Race, gender, and cohort differences in the educational experiences of Black and White Americans

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Table A1. Educational experiences of HRS-LHMS respondents by race, weighted data.

	White, non-Hispanic	Black, non-Hispanic	Total
	n=8,382	n=2,250	n=10,632
	Mean (SE) or %	Mean (SE) or %	Mean (SE) or %
Attended preschool, %	14.1	18.4*	14.5
Learning differences, %	13.4	17.5*	13.8
Math ability	3.44 (0.01)	3.35 (0.03)*	3.43 (0.01)
Reading ability	3.58 (0.01)	3.61 (0.03)	3.59 (0.01)
Proportion of schooling attending			
Private schools	0.14 (0.00)	0.04 (0.00)*	0.13 (0.00)
Majority non-White schools	0.02 (0.00)	0.81 (0.01)*	0.10 (0.00)
Ever attended a race discordant school, %	9.4	39.0*	12.2
Did not attend high school	2.8	7.7*	3.3
Rs that attended high school	n=7,343	n=1,756	n=9,099
High school coursework, %			
Vocational	17.7	21.5*	18.0
General	46.9	52.8*	47.4
College preparatory	35.5	25.7*	34.6
Foreign language courses, %			
No	43.8	59.9*	45.2
Yes	56.2	40.1*	54.8
Art participation, %			
No	45.0	45.2	45.1
Yes	55.0	54.8	54.9
Years of schooling	13.88 (0.05)	12.84 (0.10)*	13.78 (0.05)
Post-secondary education, %	68.7	57.4*	67.6
Bachelor's degree, %	34.3	17.7*	32.7

Notes: Math and reading ability range from 1-5 with higher values indicating better ability. Proportion of schooling in majority non-White schools and private schools ranges from 0-1. Ever attended a race discordant school defined for White respondents as ever attending a majority non-White school and for Black respondents as ever attending a majority non-White school. Percentages for high school coursework, foreign language coursework, and art participation reported only for respondents who attended high school; observations are reported for each group in the column sub-header. Estimates for years of schooling, post-secondary education and bachelor's degree are reported for all respondents.

^{*} p<0.025, mlincom command

Table A2. Educational experiences of HRS-LHMS respondents by gender, weighted data.

	Men	Women	Total
	n=4,264	n=6,368	n=10,632
	Mean (SE) or %	Mean (SE) or %	Mean (SE) or %
Attended preschool, %	15.8	13.4*	14.5
Learning differences, %	17.5	10.8*	13.8
Math ability	3.51 (0.02)	3.37 (0.01)*	3.43 (0.01)
Reading ability	3.37 (0.02)	3.76 (0.02)*	3.59 (0.01)
Proportion of schooling attending			
Private schools	0.13 (0.01)	0.13 (0.01)	0.13 (0.00)
Majority non-White schools	0.09 (0.01)	0.11 (0.01)*	0.10 (0.00)
Ever attended a race discordant school, %	12.5	12.0	12.2
Did not attend high school	3.6	3.1	3.3
Rs that attended high school	n=3,620	n=5,479	n=9,099
High school coursework, %			
Vocational	17.1	18.8	18.0
General	48.1	46.9	47.4
College preparatory	34.8	34.3	34.6
Foreign language courses, %			
No	49.0	42.2*	45.2
Yes	51.0	57.8*	54.8
Art participation, %			
No	54.3	37.6*	45.1
Yes	45.7	62.4*	54.9
Years of schooling	13.95 (0.06)	13.64 (0.06)*	13.78 (0.05)
ost-secondary education, %	69.8	65.8*	67.6
Bachelor's degree, %	36.9	29.3*	32.7

Notes: Math and reading ability range from 1-5 with higher values indicating better ability. Proportion of schooling in majority non-White schools and private schools ranges from 0-1. Ever attended a race discordant school defined for White respondents as ever attending a majority non-White school and for Black respondents as ever attending a majority non-White school. Percentages for high school coursework, foreign language coursework, and art courses reported only for respondents who attended high school; observations are reported for each group in column subheaders. Estimates for years of schooling, post-secondary education and bachelor's degree are reported for all respondents.

^{*} p<0.025, mlincom command

Table A3 Educational experiences of HRS-LHMS respondents by race, gender, and HRS birth cohort, weighted data, N=10,632

	White, non-Hispanic Men				White, non-Hispanic Women					
	HRS n=1,100	War Babies n=539	Early Baby Boomer n=663	Mid/Late Baby Boomer n=890	% Change	HRS n=1,424	War Babies n=838	Early Baby Boomer n=870	Mid/Late Baby Boomer n=1,286	% Change
Attended preschool, %	9.9	12.3	14.1	22.6	128.3	8.7	11.6	11.4	17.9	105.7
Learning differences, %	12.5	14.6	16.3	22.6	80.8	6.8*	7.6*	8.6*	15.4*	126.5
Math ability	3.5 (0.02)	3.5 (0.04)	3.6 (0.05)	3.5 (0.04)	1.4	3.4 (0.02)*	3.4 (0.04)	3.4 (0.04)*	3.4 (0.04)*	-0.6
Reading ability	3.3 (0.03)	3.4 (0.05)	3.4 (0.05)	3.4 (0.04)	0.9	3.8 (0.03)*	3.9 (0.04)*	3.8 (0.04)*	3.7 (0.03)*	-2.9
Proportion of schooling attending										
Private schools	0.12 (0.01)	0.16 (0.02)	0.17 (0.01)	0.12 (0.01)	0.0	0.12 (0.01)	0.15 (0.01)	0.15 (0.01)	0.14 (0.01)	16.7
Majority non-White schools	0.01 (0.00)	0.02 (0.00)	0.02 (0.00)	0.04 (0.01)	300.0	0.01 (0.00)	0.02 (0.00)	0.02 (0.00)	0.04 (0.01)	300.0
Ever race discordant school, %	7.8	8.5	7.1	13.4	70.5	7.1	6.8	7.6	12.5	76.1
Did not attend high school, %	6.7	2.8	2.0	1.8	-73.1	3.6*	2.6	1.8	1.1	-69.4
Rs that attended high school	n=932	n=472	n=587	n=795		n=1,263	n=738	n=775	n=1,144	
High school coursework, %			i							
Vocational	16.4	15.6	13.7	19.4	18.3	21.8*	20.4	18.5	15.5	-28.9
General	57.9	48.3	43.7	44.3	-23.5	49.7*	39.7*	44.3	47.3	-4.8
College preparatory	25.7	36.2	42.6	36.3	41.2	28.5	39.9	37.2	37.2	30.5
Foreign language courses, %										
No	62.0	50.6	37.3	44.6	-28.1	51.5*	42.2*	32.7	36.6*	-28.9
Yes	38.0	49.4	62.7	55.4	45.8	48.5*	57.8*	67.3	63.4*	30.7
Art participation, %										
No	57.3	54.7	58.6	50.4	-12.0	36.8*	36.8*	41.0*	32.8*	-10.9
Yes	42.7	45.3	41.4	49.6	16.2	63.2*	63.2*	59.0*	67.2*	6.3
							7/			
Years of schooling	13.5 (0.09)	14.1 (0.13)	14.5 (0.11)	14.0 (0.11)	4.2	13.1 (0.08)*	13.6 (0.11)*	14.1 (0.11)*	14.0 (0.10)	6.8
Post-secondary education, %	62.4	70.9	79.9	71.3	14.3	54.0*	62.9*	73.0*	74.7	38.3
Bachelor's degree, %	33.0	39.3	45.1	37.2	12.7	21.3*	28.5*	36.0*	35.5	66.7

Percent change calculated using percent difference between HRS cohort and Mid/Late Baby Boomer cohort. Math and reading ability range from 1-5 with higher values indicating better ability. Proportion of schooling in majority non-White schools and private schools ranges from 0-1. Ever attended a race discordant school defined for White respondents as ever attending a majority non-White school and for Black respondents as ever attending a majority non-White school. Percentages for high school coursework, foreign language coursework, and art participation reported only for respondents who attended high school; observations are reported for each group in column subheaders. Estimates for years of schooling, post-secondary education and bachelor's degree are reported for all respondents.

significantly different from HRS cohort at p<0.025 level, within race and gender comparisons

significantly different from War Babies cohort at p<0.025 level, within race and gender comparisons

significantly different from Early Baby Boomer cohort at p<0.025 level, within race and gender comparisons

mlincom command used to test for statistically significant differences between groups.

^{*} significantly different from men at p<0.025 level, within race and cohort comparisons

	Black, non-Hispanic Men					Black, non-Hispanic Women				
	HRS	War Babies	Early Baby Boomer	Mid/Late Baby Boomer	% Change	HRS	War Babies	Early Baby Boomer	Mid/Late Baby Boomer	% Change
	n=145	n=88	n=212	n=338		n=273	n=157	n=370	n=611	
Attended preschool, %	15.7	14.7	17.6	20.9	33.1	16.6	12.1	16.1	24.8	49.4
Learning differences, %	21.6	15.4	15.8	27.0	25.0	11.7	17.2	17.3	15.0*	28.2
Math ability	3.4 (0.08)	3.4 (0.11)	3.4 (0.08)	3.3 (0.06)	-3.2	3.3 (0.05)	3.2 (0.07)	3.4 (0.05)	3.4 (0.05)	2.1
Reading ability	3.4 (0.09)	3.4 (0.10)	3.5 (0.11)	3.4 (0.05)	1.2	3.6 (0.06)	3.6 (0.09)	3.9 (0.06)*	3.7 (0.05)*	3.3
Proportion of schooling attending	g									
Private schools	0.06 (0.02)	0.02 (0.01)	0.04 (0.01)	0.05 (0.01)	-16.7	0.07 (0.02)	0.03 (0.01)	0.04 (0.01)	0.04 (0.01)	-42.9
Majority non-White schools	0.89 (0.03)	0.86 (0.03)	0.80 (0.04)	0.75 (0.03)	-15.7	0.91 (0.01)	0.88 (0.03)	0.82 (0.02)	0.74 (0.02)	-18.7
Ever race discordant school, %	31.0	28.3	41.6	50.6	63.2	24.2	24.6	35.1	51.8	114.0
Did not attend high school, %	17.3	8.9	5.6	2.9	-83.2	14.9	8.9	6.4	3.6	-75.8
Rs that attended high school	n=94	n=67	n=162	n=273		n=205	n=124	n=306	n=490	
High school coursework, %										
Vocational	25.3	24.8	23.5	23.3	-7.9	18.2	16.5	12.9*	26.2	44.0
General	62.2	54.8	47.9	42.3	-32.0	61.7	62.5	59.3	46.9	-24.0
College preparatory	12.6	20.4	28.7	34.5	173.8	20.1	21.0	27.8	26.9	33.8
Foreign language courses, %										
No	69.1	72.2	63.8	62.9	-9.0	58.5	59.7	53.4	53.9	-7.9
Yes	30.9	27.8	36.2	37.1	20.1	41.5	40.3	46.6	46.1	11.1
Art participation, %										
No	56.1	56.4	46.0	45.5	-18.9	40.3	49.1	47.3	37.2	-7.7
Yes	43.9	43.6	54.0	54.5	24.1	59.7	50.9	52.7	62.8	5.2
Years of schooling	11.6 (0.4)	12.4 (0.2)	13.1 (0.2)	13.2 (0.2)	14.2	12.1 (0.2)	12.5 (0.3)	13.4 (0.2)	13.3 (0.1)	9.6
Post-secondary education, %	33.4	42.3	59.9	59.2	77.2	50.8	55.0	68.8	65.0	28.0
Bachelor's degree, %	10.7	13.8	17.2	17.0	58.9	15.0	16.7	23.5	19.9	32.7

Percent change calculated using percent difference between HRS cohort and Mid/Late Baby Boomer cohort. Math and reading ability range from 1-5 with higher values indicating better ability. Proportion of schooling in majority non-White schools and private schools ranges from 0-1. Ever attended a race discordant school defined for White respondents as ever attending a majority non-White school and for Black respondents as ever attending a majority non-White school. Percentages for high school coursework, foreign language coursework, and art participation reported only for respondents who attended high school; observations are reported for each group in column subheaders. Estimates for years of schooling, post-secondary education and bachelor's degree are reported for all respondents.

bolded significantly different from non-Hispanic White peers at p<0.025 level, within gender and cohort comparisons significantly different from HRS cohort at p<0.025 level, within race and gender comparisons

significantly different from War Babies cohort at p<0.025 level, within race and gender comparisons

significantly different from Early Baby Boomer cohort at p<0.025 level, within race and gender comparisons

mlincom command used to test for statistically significant differences between groups.

^{*} significantly different from men at p<0.025 level, within race and cohort comparisons

Table A4. Sample characteristics of core HRS sample (2014-2018) compared to HRS-LHMS subsample and predicted odds ratios from logistic regression models predicting inclusion in HRS-LHMS subsample, weighted data.

	Demographics & Bi	Pr(Inclusion in LHMS)	
	HRS	LHMS	n=16,960
	n=16,960	n=10,333	11-10,500
	Mean (SE) or %	Mean (SE) or %	OR (95% CI)
Race/Ethnicity			
White, non-Hispanic	88.9	91.0*	REF
Black, non-Hispanic	11.1	9.0*	0.68 (0.59-0.77)**
Gender			
Male	46.6	44.5*	REF
Female	53.4	55.5*	1.31 (1.21-1.41)**
Birth Cohort			
AHEAD/CODA	6.7	5.7*	0.49 (0.43-0.55)**
HRS	15.7	17.3*	REF
War Babies	15.7	18.8*	1.37 (1.22-1.54)**
Early Baby Boomers	20.4	23.7*	1.15 (1.03-1.29)
Mid/Late Baby Boomers	41.5	34.6*	0.44 (0.38-0.52)**
Census Region (at birth)			
Northeast	24.0	24.2	REF
Midwest	34.0	36.2*	1.24 (1.04-1.47)
South	29.8	27.9*	0.92 (0.78-1.10)
West	11.2	10.7	0.90 (0.71-1.15)
Foreign country or U.S. territory	1.0	1.0	1.08 (0.68-1.69)
Bachelor's degree (yes)	31.1	33.0*	1.16 (1.03-1.32)
Years of schooling	13.65 (0.04)	13.78 (0.05)*	
Self-rated health (0=poor, 4=excellent)	2.21 (0.01)	2.29 (0.01)*	1.23 (1.17-1.29)**

Birth years for each cohort include <1930 (AHEAD/CODA), 1931-1941 (HRS), 1942-1947 (War Babies), 1948-1953 (Early Baby Boomers), and 1954-1965 (Mid/Late Baby Boomers), HS=high-school. Years of schooling excluded from logistic regression analysis due to collinearity. LHMS sample uses non-imputed data and is therefore slightly reduced from sample we use in our main analysis.

^{**}p<.001; *p<.025; REF=reference group

Table A5. Sample characteristics of core HRS sample (2014-2018) compared to HRS-LHMS subsample by cohort, weighted data

	AHEAD/CODA		HRS		War Babies		Early Baby Boomers		Mid/Late Baby Boomers	
	HRS	LHMS	HRS	LHMS	HRS	LHMS	HRS	LHMS	HRS	LHMS
	n=1,746	n=832	n=4,335	n=2,933	n=2,149	n=1,612	n=2,825	n=2,051	n=5,905	n=2,905
Race/Ethnicity										
White, NH	92.0	93.9*	91.0	92.4*	90.0	91.0*	89.0	90.6*	87.2	90.1*
Black, NH	8.0	6.1*	9.0	7.6*	10.0	9.0*	11.0	9.4*	12.8	9.9*
Gender										
Male	36.4	33.8	44.6	43.5*	47.7	46.5	48.0	47.2	47.9	43.8*
Female	63.6	66.2	55.4	56.5*	52.3	53.5	52.0	52.8	52.1	56.2*
Census Region (at bir	rth)									
Northeast	23.3	23.0	24.1	24.1	24.0	25.0	24.3	23.1	24.0	24.8
Midwest	38.3	40.8	33.7	34.8	30.2	31.0	36.0	39.1*	33.9	36.9*
South	29.4	28.1	31.7	30.1*	34.6	33.3	28.3	26.1*	28.0	25.2*
West	7.9	6.6	9.6	10.2	10.7	10.2	10.3	10.6	13.1	12.0
Foreign country or U.S. territory	1.1	1.5	0.9	0.9	0.7	0.6	1.1	1.2	1.0	1.0
Bachelor's degree	21.8	24.9*	23.7	25.1*	29.7	31.9*	36.5	38.6*	33.3	35.0
Years of schooling	12.7 (0.1)	13.0 (0.1)*	13.1 (0.1)	13.2 (0.1)*	13.5 (0.1)	13.7 (0.1)*	14.1 (0.1)	14.2 (0.1)*	13.9 (0.1)	14.0 (0.1)
Self-rated health	1.8 (0.03)	2.0 (0.04)*	2.0 (0.02)	2.1 (0.02)*	2.2 (0.02)	2.3 (0.03)*	2.3 (0.03)	2.4 (0.03)*	2.3 (0.03)	2.4 (0.03)*

Notes: Mean (SE) or % reported

Birth years for each cohort include <1930 (AHEAD/CODA), 1931-1941 (HRS), 1942-1947 (War Babies), 1948-1953 (Early Baby Boomers), and 1954-1965 (Mid/Late Baby Boomers), NH=non-Hispanic, HS=high-school. Self-rated health measured on a 0 to 4 scale; 0=poor, 4=excellent. Years of schooling excluded from logistic regression analysis due to collinearity. LHMS sample uses non-imputed data and is therefore slightly reduced from sample we use in our main analysis.

^{*} significantly different from full sample at p<.025, adjusted Wald test

Table A6. Predicted odds ratios from logistic regression models predicting inclusion in HRS-LHMS subsample, weighted data.

	AHEAD/CODA	AHEAD/CODA HRS		Early Baby Boomers	Mid/Late Baby Boomers
	n=1,746	n=4,335	n=2,149	n=2,825	n=5,905
	OR (95% CI)				
Race/Ethnicity					
White, non-Hispanic	REF	REF	REF	REF	REF
Black, non-Hispanic	0.65 (0.42-1.00)	0.67 (0.52-0.87)*	0.79 (0.55-1.11)	0.76 (0.58-0.99)	0.62 (0.50-0.78)**
Gender					
Male	REF	REF	REF	REF	REF
Female	1.36 (1.12-1.65)*	1.21 (1.05-1.39)*	1.26 (1.02-1.54)	1.16 (0.96-1.39)	1.42 (1.26-1.60)**
Census Region (at birth)					
Northeast	REF	REF	REF	REF	REF
Midwest	1.21 (0.82-1.80)	1.12 (0.92-1.36)	0.94 (0.69-1.28)	1.84 (1.27-2.67)*	1.16 (0.87-1.54)
South	1.04 (0.70-1.54)	0.99 (0.80-1.22)	0.85 (0.60-1.21)	1.11 (0.75-1.65)	0.85 (0.65-1.10)
West	0.69 (0.42-1.12)	1.24 (0.90-1.71)	0.70 (0.46-1.06)	1.40 (0.85-2.31)	0.79 (0.53-1.18)
Foreign country or U.S. territory	2.41 (0.82-7.08)	0.92 (0.51-1.66)	0.54 (0.15-1.88)	1.50 (0.54-4.12)	1.03 (0.50-2.11)
Bachelor's degree	1.62 (1.20-2.19)*	1.14 (0.93-1.39)	1.39 (1.00-1.94)	1.22 (0.94-1.57)	1.07 (0.85-1.35)
Self-rated health	1.28 (1.13-1.43)**	1.39 (1.30-1.48)**	1.43 (1.29-1.59)**	1.39 (1.28-1.52)**	1.08 (0.99-1.18)

Birth years for each cohort include <1930 (AHEAD/CODA), 1931-1941 (HRS), 1942-1947 (War Babies), 1948-1953 (Early Baby Boomers), and 1954-1965 (Mid/Late Baby Boomers), HS=high-school. Self-rated health measured on a 0 to 4 scale; 0=poor, 4=excellent. Years of schooling excluded from logistic regression analysis due to collinearity. Years of schooling excluded from logistic regression analysis due to collinearity. LHMS sample uses non-imputed data and is therefore slightly reduced from sample we use in our analysis.

^{**}p<.001; *p<.025; REF=reference group