

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure. Timeline of State Same-Sex Marriage Policies Prior to 2015

																AK
																AZ
		Legal decision														CO
		Legislation														ID
																IN
																IL
																KS
																MT
																NC
																NV
																OK
															CA	OR
															DE	PA
															HI	SC
															MD	UT
															MN	VA
															NJ	WV
									IA				ME	NM	WI	
					MA			CT	VT	NH	NY	WA	RI	WY		
1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015

Notes: Data collection occurred during January-May in odd years (bolded). States were coded as having same-sex marriage if same-sex marriage was legal during the full period of data collection. States that passed same sex-marriage during odd years were not coded as having same-sex marriage until the following odd year. Two states enacted same-sex marriage policies during the data collection period (Iowa in February 2009 and Delaware in April 2013) and were coded as not having same-sex marriage until the following data collection cycle (2013 for Iowa and 2015 for Delaware). States in gray did not participate in the YRBSS.

eTable 1. Data Collection on Sexual Orientation

State	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015
AR											X
AZ										X	X
CA											X
CT									X	X	X
DE					X	X	X	X	X	X	X
FL											X
HI									X	X	X
IL								X	X	X	X
IN											X
KY											X
MA			X	X	X	X	X	X	X	X	X
MD										X	X
ME							X	X	X	X	X
MI										X	X
NC										X	X
ND								X	X	X	X
NH										X	
NM										X	X
NV											X
NY											X
OK											X
PA											X
RI							X	X	X	X	X
VT						X	X	X	X		X
WI									X	X	
WV											X
WY											X
TOTAL	0	0	1	1	2	3	5	7	10	15	25

eTable 2. Timing of Same-Sex Marriage Policies and Data Collection

State		Date of legalization	Form of legalization	First year of analysis coded as enacting same sex marriage	Number of survey rounds of data asking about suicide attempts and with weighted data	Number of survey rounds asking about sexual identity and with weighted data
Alabama	AL	6/26/15	Court	None	7	0
Alaska	AK	10/12/14	Court	2015	7	0
Arizona	AZ	10/17/14	Court	2015	7	2
Arkansas	AR	6/26/15	Court	None	8	1
California	CA	6/26/13	Court***	2015	1	1
Colorado	CO	10/17/14	Court	2015	3	0
Connecticut	CT	11/12/08	Court	2009	6	3
Delaware	DE	7/1/13	Legislation	2015	7	7
Florida	FL	1/6/15	Court	None	8	1
Georgia	GA	6/26/15	Court	None	6	0
Hawaii	HI	12/2/13	Legislation	2015	7	3
Idaho	ID	10/15/14	Court	2015	8	0
Illinois	IL	11/20/13	Legislation	2015	5	4
Indiana	IN	10/6/14	Court	2015	5	1
Iowa	IA	4/3/09	Court	2011	3	0
Kansas	KS	6/26/15	Court	None	5	0
Kentucky	KY	6/26/15	Court	None	7	1
Louisiana	LA	6/26/15	Court	None	4	0
Maine	ME	12/29/12	Legislation*^	2013	8	5
Maryland	MD	1/1/13	Legislation*	2015	4	2
Massachusetts	MA	5/7/04	Court	2005	9	9
Michigan	MI	6/26/15	Court**	None	9	2
Minnesota	MN	7/1/13	Legislation	Does not participate in YRBSS		
Mississippi	MS	6/26/15	Court	None	8	0
Missouri	MO	6/26/15	Court	None	8	0
Montana	MT	11/9/14	Court	2015	9	0
Nebraska	NE	6/26/15	Court	None	6	0
Nevada	NV	10/9/14	Court	2015	8	1
New Hampshire	NH	1/1/10	Legislation	2011	7	1
New Jersey	NJ	10/22/13	Court	2015	3	0

State		Date of legalization	Form of legalization	First year of analysis coded as enacting same sex marriage	Number of survey rounds of data asking about suicide attempts and with weighted data	Number of survey rounds asking about sexual identity and with weighted data
New Mexico	NM	12/19/13	Court	2015	6	2
New York	NY	7/24/11	Legislation	2013	8	1
North Carolina	NC	10/10/14	Court	2015	5	0
North Dakota	ND	6/26/15	Court	None	9	4
Ohio	OH	6/26/15	Court	None	3	0
Oklahoma	OK	10/6/14	Court	2015	6	1
Oregon	OR	5/19/14	Court	Does not participate in YRBSS		
Pennsylvania	PA	5/20/14	Court	2015	2	1
Rhode Island	RI	7/1/11	Legislation	2013	8	5
South Carolina	SC	11/12/14	Court	2015	8	0
South Dakota	SD	6/26/15	Court	None	9	0
Tennessee	TN	6/26/15	Court	None	7	0
Texas	TX	6/26/15	Court	None	6	0
Utah	UT	10/6/14	Court^^	2015	8	0
Vermont	VT	9/1/09	Legislation	2011	8	5
Virginia	VA	10/6/14	Court	2015	3	0
Washington	WA	12/6/12	Legislation*	Does not participate in YRBSS		
West Virginia	WV	10/9/14	Court	2015	8	1
Wisconsin	WI	10/6/14	Court	2015	8	2
Wyoming	WY	10/17/14	Court	2015	9	1
^Previous legislation legalized same sex marriage that was later repealed by voters.						
*Legislation was affirmed by voter ballot referendum.						
**Same sex marriages occurred March 22, 2014 after a US district court ruling that was later overturned.						
^^Same sex marriages occurred between December 23, 2013 and January 2, 2014 after a US district court ruling. Marriages were halted after a lawsuit was filed.						
***Same sex marriages occurred between June 16, 2008 and November 5, 2008 after a California Supreme court ruling. Marriages were halted after a voter referendum that made same sex marriage illegal.						

eTable 3. Linear Analysis of Differences in Baseline Trends in Same-Sex Marriage and Non-Same-Sex Marriage States

	Suicide attempts (N=615,490)	
	Point estimate	95% CI
Same-sex marriage state*year	<0.001	-0.001 - 0.001
Year	<0.001	-0.001 - <0.001
Same-sex marriage state	0.010	-0.004 - 0.024
Age		
14 and younger	Ref	
15	-0.002	-0.006 - 0.002
16	-0.004*	-0.008 - <0.001
17	-0.019***	-0.023 - -0.015
18 and older	-0.016***	-0.020 - -0.011
Race/ethnicity		
White	Ref	
Black	0.027***	0.023 - 0.031
Hispanic/Latino	0.042***	0.038 - 0.047
Other race/ethnicity	0.036***	0.031 - 0.040
Sex		
Male	Ref	
Female	0.035***	0.033 - 0.037
Unemployment rate	0.001*	<0.001 - 0.001
Anti-discrimination policy	-0.001	-0.007 - 0.005

Notes: Linear regression models include controls for state and year. We tested quadratic terms to confirm that baseline trends in suicide attempts were linear. *<0.1, **<0.05, ***<0.01

eTable 4. Linear Difference-in-Differences Analysis of Same-Sex Marriage Policies: Changes in High School Student Suicide Attempts in Same-Sex Marriage States Relative to Non-Same-Sex Marriage States

	Suicide attempts (N=762,678)	
	Point estimate	95% CI
Same-sex marriage policy enacted	-0.006**	-0.012 - -0.001
Same-sex marriage state	0.005	-0.006 - 0.017
Age		
14 and younger	Ref	
15	-0.001	-0.005 - 0.003
16	-0.003	-0.007 - 0.001
17	-0.018***	-0.022 - -0.014
18 and older	-0.015***	-0.019 - -0.010
Race/ethnicity		
White	Ref	
Black	0.029***	0.026 - 0.033
Hispanic/Latino	0.043***	0.039 - 0.047
Other race/ethnicity	0.032***	0.028 - 0.037
Sex		
Male	Ref	
Female	0.036***	0.033 - 0.038
Unemployment rate	<0.001	-0.002 - 0.002
Anti-discrimination policy	-0.003	-0.009 - 0.003

Notes: Linear regression models include controls for state and year. *<0.1, **<0.05, ***<0.01

eTable 5. Linear Difference-in-Differences Analysis of Same-Sex Marriage Policies: Changes in All High School Student Suicide Attempts in Same-Sex Marriage States Relative to Non-Same-Sex Marriage States With Sexual Orientation Data

	All student suicide attempts in states that collected data on sexual orientation (N=231,413)	
	Point estimate	95% CI
Same-sex marriage policy enacted	0.003	-0.009 - 0.014
Same-sex marriage policy * sexual minority	-0.040***	-0.069 - -0.012
Same-sex marriage state	<0.001	-0.024 - 0.024
Sexual minority	0.206***	0.187 - 0.224
Age		
14 and younger	Ref	
15	0.003	-0.005 - 0.012
16	-0.003	-0.012 - 0.006
17	-0.014***	-0.023 - -0.005
18 and older	-0.016***	-0.025 - -0.008
Race/ethnicity		
White	Ref	
Black	0.034***	0.026 - 0.043
Hispanic/Latino	0.044***	0.034 - 0.054
Other race/ethnicity	0.019***	0.011 - 0.027
Sex		
Male	Ref	
Female	0.022***	0.017 - 0.028
Unemployment rate	0.007**	<0.001 - 0.014
Anti-discrimination policy	-0.009	-0.022 - 0.004

Notes: Linear regression models include controls for state and year. *<0.1, **<0.05, ***<0.01

eTable 6. Robustness Check Linear Difference-in-Differences “Lead” Analysis of Passing Same-Sex Marriage Laws in the Next 1-2 Years: Changes in High School Student Suicide Attempts in Same-Sex Marriage States Relative to Non-Same-Sex Marriage States

	Suicide attempts among all students in all states (N=765,039)		Suicide attempts among all students in states that collected sexual orientation data (N=231,413)	
	Point estimate	95% CI	Point estimate	95% CI
Lead: Enacting same-sex marriage in next 2 years	<0.001	-0.006 - 0.006	0.014**	0.002 - 0.026
Lead*sexual minority			-0.022	-0.056 - 0.011
Sexual minority			0.200***	0.171 - 0.230
Same-sex marriage state	0.009	-0.005 - 0.024	<0.001	-0.022 - 0.022
Age				
14 and younger	Ref		Ref	
15	-0.002	-0.006 - 0.002	-0.002	-0.006 - 0.002
16	-0.004**	-0.008 - <0.001	-0.004**	-0.008 - <0.001
17	-0.019***	-0.023 - -0.015	-0.019***	-0.023 - -0.015
18 and older	-0.016***	-0.020 - -0.011	-0.016***	-0.020 - -0.011
Race/ethnicity				
White	Ref		Ref	
Black	0.030***	0.026 - 0.033	0.030***	0.026 - 0.033
Hispanic/Latino	0.044***	0.039 - 0.048	0.044***	0.039 - 0.048
Other race/ethnicity	0.034***	0.030 - 0.038	0.034***	0.030 - 0.038
Sex				
Male	Ref		Ref	
Female	0.035***	0.033 - 0.037	0.035***	0.033 - 0.037
Unemployment rate	<0.001	-0.002 - 0.002	<0.001	-0.002 - 0.002
Anti-discrimination policy	-0.003	-0.009 - 0.003	-0.003	-0.009 - 0.003

Notes: Linear regression models include controls for state and year. “Lead” variables indicating states would later pass same-sex marriage policies were not associated with reduced adolescent suicide attempts in the full population or among sexual minority youth, indicating that the results we find are not due to differences in suicide attempts in same-sex marriage states relative to non-same-sex marriage states that occurred prior to same-sex marriage enactment. *<0.1, **<0.05, ***<0.01

eTable 7. Robustness Check Linear Difference-in-Differences “Lag” Analysis of Passing Same-Sex Marriage Laws in the Next 1-2 Years: Changes in High School Student Suicide Attempts in Same-Sex Marriage States Relative to Non-Same-Sex Marriage States

	Suicide attempts among all students in all states (N=765,039)		Suicide attempts among all students in states that collected sexual orientation data (N=231,413)	
	Point estimate	95% CI	Point estimate	95% CI
Lag: Enacted same-sex marriage in past 2 years	-0.006**	-0.011 - <0.001	0.003	-0.009 - 0.014
Lag*sexual minority			-0.040***	-0.069 - -0.012
Sexual minority			0.206***	0.187 - 0.224
Same-sex marriage state	0.010	-0.004 - 0.024	<0.001	-0.024 - 0.024
Age				
14 and younger	Ref			
15	-0.002	-0.006 - 0.002	-0.002	-0.006 - 0.002
16	-0.004**	-0.008 - <0.001	-0.004**	-0.008 - <0.001
17	-0.019***	-0.023 - -0.015	-0.019***	-0.023 - -0.015
18 and older	-0.016***	-0.020 - -0.011	-0.016***	-0.020 - -0.011
Race/ethnicity				
White	Ref			
Black	0.030***	0.026 - 0.033	0.030***	0.026 - 0.033
Hispanic/Latino	0.043***	0.039 - 0.048	0.043***	0.039 - 0.048
Other race/ethnicity	0.033***	0.029 - 0.037	0.033***	0.029 - 0.037
Sex				
Male	Ref			
Female	0.035***	0.033 - 0.037	0.035***	0.033 - 0.037
Unemployment rate	<0.001	-0.002 - 0.002	<0.001	-0.002 - 0.002
Anti-discrimination policy	-0.003	-0.009 - 0.003	-0.003	-0.009 - 0.003

Notes: Linear regression models include controls for state and year. The estimated relationship between the lagged same-sex marriage variable and adolescent suicide attempts suggests that the relationship between same-sex marriage policies and adolescent suicide attempts persisted following initial implementation. *<0.1, **<0.05, ***<0.01

eTable 8. Robustness Check Difference-in-Differences Analysis of Same-Sex Marriage Policies Excluding Massachusetts

	Suicide attempts among all adolescents (N=737,063)			
	Point estimate	95% CI	Point estimate	95% CI
Equal marriage	-0.007**	-0.013 - -0.002	-0.002	-0.017 - 0.014
Equal marriage*sexual minority			-0.040**	-0.072 - -0.008
Sexual minority			0.201***	0.181 - 0.221
Same-sex marriage state	0.006	-0.008 - 0.020	0.003	-0.023 - 0.029
Age				
14 and younger	Ref		Ref	
15	-0.001	-0.005 - 0.004	0.006	-0.004 - 0.017
16	-0.003*	-0.008 - 0.001	-0.003	-0.014 - 0.007
17	-0.018***	-0.022 - -0.014	-0.015***	-0.026 - -0.005
18 and older	-0.015***	-0.019 - -0.010	-0.016***	-0.026 - -0.006
Race/ethnicity				
White	Ref		Ref	
Black	0.029***	0.025 - 0.033	0.037***	0.028 - 0.047
Hispanic/Latino	0.042***	0.038 - 0.047	0.041***	0.028 - 0.054
Other race/ethnicity	0.029***	0.025 - 0.034	0.021***	0.011 - 0.031
Sex				
Male	Ref		Ref	
Female	0.036***	0.034 - 0.038	0.023***	0.017 - 0.030
Unemployment rate	<0.001	-0.001 - 0.001	0.006*	-0.001 - 0.013
Anti-discrimination policy	-0.001	-0.006 - 0.005	-0.015**	-0.030 - -0.000

Notes: Linear regression models include controls for state and year. The main effect estimates indicate that the relationship between same-sex marriage policies and adolescent suicide attempts continued to hold when the state of Massachusetts was excluded from the analysis. *<0.1, **<0.05, ***<0.01

eTable 9. Robustness Check Linear Difference-in-Differences Analysis of Same-Sex Marriage: Changes in High School Students Having any Juice or Carrot Consumption in the Past 7 Days, and Never/Rarely Wearing Seatbelts in Same-Sex Marriage States Relative to Non-Same-Sex Marriage States

	Juice consumption (N=738,032)		Carrot consumption (N=713,804)		Seatbelt use (N=724,359)	
	Point estimate	95% CI	Point estimate	95% CI	Point estimate	95% CI
Passed same-sex marriage	0.007	-0.006 - 0.020	0.001	-0.010 - 0.012	-0.002	-0.006 - 0.003
Same-sex marriage state	0.147***	0.124 - 0.171	0.049***	0.029 - 0.069	-0.027***	-0.044 - -0.011
Age						
14 and younger	Ref		Ref		Ref	
15	<0.001	-0.007 - 0.006	0.007**	0.001 - 0.013	0.011***	0.008 - 0.013
16	0.005	-0.003 - 0.012	0.012***	0.006 - 0.018	0.006***	0.003 - 0.009
17	0.006	-0.001 - 0.014	0.018***	0.012 - 0.024	0.005***	0.003 - 0.008
18 and older	0.017***	0.009 - 0.025	0.012***	0.005 - 0.019	-0.007***	-0.011 - -0.003
Race/ethnicity						
White	Ref		Ref		Ref	
Black	-0.165***	-0.173 - -0.157	0.044***	0.038 - 0.050	-0.023***	-0.026 - -0.020
Hispanic/Latino	-0.078***	-0.088 - -0.069	0.035***	0.029 - 0.041	-0.031***	-0.035 - -0.028
Other race/ethnicity	-0.047***	-0.058 - -0.036	0.009***	0.002 - 0.015	-0.022***	-0.025 - -0.019
Sex						
Male	Ref		Ref		Ref	
Female	-0.013***	-0.017 - -0.009	-0.016***	-0.019 - -0.012	0.031***	0.029 - 0.033
Unemployment rate	0.001	-0.003 - 0.004	0.003***	0.001 - 0.006	0.001	<0.001 - 0.002
Anti-discrimination policy	-0.010	-0.022 - 0.003	-0.034***	-0.047 - -0.022	-0.002	-0.007 - 0.004

Notes: Linear regression models include controls for state and year. Sample sizes differ based on variation in inclusion of outcome questions by state and year. *<0.1, **<0.05, ***<0.01