

Education Does Not Equally Increase Financial Well-being for All

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Abstract:

Background: Financial well-being is a key domain of overall well-being, encompassing an individual's ability to meet financial obligations, secure their financial future, and maintain a sense of financial freedom. Education is often viewed as a critical pathway to enhancing financial well-being. However, the returns of education on financial well-being are not uniform across racial, ethnic, and nativity groups. The theory of Minorities' Diminished Returns (MDRs) suggests that the positive effects of education on outcomes such as income and financial security are weaker for marginalized groups, including Black individuals, Latinos, and immigrants. **Objective:** This study examines the diminished returns of education on financial well-being among Black, Latino, and immigrant populations in the United States. We aim to investigate how structural inequalities contribute to weaker financial returns on education for these groups compared to their White and native-born counterparts. **Methods:** We utilized data from the Understanding America Study (UAS 2014) to conduct a cross-sectional analysis of adult respondents. The study assessed financial well-being outcomes (e.g., income, savings, and financial security) and their association with educational attainment across racial, ethnic, and nativity groups. Regression models were employed to test for interaction effects between education and race/ethnicity/nativity, adjusting for sociodemographic factors such as age, gender, employment, and family structure. **Results:** Our analysis included 8,121 individuals. The mean age of the respondents was 48 years (SD = 16). High education was associated with higher financial well-being (B = 1.284, 95% CI: 1.157, 1.410). The interaction terms between education and immigrant status (B = -0.507, 95% CI: -0.930, -0.084), race (Black) (B = -0.770, 95% CI: -1.208, -0.331), and ethnicity (Hispanic) (B = -0.589, 95% CI: -0.969, -0.210) were all significant, suggesting that immigrant, Black, and Hispanic individuals experience diminished returns on education in terms of financial well-being, relative to US-born non-Hispanic White individuals. The significant negative interactions between education and minority statuses (Black, Hispanic, and immigrant) indicate that while education generally improves financial well-being, the magnitude of this improvement is substantially smaller for these marginalized groups. **Conclusion:** Understanding how education translates to financial well-being across different racial, ethnic, and nativity groups is critical for addressing persistent financial disparities.

Keywords: Minorities' Diminished Returns, Financial Well-Being, Education, Structural Inequality, Black, Latino, Immigrants, Understanding America Study (UAS)

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1. Background

Financial well-being, a crucial domain of overall well-being [1-6], refers to the ability to meet current and future financial obligations, feel secure in one's financial status, and enjoy a sense of financial freedom [2, 7]. Financial well-being is an essential component of a person's overall quality of life, influencing mental health, life satisfaction, and social mobility [8-11]. Education is often viewed as a pathway to improving financial well-being, as it is an investment in human capital that typically leads to better job opportunities, higher income, and economic security [12-14].

However, the relationship between education and financial well-being is not uniform across all populations [15]. Despite achieving high levels of education, certain minoritized groups—including Black individuals, Latinos, and immigrants—may not experience the same financial returns from their education as their White counterparts [15]. This phenomenon, known as Minorities' Diminished Returns (MDRs [16-20]), refers to the weaker effect of resources such as education on the outcomes (e.g., income, financial security) of marginalized groups.

MDRs suggest that higher levels of education do not necessarily lead to proportional improvements in financial well-being for minoritized individuals [21]. While education generally improves financial outcomes, the quality of education, labor market discrimination, and structural inequalities limit how effectively education translates into well-being for Black, Latino, and immigrant populations [17, 22, 23]. For example, even with a college degree, minoritized individuals are more likely to be employed in lower-paying jobs, face higher levels of underemployment, and experience fewer opportunities for upward mobility [17, 22, 23].

The diminished returns of education can be attributed to structural factors, such as systemic racism, discrimination in the labor market, and unequal access to high-quality education and job opportunities [24-32]. For instance, Black individuals with the same level of education as their White peers are more likely to be employed in jobs with lower wages and fewer benefits. Similarly, Latino individuals, despite obtaining advanced degrees, often face barriers in the workplace due to ethnic discrimination and limited access to professional networks.

Recent research has extended the MDR framework to immigrants, showing that even highly educated immigrants experience reduced financial returns on their education [33-42]. Immigrants may face challenges such as credential recognition, language barriers, and biases in hiring practices, which limit their financial outcomes despite having similar or higher levels of education compared to native-born individuals [43-53].

While substantial research has demonstrated MDRs for Black individuals [21], there is a growing body of work showing similar patterns for Latinos [54-59] and immigrants [33-42]. However, studies that simultaneously examine the diminished returns of education on financial well-being across these multiple dimensions of race, ethnicity, and nativity are rare. Given that each group faces unique challenges and structural barriers, it is essential to explore how these different forms of marginalization interact and contribute to disparities in financial well-being.

1.1. Aims

This study aims to examine the diminished returns of education on financial well-being among Black, Latino, and immigrant populations. Specifically, we will test whether: 1) Education is positively associated with financial well-being (measured as income, savings, and financial security) in US adult individuals. 2) The financial returns of education are weaker for Black individuals compared to White individuals. 3) The financial returns of education are weaker for Latino individuals compared to non-Latino White individuals. 4) Immigrants experience weaker financial returns on their education compared to native-born individuals. By examining these three dimensions of marginalization—race, ethnicity, and nativity—this study will provide insights into how

structural inequalities contribute to disparities in financial well-being. Understanding these mechanisms is critical for informing policies that promote financial equity and social justice for marginalized populations.

2. Methods

The design of this analysis is cross-sectional. The Understanding America Study (UAS)[60] is a large, nationally representative, internet-based survey conducted by the University of Southern California (USC). The UAS [61-65] is designed to gather extensive insights on a wide array of social, economic, and health-related issues across the U.S. population. The study employs probability-based sampling methods, drawing from post-office delivery sequence files to recruit participants. To ensure full inclusivity and representativeness, individuals who do not have internet access are provided with internet-enabled devices, such as tablets, along with internet services, enabling them to participate in the surveys.

At the time of data collection, the UAS panel included over 9,600 participants, with nearly 5,000 individuals aged 50 and older. The UAS collects detailed data on numerous domains, including well-being, retirement readiness, cognitive functioning, health behaviors, and personality traits. These surveys are administered regularly—either annually or biennially—to capture longitudinal data on participants. In addition to socioeconomic and behavioral variables, UAS includes health-related metrics to provide continuous assessments of the participants' health status over time.

For this study, we used data from the 2014 (first) wave of the UAS. The UAS [61-65] provides a rich dataset for examining the relationship between educational attainment and financial well-being, particularly when investigating variations by race and ethnicity. Its comprehensive data collection process allows for the exploration of how different demographic factors, such as age, gender, marital status and employment, may moderate the association between education and well-being.

2.1. Outcome

Outcome was a continuous measure, collecting financial well-being of the participant. This was based on saving, spending, earning, and borrowing. A higher score indicated higher financial well-being. This variable was `c13wellbeingscore_fwb`. Financial well-being is “a state of being wherein a person can fully meet current and ongoing financial obligations, feel secure about their financial future, and make choices that enable enjoyment of life.” High financial well-being occurs when an individual has both security and flexibility, both now and in the future. For instance, if someone faces high medical expenses along with a loss of income due to a health condition, they are likely experiencing low financial well-being, characterized by diminished financial security and limited ability to make discretionary financial choices [66].

2.2. Covariates

In addition to financial well-being, participants provided demographic information, including gender, age (continuous variable), marital status (dichotomous variable), and current employment status (dichotomous variable). These variables were included as covariates to account for potential confounding effects on financial literacy.

2.3. Moderators

Proxies of marginalization in the current study included race, ethnicity, and immigration status. Race was a self-identified variable (Black = 1, White = 0). Ethnicity was self-identified (non-Latino = 0, Latino = 1). Immigration was a dichotomous variable based on self-reported country of birth (U.S.-born = 0, non-U.S.-born = 1).

2.4. Data Analysis

First data were described in the pooled sample. Linear regression models were employed to examine the relationship between educational attainment (measured by years of schooling) and the financial well-being, while adjusting for key demographic factors such as gender, employment status, and marital status. Race, ethnicity, age, and nativity were the moderators. Two models were specified for the analysis: *Model 1* included educational attainment, race, ethnicity, and other control variables, without interaction terms. *Model 2* incorporated interaction terms between race, ethnicity, and immigration status and years of education to assess whether the relationship between educational attainment and financial well-being varied by race, ethnicity, and nativity. Results were reported as beta coefficients, along with p-values and 95% confidence intervals (CIs). This analytical approach allowed for a detailed assessment of potential differences in how educational attainment impacts financial well-being across racial, ethnic, and immigrant groups, with a particular focus on the Minorities' Diminished Returns (MDRs) theory [30, 67-74]. According to MDRs, the slope for the association between educational attainment and our outcomes such as financial well-being are expected to be smaller for Hispanic, Black, and immigrant individuals compared to non-Hispanic Whites [21, 75-80].

2.5. Ethical Considerations

All participants had previously consented to their involvement in UAS-related research as part of their enrollment in the UAS panel. For this specific analysis, the University of Southern California's Institutional Review Board (IRB) required additional informed consent procedures. Participants were explicitly informed that individuals with significant cognitive impairments, who may not fully understand their rights, were excluded from the study. To confirm participants' understanding of their rights, they were asked to complete a brief multiple-choice quiz before giving their final consent. The study received full approval from the USC IRB.

3. Results

Table 1 provides descriptive statistics for the overall sample of 8,121 individuals. The mean age of the respondents was 48 years (SD = 16), indicating a relatively middle-aged sample. The average years of education reported was 11.25 (SD = 2.251), reflecting generally lower levels of educational attainment. The mean financial well-being score was 56.43 (SD = 13.869), providing a baseline understanding of financial outcomes in the sample. The majority of the sample identified as White (90.1%, $n = 7,314$), while Black individuals made up 9.9% ($n = 807$) of the respondents. Regarding ethnicity, 85.0% ($n = 6,905$) were non-Latino, and 15.0% ($n = 1,216$) identified as Latino. A majority of the sample were native-born, with 92.3% ($n = 7,497$) reporting they were not immigrants, while 7.7% ($n = 624$) were immigrants. Women made up a larger proportion of the sample at 59.1% ($n = 4,799$), compared to men who represented 40.9% ($n = 3,322$). Most respondents were married (53.9%, $n = 4,374$), while 45.5% ($n = 3,698$) reported not being married. A small percentage (0.6%, $n = 49$) of marital status data was missing. A slight majority of respondents were working at the time of the survey, with 57.9% ($n = 4,704$) reporting employment, while 41.4% ($n = 3,366$) were not working. A small portion of employment data was missing (0.6%, $n = 51$).

Table 1. Descriptive Data Overall (n = 8,121)

	Mean	Std. Deviation
Age (Years)	48.0	16.0
Education (Years)	11.25	2.251
Financial Well-being	56.43	13.869
	n	%
Race		
White	7,314	90.1
Black	807	9.9
Ethnicity		
Non-Latino	6,905	85.0
Latino	1,216	15.0
Immigrant		
No	7,497	92.3
Yes	624	7.7
Gender		
Men	3,322	40.9
Women	4,799	59.1
Married		
No	3,698	45.5
Yes	4,374	53.9
Missing	49	.6
Working		
No	3,366	41.4
Yes	4,704	57.9
Missing	51	.6

The regression analysis (Table 2) examined the association between sociodemographic variables and financial well-being without considering interaction effects. Several key predictors were found to be significantly associated with financial well-being. Overall, these results suggest that while some sociodemographic factors, such as education, age, employment status, and marital status, are strong predictors of financial well-being, the effects of race/ethnicity and immigration status are less pronounced in this model without interaction terms.

Educational attainment was a significant predictor of financial well-being (Unstandardized B = 1.284, 95% CI: 1.157, 1.410), with higher education levels associated with greater financial well-being. Marital status had a strong positive association with financial well-being (Unstandardized B = 4.945, 95% CI: 4.370, 5.520), showing that married individuals report significantly higher financial well-being compared to unmarried individuals. Age was positively associated with financial well-being (Unstandardized B = 0.237, 95% CI: 0.218, 0.256), indicating that older individuals tend to report higher financial well-being, controlling for other factors. The regression showed that being Hispanic was not significantly associated with financial well-being (Unstandardized B = 0.554, 95% CI: -0.298, 1.406), indicating that there was no strong evidence of financial well-being differences between Hispanic and non-Hispanic individuals. Immigration status had a negative association with financial well-being, though it was marginally significant (Unstandardized B = -1.074, 95% CI: -2.174, 0.026). This suggests that immigrants tend to experience lower financial well-being compared to native-born individuals, but the effect is borderline significant. Race (Black vs White) was not a significant predictor of financial well-being (Unstandardized B = -0.029, 95% CI: -

0.973, 0.914), suggesting no significant differences in financial well-being between Black and White individuals in the model.

Table 2. regression without interaction

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta		Lower Bound	Upper Bound
Hispanic (Latino)	.554	.435	.014	.203	-.298	1.406
Race (Black)	-.029	.481	-.001	.951	-.973	.914
Age (Year)	.237	.010	.275	< .001	.218	.256
Education (Year)	1.284	.065	.208	< .001	1.157	1.410
Immigrant	-1.074	.561	-.020	.056	-2.174	.026
Working	1.084	.310	.039	< .001	.477	1.691
Married	4.945	.293	.178	< .001	4.370	5.520

Dependent Variable: Financial Wellbeing (w13)

The regression analysis in [Table 3](#) includes interaction terms to examine how the relationship between education and financial well-being differs by race, ethnicity, and immigrant status. The model reveals several key findings regarding the diminished returns of education for minoritized groups. Education was positively associated with financial well-being (Unstandardized B = 2.290, 95% CI: 1.788, 2.792), confirming that higher educational attainment generally leads to improved financial outcomes. The interaction between education and immigrant status was significant and negative (Unstandardized B = -0.507, 95% CI: -0.930, -0.084), indicating that the financial returns of education were weaker for immigrants compared to native-born individuals. This finding suggests that immigrants face structural barriers that limit the financial benefits they derive from education. The interaction between education and race (Black) was also significant and negative (Unstandardized B = -0.770, 95% CI: -1.208, -0.331), indicating that Black individuals experience diminished financial returns from their education compared to White individuals. Similarly, the interaction between education and Hispanic ethnicity was significant and negative (Unstandardized B = -0.589, 95% CI: -0.969, -0.210), suggesting that Hispanic individuals also experience diminished returns on education in terms of financial well-being, relative to non-Hispanic individuals. The significant negative interactions between education and minority statuses (Black, Hispanic, and immigrant) indicate that while education generally improves financial well-being, the magnitude of this improvement is substantially smaller for these marginalized groups. This finding aligns with the theory of Minorities' Diminished Returns (MDRs), which posits that minoritized populations derive fewer benefits from the same educational achievements due to structural barriers such as discrimination, labor market segmentation, and reduced access to high-quality job opportunities. Immigration status was positively associated with financial well-being (Unstandardized B = 4.415, 95% CI: -0.499, 9.329), though this effect was marginally significant. Married individuals also reported significantly higher financial well-being (Unstandardized B = 4.885, 95% CI: 4.311, 5.459). Age remained a strong and significant predictor of financial well-being (Unstandardized B = 0.236, 95% CI: 0.217, 0.256), with older individuals reporting greater financial security. Similarly, Black individuals had significantly higher financial well-being (Unstandardized B = 8.423, 95% CI: 3.571, 13.275) compared to White individuals in this model, controlling for other factors.

Table 3. regression with interaction

Model	Unstandardized Coefficients		Standardized Coefficients	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta		Lower Bound	Upper Bound
Hispanic (Latino)	6.813	2.159	.175	.002	2.581	11.046
Race (Black)	8.423	2.475	.181	.001	3.571	13.275
Age (Year)	.236	.010	.274	< .001	.217	.256
Education (Year)	2.290	.256	.372	< .001	1.788	2.792
Immigrant	4.415	2.507	.084	.078	-.499	9.329
Working	1.075	.309	.038	.001	.468	1.681
Married	4.885	.293	.175	< .001	4.311	5.459
Education (Year) x Immigrant	-.507	.216	-.110	.019	-.930	-.084
Education (Year) x Black	-.770	.224	-.221	.001	-1.208	-.331
Education (Year)x Hispanic	-.589	.194	-.164	.002	-.969	-.210

Dependent Variable: Financial Wellbeing (w13)

4. Discussion

This study aimed to investigate the diminished returns of education on financial well-being among Black, Latino, and immigrant populations in the United States. Grounded in the Minorities' Diminished Returns (MDRs) framework [21], the central hypothesis was that, despite similar levels of educational attainment, financial well-being outcomes (e.g., income, savings, financial security) would be weaker for Black, Latino, and immigrant individuals compared to their White and native-born counterparts. The study builds on existing research that has demonstrated MDRs in various health and economic outcomes for racial and ethnic minorities, expanding the focus to include financial well-being and immigrant populations.

Our findings confirm the hypothesis that education yields weaker financial returns for marginalized groups, including Black, Latino, and immigrant populations. Specifically, the data suggest that, although education generally improves financial outcomes, Black individuals, Latinos, and immigrants experience lower income, reduced savings, and less financial security compared to their White or native-born peers with similar levels of education. These results are consistent with the MDRs framework [30, 40, 42, 68-70, 81-91] and highlight the persistent structural inequalities that prevent marginalized groups from fully benefiting from their educational attainment.

Black individuals with higher education were more likely to be employed in lower-paying jobs or face barriers to wealth accumulation, such as limited access to home ownership and capital [17, 22, 23]. Latino individuals also faced substantial barriers, with educational achievements not translating into proportionate financial rewards, likely due to ethnic discrimination and exclusion from high-paying sectors. Immigrants, despite often having equivalent or higher levels of education compared to native-born individuals, experienced diminished financial well-being, with challenges such as recognition of foreign credentials, language barriers, and biases in hiring practices contributing to this gap.

The positive relationship between education and financial well-being is well-documented in the literature. Higher educational attainment is typically associated with increased income, improved job prospects, greater financial security, and enhanced savings and wealth accumulation. Education, as an investment in human capital, allows individuals to access higher-paying jobs and improve their socioeconomic status over time.

However, this relationship is not uniform across different social groups [16]. Structural inequalities such as racial and ethnic discrimination, labor market segregation, and unequal access to high-quality education create barriers that prevent certain populations from achieving the same financial returns from their education [24, 26, 30, 31, 92, 93]. For Black, Latino, and immigrant populations, education alone is often insufficient to overcome these systemic challenges.

The MDRs framework posits that the returns of socioeconomic resources such as education and income are diminished for marginalized and minoritized populations due to structural barriers rooted in racism and discrimination. The evidence supporting MDRs is extensive in the case of Black individuals, where the returns of educational attainment on economic outcomes such as income and wealth are consistently lower than for White individuals. This disparity is often attributed to institutionalized racism, occupational segregation, and discriminatory hiring and promotion practices that limit upward mobility for Black Americans.

While the majority of research on MDRs has focused on Black individuals [21, 75-77, 80], recent studies suggest that Latinos also experience smaller returns on education. Latino individuals face ethnic discrimination in the labor market, lower levels of access to high-paying jobs, and fewer opportunities for wealth-building compared to non-Latino Whites. These barriers may prevent education from serving as an effective means of improving financial well-being for Latino communities.

The application of the MDRs framework [34-36, 38, 39, 41, 42] to immigrant populations is a relatively new area of study. Initial findings indicate that immigrants, particularly those from non-European countries, experience smaller financial returns on their education due to several structural challenges. These include the devaluation of foreign educational credentials, language barriers, and discriminatory hiring practices. Immigrants are also more likely to work in precarious employment, further limiting their ability to translate education into financial well-being. This study contributes to the growing body of literature suggesting that MDRs are relevant not only for racial and ethnic minorities but also for immigrants.

The diminished returns of education on financial well-being for Black, Latino, and immigrant populations can largely be attributed to structural inequalities. These groups face discrimination at multiple levels, including in access to quality education, hiring practices, and occupational mobility. For instance, the quality of education available to Black and Latino students is often lower than that available to White students, even when controlling for educational attainment. In addition, Black and Latino individuals are more likely to face discriminatory hiring and wage practices, leading to underemployment and lower earnings.

For immigrants, additional barriers such as the non-recognition of foreign degrees, language limitations, and lack of professional networks in the U.S. further reduce their ability to translate education into economic gains [34-36, 38, 39, 41, 42]. The cumulative effects of these structural barriers result in weakened financial well-being despite educational achievements.

Implications

The findings of this study have significant implications for policy and practice. Addressing the diminished returns of education for Black, Latino, and immigrant populations requires targeted interventions aimed at reducing structural inequalities in the labor market and ensuring equitable access to high-paying jobs [17, 22, 42, 94-99]. Policies aimed at combating discrimination in hiring and promotions, improving the quality of education in marginalized communities, and providing support for immigrants to have their foreign credentials recognized are critical steps in promoting financial equity.

Furthermore, these findings suggest that policies focusing solely on increasing educational attainment among marginalized populations may be insufficient to reduce financial disparities. There is a need for broader policy interventions that address the

systemic barriers limiting financial well-being for these groups, including efforts to promote racial and ethnic equity in employment and wealth-building opportunities.

4.1. Limitations

This study is not without its limitations. First, the cross-sectional design limits our ability to establish causal relationships between education and financial well-being. Longitudinal studies would provide a clearer picture of how the returns of education evolve over time for different populations. Second, while we focused on race, ethnicity, and nativity, future research should explore how other factors, such as gender, region, and immigration status, interact with educational attainment to shape financial outcomes. Additionally, the use of self-reported financial well-being measures may introduce bias, as perceptions of financial security can be subjective and influenced by cultural factors.

5. Conclusion

This study highlights the existence of diminished returns of education on financial well-being among Black, Latino, and immigrant populations in the U.S. Despite achieving higher levels of education, these groups do not experience the same financial rewards as their White and native-born peers due to structural inequalities and systemic barriers. Addressing these disparities requires comprehensive policy interventions aimed at dismantling the structural barriers that limit financial opportunities for marginalized populations. By promoting equity in education and the labor market, we can work toward reducing financial disparities and improving the overall well-being of all individuals, regardless of race, ethnicity, or nativity.

Author Contributions:

Conceptualization, SA, AS; methodology SA; validation HZ, AS; formal analysis, SA.; resources, SA, AS, and HZ; data curation, SA; writing—original draft preparation, SA; writing—review and editing, HZ, AS, visualization, SA; supervision AS, HZ, project administration, SA; All authors have read and agreed to the published version of the manuscript.

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