

# **THE LONG-RUN IMPACTS OF MEXICAN-AMERICAN SCHOOL DESEGREGATION**

ONLINE APPENDIX  
June 28, 2023

Francisca M. Antman  
University of Colorado Boulder  
francisca.antman@colorado.edu

Kalena E. Cortes  
Texas A&M University  
kcortes@tamu.edu

Table A1: Extended Results By Gender - Impact of Mendez v. Westminster on Hispanic Educational Attainment for Post-Mendez Cohorts (1941-1945 Birth Cohorts) Relative to 1931-1935 Birth Cohorts

Panel A: Hispanic Sample (same as Table 2, Panel A)			
	(1)	(2)	(3)
	Years of education	Jr. High School	High School
High Segregation x Post-Mendez Cohort	0.900** (0.337)	0.153*** (0.035)	0.090* (0.044)
Mean (y-variable)	11.10	0.872	0.599
Number of observations	5,630	5,630	5,630
R <sup>2</sup>	0.107	0.103	0.069
Panel B: Hispanic Men			
	(1)	(2)	(3)
	Years of education	Jr. High School	High School
High Segregation x Post-Mendez Cohort	1.112*** (0.304)	0.167*** (0.031)	0.132 (0.080)
Mean (y-variable)	11.47	0.887	0.641
Number of observations	2,721	2,721	2,721
R <sup>2</sup>	0.102	0.106	0.063
Panel C: Hispanic Women			
	(1)	(2)	(3)
	Years of education	Jr. High School	High School
High Segregation x Post-Mendez Cohort	0.740* (0.372)	0.139** (0.059)	0.063 (0.043)
Mean (y-variable)	10.75	0.857	0.559
Number of observations	2,909	2,909	2,909
R <sup>2</sup>	0.104	0.105	0.069
Birth Cohort Fixed Effects	Yes	Yes	Yes
County Fixed Effects	Yes	Yes	Yes

*Notes:* High segregation (HiSeg) indicates that the Hispanic to non-Hispanic population ratio is above the 75% level of all California counties based on 1940 full-count Census. Post-Mendez Cohort is an indicator for birth year being 1941 or later. Other controls include indicator for female (panel A only), and in all panels an indicator for 1990 Census observation and indicator for 2000 Census observation, respectively, in addition to fixed effects noted in Table A1. Sample is limited to Hispanic men and women from 5% samples of 1980, 1990, and 2000 Censuses in California whose birth cohorts are between 1941 and 1945 (treatment group) and birth cohorts between 1931 and 1935 (comparison group), and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (above the 75% level for all 1940 counties: high segregation) or very low (below the 25% level for all 1940 counties: low segregation). Robust standard errors, clustered at county level, in parentheses. Statistical significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

Table A2: Impact of Mendez v. Westminster on Non-Hispanic Whites with Alternative Comparison Group, Post-Mendez Cohorts (1941-1945 Birth Cohorts) Relative to 1921-1930 Birth Cohorts

Panel A: Non-Hispanic White Sample			
	(1)	(2)	(3)
	<u>Years of education</u>	<u>Jr. High School</u>	<u>High School</u>
High Segregation x Post-Mendez Cohort	-0.311** (0.117)	-0.003 (0.006)	-0.031** (0.012)
Mean (y-variable)	13.25	0.982	0.873
Number of observations	34,783	34,783	34,783
R <sup>2</sup>	0.061	0.015	0.031
Panel B: Non-Hispanic White Men			
	(1)	(2)	(3)
	<u>Years of education</u>	<u>Jr. High School</u>	<u>High School</u>
High Segregation x Post-Mendez Cohort	-0.330* (0.167)	-0.002 (0.007)	-0.033 (0.020)
Mean (y-variable)	13.53	0.979	0.872
Number of observations	16,798	16,798	16,798
R <sup>2</sup>	0.062	0.018	0.041
Panel C: Non-Hispanic White Women			
	(1)	(2)	(3)
	<u>Years of education</u>	<u>Jr. High School</u>	<u>High School</u>
High Segregation x Post-Mendez Cohort	-0.310*** (0.094)	-0.005 (0.008)	-0.029*** (0.010)
Mean (y-variable)	12.98	0.984	0.875
Number of observations	17,985	17,985	17,985
R <sup>2</sup>	0.043	0.014	0.024
Birth Cohort Fixed Effects	Yes	Yes	Yes
County Fixed Effects	Yes	Yes	Yes

*Notes:* High segregation (HiSeg) indicates that the Hispanic to non-Hispanic population ratio is above the 75% level of all California counties based on 1940 full-count Census. Post-Mendez Cohort is an indicator for birth year being 1941 or later. Other controls include indicator for female (panel A only), and in all panels an indicator for 1990 Census observation and indicator for 2000 Census observation, respectively, in addition to fixed effects noted in Table A2. Sample is limited to non-Hispanic white men and women from 5% samples of 1980, 1990, and 2000 Censuses in California whose birth cohorts are between 1941 and 1945 (treatment group) and birth cohorts between 1921 and 1930 (comparison group), and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (above the 75% level for all 1940 counties: high segregation) or very low (below the 25% level for all 1940 counties: low segregation). Robust standard errors, clustered at county level, in parentheses. Statistical significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

Table A3: Robustness Analysis of the Impact of Mendez v. Westminster - Using Alternative Definitions of High and Low Segregated Counties

	Panel A: Hispanic Sample		
	(1) Years of education	(2) Jr. High School	(3) High School
High Segregation x Post-Mendez Cohort	0.897*** (0.313)	0.152*** (0.032)	0.092** (0.042)
Mean (y-variable)	11.16	0.877	0.604
Number of observations	7,068	7,068	7,068
R <sup>2</sup>	0.103	0.099	0.067
	Panel B: Placebo Sample (Hispanic Birth Cohorts 1921-1930)		
	(1) Years of education	(2) Jr. High School	(3) High School
High Segregation x Placebo Post-Mendez Cohort	-0.329 (0.408)	-0.013 (0.062)	-0.130* (0.070)
Mean (y-variable)	9.127	0.688	0.358
Number of observations	4,372	4,372	4,372
R <sup>2</sup>	0.072	0.078	0.039
	Panel C: Non-Hispanic White Sample		
	(1) Years of education	(2) Jr. High School	(3) High School
High Segregation x Post-Mendez Cohort	-0.403*** (0.082)	-0.010*** (0.003)	-0.030*** (0.010)
Mean (y-variable)	13.50	0.986	0.897
Number of observations	34,545	34,545	34,545
R <sup>2</sup>	0.058	0.006	0.019
Birth Cohort Fixed Effects	Yes	Yes	Yes
County Fixed Effects	Yes	Yes	Yes

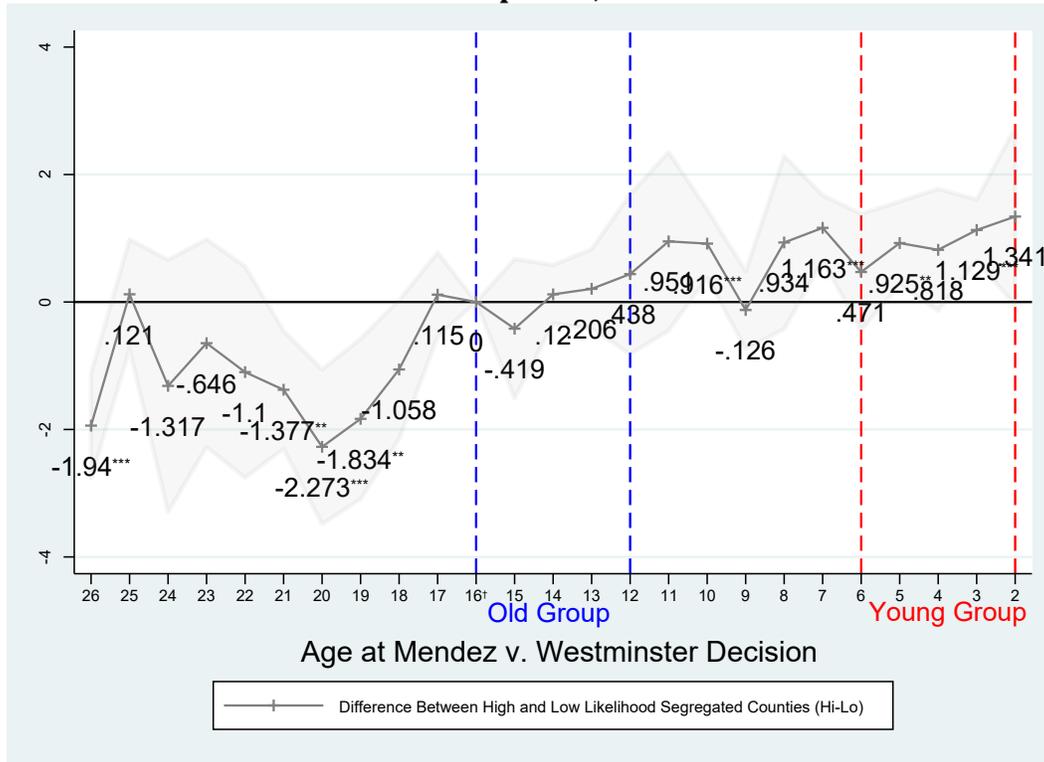
*Notes:* High segregation (HiSeg) indicates that the Hispanic to non-Hispanic population ratio is above the 67% level of all California counties based on 1940 full-count U.S. Census. Post-Mendez Cohort is an indicator for birth year being 1941 or later. Other controls include indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively, in addition to fixed effects noted in Table A3. Sample is limited to men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (above the 67% level for all 1940 counties: high segregation) or very low (below the 33% level for all 1940 counties: low segregation). Samples in panels A and C include only those individuals with birth cohorts between 1941 and 1945 (treatment group) or birth cohorts between 1931 and 1935 (comparison group). Sample in panel B includes only those individuals with birth cohorts between 1926 and 1930 (placebo treatment group) or birth cohorts between 1921 and 1925 (placebo comparison group). Robust standard errors, clustered at county level, in parentheses. Statistical significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

Table A4: Impact of Mendez v. Westminster with Alternative High and Low Segregation Definitions, Post-Mendez Cohorts (1941-1945 Birth Cohorts) Relative to 1921-1930 Birth Cohort Comparison Group

	Panel A: Hispanic Sample		
	(1) Years of education	(2) Jr. High School	(3) High School
High Segregation x Post-Mendez Cohort	1.900*** (0.304)	0.231*** (0.038)	0.181*** (0.029)
Mean (y-variable)	10.42	0.810	0.517
Number of observations	8,609	8,609	8,609
R <sup>2</sup>	0.173	0.149	0.131
	Panel B: Hispanic Men		
	(1) Years of education	(2) Jr. High School	(3) High School
High Segregation x Post-Mendez Cohort	1.957*** (0.317)	0.215*** (0.043)	0.118** (0.042)
Mean (y-variable)	10.79	0.830	0.554
Number of observations	4,077	4,077	4,077
R <sup>2</sup>	0.172	0.140	0.134
	Panel C: Hispanic Women		
	(1) Years of education	(2) Jr. High School	(3) High School
High Segregation x Post-Mendez Cohort	1.965*** (0.393)	0.241*** (0.051)	0.245*** (0.042)
Mean (y-variable)	10.10	0.792	0.484
Number of observations	4,532	4,532	4,532
R <sup>2</sup>	0.168	0.162	0.126
Birth Cohort Fixed Effects	Yes	Yes	Yes
County Fixed Effects	Yes	Yes	Yes

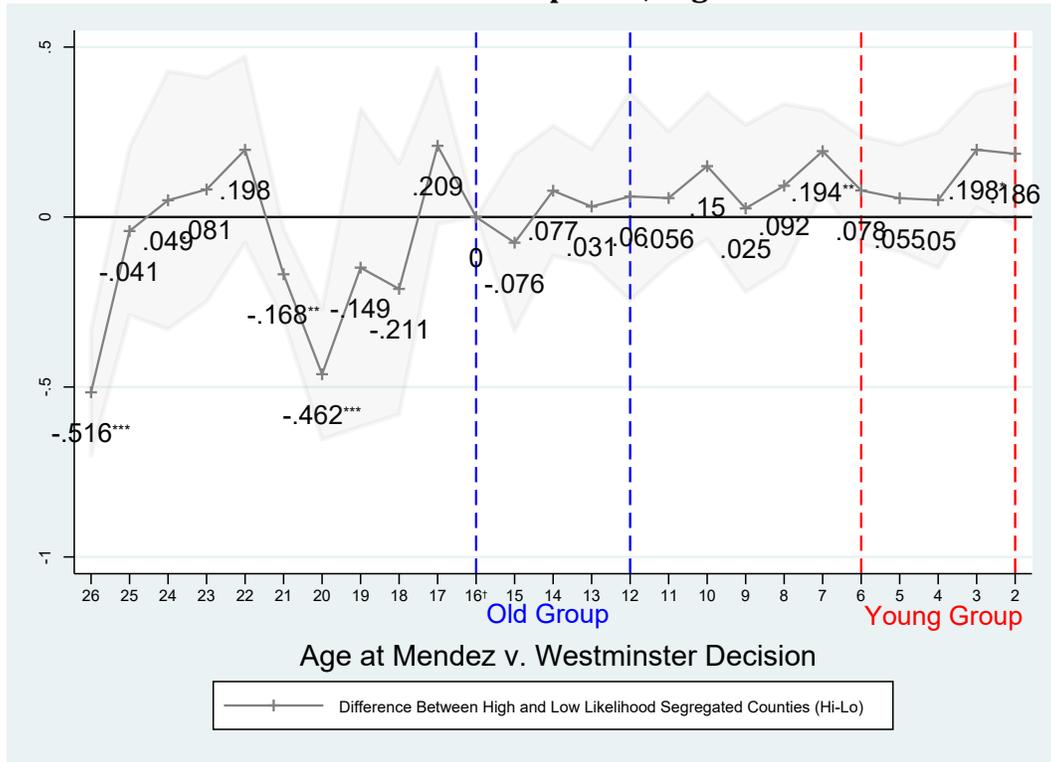
*Notes:* High segregation (HiSeg) indicates that the Hispanic to non-Hispanic population ratio is above the 67% level of all California counties based on 1940 full-count U.S. Census. Post-Mendez Cohort is an indicator for birth year being 1941 or later. Other controls include indicator for female (panel A only), indicator for 1990 Census observation and indicator for 2000 Census observation, respectively, in addition to fixed effects noted in Table A4. Sample is limited to Hispanic men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (above the 67% level for all 1940 counties: high segregation) or very low (below the 33% level for all 1940 counties: low segregation). Samples in panels A and C include only those individuals with birth cohorts between 1941 and 1945 (treatment group) or birth cohorts between 1931 and 1935 (comparison group). Sample in panel B includes only those individuals with birth cohorts between 1926 and 1930 (placebo treatment group) or birth cohorts between 1921 and 1925 (placebo comparison group). Robust standard errors, clustered at county level, in parentheses. Statistical significance levels: \*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

**Figure A1: Event Study Analysis – Educational Attainment for Hispanics, Years of Education Outcome**



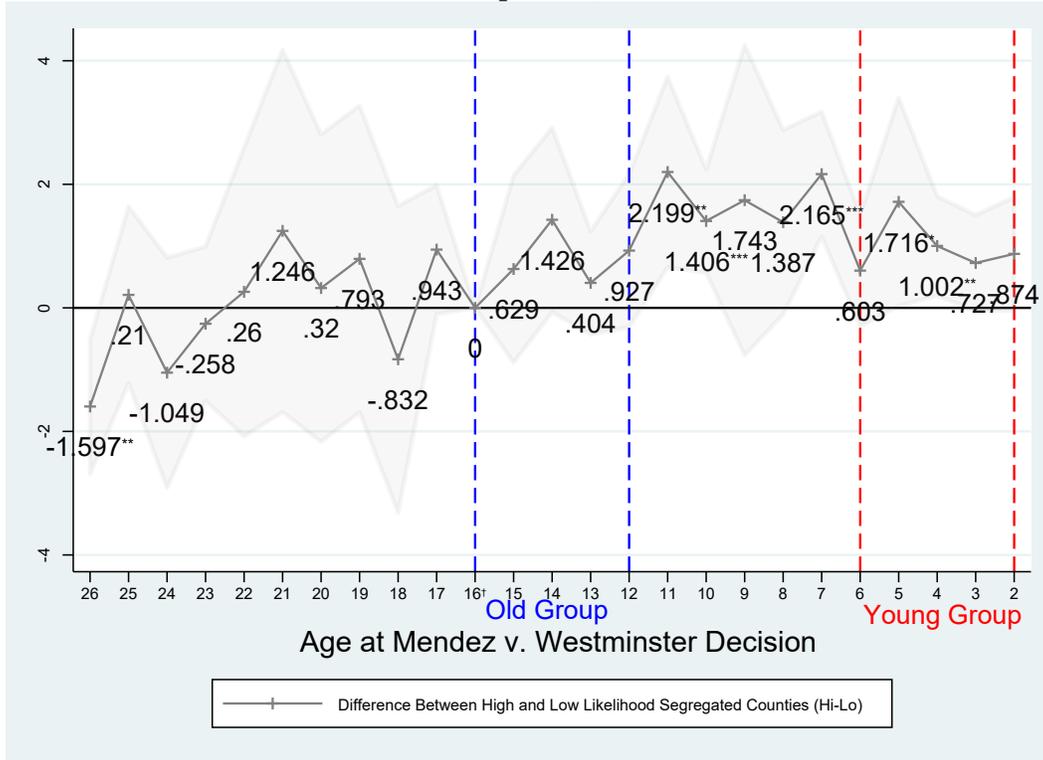
Notes: Sample is limited to Hispanic men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (i.e., above the 75% level for all 1940 counties: high segregation) or very low (i.e., below the 25% level for all 1940 counties: low segregation). Graph shows the difference-in-differences coefficient estimate on birth year interacted with high segregation county indicator. Reference category is the 1931 birth year (age 16 at the time of the *Mendez* decision). All regression models also include birth year fixed effects, county fixed effects, indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively. Shaded areas indicate the 90% confidence intervals, where standard errors are clustered at county level.

**Figure A2: Event Study Analysis – Educational Attainment for Hispanics, High School Outcome**



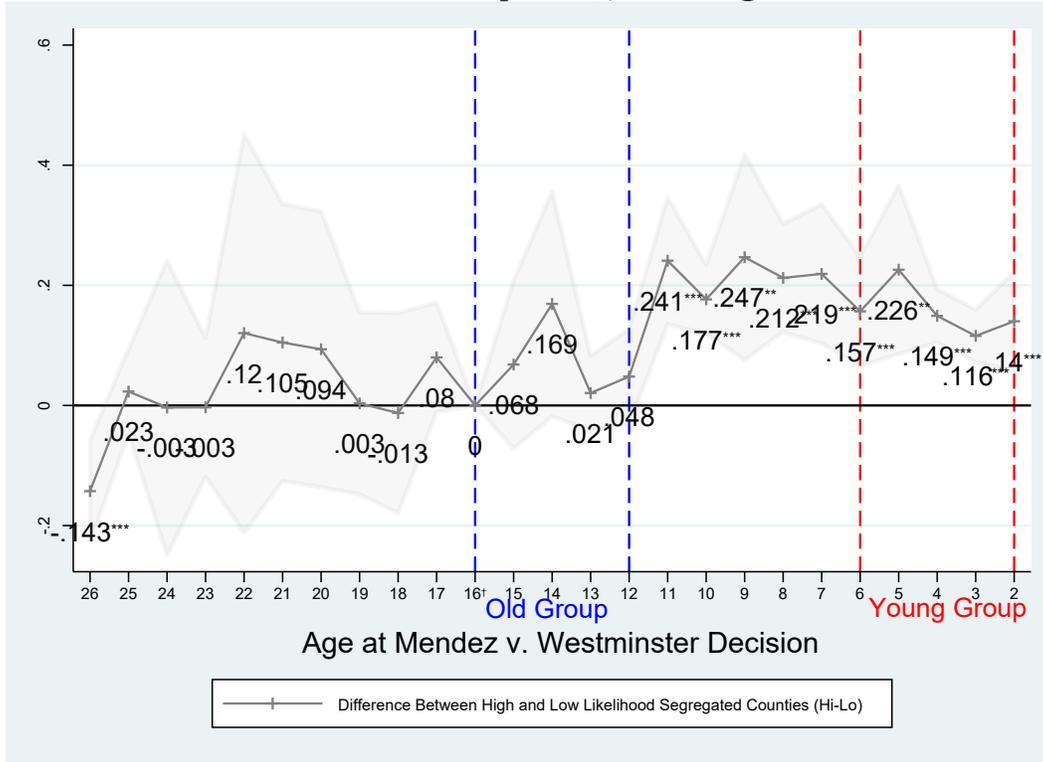
Notes: Sample is limited to Hispanic men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (i.e., above the 75% level for all 1940 counties: high segregation) or very low (i.e., below the 25% level for all 1940 counties: low segregation). Graph shows the difference-in-differences coefficient estimate on birth year interacted with high segregation county indicator. Reference category is the 1931 birth year (age 16 at the time of the *Mendez* decision). All regression models also include birth year fixed effects, county fixed effects, indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively. Shaded areas indicate the 90% confidence intervals, where standard errors are clustered at county level.

**Figure A3: Event Study Analysis with 1930 County Segregation Data – Educational Attainment for Hispanics, Years of Education Outcome**



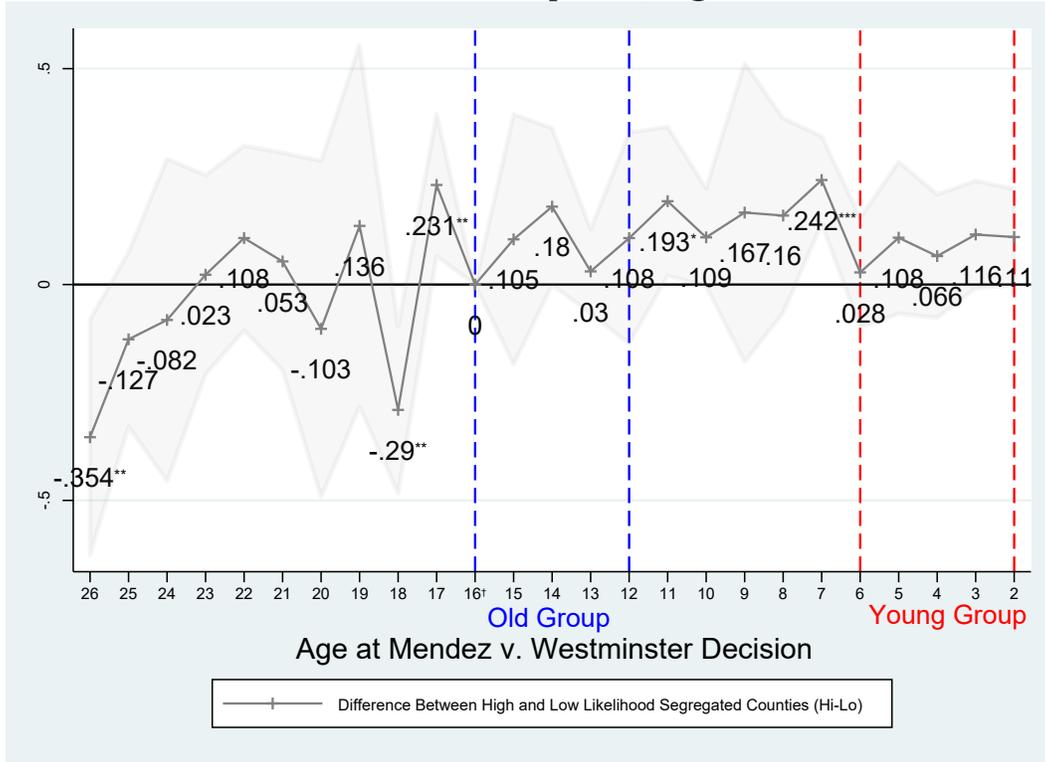
Notes: Sample is limited to Hispanic men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (i.e., above the 75% level for all 1930 counties: high segregation) or very low (i.e., below the 25% level for all 1930 counties: low segregation). Graph shows the difference-in-differences coefficient estimate on birth year interacted with high segregation county indicator. Reference category is the 1931 birth year (age 16 at the time of the *Mendez* decision). All regression models also include birth year fixed effects, county fixed effects, indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively. Shaded areas indicate the 90% confidence intervals, where standard errors are clustered at county level.

**Figure A4: Event Study Analysis with 1930 County Segregation Data – Educational Attainment for Hispanics, Junior High School Outcome**



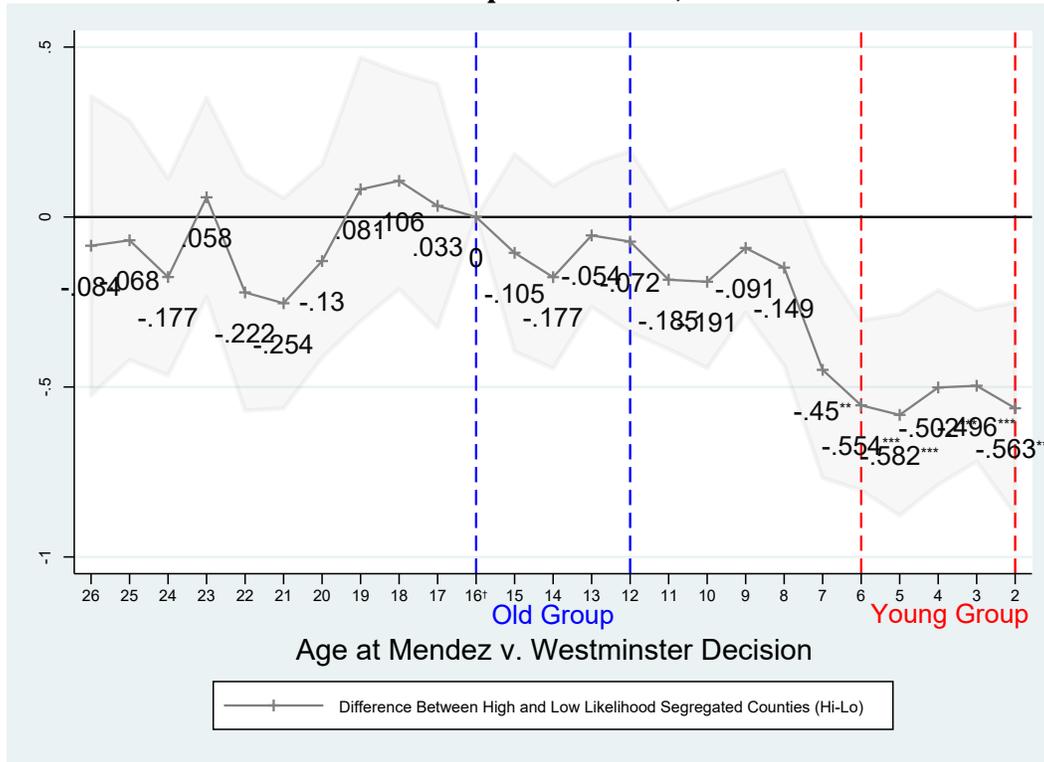
Notes: Sample is limited to Hispanic men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (i.e., above the 75% level for all 1930 counties: high segregation) or very low (i.e., below the 25% level for all 1930 counties: low segregation). Graph shows the difference-in-differences coefficient estimate on birth year interacted with high segregation county indicator. Reference category is the 1931 birth year (age 16 at the time of the *Mendez* decision). All regression models also include birth year fixed effects, county fixed effects, indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively. Shaded areas indicate the 90% confidence intervals, where standard errors are clustered at county level.

**Figure A5: Event Study Analysis with 1930 County Segregation Data – Educational Attainment for Hispanics, High School Outcome**



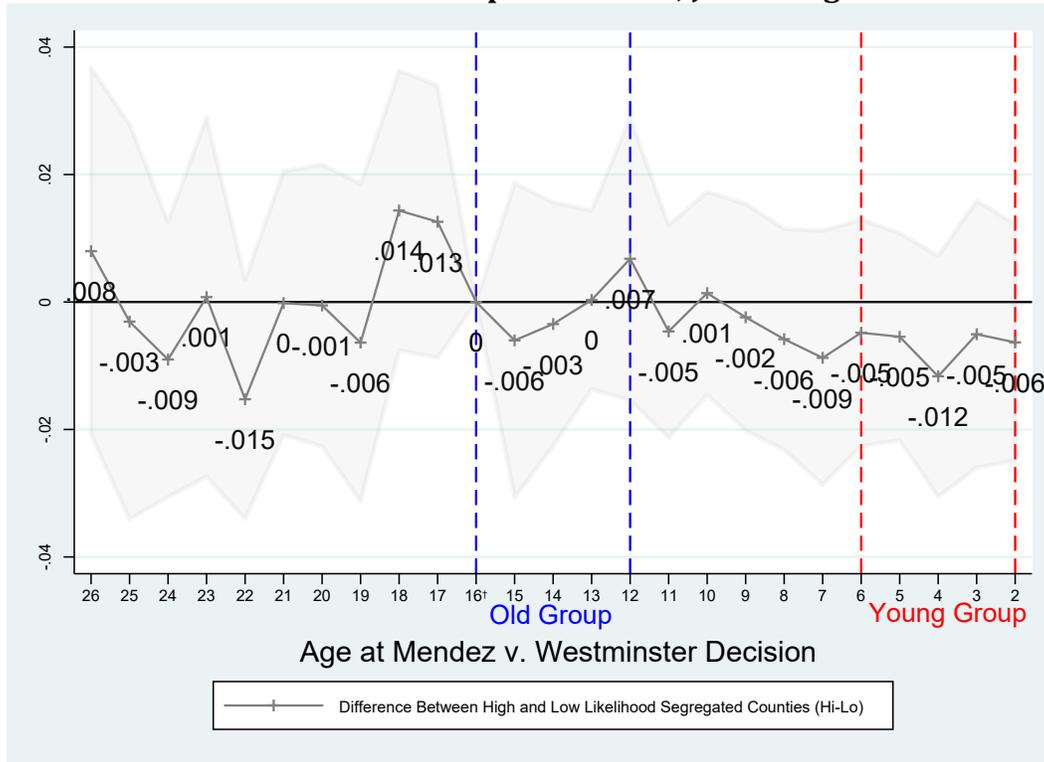
Notes: Sample is limited to Hispanic men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (i.e., above the 75% level for all 1930 counties: high segregation) or very low (i.e., below the 25% level for all 1930 counties: low segregation). Graph shows the difference-in-differences coefficient estimate on birth year interacted with high segregation county indicator. Reference category is the 1931 birth year (age 16 at the time of the *Mendez* decision). All regression models also include birth year fixed effects, county fixed effects, indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively. Shaded areas indicate the 90% confidence intervals, where standard errors are clustered at county level.

**Figure A6: Event Study Analysis with 1930 County Segregation Data – Educational Attainment for Non-Hispanic Whites, Years of Education Outcome**



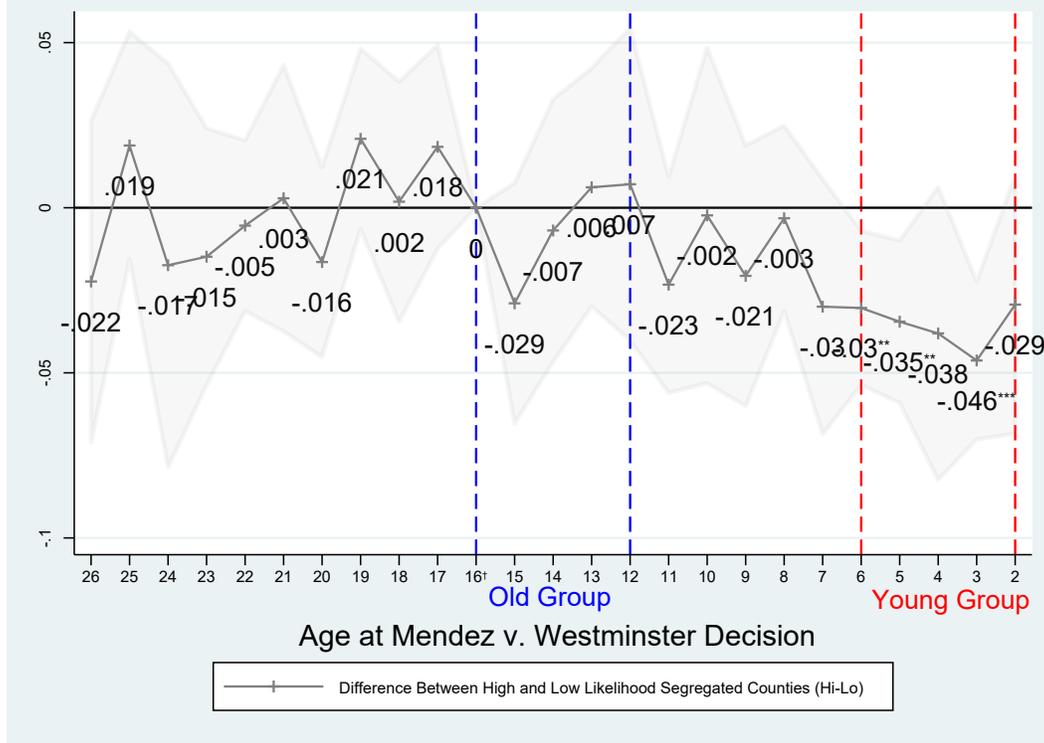
Notes: Sample is limited to non-Hispanic white men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (i.e., above the 75% level for all 1930 counties: high segregation) or very low (i.e., below the 25% level for all 1930 counties: low segregation). Graph shows the difference-in-differences coefficient estimate on birth year interacted with high segregation county indicator. Reference category is the 1931 birth year (age 16 at the time of the *Mendez* decision). All regression models also include birth year fixed effects, county fixed effects, indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively. Shaded areas indicate the 90% confidence intervals, where standard errors are clustered at county level.

**Figure A7: Event Study Analysis with 1930 County Segregation Data – Educational Attainment for Non-Hispanic Whites, Junior High School Outcome**



Notes: Sample is limited to non-Hispanic white men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (i.e., above the 75% level for all 1930 counties: high segregation) or very low (i.e., below the 25% level for all 1930 counties: low segregation). Graph shows the difference-in-differences coefficient estimate on birth year interacted with high segregation county indicator. Reference category is the 1931 birth year (age 16 at the time of the *Mendez* decision). All regression models also include birth year fixed effects, county fixed effects, indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively. Shaded areas indicate the 90% confidence intervals, where standard errors are clustered at county level.

**Figure A8: Event Study Analysis with 1930 County Segregation Data – Educational Attainment for Non-Hispanic Whites, High School Outcome**



Notes: Sample is limited to non-Hispanic white men and women from 5% samples of 1980, 1990, and 2000 Censuses who were born in California and who reside in a county where the Hispanic to non-Hispanic population ratio was either very high (i.e., above the 75% level for all 1930 counties: high segregation) or very low (i.e., below the 25% level for all 1930 counties: low segregation). Graph shows the difference-in-differences coefficient estimate on birth year interacted with high segregation county indicator. Reference category is the 1931 birth year (age 16 at the time of the *Mendez* decision). All regression models also include birth year fixed effects, county fixed effects, indicator for female, indicator for 1990 Census observation and indicator for 2000 Census observation, respectively. Shaded areas indicate the 90% confidence intervals, where standard errors are clustered at county level.