therapy				
	Supportive family	Neutral family	Adverse family	Overall	Difference
<i>Panel A</i>					
Felt gender was different	0.03 (0.00)	-0.02 (0.00)	0.00 (0.00)	0.00 (0.00)	0.04 (0.00)
Pre-treatment average outcome	0.00	0.00	0.00	0.00	
Treated individuals	1,992	3,667	1,407	7,066	
Sample size	21,278	36,209	14,130	71,617	
<i>Panel B</i>					
Thought of self as trans	0.06 (0.07)	0.11 (0.06)	-0.01 (0.05)	0.07 (0.04)	-0.02 (0.08)
Pre-treatment average outcome	0.00	0.06	0.00	0.03	
Treated individuals	1,525	3,145	1,259	5,929	
Sample size	18,288	36,401	14,644	69,333	
<i>Panel C</i>					
Told others that was trans	1.28 (0.90)	0.01 (0.21)	0.59 (0.42)	0.42 (0.25)	1.11 (0.92)
Pre-treatment average outcome	0.00	0.29	0.00	0.16	
Treated individuals	416	1,039	399	1,854	
Sample size	5,850	13,827	5,302	24,979	
<i>Panel D</i>					
Full time as gender identity	23.64** (7.90)	3.95 (4.12)	2.91 (13.38)	9.46** (3.64)	19.84* (8.85)
Pre-treatment average outcome	3.28	6.82	4.76	5.61	
Treated individuals	61	132	21	214	
Sample size	1,008	2,148	348	3,504	

Notes: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ . This table reports the event study estimates for the impact of gender identity milestones on initiating gender-affirming hormone therapy by family support group using only respondents who were assigned male at birth. A separate cohort is defined for every combination of age and calendar year of first exposure. The event window includes five years before and one year after each cohort's initiation. For each cohort, the control group includes all individuals who initiated one year after the treated group. Cohorts with less than twenty five control units are dropped. All regressions include cohort-individual and cohort-age-calendar year fixed effects as well as cohort-specific controls for the other three social transition steps and are weighted by synthetic unit weights. Robust standard errors are clustered by individual and reported in parenthesis.