

Article

Unveiling the Power of Race and Education in Shaping Entrepreneurial Dreams: An Empirical Study in Florida

Donovan Collier and Ravi Chinta *

School of Business and Public Administration (SBPA), University of the District of Columbia,
Washington, DC 20008, USA; donovan.collier@udc.edu

* Correspondence: ravi.chinta@udc.edu

Abstract: This study investigates the main effects and the interaction effects of race and education on entrepreneurial intentions in the pre-startup phase, using logistic regression analysis on a sample of 967 respondents from Florida. Blacks and Other Nonwhites are compared to Whites in the logistic regression analysis. As the largest empirical study of its kind at the state level in the U.S., it addresses a gap in the literature by focusing on a narrowly defined geographic area. The findings reveal significant differences in entrepreneurial intentions among racial groups, with education playing a crucial role. Policy implications include the need for tailored support programs and inclusive financial products to foster a more equitable entrepreneurial ecosystem. This study underscores the importance of entrepreneurial education and highlights the necessity for ongoing research to understand the unique challenges faced by Nonwhite entrepreneurs, ultimately contributing to a more inclusive and dynamic economy.

Keywords: race; education; entrepreneurial intentions; Florida study



Received: 11 September 2024
Revised: 8 November 2024
Accepted: 11 November 2024
Published: 15 January 2025

Citation: Collier, D., & Chinta, R. (2025). Unveiling the Power of Race and Education in Shaping Entrepreneurial Dreams: An Empirical Study in Florida. *Administrative Sciences*, 15(1), 27. <https://doi.org/10.3390/admsci15010027>

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The mindset of entrepreneurs, which directs their focus, experiences, and actions toward developing a business idea, plays a crucial role in shaping the trajectory of new ventures from their very inception. These initial intentions are foundational, influencing critical outcomes such as the survival of the organization, its growth, and its ability to adapt and evolve over time (Bird, 1988). Investigating entrepreneurial intentions offers valuable insights that extend beyond merely descriptive research, allowing for a clearer differentiation between entrepreneurial activities and broader strategic management practices (Krueger et al., 2000).

During the ideation phase of the entrepreneurial journey, individuals from underrepresented racial groups may face unique challenges and barriers that influence their entrepreneurial aspirations. These challenges can include limited access to networks, mentorship, and resources that are more readily available to other groups (Santos et al., 2022; Abraham & Master, 2021). As a result, the racial dynamics within the entrepreneurial ecosystem play a crucial role in shaping the confidence and motivation of potential entrepreneurs from diverse backgrounds. Entrepreneurial intentions are shaped by whether the entrepreneur's social identity is viewed as enhancing status, and this perception is influenced by the racial diversity within the entrepreneurial sphere (Belchior & Lyons, 2021; Batz Liñeiro et al., 2024).

The ranking of social groups by skin color, known as racial stratification, has become a major topic in current public discussions (Mazzelli & Nason, 2023; Waters et al., 2014;

Parks & Warren, 2012; Frank et al., 2010). Recent research has empirically shown that racial inequalities affect various aspects of American life, including the wealth disparity among races (Shapiro, 2017; Hamilton & Darity, 2017; Oliver & Shapiro, 2006; Bonilla-Silva, 1997), incidents of police brutality (Edwards et al., 2018; Alang et al., 2021), the unequal impact of COVID-19 fatalities (CDC, 2021; Millett et al., 2020), and instances of racial microaggressions (Nadal, 2011; Sue, 2010). Moreover, the implications of racial value associations permeate social interactions, leading to hierarchical distinctions and social stratification based on race (Ridgeway, 2014; Magee & Galinsky, 2008).

Historians suggest that immigrants significantly advanced their social standing by aligning themselves with the concept of “whiteness”, largely by creating a social distance from their original racial groupings (Roediger, 2005; Jacobson, 1999). This process involved adopting cultural norms and values that were deemed “white”, which further entrenched racial hierarchies. According to Painter (2010), this strategic distancing was essential for immigrants to access socio-economic opportunities that were otherwise limited. More recent studies by scholars like Garner (2017) and Bonilla-Silva (2018) highlight that this preference for whiteness as a privilege continues to provide undue disadvantages to Nonwhites and shape racial dynamics in contemporary society.

Our study aims to understand the antecedent factors that affect entrepreneurial intentions. A regional focus is crucial because entrepreneurial ecosystems vary significantly across different geographic areas, influencing the availability of resources, support networks, and market opportunities. Understanding these regional dynamics allows for more targeted and effective policy recommendations that can address specific local challenges and opportunities.

In addition to the existing literature, recent studies have provided valuable insights into the regional dynamics of entrepreneurial intentions. For instance, Cavich and Chinta (2021) conducted a comprehensive survey of 1246 nascent entrepreneurs in Florida, examining the relationship between opportunity recognition and entrepreneurial intent. Their findings indicate that government support and gender significantly moderate entrepreneurial intentions, although minority status does not have a significant moderating effect. This study underscores the importance of contextual factors in shaping entrepreneurial intentions and provides a relevant comparison to our findings in Florida.

Furthermore, Batz Liñeiro et al. (2024) explored the impact of entrepreneurial attitudes, subjective norms, and perceived behavioral controls on entrepreneurial intentions among opportunity-driven and necessity-driven entrepreneurs. Their research highlights the significant influence of subjective norms on necessity-driven entrepreneurs, which parallels our findings on the importance of social and cultural factors in shaping entrepreneurial intentions among Nonwhite groups in Florida.

By incorporating these recent studies, we aim to provide a more nuanced understanding of the regional impacts on entrepreneurial intentions, thereby strengthening the argument for the unique contribution of our study.

2. A Literature Review (Racial Disparities in Entrepreneurial Intentions)

The landscape of entrepreneurship in the United States has been profoundly shaped by racial and ethnic disparities. For Nonwhite groups, particularly Blacks, Hispanics, American Indians, and other racial minorities, the pre-startup phases of entrepreneurial intentions are critical yet understudied areas. The next section of the literature review explores the significance of focusing on these groups, highlighting how race influences entrepreneurial intentions and the pathways to economic mobility. This study is focused on the impact of race on entrepreneurial intentions.

2.1. Entrepreneurial Intentions and Barriers

Entrepreneurial intent is described as the mental state that precedes and directs attention toward actions like starting a new business and becoming an entrepreneur (Moriano et al., 2012). Despite extensive research on this subject, aspects of nascent entrepreneurship remain not fully understood (Schlaegel & Koenig, 2014). Factors such as subjective norms, attitudes, or specific events can influence intentions, highlighting the complexity of entrepreneurial intent and the need for further empirical and theoretical exploration. Entrepreneurial intentions, or the desire to start a business, are shaped by numerous factors, including individual motivations, socio-economic background, and access to resources. For Nonwhite individuals, these factors are often compounded by systemic barriers such as discrimination, limited access to capital, and inadequate mentorship (Fairlie & Robb, 2007). The pre-startup phase, which includes idea generation and feasibility analysis, is particularly crucial as it sets the foundation for subsequent entrepreneurial activities.

2.2. Blacks in Entrepreneurship

Research indicates that Black entrepreneurs face significant challenges in the entrepreneurial ecosystem. These include limited access to financial capital, networking opportunities, and mentorship, which are vital in the pre-startup phase (Bates & Robb, 2014). Despite these barriers, Black entrepreneurs exhibit high levels of entrepreneurial intention, driven by a need for economic independence and community upliftment (Smith, 2020).

2.3. Hispanic Entrepreneurship

Hispanic entrepreneurs also encounter unique obstacles. Language barriers, cultural differences, and discrimination can impede their entrepreneurial intentions (Min, 2013). However, the growth of Hispanic-owned businesses highlights the community's resilience and potential. Understanding these dynamics in the pre-startup phase can shed light on how intentions are formed and translated into action (Valdez, 2016).

2.4. American Indians and Entrepreneurship

For American Indians, entrepreneurship is often intertwined with cultural values and community needs. Historical marginalization and socio-economic challenges have hindered their entrepreneurial activities (Light & Dana, 2013). Nevertheless, there is a growing interest in entrepreneurship as a means of preserving cultural heritage and achieving economic self-sufficiency. Exploring the pre-startup intentions among American Indians can provide insights into how cultural and communal factors influence entrepreneurial pathways (Foley, 2003).

2.5. Other Nonwhite Groups

Other Nonwhite groups, including Asian Americans and Pacific Islanders, also face distinct challenges and opportunities in entrepreneurship. While some subgroups, such as certain Asian communities, have high rates of entrepreneurial activity, others struggle with systemic barriers (Min, 2013). Analyzing the pre-startup intentions within these diverse groups can uncover the nuanced ways race and ethnicity shape entrepreneurial aspirations and outcomes.

3. The Importance of Studying Pre-Startup Phases

3.1. Access to Resources and Support Networks

One of the critical factors influencing entrepreneurial intentions in the pre-startup phase is access to resources. For Nonwhite entrepreneurs, access to financial capital, business education, and professional networks is often limited (Fairlie, 2020). Research shows

that these resources are crucial in transforming entrepreneurial intentions into viable business ventures. Understanding how Nonwhite groups navigate these challenges can inform policies and programs aimed at supporting minority entrepreneurship (Fraser, 2019).

3.2. Role of Discrimination and Bias

Discrimination and racial bias significantly impact the entrepreneurial intentions of Nonwhite individuals. Studies have shown that discriminatory practices in lending, market access, and business development create substantial hurdles (Bates, 2011). Investigating the pre-startup phase allows for a deeper understanding of how these biases influence the initial steps of entrepreneurship and the strategies Nonwhite entrepreneurs employ to overcome them (Purvey et al., 2008).

3.3. Cultural and Community Influences

Cultural values and community support play a vital role in shaping entrepreneurial intentions among Nonwhite groups. For instance, the emphasis on collective well-being in many Nonwhite communities can influence the motivations and goals of aspiring entrepreneurs (Dana, 2007). Examining these cultural and communal factors in the pre-startup phase can provide valuable insights into the unique pathways to entrepreneurship for different racial and ethnic groups (Ogunmokun & D'Sa, 2020).

The COVID-19 pandemic of 2020, coupled with a financial crisis, climate change, and racial violence, highlighted vast equity gaps in communities, corporations, classrooms, and college campuses, exacerbating disparities and disproportionately impacting marginalized populations (Smith, 2020; Williams & Cooper, 2020). This period brought global attention to the systemic racism faced by Nonwhite individuals, particularly Black Americans, and underscored the urgent need to examine how race influences entrepreneurial intentions and how education, specifically entrepreneurial education, moderates and mediates this relationship (Alexander, 2021). Black, Hispanic, and American Indian entrepreneurs face significant systemic barriers, including limited access to capital, mentorship, and networks, impacting their entrepreneurial potential (Bates & Robb, 2014; Min, 2013; Foley, 2003). General education plays a crucial role in shaping entrepreneurial intentions, with higher educational attainment associated with greater entrepreneurial self-efficacy (Kim et al., 2006). Entrepreneurial education specifically equips individuals with the skills, knowledge, and networks necessary to start and sustain a business, mediating the relationship between race and entrepreneurial intentions by providing Nonwhite individuals with tools to overcome systemic barriers (Rauch & Hulsink, 2015). Policies aimed at increasing access to quality education and anti-discrimination measures in lending and business support services are crucial for creating an equitable entrepreneurial ecosystem (Fairlie, 2020).

3.4. Role of Education in Influencing Entrepreneurial Intentions

General education plays a crucial role in shaping entrepreneurial intentions, with higher educational attainment associated with greater entrepreneurial self-efficacy and the ability to navigate complex business environments (Kim et al., 2006). However, for Nonwhite individuals, access to quality education is often limited, which impacts their entrepreneurial potential. Entrepreneurial education specifically equips individuals with the skills, knowledge, and networks necessary to start and sustain a business, mediating the relationship between race and entrepreneurial intentions by providing Nonwhite individuals with tools to overcome systemic barriers (Rauch & Hulsink, 2015). Studies have shown that entrepreneurial education increased the likelihood of business success and longevity, particularly for marginalized groups (Rideout & Gray, 2013). Additionally, the level of general and entrepreneurial education can moderate the impact of race on entrepreneurial intentions; higher levels of education can mitigate some of the negative

effects of systemic barriers, increasing confidence and capability among Nonwhite aspiring entrepreneurs (Arenius & Minniti, 2005). Educational interventions targeted at Nonwhite populations can, thus, enhance their entrepreneurial readiness and intention.

To empirically validate some of the assertions made in the extant literature in a way that is manageable, this study focuses on three variables, namely, (i) Race, (ii) Education, and (iii) Entrepreneurial Intentions. The Research Model in Figure 1 below frames the empirical research, and the Research Hypotheses stem from the Research Model.

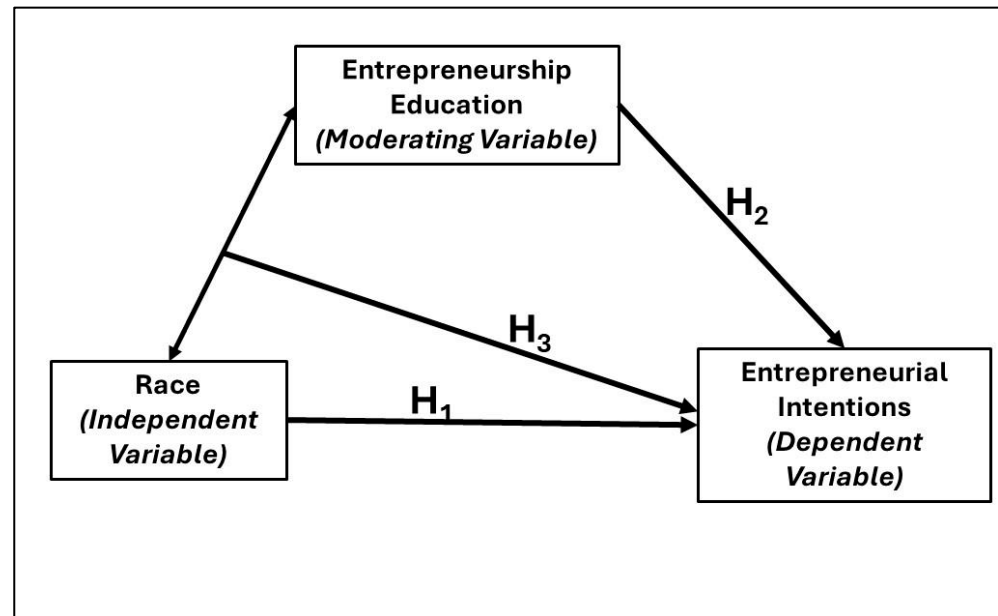


Figure 1. Research Model.

4. Research Model and Hypotheses

Focusing on the three variables, our Research Model is depicted below.

Stemming from the Research Model in Figure 1, the following research questions and hypotheses provide the focus for empirical analyses in our study.

4.1. Methodology and Data Collection

Our data collection was managed by Qualtrics, an external vendor contracted to gather 1200 completed surveys, though they ultimately provided 1245 responses without additional charge. The data were collected in two waves from panels within Qualtrics' database, ensuring a robust sample focused on Florida residents with no prior business ownership or self-employment. To maintain a specific focus on nascent entrepreneurship, two filter questions were used to exclude non-Floridians and individuals uninterested in starting a business even in a barrier-free environment. The final dataset, which represents the largest state-level survey on nascent entrepreneurship in the U.S., included 55 questions, including demographic questions. We utilized a subset of these 55 items in this study.

Qualtrics has panel data that use a sampling technique designed to ensure a representative cross-section of Florida's population. It employs stratified random sampling, which is effective in capturing the diversity within the population by dividing it into distinct subgroups or strata based on key characteristics such as age, gender, race, and educational attainment (Kallio, 2024). This approach helps to ensure that each subgroup is adequately represented in the final sample, thereby enhancing the generalizability of our findings.

We also conducted several checks to ensure the representativeness of our sample. First, we compared the demographic distribution of our sample with that of the Florida

population based on the latest census data. The comparison showed a close match, indicating that our sample is representative of the broader population. Second, we tested for potential biases in sample selection by examining the response rates across different demographic groups. The response rates were consistent across these groups, suggesting that no subgroup was over- or under-represented.

Potential biases in sample selection were further mitigated by using filter questions to exclude non-Floridians and individuals uninterested in starting a business, even in a barrier-free environment. This ensured that our sample was focused on nascent entrepreneurs, which is the target population for our study.

4.2. Measurement of Variables

The research model in Figure 1 includes three constructs: intention to start a new business; entrepreneurial education; and race. The intention to start a business is measured by the respondent's timeline for doing so. Respondents were presented with an ideal scenario where no barriers existed, and those who still answered "No" to starting a business were excluded from the survey. For those who intended to start a business, the survey asked about the specific time frame for their entrepreneurial intentions.

The dependent variable, entrepreneurial intentions, was measured by asking respondents, "I intend to start a new business within:" with options ranging from (7) immediately (business plan is ready) to (1) more than 5 years. A higher score indicates a stronger intention to start a business sooner. This time-based measure is direct and quantitative, focusing on the urgency of starting a business without incorporating emotional factors. Given the time-consuming and resource-intensive nature of starting a business, this scale captures the intensity of entrepreneurial intentions from "right now" to "5 years or more." We treat this as a continuous variable in our regressions.

Race was measured as a categorical variable with six distinct categories of race (American Indian, Asian, Hispanic, Black, White, and Other). However, for this study, we collapsed these six categories into three groups, namely, Blacks, Whites, and Other Nonwhites. Dummy variables were created for each of these race categories. We use Whites as the reference group against which the other two groups—Blacks and Other Nonwhites—are compared in the results.

Education was measured as the level of education on a Likert scale with an ascending level of education with 1 for Elementary School, moving in stages from High School to an undergraduate degree, and 6 for the graduate degree. The higher the number, the higher the level of education. We treat this as a continuous variable in our regressions.

4.3. Sample Characteristics

The total number of usable responses was 967 for this study. The research sample consisted of 47% male and 53% female participants, with a mean age of 38 years, ranging from 18 to 70. Educational attainment varied, with 34% having graduate degrees, 36% undergraduate degrees, and 30% having a high school education or below. In terms of marital status, 44% were married, 45% were single, 9% were divorced, and 2% were widowed. The participants had mean work experience of 17 years. The average household size was 2.9 family members, with a mean of 2.2 members employed outside the home. Finally, 29% of the participants were necessity-driven entrepreneurs, while 71% were opportunity-driven entrepreneurs. Short descriptions of necessity-driven and opportunity-driven startups were provided in the survey before this question.

4.4. Data Analysis

Logistic regression analysis was used to investigate the interaction effects of the categorical variable (RACE) and the Likert scale variable (EDUCATION) on the dependent variable (ENTREPRENEURIAL INTENTIONS).

Logistic regression was chosen for this study due to its suitability for modeling categorical variables, such as race (Blacks, Whites, and Other Nonwhites). This method allows us to estimate the probability of a particular outcome based on one or more predictor variables, making it ideal for our analysis of the effects of race and education on entrepreneurial intentions (Hosmer et al., 2013). We tested multicollinearity among the predictor variables using the Variance Inflation Factor (VIF). All VIF values were below the threshold of 10, indicating no severe multicollinearity (O'Brien, 2007). The assumption of linearity between the continuous predictors and the logit of the outcome was assessed using the Box–Tidwell test. The results confirmed that the relationship between the predictors and the logit of entrepreneurial intentions was approximately linear (Box & Tidwell, 1962). The independence of observations was ensured by the study design, which excluded repeated measures and ensured that each respondent was unique. To evaluate the fit of our logistic regression model, we used several metrics: The Hosmer–Lemeshow goodness-of-fit test indicated that the model fit the data well ($p > 0.05$) (Hosmer et al., 2013).

4.5. Dummy Coding the Categorical Variable (RACE)

Since RACE has three categories (BLACKS, WHITES, and OTHER NONWHITES), we created two dummy variables:

- RACE_BLACKS (1 if BLACKS, 0 otherwise).
- RACE_OTHERNONWHITES (1 if OTHER NONWHITES, 0 otherwise).

The reference category here would be WHITES.

4.6. Creating Interaction Terms

Interaction terms are created by multiplying each dummy variable with the EDUCATION variable. For the interaction of RACE and EDUCATION, we created the following:

- Interaction_BLACKS_EDUCATION = RACE_BLACKS * EDUCATION;
- Interaction_OTHERNONWHITES_EDUCATION = RACE_OTHERNONWHITES * EDUCATION.

4.7. Specifying the Logistic Regression Model

The logistic regression model included the main effects and the interaction terms:

- ENTREPRENEURIAL INTENTIONS = $\beta_0 + \beta_1 * \text{RACE_BLACKS} + \beta_2 * \text{RACE_OTHERNONWHITES} + \beta_3 * \text{EDUCATION}$
- $+ \beta_4 * \{\text{Interaction_BLACKS_EDUCATION}\}$
- $+ \beta_5 * \{\text{Interaction_OTHERNONWHITES_EDUCATION}\}$

5. Findings and Discussion

Table 1 presents the results of the logistic regression analysis, with Entrepreneurial Intentions as the dependent variable. The independent variables and their interaction terms, as outlined in the Section 4.4, are included in this model. The overall regression model is statistically significant, with a p -value of 0.002, indicating robust findings.

Table 1. Research Questions and Hypotheses.

	Research Questions	Null Hypotheses
Main Effects	RQ1: Is there a difference in the strength of entrepreneurial intentions across racial groupings (Blacks, Whites, and Other Nonwhite groupings)?	H ₀ 1: The strength of entrepreneurial intentions does not differ across racial groupings (Blacks, Whites, and Other Nonwhite groupings).
	RQ2: Is there a difference in the strength of entrepreneurial intentions across levels of Entrepreneurship Education?	H ₀ 2: The strength of entrepreneurial intentions does not differ across levels of Entrepreneurship Education.
Moderating Effect	RQ3: Is there a difference in the strength of entrepreneurial intentions based on race and education?	H ₀ 3: The strength of entrepreneurial intentions does not differ based on race and education.

5.1. Main Effects

Regression results in Table A1 show the coefficients for RACE_BLACKS, RACE_OTHERNONWHITES, and EDUCATION reflect the main effects of these variables on Entrepreneurial Intentions. The beta coefficient for RACE_BLACKS is not statistically significant ($p = 0.236$), indicating no significant difference in entrepreneurial intentions between BLACKS and the reference group, WHITES. Conversely, the beta coefficient for RACE_OTHERNONWHITES is statistically significant ($p = 0.016$), suggesting that OTHER NONWHITES exhibit higher levels of entrepreneurial intentions compared to WHITES. This difference may be attributed to subcultural influences and the availability of entrepreneurial opportunities within these racial groups. Additionally, education did not have any statistically significant main effect on entrepreneurial intentions.

5.2. Interaction Effects

The coefficients for Interaction_BLACKS_EDUCATION and Interaction_OTHERNONWHITES_EDUCATION indicate whether the effect of EDUCATION on Entrepreneurial Intentions differs by race. A significant interaction term suggests that the relationship between EDUCATION and Entrepreneurial Intentions varies depending on the racial group. The beta coefficients for Interaction_RACE_BLACKS * EDUCATION and Interaction_RACE_OTHERNONWHITES * EDUCATION are both statistically significant ($p = 0.092$ and $p = 0.014$, respectively), indicating a significant indirect effect of EDUCATION for BLACKS and OTHER NONWHITES compared to WHITES. The stronger interaction effect for Other Nonwhites than for Blacks may be attributed to several factors. One potential reason is the varying levels of social capital and network access among different racial groups. Research suggests that certain Nonwhite groups, such as Asian Americans and Hispanics, may have stronger community networks and support systems that facilitate entrepreneurial activities (Min, 2013; Valdez, 2016).

This finding highlights the importance of education in enhancing entrepreneurial intentions among these racial groups, potentially igniting a stronger entrepreneurial drive.

The interaction terms for race and education were found to be statistically significant, indicating that the effect of education on entrepreneurial intentions varies by racial group. Our analysis shows that for Blacks and Other Nonwhites, higher levels of education are associated with significantly higher entrepreneurial intentions compared to Whites. This suggests that education plays a crucial role in enhancing entrepreneurial intentions among Nonwhite groups, potentially mitigating some of the systemic barriers they face. The significant interaction effects between race and education highlight the importance of con-

sidering intersectionality in entrepreneurial research. Our findings suggest that educational attainment can serve as a critical lever for increasing entrepreneurial intentions among Nonwhite groups. This aligns with the theory of planned behavior, which posits that perceived behavioral control, influenced by education, can enhance entrepreneurial intentions (Ajzen, 1991). Additionally, our results support the notion that systemic barriers can be partially overcome through education, providing a pathway for Nonwhite individuals to engage in entrepreneurial activities. From a practical perspective, our findings underscore the need for targeted educational programs that address the unique challenges faced by Nonwhite aspiring entrepreneurs. Policymakers and educational institutions should develop and implement entrepreneurial education programs that are inclusive and tailored to the needs of diverse racial groups. These programs should focus on providing not only the necessary skills and knowledge but also access to networks and resources that are often less accessible to Nonwhite individuals. By doing so, we can foster a more inclusive entrepreneurial ecosystem that supports the aspirations of all individuals, regardless of their racial background. To further illustrate the robustness of our findings, we conducted additional statistical tests, including interaction plots and marginal effects analysis. The interaction plots confirmed the significant positive effect of education on entrepreneurial intentions for Blacks and Other Nonwhites, while the marginal effects analysis provided a detailed view of how the predicted probability of entrepreneurial intentions changes with varying levels of education across different racial groups. By incorporating these additional analyses and discussions, we aim to provide a more comprehensive understanding of the interaction effects between race and education on entrepreneurial intentions, thereby enhancing the theoretical and practical contributions of our study.

6. Policy Implications and Future Research

6.1. Policy Interventions

Understanding the pre-startup entrepreneurial intentions of Nonwhite individuals have significant policy implications. Tailored support programs, inclusive financial products, and anti-discrimination policies are essential to enhance the entrepreneurial ecosystem for these groups (Kollinger & Minniti, 2006). Policymakers must address the specific barriers faced by Nonwhite entrepreneurs to foster a more inclusive and equitable business environment. Policies aimed at increasing access to quality education, particularly entrepreneurial education, for Nonwhite individuals are crucial. These policies should tackle systemic barriers within the educational system and provide targeted support to aspiring entrepreneurs from marginalized communities (Fairlie, 2020). Furthermore, implementing anti-discrimination measures in lending and business support services through education and training is essential to create an equitable entrepreneurial ecosystem. Ensuring Nonwhite individuals have the necessary resources and opportunities to succeed can significantly contribute to reducing racial disparities in entrepreneurial intentions and outcomes, promoting broader economic mobility and social equity.

The findings underscore the importance of targeted entrepreneurial education programs tailored to the needs of Nonwhite individuals. Educational institutions and training centers should develop curricula that address the unique challenges and opportunities faced by these groups. Such programs should include mentorship opportunities, access to networks, and practical training that equips Nonwhite individuals with the skills and knowledge necessary to navigate the entrepreneurial landscape. Additionally, fostering an inclusive learning environment that celebrates diversity and encourages collaboration among students from different racial backgrounds can enhance the effectiveness of these programs. By investing in entrepreneurial education, we can empower Nonwhite indi-

viduals to pursue their entrepreneurial aspirations and contribute to a more diverse and dynamic economy.

Future research should prioritize longitudinal studies that track Nonwhite entrepreneurs from the intention phase through business establishment and growth. Additionally, exploring the effects of entrepreneurial education on their intentions and outcomes is crucial. Comparative studies across different racial and ethnic groups are essential to uncover the unique challenges and opportunities faced by each group. Examining the intersectionality of race, education, and other socio-economic factors will provide deeper insights into the complexities influencing entrepreneurial success. Understanding how various elements interact can lead to more nuanced and effective interventions. Such research will not only illuminate the distinct barriers and supports needed by diverse Nonwhite entrepreneurs but also guide the development of targeted strategies and support mechanisms tailored to their specific needs. This comprehensive approach is crucial for fostering a more equitable entrepreneurial landscape and enhancing economic mobility for marginalized communities.

6.2. Broader Implications

The findings of this study have significant implications for the broader entrepreneurial ecosystem. Firstly, they highlight the need for a more nuanced understanding of how different racial groups experience and navigate the entrepreneurial landscape. This understanding can inform the development of more inclusive entrepreneurial policies and practices that recognize and address the unique challenges faced by Nonwhite entrepreneurs.

One Florida-specific implication is the need to streamline the process for obtaining business permits and licenses, which can be particularly burdensome for Nonwhite entrepreneurs. Simplifying these processes and reducing associated costs can help remove barriers to entry and support the growth of minority-owned businesses in the state ([Florida's Entrepreneurship Agenda, 2022](#)).

Additionally, this research suggests that there is a need for ongoing education and awareness-raising about the systemic barriers that Nonwhite entrepreneurs face. This can help to build a more inclusive culture within the entrepreneurial ecosystem, where diversity is not only recognized but actively promoted and supported.

Finally, the study's findings can inform the design of targeted interventions and support programs that are tailored to the specific needs of Nonwhite entrepreneurs. By leveraging data and insights from this research, policymakers, educators, and business leaders can develop more effective strategies to support Nonwhite entrepreneurs, ultimately contributing to a more equitable and dynamic economy.

7. Limitations

This study has several limitations that should be acknowledged. First, the cross-sectional design limits our ability to infer causality between the variables. Longitudinal studies would be beneficial to track changes in entrepreneurial intentions over time. Second, while we used stratified random sampling to ensure a representative sample, there may still be potential biases due to self-selection or non-response. Third, this study focuses on Florida, and the findings may not be generalizable to other regions with different demographic and economic contexts. Additionally, we did not control all potential confounding variables, such as prior entrepreneurial experience or access to financial resources, which could influence entrepreneurial intentions.

Future research should prioritize longitudinal studies to track the evolution of entrepreneurial intentions among Nonwhite individuals over time. This would provide insights into how intentions develop and change in response to various factors. Compara-

tive studies across different states or regions would also be valuable in understanding the contextual differences in entrepreneurial intentions. Furthermore, exploring the impact of specific educational interventions on entrepreneurial intentions and outcomes can provide actionable insights for policymakers and educators. Examining the intersectionality of race, education, and other socio-economic factors will offer a deeper understanding of the complexities influencing entrepreneurial success. Such research will help in developing targeted strategies and support mechanisms tailored to the needs of diverse Nonwhite entrepreneurs, ultimately fostering a more equitable entrepreneurial landscape.

8. Conclusions

The study of entrepreneurial intentions in the pre-startup phases among Nonwhite groups is a critical area of research, offering valuable insights into how race and education influence entrepreneurial aspirations. By examining the role of race in shaping entrepreneurial intentions and the impact of educational background, this research provides a deeper understanding of the barriers and opportunities encountered by Blacks, Whites, and Other Nonwhite minorities. It highlights the significant role of educational attainment and entrepreneurial education in influencing entrepreneurial intentions. This focus is essential for informing policies and practices that can enhance educational access and support for aspiring entrepreneurs from marginalized communities.

In conclusion, this study highlights the significant influence of race and entrepreneurial education on shaping entrepreneurial intentions, positioning them as critical precursors in the entrepreneurial journey. By empirically examining the impacts of these factors, we provide a deeper understanding of the psychological barriers that deter individuals from pursuing inherently risky and uncertain entrepreneurial paths. Our findings reveal that the interplay between race and education can significantly dampen entrepreneurial intentions, a phenomenon that traditional models of entrepreneurial decision-making fail to capture. This research paves the way for a new discourse in entrepreneurship, urging scholars to delve into the early stages of entrepreneurial aspirations and the underlying factors that may hinder or propel these ambitions.

As society continues to confront the legacy and ongoing impact of racial and educational inequities, it is imperative for scholars to examine how race and education can impact entrepreneurship (Bonilla-Silva, 2015; Bell & Hartmann, 2007). Understanding the contemporary forces that have shaped the inequities faced by minorities today is crucial for addressing these disparities. As philosopher George Santayana famously noted, "Those who do not learn from the past are doomed to repeat it." Through empirical studies such as ours, we can challenge entrenched beliefs and contribute to meaningful societal progress.

Author Contributions: Conceptualization, D.C. and R.C.; methodology, D.C.; software, R.C.; validation, R.C.; formal analysis, D.C.; investigation, R.C.; resources, D.C.; data curation, R.C.; writing—original draft preparation, D.C.; writing—review and editing, R.C.; visualization, R.C.; supervision, D.C.; project administration, R.C. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: IRB Committee Name is Nova Southeastern U IRB #1. IRB number: 2019-395; Exempted under Category 2; Date of Exemption was 24 July 2019.

Informed Consent Statement: Informed consent statement was part of the survey.

Data Availability Statement: Data is shared with reviewers upon request and not shared with general public.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. Regression Results.

ANOVA ^a						
Model 1	Sum of Squares	df	Mean Square	F	Sig.	
Regression	54	5	10.86	3.893	0.002 ^b	
Residual	2681	961	2.79			
Total	2735	966				
Regression Model Summary ^a						
Model 1	R	R Square	Adjusted R Square	Std. Error of the Estimate		
	0.141 ^a	0.02	0.015	1.67028		
Regression Model Coefficients ^a						
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	4.98	0.35			14.25	0
Blacks	−0.77	0.65	−0.18		−1.19	0.236
Other_Nonwhites	−1.54	0.64	−0.39		−2.41	0.016
Education	0.04	0.08	0.02		0.45	0.651
Interaction_Blacks * Education	0.28	0.16	0.25		1.69	0.092
Interaction_OtherNonwhites * Education	0.38	0.15	0.4		2.46	0.014

^a Dependent Variable: Entrepreneurial Intentions Intensity; ^b Predictors: (Constant), Blacks, Other_Nonwhites, Education, Interaction_Blacks Education, Interaction_OtherNonwhites * Education.

References

- Abraham, L., & Master, B. K. (2021). *Equity in entrepreneurship: Challenges and opportunities*. RAND Corporation. Available online: <https://www.rand.org/pubs/perspectives/PEA1141-11.html> (accessed on 15 December 2023).
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211. [CrossRef]
- Along, S., McAlpine, D., McCreedy, E., & Hardeman, R. (2021). Police brutality and black health: Setting the agenda for public health scholars. *American Journal of Public Health*, 107, 662–665. [CrossRef] [PubMed]
- Alexander, M. (2021). *The New Jim Crow: Mass incarceration in the age of colorblindness*. The New Press.
- Arenius, P., & Minniti, M. (2005). Perceptual variables and nascent entrepreneurship. *Small Business Economics*, 24, 233–247. [CrossRef]
- Bates, T. (2011). Minority entrepreneurship. *Foundations and Trends in Entrepreneurship*, 7, 151–311. [CrossRef]
- Bates, T., & Robb, A. (2014). Small business lending: Challenges and opportunities for minority-owned firms. *Journal of Business & Finance Librarianship*, 19, 255–275.
- Batz Liñeiro, L., Ochoa, J. A. R., & de la Barrera, J. M. (2024). Exploring entrepreneurial intentions and motivations: A comparative analysis of opportunity-driven and necessity-driven entrepreneurs. *Journal of Innovation and Entrepreneurship*, 13, 11. [CrossRef]
- Belchior, R. F., & Lyons, R. (2021). Explaining entrepreneurial intentions, nascent entrepreneurial behavior and new business creation with social cognitive career theory—A 5-year longitudinal analysis. *International Entrepreneurship and Management Journal*, 17, 1945–1972. [CrossRef]
- Bell, J. M., & Hartmann, D. (2007). Diversity in everyday discourse: The cultural ambiguities and consequences of ‘Happy Talk’. *American Sociological Review*, 72, 895–914. [CrossRef]
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13, 442–453. [CrossRef]
- Bonilla-Silva, E. (1997). Rethinking racism: Toward a structural interpretation. *American Sociological Review*, 62, 465–480. [CrossRef]
- Bonilla-Silva, E. (2015). The structure of racism in color-blind, ‘Post-Racial’ America. *American Behavioral Scientist*, 59, 1358–1376. [CrossRef]
- Bonilla-Silva, E. (2018). *Racism without racists: Color-blind racism and the persistence of racial inequality in America* (5th ed.). Rowman & Littlefield.
- Box, G. E. P., & Tidwell, P. W. (1962). Transformation of the independent variables. *Technometrics*, 4, 531–550. [CrossRef]
- Cavich, J., & Chinta, R. (2021). Nascent entrepreneurs, entrepreneurial self-efficacy, and the moderators of race, gender, and government support. *Entrepreneurship Research Journal*, 12, 363–389. [CrossRef]
- Centers for Disease Control and Prevention. (2021, January 22). COVID-19 racial and ethnic health disparities. *Centers for Disease Control and Prevention*. Available online: <https://jamanetwork.com/journals/jama/fullarticle/2775687> (accessed on 10 September 2024).

- Dana, L. P. (2007). *Handbook of research on ethnic minority entrepreneurship: A co-evolutionary view on resource management*. Edward Elgar Publishing.
- Edwards, F., Lee, H., & Esposito, M. (2018). Risk of police-involved death by race/ethnicity and place, United States, 2012–2018. *American Journal of Public Health, 108*, 1241–1248. [CrossRef]
- Fairlie, R. W. (2020). The impact of COVID-19 on small business owners: Evidence from the first three months after widespread social-distancing restrictions. *Journal of Economics & Management Strategy, 29*, 727–740.
- Fairlie, R. W., & Robb, A. M. (2007). Families, human capital, and small business: Evidence from the characteristics of business owners survey. *ILR Review, 60*, 225–245. [CrossRef]
- Florida's Entrepreneurship Agenda. (2022). *A roadmap to removing barriers to work*. Available online: <https://thefga.org/research/florida-roadmap-to-removing-barriers/> (accessed on 15 December 2023).
- Foley, D. (2003). *Indigenous Australian entrepreneurs: Not all community organizations, not all in the outback*. CAEPR Discussion Paper No. 279. Center for Aboriginal Economic Policy Research.
- Frank, R., Akresh, I. R., & Lu, B. (2010). Latino immigrants and the U. S. racial order: How and where do they fit in? *American Sociological Review, 75*, 378–401. [CrossRef]
- Fraser, S. (2019). Is there ethnic discrimination in the UK market for small business credit? *International Small Business Journal, 37*, 250–275. [CrossRef]
- Garner, S. (2017). *Racisms: An introduction* (2nd ed.). SAGE Publications.
- Hamilton, D., & Darity, W. (2017). The political economy of education, financial literacy, and the racial wealth gap. *Federal Reserve Bank of St. Louis Review, 99*, 59–76. [CrossRef]
- Hosmer, D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied logistic regression* (3rd ed.). Wiley.
- Jacobson, M. F. (1999). *Whiteness of a different color*. Harvard University Press.
- Kallio, S. (2024). *Stratified random sampling in evaluation*. *Evaluation academy*. Available online: <https://www.evalacademy.com/articles/stratified-random-sampling-in-evaluation> (accessed on 15 July 2023).
- Kim, P. H., Aldrich, H. E., & Keister, L. A. (2006). Access (not) denied: The impact of financial, human, and cultural capital on entrepreneurial entry in the United States. *Small Business Economics, 27*, 5–22. [CrossRef]
- Kollinger, P., & Minniti, M. (2006). Not for lack of trying: American entrepreneurship in black and white. *Small Business Economics, 27*, 59–79. [CrossRef]
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing, 15*, 411–432. [CrossRef]
- Light, I., & Dana, L. P. (2013). Boundaries of social capital in entrepreneurship. *Entrepreneurship Theory and Practice, 37*, 603–624. [CrossRef]
- Magee, J. C., & Galinsky, A. D. (2008). Social hierarchy: The self-reinforcing nature of power and status. *Academy of Management Annals, 2*, 351–398. [CrossRef]
- Mazzelli, A., & Nason, R. (2023). Race, status, and entrepreneurial intentions. *Academy of Management Proceedings, 2023*, 17730. [CrossRef]
- Millett, G. A., Jones, A. T., Benkeser, D., Baral, S., Mercer, L., Beyrer, C., Honermann, B., Honermann, B., Lankiewicz, E., Mena, L., Crowley, J. S., Sherwood, J., & Sullivan, P. S. (2020). Sullivan. Assessing differential impacts of COVID-19 on black communities. *Annals of Epidemiology, 47*, 37–44. [CrossRef]
- Min, P. G. (2013). *Asian Americans: Contemporary trends and issues* (2nd ed.). SAGE Publications.
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development, 39*, 162–185. [CrossRef]
- Nadal, K. L. (2011). The Racial and Ethnic Microaggressions Scale (REMS): Construction, reliability, and validity. *Journal of Counseling Psychology, 58*, 470. [CrossRef]
- O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity, 41*, 673–690.
- Ogunmokun, O. A., & D'Sa, M. A. (2020). Exploring the impact of cultural values on entrepreneurial intentions among Nigerian undergraduates. *Journal of Entrepreneurship Education, 23*, 15–28.
- Oliver, M. L., & Shapiro, T. M. (2006). *Black wealth/white wealth: A new perspective on racial inequality*. Taylor & Francis.
- Painter, N. I. (2010). *The history of white people*. W. W. Norton & Company.
- Parks, V., & Warren, D. T. (2012). Contesting the racial division of labor from below: Representation and union organizing among African American and immigrant workers. *Du Bois Review: Social Science Research on Race, 9*, 395–417. [CrossRef]
- Puryear, A. N., Rogoff, E. G., Lee, M. S., Heck, R. K. Z., Grossman, E. B., & Haynes, G. W. (2008). Sampling minority business owners and their families: The undercoverage problem. *Journal of Small Business Management, 46*, 422–455. [CrossRef]
- Rauch, A., & Hulsink, W. (2015). Putting entrepreneurship education where the intention to act lies: An investigation into the impact of entrepreneurship education on entrepreneurial behavior. *Academy of Management Learning & Education, 14*, 187–204.

- Rideout, E. C., & Gray, D. O. (2013). Does entrepreneurship education really work? a review and methodological critique of the empirical literature on the effects of university-based entrepreneurship education. *Journal of Small Business Management*, 51, 329–351. [CrossRef]
- Ridgeway, C. L. (2014). Why status matters for inequality. *American Sociological Review*, 79, 1–16. [CrossRef]
- Roediger, D. R. (2005). *Working toward whiteness: How America's immigrants became white: The strange journey from ellis island to the suburbs*. Hachette UK.
- Santos, S., Liguori, E., & Gibbs, S. (2022). *Racial identity and the entrepreneurial journey*. AACSB insights. Available online: <https://www.aacsb.edu/insights/articles/2022/04/racial-identity-and-the-entrepreneurial-journey> (accessed on 15 December 2023).
- Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, 38, 291–332. [CrossRef]
- Shapiro, T. M. (2017). *Toxic inequality: How America's wealth gap destroys mobility, deepens the racial divide, and threatens our future*. Basic Books.
- Smith, W. K. (2020). African American entrepreneurship: A case study analysis of a dynamic and thriving sector. *Journal of Business Diversity*, 20, 53–62.
- Sue, D. W. (2010). *Microaggressions in everyday life: Race, gender, and sexual orientation*. John Wiley & Sons.
- Valdez, Z. (2016). *Entrepreneurs and the search for the American dream*. Routledge.
- Waters, M. C., Kasinitz, P., & Asad, A. L. (2014). Immigrants and African Americans. *Annual Review of Sociology*, 40, 369–390. [CrossRef]
- Williams, D. R., & Cooper, L. A. (2020). COVID-19 and health equity—A new kind of 'Herd Immunity'. *Journal of the American Medical Association*, 323, 2478–2480. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.