


RESEARCH NOTE

Does the Relative Education Model Explain Turnout Across Racial and Ethnic Groups?

Ashley Grace Burkholder¹, Eric Hansen¹  and Emily Wager²

¹Department of Political Science, Loyola University Chicago, Chicago, USA and ²Department of Political Science, Rice University, Houston, USA

Corresponding author: Eric Hansen; Email: ehansen4@luc.edu

(Received 8 November 2024; revised 31 May 2025; accepted 4 June 2025)

Abstract

The relative education model holds that educational attainment reflects existing socioeconomic advantages that are associated with participation rather than spurring political participation on its own. Yet, emerging research on compensation effects suggests that greater educational attainment leads to increased political engagement among more marginal populations in which political socialization is less likely to occur outside of schools. We argue that the relative education model will better describe the relationship between education and voting patterns among more advantaged groups. We test our expectations by estimating the relative education model within racial and ethnic groups in the U.S. using data from the Current Population Survey's (CPS) Voting and Registration Supplement from 1978 to 2020. We find that for relatively highly educated White and Asian American voters, each additional year of education yields diminishing returns to turnout. For Black and Latino voters, additional years of education are positively associated with turnout regardless of relative education. The results suggest that opportunities remain to reduce racial turnout gaps and boost political participation by addressing racial gaps in educational attainment.

Keywords: Voter Turnout; Educational Attainment; Relative Education Model; Political Participation; Race and Education

Is the relative education model a universal model of the relationship between education and turnout? Nie, Junn, and Stehlik-Barry (1996) developed the model, arguing that higher educational attainment compared to one's peers, rather than one's educational attainment alone, predicts greater political participation. Yet, the relationship between education and participation seems to vary across segments of the population. Educational attainment can heighten political participation, but these benefits appear to be concentrated among more marginalized groups (Campbell 2008; Langton and Jennings 1968; Neundorf, Niemi, and Smets 2016).

We test whether the descriptive potential of the model varies across White, Black, Latino, and Asian voters. For evidence, we utilize the Current Population Survey's

(CPS) Voting and Registration Supplement to study self-reported voting behavior between 1978 and 2020. Among all groups, we find that both absolute educational attainment and educational attainment relative to one's peers are associated with increased participation. However, we find that relative education conditions the relationship between educational attainment and turnout differently across groups. For relatively highly educated White and Asian American voters, each additional year of education yields diminishing returns to turnout. For Black and Latino voters, additional years of education are positively associated with turnout regardless of relative education.

This study's principal contribution is to demonstrate that the relative education model holds varying levels of predictive power across racial and ethnic groups. Our findings provide evidence relevant to efforts to close disparities in turnout across racial and ethnic groups. While 43% of voting-eligible Whites voted in all three of the 2018, 2020, and 2022 elections, only 27% of Black and 19% of Latino adults did (Pew Research Center 2023). Simultaneously, educational attainment varies significantly by race, with 45% of Whites having completed at least a bachelor's degree in 2022, compared to 28% of Blacks and 25% of Latinos (National Center for Education Statistics 2023). Our findings are consistent with arguments that increased educational attainment can help narrow the racial turnout gaps, but we expect that educational parity alone will not result in parity in turnout.

Relative Education or Compensation?

For decades, researchers have pointed to educational attainment as a strong correlate of political participation (R. E. Wolfinger and Rosenstone 1980). Despite rising average education levels among younger generations, education-driven voting patterns observed in the mid-twentieth century bear a striking resemblance to contemporary voting patterns (Leighley and Nagler 2013). A resulting question is whether educational attainment *causes* voting behavior. Some research supports the idea of a causal link (e.g., Dee 2004; Sondheimer and Green 2010), while some question it (e.g., Berinsky and Lenz 2011; Kam and Palmer 2008).

In their relative education model, Nie, Junn and Stehlik-Barry (1996) advance a view of education as a competitive status indicator rather than a socializing agent causing participation. In their view, education reflects a set of social advantages, chief among them a position in the center of well-connected social networks. Individuals with high levels of educational attainment, compared to their age-group peers, participate in politics both as a reflection of their elevated social status and as an effort to preserve that status by working to influence political decisions.

Their model implies that one's education relative to their local social and political networks—also referred to as their “educational environment”—should predict participation better than one's absolute level of educational attainment. As Campbell (2009) succinctly puts it, “having a college degree in a place where few people have college degrees provides a larger boost to engagement than being college-educated in a place where college degrees are the norm” (p. 777). Indeed, several studies suggest higher relative education is associated with greater political participation over and above any association with educational attainment (Campbell 2009; Persson 2011; Tenn 2005).

The relative education model provides important insights that education reflects a competitive social advantage and that the probability of voting does not increase monotonically with educational attainment. However, it does not account for the heterogeneous effects of education, and civic education in particular, on participation across subgroups. Civic education appears to more strongly affect political socialization among young people from disadvantaged groups, exerting what Campbell (2019) calls a “compensation effect” (see also Campbell 2008; Langton and Jennings 1968). Students from lower socioeconomic backgrounds demonstrate greater political engagement if exposed to more civic education in school (Lindgren, Oskarsson, and Persson 2019; Neundorf, Niemi, and Smets 2016). Mandatory high school civics examinations increase political knowledge among adolescents from Latino and immigrant families (Campbell and Niemi 2016). Some techniques appear to be particularly effective. While talking openly about politics in the classroom is associated with greater engagement broadly (Martens and Gainous 2013; Torney-Purta 2002), specific conversations that highlight the political agency of marginal groups or validate their historic distrust in government do more to engage young people from marginal backgrounds (Nelsen 2021, 2023).

Of course, educational attainment includes more than civics education alone. However, it is plausible that students with higher levels of educational attainment have also been exposed to more civic education. Moreover, some authors argue that aspects of education outside of civic education, such as noncognitive skill development and the internalization of social norms, explain the connection between education and participation (Hansen and Tyner 2021; Holbein and Sunshine Hillygus 2020). Though the content of civic education may help to explain group heterogeneity, it is enough for our purposes to say that something about the educational system in America produces differing relationships between education and participation across groups.

The relative education model should also reflect group differences. If education is more strongly related to participation among disadvantaged groups as a result of its socializing effects, then we should expect to see that relationship independent of a person’s educational environment. In other words, the members of disadvantaged groups should participate more as a result of their education, regardless of their educational environment.

Translating this argument to racial and ethnic groups, we contend that the relative education model will better capture the relationship between education and voting among White citizens than among Black or Latino citizens. For a number of historical reasons, including but not limited to slavery, economic exclusion, and the inequitable provision of public goods such as education, generations of African Americans and Latinos had limited opportunities to participate in American politics. Political inequality is reproduced across generations (Brady et al., 2015). The transmission of knowledge, values, and norms surrounding civic engagement often occurs in families and communities (Gimpel et al., 2003; Verba, Burns, and Schlozman 2003). Children whose parents had fewer opportunities and resources to become politically engaged tend to be less engaged themselves. Therefore, as a result of historical exclusion, we expect Black and Latino youth to have fewer opportunities to become socialized into voting outside schools, with schools serving as important forays into civic engagement. For Whites, who have more

ample opportunities for political socialization outside schools, we may reasonably expect educational attainment to better reflect relative social status.

Then again, many opportunities for political socialization for Black and Latino youth are available outside schools. Aside from families, campaigns and community organizations like churches have also helped to mobilize Black and Latino voters (Barreto, Segura, and Woods 2004; Walton 2020). Moreover, many civically active youth see nonvoting forms of participation, like protest, as more efficacious, weakening the connection between socialization and voting (Searles and Suzuki 2024). While we expect to observe evidence more consistent with the compensation effects of education among these groups, it is possible that these alternative pathways to participation mitigate any such effect.

We formalize our expectations below:

H1: For all races, an increase in absolute years of education is associated with a higher likelihood of voting.

H2: For all races, an increase in an individual's educational rank relative to their educational environment is associated with a higher likelihood of voting.

H3a: For White individuals, relative educational rank more strongly attenuates the relationship between absolute years of education and voting.

H3b: For Black individuals, relative educational rank more weakly attenuates the relationship between absolute years of education and voting.

H3c: For Latino individuals, relative educational rank more weakly attenuates the relationship between absolute years of education and voting.

For Asian American voters, we hold weaker expectations given the wide variety of paths to political socialization and more splintered efforts at mobilization (Wong *et al.* 2011). On one hand, relative socioeconomic advantages among this group would predict a relationship between educational attainment and voting reflective of the relative education model. On the other hand, Asian American voters tend to vote at lower rates despite their socioeconomic advantages and benefit less from civic education interventions than their Black and Latino peers (Fraga 2018; Nelsen 2023). Therefore, we explore the moderating effect of educational rank for this group without formulating a specific expectation.

To the best of our knowledge, Campbell (2009) provides the only prior test of racial differences in the relative education model and finds no difference in its ability to describe nonvoting forms of participation among White and Black Americans. However, Campbell's results are derived from an analysis of a cross-sectional survey taken more than 20 years ago, and the results do not describe voting behavior. Leveraging more expansive data over time may yield different results. Using such data, Kim (2023) finds that the absolute model of education better describes the relationship between education and voting than the relative model after 2000. Though Kim (2023) points to widening economic inequality as an explanation, we note that the years after 2000 have also been marked by greater racial diversity in the electorate.

Since Nie et al. (1996) articulated their model nearly 30 years ago, it is important to test it in an increasingly diverse electorate. As research has shown that political socialization operates differently for minoritized populations compared to Whites (Raychaudhuri 2020), so too may education. We acknowledge that education might have heterogeneous effects on participation within groups as well. Rather than delving into the many mechanisms through which educational attainment may impact participation, we are interested in mapping how this relationship varies systematically across racial groups despite within-group variation. Understanding the differences between groups can help us better understand the role that education may play in addressing turnout gaps.

Data and Methods

This analysis uses the CPS Voting and Registration Supplement, which includes self-reports of election participation for presidential and midterm elections over several decades. We use CPS data from 1978 to 2020, during which educational attainment was measured in all states. The sample includes over 1.8 million respondents, with approximately 76,000 to 97,000 respondents per survey year. The large sample gives us a sufficient number of responses to analyze subgroups and measure respondents' educational attainment relative to birth and geographic cohorts.

We follow prior work and model turnout as a function of the interaction between an individual's own education and their educational rank within a defined age-place cohort (Campbell 2009; Kim 2023). For comparison, we estimate both an additive model (1) and a relative education model (2), defined below. The additive model serves as a test of H1 and H2, while the relative education model serves as a test of H3a-c.

$$\text{Voter Turnout}_{it} = \beta_0 + \beta_1 \text{Educational Attainment}_{it} + \beta_2 \text{Educational Rank}_{it} + \beta_3 \text{Controls} + \epsilon_t \quad (1)$$

$$\text{Voter Turnout}_{it} = \beta_0 + \beta_1 \text{Educational Attainment}_{it} + \beta_2 \text{Educational Rank}_{it} + \beta_3 \text{Educational Attainment}_{it} \times \text{Educational Rank}_{it} + \beta_4 \text{Controls} + \epsilon_t \quad (2)$$

The dependent variable (*Turnout*) is dichotomous, indicating whether the respondent *i* reported voting in the most recent election of survey year *t*. Self-reported voting measures raise perennial concerns due to challenges with overreporting (e.g., Ansolabehere and Hersh 2012). Recent findings that CPS data produces biased estimates of turnout, particularly for Black and Latino respondents, compound these concerns for our study (Ansolabehere, Fraga, and Schaffner 2022). In the absence of more comprehensive data or CPS validation studies allowing a correction method to be developed, we proceed by analyzing these data but caution readers about known biases in them.

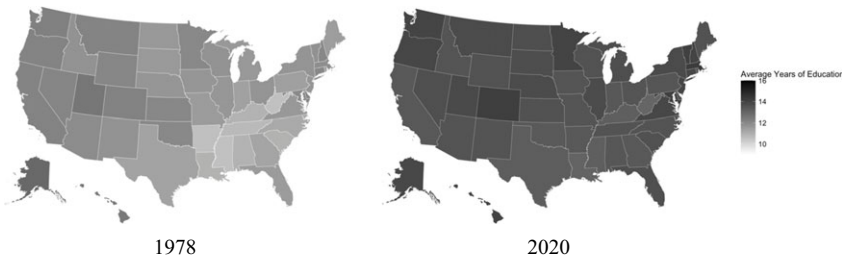


Figure 1. Educational Attainment Across States (1978 vs 2020).

The main independent variables are educational attainment and educational rank. *Educational Attainment* is a count of years of schooling that the respondent had completed at the time of the survey, following Jaeger's (1997) recommended coding scheme for CPS data. It ranges from 0 (no education at all) to 18 years (Ph.D. or professional degree). Figure 1 illustrates that educational attainment has varied widely across states and over time.

We measure *Educational Rank* as a respondent's percentile of educational attainment among other respondents within their generational cohort¹ in their state.² The variable ranges from 0 to 1 and captures how respondents' absolute value of education compares to those in their educational environments (see Helliwell and Putnam 2007; Tenn 2005). By defining educational environments within age cohorts, we eliminate the threat of multicollinearity by including age and educational rank in the same model, a problem in earlier research (Kim 2023). For example, a Millennial in 2020 with an undergraduate degree (16 years of education) ranks at about the 41st percentile of education compared to other Millennials living in Washington, D.C., but ranks in the 83rd percentile compared to other Millennials in Mississippi. On the other hand, a Baby Boomer with a high school diploma (12 years) in 2020 ranks at the 34th percentile compared to other Baby Boomers in West Virginia but ranks at the 18th percentile in Washington state. Thus, respondents' educational rank varies substantially by generation and geography.

Our model also controls for age, age squared, gender, and marital status, consistent with other scholarship examining relative education (Kim 2023; Nie, Junn, and Stehlik-Barry 1996). In particular, age is positively associated with turnout (R. E. Wolfinger and Rosenstone 1980), women are more likely to vote than men (Leighley and Nagler 2013), and married adults are more likely to turnout (N. H. Wolfinger and Wolfinger 2008). We also use fixed effects for years to control for election-related trends. We analyze respondents aged 25 and older since most people have completed their education by that age.

Finally, we code CPS data to place respondents in one of the following groups: White, Black, Latino, and Asian. The White, Black, and Asian categories include those who solely identified with that racial group. Latinos are those who indicate that their ethnicity is Hispanic or Latino, regardless of race. Our sample in total includes 82.8% identified as White, 9.5% as Black, 5.5% as Latino, and 2.2% as Asian.³

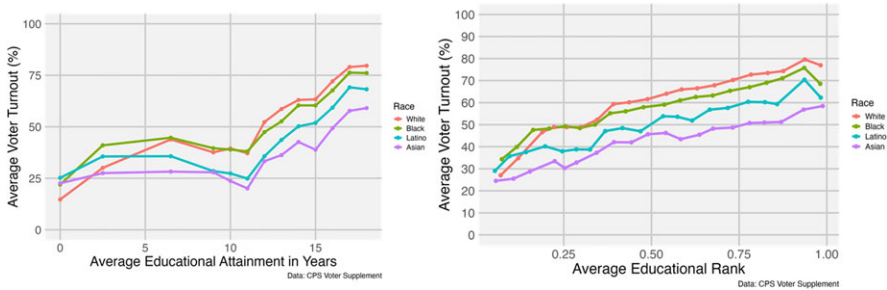


Figure 2. Average Turnout by Educational Attainment and Race.

Findings

We begin by illustrating our two independent variables of interest: *Educational Attainment* (Figure 2a) and *Educational Rank* (Figure 2b) plotted against average self-reported turnout scores. Rank values are binned at every fifth percentile. As the two figures illustrate, education in both absolute and relative terms is strongly and positively correlated with voter turnout.

As a test of H1 and H2 using the additive model, we estimate logistic regression models with robust standard errors for each group, with and without controls. Table 1 presents the results. As expected, both educational attainment and educational rank are significantly and positively related to turnout across all groups in the fully specified models. Therefore, we find support for H1 and H2.

Next, we turn to our primary analysis by estimating the relative education model with separate models by race/ethnicity to test H3a-c. We estimate a logistic regression model with robust standard errors for each group and include an interaction term between educational rank and educational attainment. We focus our interpretation on the fully specified models in the last four columns in Table 2.

The coefficient estimates for the interaction terms in those models suggest group differences, but they are difficult to interpret on their own. To facilitate interpretation, we plot the estimated marginal effects of educational attainment with 95% confidence intervals over the range of educational rank in Figure 3. In line with expectations, the figure depicting White respondents shows a negative slope, indicating that the marginal effect of an additional year of education on turnout diminishes as one climbs the educational rank ladder. Also in line with expectations, the slopes for Black and Latino voters are flat, indicating their educational environment does not condition the association between educational attainment and voting. Among Asian voters, the marginal effect of educational attainment decreases over the range of educational rank.

To present these findings in more substantive terms, Figure 4 illustrates how the predicted probability of voting (y-axis) for each racial group varies as years of educational attainment increase (x-axis) while holding respondents' rank within their educational environment constant at two different values: the 40th percentile and the 90th percentile. For White respondents at the 40th percentile, moving from a high school diploma to a graduate degree (12 to 18 on the x-axis) results in a roughly 16 percentage point increase in the likelihood of voting. For White respondents at

Table 1. Effects of Educational Attainment and Rank on Voter Turnout by Race/Ethnicity

	<i>Dependent variable:</i>							
	Voted (1 = Yes, 0 = No)							
	White	Black	Latino	Asian	White	Black	Latino	Asian
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Educational Attainment	-0.023*** (0.001)	-0.029*** (0.003)	-0.033*** (0.004)	-0.008 (0.008)	0.130*** (0.002)	0.069*** (0.004)	0.045*** (0.004)	0.041*** (0.009)
Education Rank	2.240*** (0.015)	1.920*** (0.037)	2.027*** (0.048)	1.509*** (0.086)	1.023*** (0.017)	1.103*** (0.042)	1.477*** (0.051)	1.199*** (0.094)
Age					0.086*** (0.001)	0.078*** (0.002)	0.072*** (0.003)	0.054*** (0.005)
Age Squared					-0.001*** (0.000)	-0.001*** (0.000)	0.000 (0.000)	0.000 (0.000)
Female					0.076*** (0.004)	0.241*** (0.011)	0.122*** (0.014)	0.055** (0.022)
Married					0.587*** (0.004)	0.324*** (0.011)	0.318*** (0.014)	0.239*** (0.024)
Constant	-0.682*** (0.013)	-0.738*** (0.033)	-0.685*** (0.050)	-0.987*** (0.089)	-5.138*** (0.025)	-4.296*** (0.065)	-3.905*** (0.088)	-3.445*** (0.146)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	1,490,688	170,225	99,166	38,949	1,490,688	170,225	99,166	38,949
Akaike Inf. Crit.	1,850,299.000	222,103.800	129,226.900	51,045.180	1,767,367.000	215,946.900	124,719.900	50,006.860

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Table 2. Effects of Relative Education on Voter Turnout by Race/Ethnicity

	<i>Dependent variable:</i>							
	Voted (1 = Yes, 0 = No)							
	White	Black	Latino	Asian	White	Black	Latino	Asian
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Educational attainment	-0.007*** (0.002)	-0.027*** (0.003)	-0.037*** (0.004)	-0.010 (0.008)	0.134*** (0.002)	0.069*** (0.004)	0.045*** (0.004)	0.038*** (0.010)
Education rank	3.532*** (0.038)	2.673*** (0.117)	2.700*** (0.185)	2.424*** (0.300)	1.403*** (0.043)	1.040*** (0.127)	1.431*** (0.201)	1.855*** (0.318)
Age					0.086*** (0.001)	0.078*** (0.002)	0.072*** (0.003)	0.056*** (0.005)
Age squared					-0.001*** (0.000)	-0.001*** (0.000)	-0.0004*** (0.000)	-0.0003*** (0.000)
Female					0.073*** (0.004)	0.241*** (0.011)	0.122*** (0.014)	0.053** (0.022)
Married					0.587*** (0.004)	0.325*** (0.011)	0.318*** (0.014)	0.240*** (0.024)
Attainment X Rank	-0.082*** (0.002)	-0.046*** (0.007)	-0.038*** (0.010)	-0.049*** (0.015)	-0.024*** (0.002)	0.004 (0.007)	0.003 (0.011)	-0.034** (0.016)
Constant	-0.981*** (0.016)	-0.829*** (0.036)	-0.718*** (0.050)	-1.061*** (0.092)	-5.210*** (0.026)	-4.290*** (0.066)	-3.902*** (0.088)	-516*** (0.151)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	1,490,688	170,225	99,166	38,949	1,490,688	170,225	99,166	38,949
AIC	1,849,014.000	222,061.400	129,215.100	51,037.050	1,767,274.000	215,948.600	124,721.800	50,004.230

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

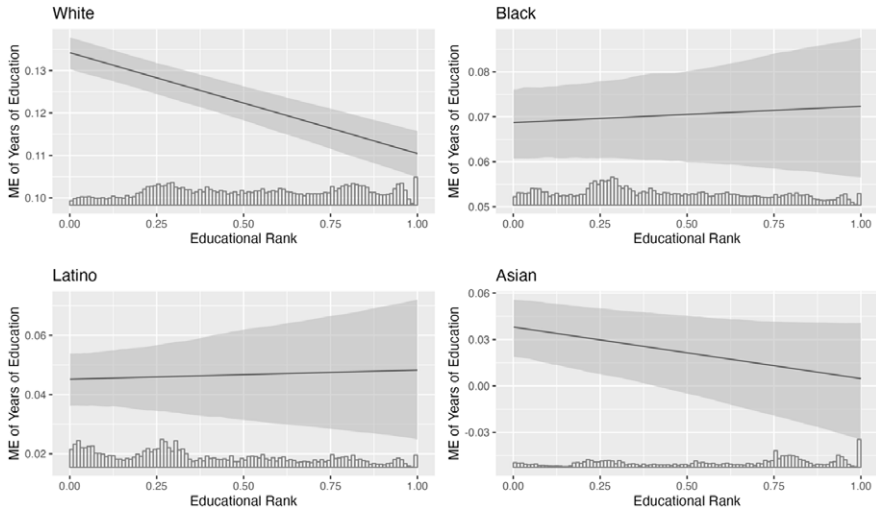


Figure 3. Marginal Effect of Educational Attainment Across Values of Educational Rank.

the 90th percentile, moving from a high school diploma to a graduate degree results in only a 12 percentage point increase in the likelihood of voting. This finding is consistent with expectations; the association between educational attainment and voting for Whites is moderated by educational rank. However, the marginal effect is rather small—the difference in gains from a six-year increase in educational attainment at the two educational ranks is about four percentage points.

For Black and Latino respondents, however, the probability of voting at different levels of educational attainment moves in parallel across the range of educational rank. Among African Americans, the difference in the probability of voting at the 40th percentile and 90th percentile of educational rank is roughly 12 percentage points at all levels of educational attainment. Among Latinos, that difference is about 17 percentage points. We see a result similar to Whites among Asian Americans. For those at the 40th percentile, moving from a high school diploma to a graduate degree results in a roughly five percentage point increase in the likelihood of voting. At the 90th percentile, the same change in educational attainment yields a roughly two percentage point increase in the likelihood of voting.

As a robustness check, we conduct likelihood ratio tests to compare the fully specified models with and without the interaction between years of education and educational rank. The results, provided in Table A1 in the appendix, indicate that the interaction significantly improves model fit for White and Asian respondents ($p < 0.05$), but not for Black or Latino respondents.

Therefore, the evidence supports H3a-c that relative education more strongly attenuates the relationship between educational attainment and voting for Whites and more weakly attenuates it for Black and Latino respondents. While we did not formalize a specific hypothesis for Asian Americans, the analysis suggests that the relative education model provides some explanatory power for their voting

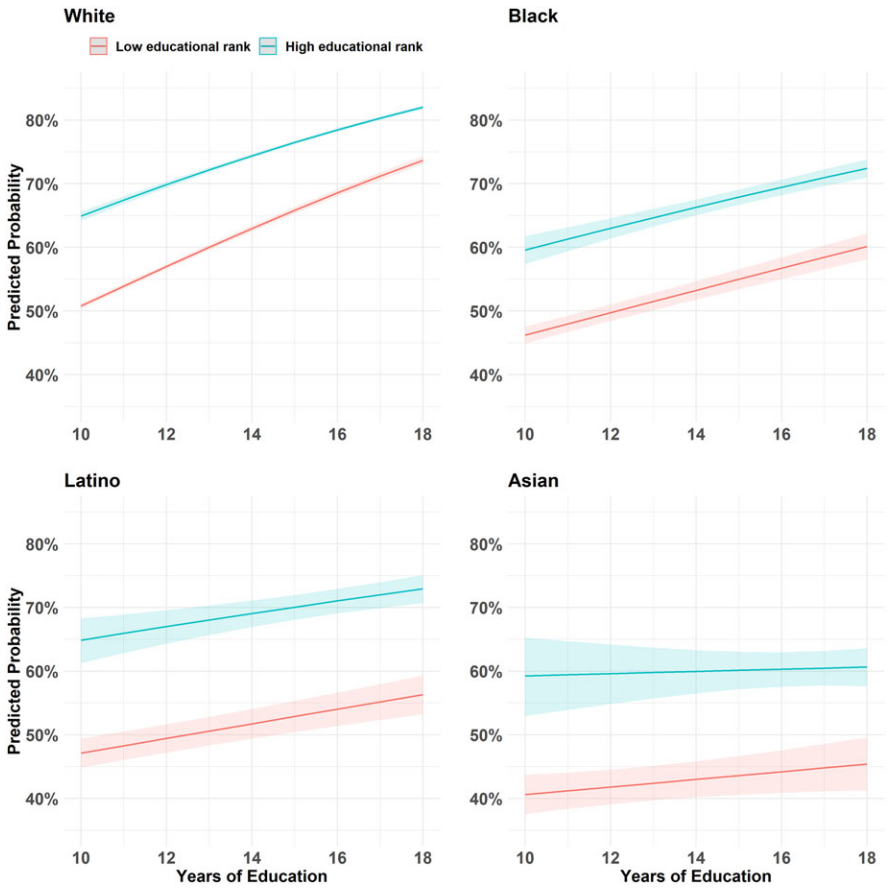


Figure 4. Probability of Voting by Educational Rank and AttainmentNote: Low educational rank = 40th percentile, high educational rank = 90th percentile.

behavior. In Section B of the appendix, we also present results with an alternative measure of *Educational Rank*, in which respondents’ rank is measured relative to their state-age cohort within their own group. Using this alternative measure leads to similar conclusions.

Discussion

The findings show that higher educational attainment is significantly associated with a higher likelihood of voting among all racial and ethnic groups. Yet, the gains from education are moderated by educational rank. While each extra year of education yields diminishing returns among White and Asian voters who are highly educated relative to their educational environment, we observe no such diminishing returns among relatively highly educated Black and Latino citizens. The original relative education model predicted uniform effects in the

population. These findings contribute to the literature by providing evidence that the model varies in its ability to predict voting behavior across racial and ethnic groups.

Caution is merited in interpreting these results. To reiterate, there are known biases in the CPS data in estimating turnout among Black and Latino voters (Ansolabehere, Fraga, and Schaffner 2022). Readers should assume that our estimates err on the high side of predicted voter turnout for minority groups. Moreover, the relatively small sample size for Black and Latino respondents compared to Whites produces less certainty in the estimates for those groups overall.

The findings hold significant implications for addressing racial disparities in political participation. They imply that sustained efforts to close educational attainment gaps between racial and ethnic groups could help narrow turnout gaps between them. By providing groups with less historical access to education with increased access, we might reasonably expect to see political participation climb. Any educational gains among these groups appear less likely to yield diminishing returns in engagement in the short term, as the relative education model might suggest. However, special attention should be paid to curricula that prompt greater civic engagement (Nelsen 2021, 2023) or help students develop noncognitive skills (Holbein and Hillygus 2020). The findings also suggest limits to this approach. Unequal turnout rates continue to appear across groups, even among highly educated citizens in both relative and absolute terms. The results reinforce the idea that education is not a silver bullet. Efforts to increase civic education should complement ongoing efforts to mobilize and empower marginal communities to resolve gaps in participation.

Supplementary material. The supplementary material for this article can be found at <https://doi.org/10.1017/rep.2025.10014>.

Data Availability. Replication data and code are available at the Harvard Dataverse at <https://doi.org/10.7910/DVN/YRRQRH>.

Acknowledgements. The authors thank Lucy Britt, Leah Christiani, Andreas Jozwiak, Eroll Kuhn, Ryan Williams, and participants in the Brennan Center's 2024 conference on The Racial Turnout Gap in the 21st Century, and the anonymous reviewers for valuable feedback. Any errors remain the responsibility of the authors.

Funding statement. This research did not receive any specific financial support.

Competing interests. The authors declare none.

Notes

1 Using generation, as opposed to birth year, to define cohort allows for a stronger indication of educational rank given that using birth year would produce a rank variable based on highly sparse data. The generations include the Lost Generation (born before 1928), the Silent Generation (1928-1945), Baby Boomers (1946-1964), Generation X (1965-1980), and Millennials (1981-1996).

2 Our choice to set the geographic reference unit for the education environment as each respondent's state is not ideal. We'd prefer a more local measure to capture localized competition but geocodes for respondents are universally available in CPS data only by state. While the metropolitan area is available for most respondents in the data, the data do not provide geographic information for individuals living outside of metropolitan areas. Because of educational disparities between urban and rural residents, we fear that

excluding nonmetropolitan respondents from the analysis would bias the picture of the relationship between educational attainment, educational environment, and turnout.

3 While numerically large enough to conduct analysis given the large N-size of the CPS data set, we expect Asian Americans to be sparsely represented in the age-place cohorts used to calculate the *Educational Rank* variable. We urge caution in interpreting these results given this measurement challenge.

References

- Ansolabehere S, Fraga BL, and Schaffner BF.** (2022) The current population survey voting and registration supplement overstates minority turnout. *Journal of Politics* **84**(3), 1850–1855. doi: [10.1086/717260](https://doi.org/10.1086/717260).
- Ansolabehere S, and Hersh E.** (2012) Validation: what big data reveal about survey misreporting and the real electorate. *Political Analysis* **20**(4), 437–459.
- Barreto MA, Segura GM, and Woods ND.** (2004) The mobilizing effect of majority-minority districts on latino turnout. *American Political Science Review* **98**(1), 65–75.
- Berinsky AJ, and Lenz GS.** (2011) Education and political participation: exploring the causal link. *Political Behavior* **33**, 357–373.
- Brady HE, Lehman Schlozman K, and Verba S.** (2015) Political mobility and political reproduction from generation to generation. *The ANNALS of the American Academy of Political and Social Science* **657**(1), 149–173.
- Campbell DE** (2008) Voice in the classroom: how an open classroom climate fosters political engagement among adolescents. *Political Behavior* **30**(4), 437–454.
- Campbell DE** (2009) Civic engagement and education: an empirical test of the sorting model. *American Journal of Political Science* **53**(4), 771–786.
- Campbell DE** (2019) What social scientists have learned about civic education: a review of the literature. *Peabody Journal of Education* **94**(1), 32–47. doi: [10.1080/0161956X.2019.1553601](https://doi.org/10.1080/0161956X.2019.1553601).
- Campbell DE, and Niemi RG.** (2016) Testing civics: state-level civic education requirements and political knowledge. *American Political Science Review* **110**(3), 495–511.
- Dee TS** (2004) Are there civic returns to education? *Journal of Public Economics* **88**, 1697–1720.
- Fraga BL** (2018) *The Turnout Gap: Race, Ethnicity, and Political Inequality in a Diversifying America*. New York: Cambridge University Press.
- Gimpel JG, Celeste LJ, and Schuknecht JE .** (2003) *Cultivating Democracy: Civic Environments and Political Socialization in America*. Washington, D.C.: Brookings Institution Press.
- Hansen ER, and Tyner A.** (2021) Educational attainment and social norms of voting. *Political Behavior* **43**(2), 711–735.
- Helliwell JF, and Putnam RD.** (2007) Education and social capital. *Eastern Economic Journal* **33**(1), 1–19.
- Holbein JB, and Sunshine Hillygus D.** (2020) *Making Young Voters: Converting Civic Attitudes into Civic Action*. Cambridge University Press.
- Jaeger DA** (1997) Reconciling the old and new census bureau education questions: recommendations for researchers. *Journal of Business & Economic Statistics* **15**(3), 300–309. doi: [10.1080/07350015.1997.10524708](https://doi.org/10.1080/07350015.1997.10524708).
- Kam CD, and Palmer CL.** (2008) Reconsidering the effects of education on political participation. *Journal of Politics* **70**(3), 612–631.
- Kim Y.** (2023) Absolutely relative: how education shapes voter turnout in the United States. *Social Indicators Research* **168**(1), 447–469. doi: [10.1007/s11205-023-03146-1](https://doi.org/10.1007/s11205-023-03146-1).
- Langton KP, and Jennings KM.** (1968) Political socialization and the high school civics curriculum in the United States. *American Political Science Review* **62**, 852–867.
- Leighley JE, and Nagler J.** (2013) *Who Votes Now?* Princeton, NJ: Princeton University Press.
- Lindgren K-O, Oskarsson S, and Persson M.** (2019) Enhancing electoral equality: can education compensate for family background differences in voting participation? *American Political Science Review* **113**(1), 108–122. doi: [10.1017/S0003055418000746](https://doi.org/10.1017/S0003055418000746).
- Martens AM, and Gainous J.** (2013) Civic education and democratic capacity: how do teachers teach and what works? *Social Science Quarterly* **94**(4), 956–976. doi: [10.1111/j.1540-6237.2012.00864.x](https://doi.org/10.1111/j.1540-6237.2012.00864.x).

- National Center for Education Statistics.** (2023) *Educational Attainment of Young Adults*. U.S. Department of Education, Institution of Education Sciences. <https://nces.ed.gov/programs/coe/indicator/caa> (March 4, 2024).
- Nelsen MD** (2021) Cultivating youth engagement: race & the behavioral effects of critical pedagogy. *Political Behavior* **43**(2), 751–784. doi: [10.1007/s11109-019-09573-6](https://doi.org/10.1007/s11109-019-09573-6).
- Nelsen MD** (2023) Lessons in empowerment: the civic potential of historically grounded conversations among racially marginalized youth. *The ANNALS of the American Academy of Political and Social Science* **705**(1), 174–191.
- Neundorf A, Niemi RG, and Smets K.** (2016) The compensation effect of civic education on political engagement: how civics classes make up for missing parental socialization. *Political Behavior* **38**(4), 921–949. doi: [10.1007/s11109-016-9341-0](https://doi.org/10.1007/s11109-016-9341-0).
- Nie NH, Junn J, and Stehlik-Barry K.** (1996) *Education and Democratic Citizenship in America*. Chicago: University of Chicago Press.
- Persson M.** (2011) An empirical test of the relative education model in Sweden. *Political Behavior* **33**, 455–478.
- Pew Research Center.** (2023) *Voter Turnout, 2018–2022*. <https://www.pewresearch.org/politics/2023/07/12/voter-turnout-2018-2022/> (March 4, 2024).
- Raychaudhuri T.** (2020) Socializing democrats: examining Asian American vote choice with evidence from a national survey. *Electoral Studies* **63**, 102114. doi: [10.1016/j.electstud.2019.102114](https://doi.org/10.1016/j.electstud.2019.102114).
- Searles S, and Suzuki S.** (2024) *Black Youth Are Invested in Their Communities but Encounter Barriers to Voting*. CIRCLE at Tufts University. <https://circle.tufts.edu/latest-research/black-youth-are-invested-their-communities-encounter-barriers-voting> (March 30, 2025).
- Sondheimer RM, and Green DP.** (2010) Using experiments to estimate the effects of education on voter turnout. *American Journal of Political Science* **54**(1), 174–189.
- Tenn S.** (2005) An alternative measure of relative education to explain voter turnout. *Journal of Politics* **67**, 271–282.
- Torney-Purta J.** (2002) The school's role in developing civic engagement: a study of adolescents in twenty-eight countries. *Applied Developmental Science* **6**(4), 203–212. doi: [10.1207/S1532480XADS0604_7](https://doi.org/10.1207/S1532480XADS0604_7).
- Verba S, Burns N, and Schlozman K.** 2003) Unequal at the starting line: creating participatory inequalities across generations and among groups. *American Sociologist* **34**(1), 45–69.
- Walton H, Jr.** (2020) *American Politics and the African American Quest for Universal Freedom*. 9th ed. New York: Routledge. doi: [10.4324/9781003028321](https://doi.org/10.4324/9781003028321).
- Wolfinger NH, and Wolfinger RE.** (2008) Family structure and voter turnout. *Social Forces* **86**(4), 1513–1528.
- Wolfinger RE, and Rosenstone SJ.** (1980) *Who Votes?* New Haven, CT: Yale University Press.
- Wong, Janelle S., Karthick Ramakrishnan S, Lee T, Junn J, and Wong J.** (2011) *Asian American Political Participation: Emerging Constituents and Their Political Identities*. Russell Sage Foundation.

Cite this article: Burkholder AG, Hansen E, and Wager E (2025). Does the Relative Education Model Explain Turnout Across Racial and Ethnic Groups? *The Journal of Race, Ethnicity, and Politics*, 1–14. <https://doi.org/10.1017/rep.2025.10014>