Who Has a Second-Generation Educational Attainment Advantage?

Christine Gambino, Social, Economic and Housing Statistics Division, U.S. Census Bureau

BACKGROUND

Educational attainment for second-generation adults (who have at least one foreign-born parent) has been shown to be higher compared to first-generation foreign-born adults, and in some cases, this attainment is higher even than that of the third-and-higher generation (those who have native-born parents). Prior research has shown that this educational advantage may not apply uniformly to all members of the second generation, and may depend on race and sex.

RESEARCH QUESTIONS

Is there a second generation advantage (defined as completion of high school and bachelor's degrees as compared to the first and third-and higher generations)?

Is the second generation advantage the same for all members of the second generation?

- Do race or Hispanic origin matter?
- Does it matter whether one or two parents are foreign-born?
- Does gender matter?

Has the second generation advantage increased during the time period 2007-2016?

• If so, has this increase been equal for different races?

DATA AND METHODS

- Basic Current Population Survey monthly sample data was aggregated for March, July, and November of every year, for the 10-year time period 2007 through 2016.
- Restricted to adults age 25 and older.
- Reinterviewed households were excluded from the sample in order to reduce standard errors.
- Design effect adjusted normalized weights were used in regressions.
- Age, age-squared, and metropolitan/nonmetropolitan residence were included as control variables.









Source: U.S. Census Bureau, Current Population Survey 2007 - 2016 Note: Universe is the civilian noninstitutionalized population of the United States, plus Armed Forces members who live in housing units - off post or on post - with at least one other civilian adult. 'First generation' refers t those who are foreign born; 'second generation' refers to those with at least one foreign-born parent; 'third-and higher generation' includes those with two U.S. native parents. Educational attainment is measured in years of school completed, not attended.



U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU census.gov

Note: for figures 2-3, FB = foreign-born.

The second generation had a higher percent completing bachelor's and advanced degrees compared to the first and third generations (Figs 1, 3a).

The first generation had a lower percent completing high school than the second and third generations (Figs 1, 2a).

<u>Regression Model 1 - main effects of generation and year:</u>

- The second generation with one foreign-born parent had the highest likelihood of bachelor's degree attainment, followed by the second generation with two foreign-born parents. The third and first generations were less likely to attain a bachelor's degree, and were not statistically different from each other.
- The second generation with one foreign-born parent and the third generation had the highest likelihoods of attaining at least a high school degree. The second generation with two foreign-born parents were less likely to have a high school degree, and the first generation was the least likely.
- The trend over time was a greater increase for the second generation than for the third generation, for both high school and bachelor's attainment.

Regression Model 2 - controlling for race, Hispanic origin, age, and sex:

- Compared to Whites, Asians had higher likelihood of attainment, while Hispanics and Blacks had lower likelihood of attainment.
- Overall, there was a positive effect of increasing age and being female on attainment

<u>Regression Model 3 - interactions of sex, race, and Hispanic origin with</u> generation:

- Hispanics had a smaller second-generation advantage than Whites in attainment of both high school and bachelor's degrees.
- Blacks had a larger second-generation advantage than Whites in attainment of both high school and bachelor's degrees.
- Asians had a smaller second-generation advantage over the third generation than Whites for bachelor's attainment, and no secondgeneration advantage for high school attainment.
- The first-generation advantage over the third generation was largest for Blacks and Whites.
- Third-generation females had higher likelihood of bachelor's attainment than males, but first and second-generation females had lower bachelor's attainment likelihood than males.

Contact Information: christine.gambino@census.gov This poster is released to inform interested parties of ongoing research and to encourage discussion. Any views expressed are those of the authors and not necessarily those of the U.S. Census Bureau.

Presented at the Annual Meeting of the Population Association of America Chicago, IL April 27-29, 2017

Logistic Regression Estimates Predicting Degree Attainment by Generation, Sex, and Year

	High School			Bachelor's			
	(1)	(2)	(3)		(1)	(2)	(3)
Intercept	1.853	1.539	1.440		-1.116	-0.997	-1.056
	[0.015]	[0.035]	[0.036]		[0.009]	[0.023]	[0.024]
First generation (foreign-born)	-1.222**	-0.747**	-0.206**		-0.024	0.135**	0.534**
	[0.025]	[0.028]	[0.037]		[0.022]	[0.024]	[0.031]
Second generation, one							
foreign-born parent	-0.017	0.317**	0.449**	_	0.197**	0.282**	0.405**
	[0.049]	[0.051]	[0.064]		[0.031]	[0.032]	[0.039]
Second generation, two		0.4.40**	0.007**		0.40.4**	0.07.4**	0 005**
foreign-born parents	-0.395**	0.149**	0.297**		0.134**	0.274**	0.385**
	[0.049]	[0.051]	[0.064]		[0.031]	[0.033]	[0.040]
Year	0.04**	0.047**	0.046**		0.027**	0.029**	0.028**
	[0.001]	[0.001]	[0.001]		[0.001]	[0.001]	[0.001]
Year*Firstgen	-0.009**	-0.011**	-0.009**		0.003	0.003	0.003
	[0.002]	[0.002]	[0.002]		[0.002]	[0.002]	[0.002]
Year*Secondgen	0.012**	0.012**	0.009*		0.007**	0.009**	0.006*
	[0.004]	[0.004]	[0.004]		[0.003]	[0.003]	[0.003]
Female		0.132**	0.179**			-0.011**	0.019**
		[0.006]	[0.007]			[0.004]	[0.005]
Hispanic		-1.798**	-1.387**			-1.419**	-1.046*
		[0.009]	[0.013]			[0.009]	[0.013]
Black		-0.848**	-0.945**			-0.791**	-0.851*
		[0.009]	[0.01]			[0.007]	[0.008]
Asian		0.040*	0.346**			0.469**	0.634**
		[0.016]	[0.075]			[0.010]	[0.031]
Age		0.052**	0.052**			0.023**	0.023**
Firstgen*Female		[0.001]	[0.001]			[0.001]	[0.001]
			-0.148**				-0.163*`
			[0.013]				[0.012]
Secondgen*Female			-0.121**				-0.104*
			[0.024]				[0.015]
Firstgen*Hispanic			-0.883**				-0.826*
			[0.022]				[0.019]
Firstgen*Black			0.455**				0.173**
			[0.029]				[0.021]
Firstgen*Asian			-0.579**				-0.294*
			[0.078]				[0.034]
Secondgen*Hispanic Secondgen*Black			-0.202**				-0.0794*
			[0.028]				[0.023]
			0.471**				0.565**
			[0.075]				[0.038]
Secondgen*Asian			-0.690**				-0.269
			[0.089]				[0.039]
						4 0 40 = 40	
Observations	1,340,740	1,340,740	1,340,740		1,340,740	1,340,740	1,340,74
				_			

' significant at 0.05 ** significant at 0.01 = negative likelihood = positive likelihood Source: Current Population Survey, pooled basic monthly data from March, July and November 2007-2016. Note: Estimates are shown under each model number, with standard errors in brackets. For generation, reference group = third eneration. For race and Hispanic origin, reference group=non-Hispanic white alone.

CONCLUSIONS

- Relative to the third generation, there was a significant second generation advantage that was *not* homogenous across different race and gender groups.
- For almost all race, gender and generational groups, educational attainment increased to some degree between 2007 and 2016. This change differed across race and Hispanic origin groups.