

THESIS

MULTICULTURAL EDUCATION & PERCEPTIONS OF RACIAL INEQUITY AMONG
WHITE AMERICANS: A COHORT ANALYSIS

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ABSTRACT

MULTICULTURAL EDUCATION & PERCEPTIONS OF RACIAL INEQUITY AMONG WHITE AMERICANS: A COHORT ANALYSIS

Growing concern over racial injustice in the United States has warranted an investigation into the perceptions of racial inequality among White Americans. The phasal introduction of multicultural education (ME) in the United States has continually increased exposure of newer cohorts of White Americans to diverse cultures and perspectives of social reality experienced by racial minorities. However, prior studies have neglected to empirically evaluate whether ME improved perceptions of racial inequity among White Americans. Using the General Social Survey (1972-2018), the present study uncovers patterns of changes in perceptions of racial inequity among White Americans. Specifically, I utilize an inter-cohort approach to illuminate patterns of association between ME cohort, educational attainment, and regionality. I conduct a thorough evaluation of the age-period-cohort dilemma in relation to racial attitudes and determine a year fixed-effects model the most empirically consistent model with the data. The multivariate analysis confirms that perceptions of racial inequity have in fact progressed with the implementation of ME. In addition, the results confirmed that more progressive racial perceptions are associated with increased educational attainment and less progressive racial perceptions associated with a Southern adolescence. Neither of these effects are contingent on ME exposure and operate independent of educational content. The implications of these findings and subsequent recommendations for continued research on ME and White racial perceptions to continue striving for racial equity through public education.

TABLE OF CONTENTS

ABSTRACT.....	ii
LIST OF TABLES	iv
LIST OF FIGURES	v
Chapter 1 – Introduction.....	1
Chapter 2 – Literature Review & Theoretical Perspective.....	6
Racial Perceptions: An Inter-Cohort Approach.....	7
Education, Socialization, And Racial Perceptions Among White Americans	8
Educational Attainment & Racial Perceptions.....	9
Multicultural Educational Reform & Generational Replacement in Perceptions of Racial Inequity.....	13
Southern Socialization & Perceptions of Racial Inequity.....	16
Chapter 3 – Data & Methods.....	19
Data & Sample.....	19
Measurement.....	21
Perceptions of Racial Inequity.....	21
Index of Perceptions of Racial Inequity.....	22
Multicultural Education Cohorts.....	22
Educational Attainment.....	23
Southern Adolescent Socialization.....	23
Controls.....	24
Methods.....	24
Chapter 4 – APC Model Selection.....	28
Age-Period-Cohort Dilemma.....	28
Age Effects on Racial Attitudes.....	29
Period Effects on Racial Attitudes.....	29
Cohort Effects on Racial Attitudes.....	30
The Hierarchical APC Estimation With Cross-Classified Random Effects Modeling Framework.....	31
Model Assessment & Selection.....	35
Chapter 5 – The Effects of Cohort, Education, and Southern Adolescence on Racial Perceptions.....	42
The Current Study.....	43
The Cohort Effect of Multicultural Education.....	43
Educational Attainment, Multicultural Education, & Racial Perceptions.....	45
Southern Adolescence, Multicultural Education, & Racial Perceptions.....	47
Analytical Strategy.....	49
Results.....	51
Bivariate Analysis.....	51
Multivariate Analysis.....	55
Discussion & Conclusion.....	66
Chapter 6 – Discussion & Conclusion.....	69
References.....	77

LIST OF TABLES

CHAPTER 3 TABLES

Table 3.1 Exploratory Factor Analysis of Racial Inequity Items from the General Social survey (1986-2018).....	23
Table 3.2 Summary Statistics of Dependent Variables and Covariates.....	26

CHAPTER 4 TABLES

Table 4.1 Comparison of APC Models of the Index of Perceptions of Racial Inequity.....	35
Table 4.2 Comparison of APC Models of Perceptions of Discrimination.....	36
Table 4.3 Comparison of APC Models of Perceptions of Education.....	37
Table 4.4 Comparison of APC Models of Perceptions of Government Aid.....	37
Table 4.5 Comparison of APC Models of Perceptions of Existing Government Assistance.....	38

CHAPTER 5 TABLES

Table 5.1 Correlations of Dependent Variables & Covariates.....	52
Table 5.2 Perceptions of Racial Inequity by Multicultural Education Cohorts (ME).....	53
Table 5.3 Models of Perceptions of Racial Inequity with Year Fixed-Effects.....	55
Table 5.4 The Conditional Effects of Multicultural Education Cohort and Educational Attainment on Perceptions of Racial Inequity with Year Fixed-Effects.....	59
Table 5.5 The Conditional Effects of Multicultural Education Cohort and Southern Adolescence on Perceptions of Racial Inequity with Year Fixed-Effects.....	62
Table 5.6 The Conditional Effects of Educational Attainment and Southern Adolescence on Perceptions of Racial Inequity with Year Fixed-Effects.....	64

LIST OF FIGURES

CHAPTER 4 FIGURES

Figure 4.1 Perceptions of Racial Inequity across Cohorts.....	41
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CHAPTER 5 FIGURES

Figure 5.1 Perceptions of Racial Inequity among White American Cohorts.....	44
Figure 5.2 Perceptions of Racial Inequity across Levels of Education.....	45
Figure 5.3 Perceptions of Racial Inequity Across U.S. Region.....	48
Figure 5.4 Standardized Coefficient Plot of Dependent Variables and Covariates.....	58
Figure 5.5 Marginal Effect of Educational Attainment by Multicultural Education Cohort.....	60
Figure 5.6 Marginal Effect of Sothern Adolescence by Multicultural Education Cohort.....	63
Figure 5.7 Marginal Effect of Southern Adolescence by Level of Educational.....	65

CHAPTER 1

INTRODUCTION

Recent years in the United States have been defined by controversial events and news encircling racial injustice, particularly surrounding instances of police brutality against Black Americans. While some Americans recognize the systemic injustices that pour out of current systems of governing and law enforcement, many Americans still argue against any systemic flaws and instead cite individual flaws or discriminatory stereotypes of racial minorities. The eruption of social movements like Black Lives Matter (BLM) has illustrated the obvious and divisive lack of commonality and consequently, a lack of collective consciousness and civility across communities nationwide. This is evident through recent bouts of social unrest in forms not limited to demonstrations and peaceful protests but also crossing lines into violent riots and looting, but notably, the variation in perceptions of and reactions to racial injustice is anything but new. Many researchers have explored differences in attitudes and perceptions about racial minorities and racial injustice in the United States across the decades (Nier et al. 2000; Steeh & Schuman 1992; Welch & Sigelman 2011), but cohort effects, or the effect of generational replacement, have often been neglected in the literature. Generally, racial attitudes have become increasingly more progressive over the last few decades. However, it is unclear whether this observed trend toward more progressive attitudes is accounted for by younger cohorts becoming more progressive compared to older cohorts. Accordingly, is America experiencing a ‘generational replacement’ in racial attitudes? How have perceptions of racial inequity changed across cohorts of White Americans? As acknowledgement and recognition of racial inequity have increased over time among White Americans, it is essential to examine the drives of such changes among this population in the U.S.

The present study explains the generational replacement effect of racial attitudes through a framework of educational reform as reflected through educational experiences as one partial explanation for changing racial perceptions across White cohorts. Initiated in the 1960s, multicultural education (ME) was strategized as a reform effort, following times of racial segregation, to improve equitable teaching methods and environments, as well as to introduce and normalize cultures outside of a Eurocentric lens. Said to be institutionalized in its fourth and fifth stages of development, around the 1980s, such presence in public institutions of education may have impacted how students perceive of and understand race relations across the nation. What is the relationship between White perceptions of racial inequity and the implementation of multicultural education across White cohorts? How has this educational reform impacted other determinants of racial perceptions among White Americans?

Prior studies have primarily focused on explaining improvements in racial attitudes broadly defined as increasingly egalitarian beliefs of individuals of differing races (Steeh & Schuman 1992). While trends of egalitarian beliefs are recognized as vitally important to understanding the entire view of White racial attitudes, the present study wants to specifically evaluate the ways in which White Americans perceive of racial inequity. Defined as the recognition of structural disadvantage to Black Americans and progressive attitudes toward improving such conditions, perceptions of racial inequity differ from racial attitudes in general, which reflect beliefs about racial minorities on an individual level. This study is interested in illuminating patterns of change in how White Americans perceive of racial inequity, which is a facet of racial attitudes which is missing abundant research in the existing literature.

The present study focuses concern on two specific determinants of racial attitude formation, educational attainment and regional socialization, which have been paid great

attention to in the existing literature (Bobo & Kluegel 1997; Kuppens & Spears 2014; Quillian 1996; Wodtke 2018). While education and racial attitudes have been studied extensively, there is an absence of research evaluating generational educational effects on racial attitudes.

Accordingly, it is unclear whether the implementation and development of multicultural education explains generational replacement of racial attitudes. Prior research has established the association between educational attainment and racial attitudes (Bobo & Kluegel 1997; Kuppens & Spears 2014; Wodtke 2018), but there is a lack of research designed to illuminate how a cohort effect may account for any part of the generally improving racial attitudes in the U.S. Therefore, it is unclear whether multicultural education has amplified the effects of educational attainment on racial perceptions. By investigating this relationship, this study will illuminate how institutional changes within public education affect perceptions of racial inequity.

Similarly, regional socialization has been suggested as a partial determinant of racial attitudes. Specifically, researchers have considered the vast difference in race relations within the Southern region of the country as a notable factor influencing how individuals perceive of race relations and racial minorities. Prior studies show a negative association between Southern residents and egalitarian racial attitudes (Quillian 1996). However, it is unclear whether the effect of Southern socialization is moderated by generational changes in multicultural education. Making sense of this association and its nuances is important to informing future understandings of how environments defined by political and cultural distinctions around race relations impact an individual's understanding of racial inequity.

In the next chapter, I review the existing literature on cohort analyses, racial attitudes, education, and regional variations to illuminate the theoretical perspectives motivating this study. By establishing the state of research as it pertains to racial attitudes and cohort analyses, the

present study is motivated through the lack of existing research on the cohort effects on racial attitudes and missing research on perceptions of racial inequity. In order to effectively conduct a cohort analysis, the following research is initiated by a thorough investigation in the age-period-cohort dilemma that encompasses any exploration involving such effects.

An important methodological consideration for the present study is the issue of simultaneously estimating age, period, and cohort effects (O'Brien 2017; Pampel 2016; Yang & Land 2006, 2008, 2013). Any analysis concerned with estimating the effects of age, period, and cohort must not overlook the significance of the others in determining the best fit and most statistically accurate model. The inherent collinearity of these effects results in confounding if restraints are not properly introduced in the modeling of the data. To address this collinearity, I began by comparing the existing literature on each of these effects and their association with racial attitudes. I then compared five models using fixed- and random-effects for age, period, and cohort to empirically determine how to estimate the non-spurious effects of age, period, and cohort.

Drawing on models with period fixed-effects, I estimate the effect of educational attainment, Southern adolescent socialization, and multicultural education on perceptions of racial inequity among White Americans. Do to so, I utilized the nationally representative dataset from the General Social Survey (1986-2018) to conduct a bivariate and multivariate analysis on the previously outlined associations.

The findings of the main empirical chapter provide evidence to support that educational attainment increases recognition of structural disadvantages to Black Americans and progressive attitudes towards improving them. At the same time, the findings also point to evidence that Southern adolescent socialization decreases one's recognition of structural disadvantages to

Black Americans and progressive attitudes towards improving them. In addition, evidence shows that being exposed to the most recent phases of multicultural education, post-1980, is positively associated with improved perceptions of racial inequity, or recognition of and progressive attitudes towards structural disadvantages to Black Americans. Importantly, this association is supported through improving students' recognition of government insufficiencies but not through perceptions of lack of education or discrimination. The analysis and discussion to follow will unpack the implications of such findings on educational reform pertaining to improving racial attitudes.

The organization of the thesis is as follows. In Chapter Two, I review existing literature and provides the theoretical underpinnings for this motivated research. Chapter Three provides an overview of the General Social Survey and sample, which will lead to a thorough discussion of the methods chosen to answer the present research questions. Chapter Four explores implications that the age-period-cohort dilemma have on studying racial attitudes. Presented here is the state of the literature as it pertains to APC effects on racial attitudes, and subsequently, an assessment of models for analyzing cohort effects on racial attitudes. Chapter Five discusses the estimated effects of cohort, educational attainment, and regional socialization on racial perceptions. Finally, Chapter Six revisits each of the research questions, identifies limitations, and finally discusses what policy implications follow from this examination of White perceptions of racial inequity.

CHAPTER 2

LITERATURE REVIEW & THEORETICAL PERSPECTIVE

The subjectivity encircling the meaning of race is important for establishing race and race relations as a construct created and supported to perpetuate hegemonic ideologies and boundaries of interest to the dominant group, that being White Americans. The existing literature on racial attitudes highlights the relationships between variation in racial attitudes and determinants of them, such as educational attainment and regionality. The following exploration of this literature will first position racial attitude formation within a social context of the United States defined by White hegemony and then discuss how determinants of racial attitudes are implicated within this context. To understand how educational attainment and Southern adolescent socialization can be factors contributing to the perpetuation of White hegemony is essential to the foundation of the coming inter-cohort approach to analysis.

I will use a framework of educational reform, multicultural education specifically, to argue that generational replacement should be improving acknowledgement of and progressive attitudes towards structural disadvantages experienced by communities of Black Americans. If multicultural education, a theory implemented in phases to improve racial equity and justice in educational experiences, functions as intended, it should target the hegemonic tendencies of the institution of education born out of a culture made for White Americans; generations exposed to this new approach to education should exhibit improved perceptions of racial inequity. The following exploration of research will address the lack of attention to generational replacement in this realm of research and position this problem in context of determinants of racial perceptions, White hegemony, and multicultural education.

RACIAL PERCEPTIONS: AN INTER-COHORT APPROACH

Cohort analyses are necessary in trying to understand attitudes as they persist over time, because “as a result of birth cohorts experiencing similar societal conditions during their formative years, including the transition to adulthood, attitudes and values cluster by birth cohort” (VanHeuvelen & Summers 2019:74). Through a theory of generational replacement, as generations age and die off, new generations with theoretically more progressive attitudes replace those of prior generations (Abramson & Inglehart 1986). The present study is informed by this approach to analysis, specifically by using cohorts defined by changes in multicultural education to examine the inter-cohort effect on White perceptions of racial inequity.

Researchers have explored the possibility of generational replacement and broader cultural changes causing major shifts in ideological foundations of the nation as a whole (Abramson & Inglehart 1986). Steeh and Schuman (1992) unpacked the possibility of increasingly negative racial attitudes, of inegalitarian beliefs, as a result of the Reagan era, finding that among White Americans, a trend toward more progressive and egalitarian attitudes persisted, despite the researchers’ anticipation otherwise. Welch and Sigelman (2011) hypothesized that the Obama era induced an amplified trend toward egalitarian attitudes among White Americans towards Black Americans, and they found the most evidence of this effect between 2004 and 2008 when Obama was coming into his presidency. Both of these examples highlight ways that scholars have framed studies of racial attitudes around change in broader societal contexts.

While there is a plethora of studies of such periodic effects, explicit studies of how a generational replacement is implicated in patterns of racial attitudes have been less prevalent. Most studies engage with concepts of generational replacement and aging effects as they relate to

racial attitude trends but neglect to distinguish a sufficient solution to the confounding nature of all three time-sensitive variables (Nier et al. 2000; Steeh & Schuman 1992; Welch & Sigelman 2011). The present study strives to fill this gap by addressing cohort effects specifically and by offering an empirical method to appropriately estimate these effects.

EDUCATION, SOCIALIZATION, AND RACIAL PERCEPTIONS AMONG WHITE AMERICANS

Prior research on racial attitudes in the United States has identified a handful of determinants that influence perceptions of racial equity (Bobo & Kluegel 1997; Kuppens & Spears 2014; Steeh & Schuman 1997; Welch & Sigelman 2011; Wodtke 2018). For example, educational attainment is suggested to improve racial attitudes (Bobo & Kluegel 1997; Kuppens & Spears 2014; Wodtke 2018), while Southern socialization is suggested to impact them negatively (Quillian 1996). But first, to understand determinants of perceptions of racial inequity begins with understanding the *meaning* of race in the U.S. Closely linked to the evolution of White hegemony, constructions and categories of race function as “a concept which signifies and symbolizes social conflict and interests by referring to different types of human bodies” (Omi & Winant 1994:55). By giving meaning to the color of one’s skin, racial formation theory argues that interpretations of such meanings support a racialized structure of society and in turn shape our experiences of institutions (Omi & Winant 1994). Reminiscent of Anthony Giddens’ (1984) theory of structuration, “ideological beliefs have structural consequences, and... social structure gives rise to beliefs” (Omi & Winant 1994:74). This duality of structure encompasses how ideologies and meanings of the social world are incorporated into social structure, which in turn, further affects individual beliefs and understandings. Importantly, ideology informs perceptions of race which manifest as legitimating beliefs about racial inequality in the United States and

forming the ideological foundation of White hegemony in the United States are perceptions of racial injustice. Such beliefs function to legitimate the structural advantages that perpetuate and reinforce racial inequities.

Using this understanding of ideological beliefs and structural inequities that reinforce one another, the following exploration of theoretical perspectives and empirical work will elucidate points of institutional and cultural contact which have been studied in relation to attitude determination and influence. Through unpacking such determinants, I argue that one theory-based, institutional solution, multicultural education (ME), provides a framework to study generational changes in perceptions of racial inequity among White Americans as it was implemented as a means of shifting racial ideologies in a progressive direction. As the dominant group, White Americans have historically been blinded to privileges and advantages garnered at the expense of other races. The implementation of multicultural education was meant to increase diversity, inclusivity, equity, and justice in the classroom. To analyze the replacement of generations through a framework of differentiated educational experiences should highlight nuances that exist in how the White population in the U.S. perceives of racial inequality.

Educational Attainment & Perceptions of Racial Inequity

The effect of educational attainment on racial attitudes has been studied extensively in the literature (Bobo & Kluegel 1997; Kuppens & Spears 2014; Wodtke 2018). Not only is the institution of education a reflection of broader societal symbols and significance, but it also holds the role of teaching and socializing students from a very early age into accepting and naturalizing these widely shared meanings. According to Bourdieu and Passeron (1990), pedagogic action, “reproduces the dominant culture, contributing thereby to the reproduction of the structure of the power relations within a social formation in which the dominant system of education tends to

secure a monopoly of legitimate symbolic violence” (P. 6). The institutional nature and characteristics of the education system must require it to reproduce the conditions which are necessary to its function, or the existing social structure (Ibid). Under such a framework, the prevalence of White hegemony as it is embedded in institutions, particularly public education, and the historical-political contexts of regions become invaluable to understand as factors of racial attitude formation. This context provides the present research with a footing to make sense of how multicultural education is or is not improving perceptions of racial inequity.

Similar understandings of social reproduction permeate the literature in theories of education, as well. Specifically, John Dewey’s work, a great contributor to theories of education reform, emphasizes the reproductive nature of the system of education:

Dewey’s great contribution to the theory of education was to help us get rid of the idea that education is a matter of either inducing or educating truth. Primary and secondary education will always be a matter of familiarizing the young with what their elders take to be true, whether it is true or not. (Rorty 1999:4)

Notably, this kind of reproduction passes onto children tenets of White hegemony and other dominating, legitimized systems, such as capitalism (Keisch & Scott 2015). The present study aims to understand how the institution of education inculcates biases in favor of White hegemony so that trends in perceptions of racial inequity can be analyzed through a lens of educational reform. As will be further demonstrated, as evident through the implementation of multicultural education, reform has targeted multiculturalism and improving racial inequities that stem out of the public institution of education.

Importantly, while there has been plenty of empirical work on educational attainment and racial attitudes, results have demonstrated nuance. Researchers have shown that the relationship

between educational attainment differs between overt, explicit racist biases and more covert, implicit biases (Bobo & Kluegel 1997; Kuppens & Spears 2014). Most studies, focused on explicit, overt expressions of racial attitudes, have shown a positive association between educational attainment and racial attitudes, particularly among White Americans (Bobo & Kluegel 1997; Kuppens & Spears 2014; Wodtke 2018). For example, Bobo and Kluegel (1997) find an association between educational attainment and adherence to Jim Crow racism, stereotyping, and perceptions of discrimination. Based on their analysis of White Americans, respondents with higher levels of education were less likely to produce indicators of Jim Crow racism while still reflecting discriminatory stereotypes of Black Americans, where Jim Crow racism is indicated by respondent's agreeance with variables measuring beliefs of lesser innate ability of Black Americans, resistance to inter-racial marriage, as well as support for racial segregation in housing. While such indicators of explicit racism decreased with higher education levels, discriminatory attitudes persisted, nonetheless.

In a broader view of their findings, Bobo and Kluegel (1997:119) offer, and have largely been correct, that policy will continue to be stagnant concerning assisting black communities because of a lack of white responsibility and a continued view of black individuals as “undeserving of special treatment from the government.” In this prediction, White Americans will continue to dismiss structural disadvantages to Black Americans that reminisce as a result of Jim Crow laws and behaviors. The present study aims to target a question much related: Do more recent cohorts of White Americans acknowledge structural racism and are attitudes towards improving structural inequities increasing?

Adding more evidence of nuance, Wodtke (2018) analyzed cross-sectional data from the GSS (1994-2016) as well as 2006-2010 GSS panel data to examine the association between

attitudes towards racial injustice and educational attainment. They found that, while there is an effect of education, it may not be as “enlightening with regard to beliefs about racial inequality as is commonly assumed” (Wodtke 2018:291), and confounders on the individual level must be considered. In a more contemporary example, Kuppens and Spears (2014) uncover a similar pattern in their investigation of how educational attainment effects implicit versus explicit measures of prejudice. In this example, explicit measures of racism are parallel with Jim Crow racism, or outright, overt displays of prejudice. Alternatively, implicit measures of prejudice align with what Bobo and Kluegel (1997) operationalize as discriminatory stereotypes, or covert discrimination. Kuppens and Spears (2014) find that educational attainment is strongly, negatively related to explicit measures of self-reporting prejudice, but simultaneously, levels of prejudice among the highly educated are hardly below those of the less educated, meaning that education is much less associated implicit discriminatory attitudes. Thus, the highly educated may be more likely to be *aversive* racists, or the highly educated may maintain more subtle and unconscious beliefs about racial minorities.

These findings are critical in the realization that education does in fact lower explicit measures of prejudice, but higher education is not a fix-all solution for debunking racist biases. Clearly, based on these findings and those of Bobo and Kluegel (1997), education’s association with racial attitudes is more complex than general trends may suggest. It is important to highlight the possibility that the effect of education is nuanced, particularly taken the institutionalized nature of White hegemony within the education system as proposed previously. Has the history of White hegemony in the United States been inculcated into the institution of public education? In examining the history of educational reform alone, one may argue that that history is diminished. In context of educational reform, it may be the content and quality of education that

is essential to the development of racial perceptions, contrary to the support that has proven quantity of education as an important determinant to racial perceptions.

Multicultural Educational Reform & Generational Replacement in Perceptions of Racial Inequity

Efforts to mitigate the violence perpetuated against racial minorities in the public institution of education have not gone untouched following *Brown v. Board of Education*, the original court decision which ruled racial segregation in public schools unconstitutional in 1954. In what form have such changes taken, and to what extent have such changes effectively reconstructed White attitudes to be perceptive of structural inequities against racially marginalized communities? One example of a reform effort in public education is the continuous implementation of multicultural education (ME). Although Keisch and Scott (2015) argue that education reform in recent years has operated through frameworks of white supremacy and capitalism, embedded a white supremacy worldview further into institutions of education, the written goals of multicultural education are supposedly above perpetuating these issues and in fact, are targeting them. Has the implementation of multicultural education further amplified the progressive improvement of racial perceptions associated with educational attainment? The present study explores answers to these questions.

Although not exclusively targeting students' perceptions of racial inequities in the country, multicultural education was implemented in the early 1960s and has morphed over the last 60 years into a standard form of curriculum to be exhibited in all public classrooms (Gay 2004). Following the desegregation of public schools, reformists' attention turned to the classroom where inevitably, inequalities from the social world persisted. While it is evident still today that not all inequalities have diminished regarding access and quality of public education

for all, much has changed since this time of initial reform. As stated by one of the more notable figures in the theory of multicultural education, James A. Banks (1993b:3), “a major goal of multicultural education... is to reform the school and other educational institutions so that students from diverse racial, ethnic, and social-class groups with experience educational equality,” though with an important caveat:

The major theorists and researchers in multicultural education agree that the movement is designed to restructure educational institutions so that all students, *including middle-class white males, will acquire the knowledge, skills, and attitudes needed to function effectively in a culturally and ethnically diverse nation and world.* Multicultural education... is not an ethnic- or gender-specific movement. It is a movement designed to empower all students to become knowledgeable, caring, and active citizens in a deeply troubled and ethnically polarized nation and world. (Banks 1993a:23, emphasis added)

Striving for expanded diversity and equity as such very importantly argues against colorblind ideology, which is an ideology characterized by contention in twenty-first-century race relations (Gay 2004). In line with these common goals are the five basic tenets of multicultural education, which include content integration, the knowledge construction process, prejudice reduction, an equity pedagogy, and an empowering school culture and social structure (Banks 1993a; Banks 1993b; Okoye-Johnson 2011).

Of relevance to progress in White racial attitudes and perceptions of racial inequity, specifically, are the dimensions of multicultural education targeting content integration, prejudice reduction, and teaching of the knowledge construction process. Through challenging the presumption of many that knowledge is “value-free”, multicultural education strives to enhance student’s understandings of the ways that knowledge is created and “influenced by

factors of race ethnicity, gender, and social class” (Banks 1993a:25). The many kinds of knowledge considered under this umbrella, including personal, cultural, popular, mainstream academic, transformative, and school knowledge, all have foundations in a social world defined by white supremacy. Targeting the processes through which knowledge is formed on this basis should provide students with resources to deconstruct their social realities and uncover inequities. By targeting the sources of the knowledge and the processes through which the social world is legitimized, inequities disguised by normalization and privilege should be made clear. Similarly, the dimensions of multicultural education addressing goals of prejudice reduction and content integration should illuminate and normalize other cultures while decentralizing the white experience. Given the proposed goals of multicultural education and the nature of advancing education, one should thus anticipate that with more engagement with such an environment, one would improve in how they perceive of the racial context of the United States.

The literature points to five semi-distinct phases of changes in the forms in which multicultural education has taken to approach these goals. The first phase of ME, emerging around 1960, consisted of a focus on “race-specific minority studies units, courses and programs” as a result of movements initiated by groups of racial minorities striving for representation (Gay 2004:99). The initiation of the movement toward multicultural education included the first implementation of ethnic studies courses into curricula and importantly into teacher preparation schools (Okoye-Johnson 2011). Subsequently, the second phase of multicultural education encapsulated the representation of multiple ethnicities into the same courses (Gay 2004). From this phase of multi-ethnic courses came a third phase, which occurred in the early 1970s and 1980s, stemming from movements of other marginalized and victimized groups, such as women and individuals with disabilities, who were striving for representation of

their own in public education (Banks 1993b; Okoye-Johnson 2011). Because of the indistinctive timeline on which these implementations unraveled, the study moving forward treats the time-period from 1960-1979 as the first set of stages of multicultural education introduction.

The second distinctive set of stages of multicultural education implementation include the fourth and fifth phases; these are phases which are supposedly present and fully embedded into public educational institutions. The fourth phase, from the mid-1980s to 1990s, was characterized by theory and research development of multicultural education. The fifth, the most contemporary phase, incorporates the institutionalization of the elements of prior stages entirely into curricula and the experience of public education (Oyoke-Johnson 2011). This breakdown of the implementation of ME is important for understanding the generational replacement effects of racial perceptions of White Americans. Based on such periodization, the introduction of Phase 4 and 5 of multicultural education should explain how younger generations adopted more progressive perceptions of racial inequity in the United States. Following that shift of institutionalization, it may also be anticipated that education's effect on improving racial perceptions would amplify following the exposure of new generations to this new approach to public education.

Southern Socialization & Perceptions of Racial Inequity

One area to be considered in evaluating the determinants of racial attitudes and perceptions of racial inequity lies in the social and political context of socialization during an individual's formative years¹. As with most all, place matters. Sociologists have underlined the importance of environment and its political and cultural context in determining how an individual is socialized. Through cultural socialization, beginning with at an early age,

¹During early years of education up until coming-of-age years, roughly 18 years old. (Steeh & Schuman 1992)

individuals are taught and informed about the social world and how to behave through the environments in which they are surrounded.

Following the history of the United States, it is intelligible that racial contexts differ by region, and, in turn, region should determine racial attitudes and perceptions of racial inequity. Specifically, the historical division of Northern and Southern states are often thought to contain varying characteristics, characteristics which are reflective in policy and resource distribution. In fact, studies have shown that although over time racial discrimination has declined within Southern states and outside states, those socialized in the South have constantly maintained higher levels of racism, specifically on indices of traditional prejudice and on attitudes towards policy aimed toward improving racial injustice (Quillian 1996).

As suggested by Kuo (2019:796), and demonstrative of structuration and symbolic violence as previously discussed (Giddens 1984), contemporary culture and policy outcomes are tied to patterns of slaveholdings; as such, in Southern U.S. states, “the twin forces of intergenerational socialization and institutionalize racism allowed for the persistence of racial hierarchies over time.” As evidence leftover of the Civil War, social and political contexts in the South have grown out of a history of harsh segregation of Black Americans from the rest of society, fatal discrimination of Black men specifically, and neglected rights for the Black communities. Years following this era have shown challenges in attaining equal voting rights, steep inclines in mass incarceration, and continually racialized and discriminatory cultures. Though the country as a whole is not immune to or absent of racism, culturally or structurally, Southern states, bleeding cultures born of land- and slave-owning, are states dense with stagnant policy following the civil rights era. Given such a pretext, the present research anticipates stagnant progress in perceptions of racial inequity in southern states; given the nature of

education as an institution, the present research also anticipates a suppressed effect of education as a determinant of racial attitudes for respondents who grew up in a southern state.

The following chapters will take steps to investigate determinants of perceptions of racial inequity among White Americans in the context of multicultural cultural education. Chapter 4 will dig into the age-period-cohort dilemma in relation to racial attitudes; based on the findings of five models of varying constraints on those variables, the model deemed fittest will be used to carry out the main empirical investigation of Chapter 5. Chapter 6 will discuss the findings of the empirical analysis and the subsequent implications for perceptions of racial inequity and education as an institution of influence on racial attitudes.

CHAPTER 3

DATA & METHODS

DATA & SAMPLE

Following that quantitative methods are favorable for producing externally valid evidence on generalizable patterns and solutions in the social world, particularly regarding attitudinal measures, I conduct a secondary data analysis using the General Social Survey (GSS) in this study. Such a methodological determination is supported by existing literature in the field of racial attitude work (Bobo & Kluegel 1997; Carter et al. 2016; Hunt 2007; Kuppens & Spears 2014; Quillian 1996; Steeh & Schuman 1992; Wodtke 2018). While other existing datasets present opportunities for studying racial attitudes, some of the most prominent work in this subfield has been completed using the GSS (Bobo & Kluegel 1997; Carter et al. 2016; Hunt 2007; Steeh & Schuman 1992; Wodtke 2018). The General Social Survey (GSS) is “a project of the independent research organization NORC at the University of Chicago, with principal funding from the National Science Foundation” (GSS Data Explorer). The GSS first began data collection in 1972 of a nationally representative sample of adults in the U.S. and has continued adapting questions for almost 50 years.

The GSS is a voluntary interview (in-person or via telephone) averaging roughly 120 minutes which recently has had negative repercussions on the survey’s response rate (Morgan 2020). According to Smith’s overview of the GSS (2016), the average percent of respondents eligible to participant completed the interview was roughly 75-77% prior to 2000, and since 2000 has dropped to an average of a 70% response rate. Morgan (2020) uses comparative analysis of the GSS in relation to the American Community Survey (ACS) which is known for nationally representative data; the researcher concluded that the GSS aligns closely with the

representativeness of the ACS, allowing analysts to proceed confidently in generalizable analyses. The survey is developed and continuously revised by several principal investigators and interdisciplinary teams, including the implementation of panel waves in 2008.

The GSS notably strives to report unbiased patterns of attitudes and behaviors. The organization's website confidently states, "the GSS is the single best source for sociological and attitudinal trend data covering the United States. It allows researchers to examine the structure and functioning of society in general as well as the role played by relevant subgroups" (About the GSS 2020). As such, the multitude of attitudinal data coupled with demographic data is suitable to facilitate the present secondary data analysis.

Due to data availability and listwise deletion, the sample was restricted to respondents from 1986 to 2018 of the GSS. I restrict the pooled sample to respondents to those self-identifying as white and non-Hispanic ($n = 2,936$).

Cohorts are defined by the respondent's birth year (1910 to 1997). To analyze the effect of multicultural education reform more closely over cohorts, birth year was coded into three cohorts mirroring estimated periods of the introduction of each new phase of multicultural education into school curricula. The multicultural education cohorts were estimated onto the following breakdown of birth years: 1910-1959 (Pre-ME; $n = 1,667$), 1960-1979 (ME phases 1-3; $n = 1,063$), and 1980-2000 (ME Phase 4+; $n = 206$). It is to be noted that these are estimated cohorts based on less than concrete estimations of when each phase was rolled out, as discussed in the literature. Importantly, the Phase 4+ cohort of respondents only represents roughly 7% of the total sample; as a result, the analysis will proceed with precaution in making any generalizable solutions based on this rather small subsample.

MEASUREMENT

Perceptions of Racial Inequity

In order to understand perceptions of racial inequity among White Americans, the present study draws upon four survey questions from the GSS which indicate a respondent's perception of the underlying causes of racial inequity. The original GSS variable *racdif1* asked respondents if on average, they agreed that differences in jobs, income, and housing between Black and White Americans is due to discrimination. The original GSS variables *racdif3* asked respondents if on average, they agreed that differences in jobs, income, and housing between Black and White Americans is due to a lack of education. The original GSS variable *helpblk* asked if they believe that the government should or should not be giving special assistance to Black Americans on a scale of 1 to 7. Finally, the original GSS variable *natracey* asked respondents if they thought too much, too little, or the right about of government spending was going to assistance towards Black Americans.

Although originally measured at the ordinal level, these variables have correspondingly been recoded into binomial variables to facilitate the forthcoming multivariate analysis (summary statistics in Table 3.2). The chosen variables are satisfactory for measuring perceptions of racial inequity for a number of reasons. Although there are two facets to this index, one of perceptions of government spending and assistance provided for Black Americans and one of perceptions of existing forms of oppression, together they provide a well-rounded view of how an individual makes sense of existing racial relations and the state of racial equity as well as future endeavors toward racial equity.

When examining the validity of the first two variables, those asking if inequalities in employment, income, and housing conditions are results of discrimination and lack of education,

respectively, it is suggested that a positive affirmation to these questions (yes) indicates acknowledgement of increased barriers to opportunities of employment, income, and housing for Black Americans. Relatedly, the latter two variables asking if the government should assist Black Americans and if the current spending is sufficient highlight perceptions of assistance toward overcoming barriers faced by this community. An affirmative response to both questions indicates a respondent's recognition of structural barriers and a positive perception toward improving these conditions.

Index of Perceptions of Racial Inequity

I conducted an exploratory (EFA) and confirmatory factor analysis (CFA) on the four indicators of perceptions of racial inequity from the GSS, which can be described in Table 3.1. Both the EFA and CFA produced a single factor solution ($\lambda = 1.43$). This factor represents a respondent's acknowledgement and perceptions toward the existence of racial inequity in the U.S. The index was shown to be reliable ($\alpha = 0.68$). The factor was transformed into a normalized index with a scale of 0 to 100 with a greater score indicating greater acknowledgement of racial inequity and a positive perception toward improving such conditions. The average score amongst White respondents was 38.39 where respondents differed from this average by 27.10.

Multicultural Education Cohorts

The focal variable of the study is the measurement of multicultural education cohorts, which originate from the birth year variable from the GSS. Using the previously outlined periodization, an indicator variable was coded to designate respondents who were exposed to

Table 3.1 Exploratory Factor Analysis of Racial Inequity Items from the General Social survey (1986-2018)

Variable	Description	Factor Loadings	Factor Uniqueness
Discrimination	Are jobs, income, and housing conditions worse for Blacks because of discrimination?	-0.56	0.68
Lack of education	Are jobs, income, and housing conditions worse for Blacks because of a lack of education?	-0.53	0.71
Government aid	Should the government give aid to Black Americans?	0.66	0.56
Existing government assistance	Is the government spending too little on assistance to Black Americans?	0.62	0.61

Note: $\alpha = 0.68$, 1 factor solution ($\lambda_1 = 1.43$; $\lambda_2 = 0$) $N = 2,936$

Phases 4 and 5 of multicultural education (1980-2000; $n = 206$) compared to the pre-multicultural education and early phases of multicultural education cohort (1910-1979; $n = 2,730$).

Educational Attainment

The independent variable of educational attainment is measured by highest year of school completed in years. The average respondent has roughly 14 years of education, or the equivalent of an associate degree. This variable is preferred to that of which measures highest attained degree, as this research is concerned with the effect of length of time in which a respondent has been exposed to a formal education.

Southern Adolescent Socialization

The independent variable of southern socialization is measured using an indicator on whether the respondent was a resident in the South at the age of 16 years old. About 28% of the sample responded that they resided in a southern state at the age of 16. This variable specifically

was chosen in contrast to the respondent's residency at the time of their survey since the present research questions are largely concerned with the attitude formation that occurs in early development and schooling. The location where which one was living at the age of 16 is likely more representative of the environment of their socialization than where they were living while data was being collected, regardless of a respondent's age.

Controls

Other variables included in the present analysis function as controls to account for confounding effects of individual characteristics; these include sex (0 = male, 1 = female, 48% female), respondent income (mean = \$24,290.38), and conservatism (1-7 scale; mean = 4.12). Most of these controls, specifically sex and income-level, are standard in attitudinal research (Hunt 2007; Steeh & Schuman 1992). While political views are often included in analyses of attitude change as well, this study particularly wanted to acknowledge and account for how varying political ideologies may inform one's perceptions of racial inequity, and as such they are included in all models as a covariate.

Table 3.2 outlines the summary statistics for the main outcome variables and covariates for the present study.

METHODS

I utilize ordinary least squares (OLS) regression modeling for measuring the effects of multicultural education cohort, educational attainment, and Southern adolescent socialization on perceptions of racial inequity. I initially estimate a model of the racial perception index. Next, I estimate separate models for each indicator of racial perception. The purpose of these models is to examine these effects on general perceptions and specific beliefs about the nature of and solution to racial inequity in the United States.

Prior to modeling perceptions of racial inequity to determine the effects of multicultural education cohorts, educational attainment, and Southern adolescent socialization, I empirically assess the age-period-cohort (APC) dilemma. The first empirical chapter explores the existing literature on the varying implications of age, period, and cohort effects and how they relate to racial attitudes. In order to understand what implications this dilemma has on constructing appropriate and fit models, the present research replicates the “hierarchical APC estimation with cross-classified random effects modeling” (HAPC-CCREM) from Yang and Land (2006, 2008, & 2013). Using five combinations of fixed- and random-effect specifications, each dependent variable is regressed and compared by model fit using information criteria (AIC, BIC). The outcome of this assessment determined the model with year fixed-effects and the omission of age as the best fit to the data compared to the other models.

Below, I show the specification of the models for measuring the effects of ME cohort, educational attainment, and Southern adolescent socialization.

$$(1) \text{ Perceptions of racial inequity} = \beta_0 + \beta_1 \text{ young} + \beta_2 \text{ education} + \beta_3 \text{ south} + \beta_4 \text{ sex} + \beta_5 \text{ political views} + \beta_6 \text{ income} + \mu_{it} + \varepsilon_{it}$$

Equation 1 shows perceptions of racial inequity as a linear function of Phase 4+ of multicultural education cohort and the other covariates described above. μ represents a vector of fixed intercepts for every different year t of the GSS while ε_{it} represents the residual for respondent i in year t . The *young* coefficient will inform Hypothesis 1 (B₁). The *education* coefficient will inform Hypothesis 2 (B₂). Finally, the *south* coefficient will inform Hypothesis 4 (B₃).

The subsequent model will interact education and most recent multicultural education indicator (*young*) to estimate how the effect of education differs, if at all, between the cohort

Table 3.2 Summary Statistics of Dependent Variables and Covariates

Variable	Description	Mean	Median	SD	Min	Max
Racial Inequity Index	Composite index measuring perceptions toward racial inequity among Black Americans	38.39	34.18	27.10	0	100
Discrimination	Binomial indicating if one attributes inequity of housing, income, and jobs among Black Americans to discrimination	0.32			0	1
Lack of education	Binomial indicating if one attributes inequity of housing, income, and jobs among Black Americans to a lack of education	0.49			0	1
Government Aid	Binomial indicating if one agrees that the government should be providing aid to Black Americans	0.14			0	1
Existing government assistance	Binomial indicating if one agrees that the government is spending too little on Black Americans	0.22			0	1
Non-Hispanic White	Indicating white, non-Hispanic respondents	1.0			1	1
Birth year	Year of birth of respondent	1956.9	1957	15.07	1910	1997
ME phasal cohorts	Ordinal measurement of phases of ME implementation: Pre-ME (before 1959), ME Phases 1-3 (1960-1979), ME Phase 4+ (1980-2000)	0.50	0	0.63	0	2
Most recent ME cohort	Indicating respondents born in 1980 or after (ME Phase 4+)	0.07			0	1
Educational attainment	Years of education completed	13.99	14	2.69	0	20
Southern adolescence	Indicating respondents who resided in the south at the age of 16	0.28			0	1
Respondent income	Respondents self-reported income at the time of data collection	\$24,540.7	\$17,954	\$33,080.92	\$234	\$480,144.5
Female	Indicating respondents who identify as female	0.48			0	1
Conservatism	A scale of liberalism (1) to conservatism (7)	4.13	4	1.40	1	7

Note: n = 2,936

exposed to the most recent institutionalization of multicultural education and those prior to this implementation.

$$(2) \text{ Perceptions of racial inequity} = \beta_0 + \beta_1 \text{ young} + \beta_2 \text{ education} + \beta_3 (\text{young})(\text{education}) + \beta_4 \text{ south} + \beta_5 \text{ sex} + \beta_6 \text{ political views} + \beta_8 \text{ income} + \mu_{it} + \varepsilon_{it}$$

Equation 2 estimates perceptions of racial inequity as a function moderated by the interaction between multicultural education cohort and educational attainment, among other covariates listed above. The interaction term, B3, will inform Hypothesis 3.

$$(2) \text{ Perceptions of racial inequity} = \beta_0 + \beta_1 \text{ young} + \beta_2 \text{ south} + \beta_3 \text{ education} + \beta_4 (\text{south})(\text{education}) + \beta_6 \text{ sex} + \beta_7 \text{ political views} + \beta_9 \text{ income} + \mu_{it} + \varepsilon_{it}$$

Model 3 estimates perceptions of racial inequity as a function moderated by the interaction between Southern adolescent socialization and educational attainment, among the listed covariates. The interaction term, B4, will inform Hypothesis 5.

$$(3) \text{ Perceptions of racial inequity} = \beta_0 + \beta_1 \text{ young} + \beta_2 \text{ south} + \beta_3 \text{ education} + \beta_4 (\text{south})(\text{young}) + \beta_6 \text{ sex} + \beta_7 \text{ political views} + \beta_9 \text{ income} + \mu_{it} + \varepsilon_{it}$$

The final model, Model 4, estimates perceptions of racial inequity as a function moderated by the interaction between Southern adolescent socialization and multicultural education cohort. The interaction term, B4, will inform Hypothesis 6.

In all models, standard errors have been adjusted for heteroskedasticity by using robust standard errors. All models employ the sampling weights provided by the GSS.

CHAPTER 4

APC MODEL SELECTION

AGE-PERIOD-COHORT DILEMMA

Research on racial attitudes has carefully navigated the implications of age-period-cohort models and analyses by noting their confounding natures but not through empirically determining a model best fit to address the dilemma. While the central concern for the present research focuses on the effects of multicultural education cohorts across perceptions of racial inequity among White Americans, this chapter address the dilemma in estimating ‘age-period-cohort models’. Any analysis concerned with an isolated effect of age, period, or cohort must not overlook the significance of the others in determining the best fit and most statistically accurate model. The inherent collinearity of such effects in cross-sectional data results in confounding if restraints are not introduced based on the nature of the variables. Age effects are broadly understood as the effects of aging, or life-course factors that influence changes in attitudes on the individual level. Relatedly, period effects lie in defining eras or changes in society demarcated by events, which notably affects the wider population. Lastly is the cohort or generational effect, or a set of a population with the same birth year or age, in which distinctive events shape attitude development over time in a similar formative way across this sub-set of a population. Because each variable is a linear function of the two others (period – cohort = age) controlling for the two variables not of interest only takes constant the third, as well.

Prior discussions on racial attitudes have notable focused on period and cohort effects, while age effects have not been proven to significantly affect racial attitudes (Danigelis & Cutler 1991; Krosnick & Alwin 1989). The existing literature often defaults to omittance of one of the three variables or grouping of one of the variables (Steeh & Schuman 1992; Welch & Sigelman

2011). An approach less commonly taken to study racial attitudes and attitudinal change in general includes specifying cohort as the fixed-effect with age and period being treated as random-effects, and no work known to the researcher has evaluated the HAPC-CCREM approach in relation to measuring racial attitudes. This discussion explores the current state of findings on what support has been found on each of the effects pertaining to racial attitudes, and I evaluate the appropriateness of HAPC-CCREM and alternative approaches for measuring perceptions of racial inequity. Following, using the literature as a background, I test five-models using the HAPC-CCREM framework from Yang and Land (2006, 2008, 2010) to inform which model best measures the cohort effect on perceptions of racial inequity among White Americans.

Age Effects on Racial Attitudes

Most discussions of attitudinal change, racial attitudes included, acknowledge a generally known hypothesis of a tendency of increased conservatism with middle age (Sears 1983). Between social and psychological factors, middle and older aged individuals are thought to morph toward more conservative world views, and simultaneously, the idealism and liberalism that is associated with young adulthood is supposed to diminish with age (Sears 1983). On the contrary, and despite some partial evidence of such patterns, no empirical work has established this pattern concretely. Specifically, Danigelis and Cutler (1991) neglected to find any evidence of increasing or decreasing conservatism with age in regard to race relations; relatedly, work from Krosnick and Alwin (1989) concluded broadly that no age group is more likely than another to be susceptible to attitude change.

Period Effects on Racial Attitude

Changes in racial attitudes that are induced by racially charge events or eras of political change have been extensively studied in the literature. In fact, the findings of several studies

suggest an outline of possible changes across a number of decades. Prior studies show increasing tolerance and support for racial equity among Whites across the last few decades (Steeh & Schuman 1992; Welch & Sigelman 2011). Although Steeh and Schuman (1992) were curious about a possible decline in egalitarian beliefs and support for racial equity resulting out of the Reagan era, their analysis suggested that among White young Americans, the positive trend in improving racial attitudes continued. Having similarly studied period effects under a presidential framework is the work of Welch and Sigelman (2011), who hypothesized that the Obama era induced an increased improvement in racial attitudes among White Americans toward Black Americans, and their work largely found evidence of such a positive period effect between 2004 and 2008 when Obama was coming into his presidency.

Out of such work one can conclude the significance of understanding and acknowledging period effects when analyzing cross-sectional data over time; the broadly verified positive trend in racial attitudes over the last several decades is imminent in making sense of the size of a possible cohort effect at play.

Cohort Effects on Racial Attitudes

The central focus of the present study is the cohort or generational effect which refers to events experienced during early childhood and through adulthood for a set of individuals, usually delineated by coming-of-age years (18 years old). Studies of cohort effects focus on the effect of groups of individuals who are socialized during periods of heightened change around race relations which replace the more conservative attitudes of older generations. Parallel to the positive period effect through the 80s was a finding concluding increasing liberalism across decadal cohorts in the 1960s, 70s, and 80s on most issues; “it appears from these analyses that socializing experiences conducive to integration and racial equality, when

they operate at all, act to create more liberal cohorts of young adults” (Steeh & Schuman 1992:360). As this has been the case and is expected to continue, the work of cohort replacement, over time, increases society’s overall levels of liberalism and equitable racial attitudes.

The present research inserts into this overall discussion of liberalization racial attitudes, particularly among White Americans. I explicitly aim to evaluate the cohort effect of multicultural education using the HAPC-CCREM framework, which is necessary given the previously described conflation that occurs between age, cohort, and period effects when modeled simultaneously.

THE HIERARCHICAL APC ESTIMATION WITH CROSS-CLASSIFIED RANDOM EFFECTS MODELING FRAMEWORK

Similarly focused on attitudinal research in their survey of literature, Ekstam (2021) finds that the majority of studies exploring their chosen subfield, attitudes towards homosexuality, have similarly excluded any measure of age in their chosen models based on a presumption that age effects are absent in regard to attitudes of homosexuality. Others have broken this linear dependency of the effects by including random and fixed effects of age, period, and cohort in linear regression models. This approach necessitates a ‘hierarchical APC estimation with cross-classification random effects modeling’ (HAPC-CCREM) (Yang and Land 2006, 2008, 2013). Importantly, this sort of estimation has been critiqued for a bias which shrinks one of the variables specified as random to nearly zero, most likely this variable being the effect of cohort due to its closely correlation with age (O’Brien 2017). Resulting from these biases are likely inflated period effects due to such shrunken cohort effects, paired with a strong negative age effect.

An approach less commonly taken includes specifying cohort as the fixed-effect with age and period being treated as random-effects (Pampel 2016). In this case, rather than the previously described biases resulting from the cohort effect specified as random, the results will be mirrored; the now fixed effect of cohort will shrink the negative age effect, inflate the positive cohort effect, and shrink the positive period effect.

Notably, such a wide range of constraints employed across studies has yielded quite a wide range of conclusions, as well. As such, Ekstam (2021) proceeds to test the previously defined constraints to evaluate the differences in results to further understand the implications that come with any APC analysis and to hopefully provide further guidance for scholars moving forward with such kind of analyses.

The present question of the effect of cohort on perceptions of racial inequity is replicated within five models to come to a conclusion to move forward with the expressed research questions (Yang 2006, 2008, 2010). The following replication will be in reference to the independent and dependent variables outlined in Chapter Three. Each model assessment is based on models replicated on all five independent variables—the racial inequity index in addition to each of its components, separately. While Chapter Three outlines a variation of the cohort variable that will be employed to inform theoretical considerations in line with educational changes as they pertain to equitable race relations, the following replication utilizes the original cohort variable provided by the GSS, that is, simply using a respondent’s birth year. Accordingly, the age variable is a function of a respondent’s self-reported birth year. Lastly, other variables of interest included in these replicated models included a respondent’s years of education as well as whether they resided in a southern state at the age of 16. Controls include a respondent’s sex, political affiliation, and yearly income.

Model 1 includes a constraint on the age variable, presented as a fixed-effect, while period and cohort are treated as random-effects. Model 1 as replicated is:

$$\text{Perceptions of racial inequity} = \beta_0 + \beta_1 A_i + K_c + \pi_p + \varepsilon_i$$

Model 1 estimates perceptions of racial inequity where β_0 is the intercept, β_1 represents the fixed-effect for age, K_c is the random effects of cohort, π_p is the random effects of period, and ε_i is the residual for respondent i .

Model 2 only diverges from Model 1 by including a random intercept for age and fixed intercepts for cohort:

$$\text{Perceptions of racial inequity} = \beta_0 + \beta_1 C + \alpha_a + \pi_p + \varepsilon_i$$

Now, $\beta_1 C$ represents the cohort fixed effect while α_a is the age random effect. While both of these models should specify categorical constraints on cohort, a constraint is also imposed on each specified random effect, which effectively shrinks the linear effect to zero (Ekstam 2021; O'Brien 2017).

Model 3 should produce similar results to Model 2, as it completely omits any age effect, but maintains a fixed effect for period ($\beta_2 P$), assuming no relationship between age and the dependent variable:

$$\text{Perceptions of racial inequity} = \beta_0 + \beta_1 C + \beta_2 P + \varepsilon_{it}$$

Model 4 is replicated as follows:

$$\text{Perceptions of racial inequity} = \beta_0 + \beta_1 A_i + \beta_2 A_i^2 + \beta_3 C + \pi_p + \varepsilon_{it}$$

where age and cohort are fixed effects, and period is specified as random.

Lastly, Model 5 specifies all age, cohort, and period effects as fixed effects (CCFEM specification; Yang and Land 2006, 2008, 2013):

$$\text{Perceptions of racial inequity} = \beta_0 + \beta_1 A + \beta_2 C + \beta_3 P + \varepsilon_{it}$$

In this model, the cohort variable is no longer broken down, rather age is deconstructed into two groups, those 18 to 40 years old, and those 41 to 89 years old, where β_{iA} represents this deconstructed variable.

Following the employment of these five models of the previously described data set, the present study utilized specific model selection criteria to deem which model is best fit for the present data. This model selection relies heavily on information criteria, specifically Bayes Information Criteria (BIC) and Akaike Information Criteria (AIC), both of which are measures of goodness-of-fit for any estimated model of observed data. Generally speaking, lower AIC and BIC statistics are indicative of a better model fit; a general rule of thumb is that scores differing by roughly 10 points are considerably different. Importantly, BIC increases, or penalizes, as a model's number of parameters increases, and as such, BIC is a considerably more conservative measure of fit. This is a crucial point to be considerate of moving forward with such an evaluation as the models vary in their number of parameters, particularly given the nature of fixed effects (note the degrees of freedom in Tables 4.1-4.5). Specifically, the models affected by large parameters are those with fixed intercepts for period and cohort due to the expansive time frame covered by this study. Because fixed effects consist of a vector of fixed intercepts for each year of data collection and each birth year, respectively, models with these specifications have a large number of parameters. While a greater number of parameters usually coincides with a better model fit, the nature of the fixed intercepts in fixed-effect models may result in an overfit.

The second model selection criteria will be based on comparing the effects of cohort across the different models to evaluate if there is a substantive difference in the estimated effects. Plotting the effects of cohort graphically for each model by each dependent variable will allow for a direct comparison of the estimated effects of cohorts across the models. This assessment

focuses primarily on a cohort effect, as this is the main effect of concern in the current study. The variation in models will be evaluated visually to determine further the best fit after noting comparisons of information criteria.

MODEL ASSESSMENT & SELECTION

Table 4.1 represents estimates of the cohort effect on the racial inequity index across the five models described above. Based on the AIC and BIC, Model 3 fits relatively better with the GSS data (AIC = 27224.09; BIC = 27888.41) by including fixed intercepts for year and omitting age from the model. Although distant from other model estimates (Models 1, 2, and 4), the information criteria for Model 5 (fixed intercepts for age, period, and cohort) are not notably different from Model 3 (difference < 10). This shows the utility of periodic fixed-effects for modeling the data.

Table 4.1 Comparison of APC Models of the Index of Perceptions of Racial Inequity

	1	2	3	4	5
Cohort		0.0241 (0.501)	0.0344 (0.319)	0.0253 (0.814)	0.0435 (0.462)
Model Specifications					
Age RE?	No	Yes	No	No	No
Age FE?	No	No	No ^a	No	Yes ^b
Cohort RE?	Yes	No	No	No	No
Year RE	Yes	Yes	No	Yes	No
Year FE	No	No	Yes	No	Yes
Model Fit					
AIC	27953.06	28020.31	27224.09	28009.43	27226.09
BIC	28012.91	28594.85	27888.41	28583.97	27896.39
Log-likelihood	-13966.53	-13914.15	-13501.05	-13908.71	-13501.05
Degrees of Freedom	10	96	111	96	112
Note: a – age omitted from model; b – age dichotomized; RE – Random Effects; FE – Fixed Effects; N = 2,936					

Table 4.2 Comparison of APC Models of Perceptions of Discrimination

	1	2	3	4	5
Cohort		-0.00129 (0.00)	-0.000118 (0.722)	-0.00298 (0.001)	0.000489 (0.393)
Model Specifications					
Age RE?	No	Yes	No	No	No
Age FE?	No	No	No ^a	No	Yes ^b
Cohort RE?	Yes	No	No	No	No
Year RE	Yes	Yes	No	Yes	No
Year FE	No	No	Yes	No	Yes
Model Fit					
AIC	3788.334	3868.99	3765.934	3864.865	3766.156
BIC	3848.182	4443.531	4412.293	4439.406	4424.484
Log-likelihood	-1884.167	-1838.495	-1774.967	-1836.432	-1773.078
Degrees of Freedom	10	96	108	96	110
Note: a – age omitted from model; b – age dichotomized; RE – Random Effects; FE – Fixed Effects; N = 2,936					

Table 4.2 notes information criteria for models predicting perceptions of discrimination against Black Americans. Although favoring BIC for its conservative nature is preferable, in this case, Model 1 has the lowest BIC but will not be useful for the main analysis due to its specification of cohort as random, or the main effect of concern in this study. Rather, if evaluating ICs outside of Model 1, Model 3 again presents the best fit in terms of BIC and AIC because its BIC has a greater than 10-point difference from all other models (AIC = 3765.934; BIC = 4412.293).

Table 4.3 presents the information criteria for models predicting perceptions of lack of education among Black Americans limited to White respondents. Again, once looking past the insufficiencies of Model 1, which has the lowest BIC across models on this dependent variable, Models 3 and 5 have less than a ten-point difference in AIC, and Model 3 maintains the lowest BIC of all models, suggesting it the best fit (AIC = 4031.779, BIC = 4678.137).

Table 4.3 Comparison of APC Models of Perceptions of Education

	1	2	3	4	5
Cohort		-0.00210 (0.00)	-0.000666 (0.051)	-0.00391 (0.00)	-0.00151 (0.010)
Model Specifications					
Age RE?	No	Yes	No	No	No
Age FE?	No	No	No ^a	No	Yes ^b
Cohort RE?	Yes	No	No	No	No
Year RE	Yes	Yes	No	Yes	No
Year FE	No	No	Yes	No	Yes
Model Fit					
AIC	4088.017	4153.337	4031.779	4150.885	4035.714
BIC	4147.865	4727.878	4678.137	4725.426	4694.043
Log-likelihood	-2034.009	-1980.668	-1907.889	-1979.442	-1907.857
Degrees of Freedom	10	96	108	96	110
Note: a – age omitted from model; b – age dichotomized; RE – Random Effects; FE – Fixed Effects; N = 2,936					

Table 4.4 presents information criteria and model specifications for estimates of attitudes toward general government aid. Model 1 will continue to be excluded due to the randomized

Table 4.4 Comparison of APC Models of Perceptions of Government Aid

	1	2	3	4	5
Cohort		0.000127 (0.560)	0.000364 (0.113)	-0.000139 (0.877)	0.000666 (0.090)
Model Specifications					
Age RE?	No	Yes	No	No	No
Age FE?	No	No	No ^a	No	Yes ^b
Cohort RE?	Yes	No	No	No	No
Year RE	Yes	Yes	No	Yes	No
Year FE	No	No	Yes	No	Yes
Model Fit					
AIC	1917.126	1998.866	1951.689	2004.578	1953.215
BIC	1976.974	2573.407	2598.048	2579.119	2605.558
Log-likelihood	-948.5628	-903.4329	-867.8446	-906.289	-867.6074
Degrees of Freedom	10	96	108	96	109
Note: a – age omitted from model; b – age dichotomized; RE – Random Effects; FE – Fixed Effects; N = 2,936					

cohort effect. Interestingly, aside from Model 1, Model 2 has the lowest BIC compared to the other models for this dependent variable, which is inconsistent with findings from the dependent variables thus far. Notably, this is only roughly a 25-point difference with the BIC of Model 3, which also maintains the lowest AIC.

Table 4.5 Comparison of APC Models of Perceptions of Existing Government Assistance

	1	2	3	4	5
Cohort		0.00207 (0.000)	0.00165 (0.000)	0.00252 (0.137)	0.00123 (0.035)
Model Specifications					
Age RE?	No	Yes	No	No	No
Age FE?	No	No	No ^a	No	Yes ^b
Cohort RE?	Yes	No	No	No	No
Year RE	Yes	Yes	No	Yes	No
Year FE	No	No	Yes	No	Yes
Model Tests & Statistics					
AIC	2912.683	2970.255	2863.668	2959.147	2861.719
BIC	2972.531	3544.797	3516.012	3533.688	3514.063
Log-likelihood	-1446.342	-1389.128	-1322.834	-1383.573	-1321.86
Degrees of Freedom	10	96	108	96	109

Note: a – age omitted from model; b – age dichotomized; RE – Random Intercept; FE – Fixed Intercepts

Lastly, Table 4.5 presenting models on perceptions toward existing government assistance for Black Americans reflects the same pattern as that of Table 4.2. After overlooking Model 1 as the model with the lowest information criteria due to its randomization of any cohort effect, Model 3 presents the lowest AIC while Model 5 the lowest BIC, making the conclusion of best fit slightly unclear, as the Model 3 BIC is only a 2-point difference from that of Model 5.

While model assessment based on information criteria alone yielded majorly similar results across dependent variables, it is crucial to assess the effects of cohort across models to evaluate any substantive differences in the estimated effects based on the respective outputs.

Figure 4.1 shows the fixed-effects of birth cohort by scores on the index of racial perceptions and its components. Estimates from Model 1 are excluded because this model is based on random effects of cohort.

As can be seen in each of the figures, there are not starkly different outcomes across models on any of the dependent variables. In few of the figures, the earlier birth cohort effects exhibit a greater divergence than the outcomes in newer cohorts; this is important to note given the more contemporary focus of the present research questions. Given the remarkably close outcomes, specifically between Models 3 and 5, or those of note based on the IC assessment, it is challenging to reach a concrete conclusion. On average, based on a visual evaluation of all five outcome variables, the effect of cohort based on Model 3 seems to represent the middle-ground of all models. Although the varying specifications of age and period do not change the cohort effect drastically across models, they must nonetheless be theorized as they exist in their relationship to racial attitudes.

Given the above fact and the prior evaluation based on information criteria, Model 3, which includes a year fixed effect and omits any effect of age, is determined to be best fit. Because of mirrored patterns emerging from the selection processes among the racial inequity index and its components, Model 3 has been deemed the best fit. Across most all the dependent variables, Model 3 presented the lowest score for information criteria largely across AIC and BIC. Even more so, to reflect on the conservative nature of BIC and the greater number of parameters which are included in Model 3 show that even with penalization for such a large number of parameters, Model 3 maintains the lowest BIC and the best fit for the given data. This chapter has taken into consideration the dilemma associated with age-period-cohort collinearity and through exploring previously suggested solutions has determined that specifying fixed

period effects and omitting an age effect is the most appropriate variation of model to use going forward into the main analysis.

As can be determined from the findings visualized in Figure 4.1, birth cohort alone is not significantly associated with perceptions of racial inequity. Given this evidence, birth year is not an adequate measure to answer the present research questions. Within a framework of multicultural education and in reference to the previously described periodization outlined in Chapter Three, I argue that operationalizing cohorts in context of before and after the institutionalization of multicultural education will provide further insight into changing perceptions of racial inequity.

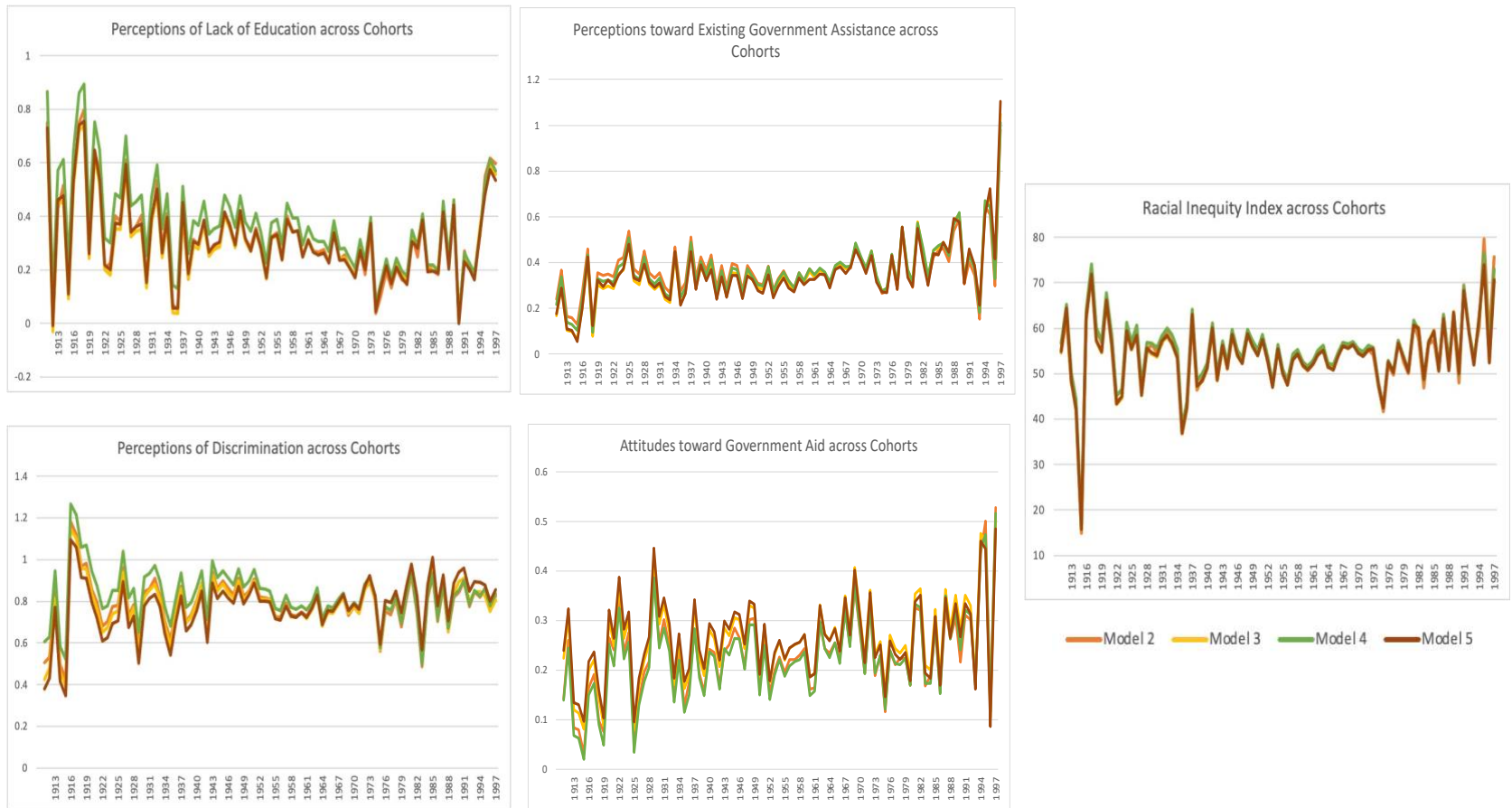


Figure 4.1 Perceptions of Racial Inequity across Cohorts

CHAPTER 5

THE EFFECTS OF COHORT, EDUCATION, AND REGION ON RACIAL PERCEPTIONS

Over the years, research on racial attitudes has highlighted how educational attainment induces more progressive racial attitudes in the United States (Bobo & Kluegel 1997; Kuppens & Spears 2014; Wodtke 2018). While these studies show educational attainment is positively associated with improving racial attitudes, it is unclear how educational attainment impacts perceptions of racial inequity in the United States. Most studies have proven a link between educational attainment and decreased levels of explicit, overt discrimination, while the effect on implicit biases and prejudice has not demonstrated such a distinct association. In order to more intricately understand the nuanced association between educational attainment and racial attitudes, this study asks more specifically what the relationship is between educational attainment and *perceptions of racial inequity* - an individual's acknowledgement and understanding of structural disadvantages experienced by Black Americans. Perceptions of racial inequity have lacked empirical attention in the literature but are central to understanding racial attitudes among White Americans and how to make improvement towards racial justice in the United States.

In analyzing the relationship between the institution of education and its effect on perceptions of racial inequity, I examine changes in racial perceptions across cohorts of White Americans. More specifically, I examine the effects of multicultural education cohorts on racial perceptions among White Americans. Starting in the 1960s, reform efforts were implemented to create more equitable learning experiences for students and to improve race relations (Banks 1993b). While many studies explore periodic effects on racial attitudes (Steeh & Schuman 1992; Welch & Sigelman 2011), there has not been notable work in understanding the effect of

generational replacement on racial attitudes. The generational effect assumes that a generation gets older and begins to die off, it is continuously replaced with a younger generation with gradually changing ideologies (Abramson & Inglehart 1986). Based on the null finding in Chapter 4, this study is centered on the following question: what is the effect of cohort replacement on perceptions of racial inequity following the implementation stages of multicultural education in the United States? Does this cohort effect explain the general trend toward progressive perceptions of racial inequity among young White Americans?

Such questions are essential to answer, particularly in relation to educational reform. In context of contemporary debates on the inclusion of material around racial injustice in public schooling, specifically concepts from Critical Race Theory (Delgado & Stefancic 2017), making sense of the effect of education in its current form on how students perceive of racial inequity is vastly important for moving forward with reforming public education in a way that is benefiting the wellbeing of society as a whole; with greater acknowledgement and recognition of disadvantages that marginalized communities face, the greater the progressive force of advocacy and justice that will come with a new generation of adults.

THE CURRENT STUDY

The Cohort Effect of Multicultural Education

Perceptions of racial minorities and racial equity among White Americans have been improving over time alongside cultural and systemic changes pertaining to race relations. As shown in Figure 5.1, the proportion of respondents who agreed that housing, income, and job differences between Black and White Americans is due discrimination and lack of education increased starkly. Even more so, the proportion of respondents who agreed that existing government assistance to Black communities is not sufficient rose tremendously among

respondents born after 1980 as did the proportion of respondents in support of government aid to Black communities in general. Combining all these indicators into a compose score shows the average respondent has become increasingly progressive in their perceptions of racial inequity, particularly among respondents born after 1980.

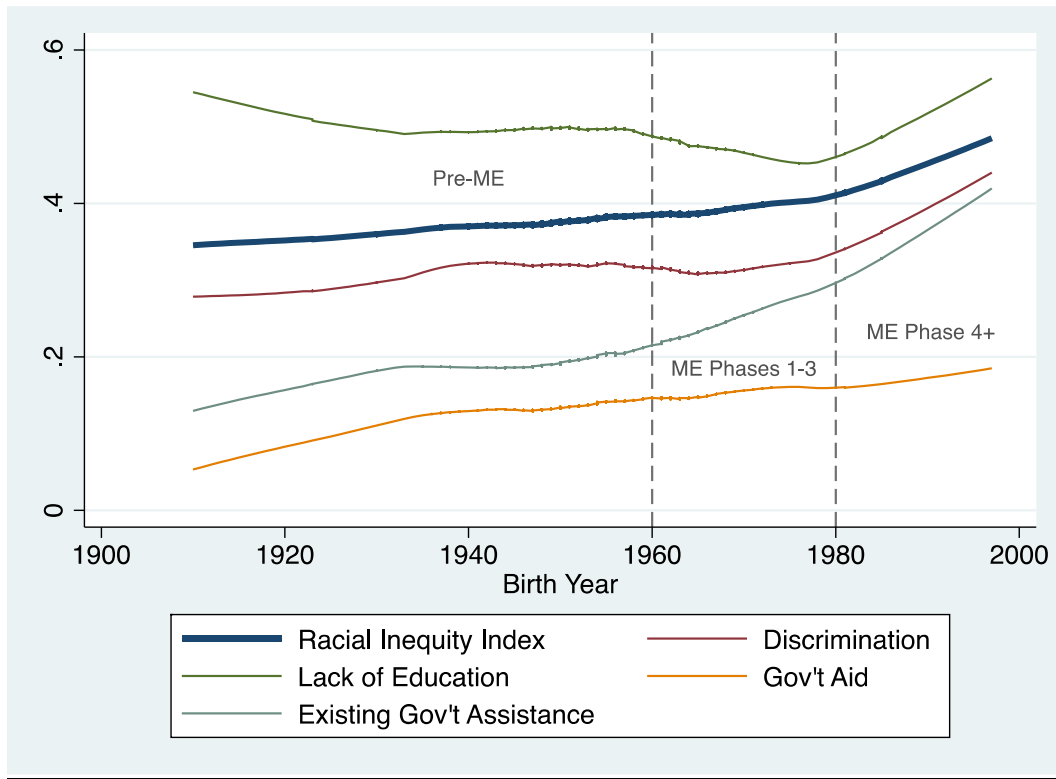


Figure 5.1 Perceptions of Racial Inequity among White American Cohorts
Source: General Social Survey (1986-2018)

The present study account for this cohort effect on perceptions of racial inequity with the introduction and development of multicultural education in the American educational system (Steeh & Schuman 1992; Okoye-Johnson 2011; Welch & Sigelman 2011). The present study anticipates that such institutional changes partially accounted for through multicultural education have worked to generally improve perceptions of racial inequity among White Americans. Assuming an effect of generational replacement (Abramson & Inglehart 1986). As new cohorts of children enter into the institution of public education with the institutionalization of

multicultural education following Phases 4 and 5, perceptions of racial inequity will progress with such reforms. As the new generations of children grow older, societal levels of acknowledgment of racial inequity will improve among White Americans following improved learning conditions made to facilitate progressive racial attitudes. Therefore, I expect the following:

H1: White Cohorts in Phase 4 and 5 of multicultural education reform will exhibit greater acknowledgement of structural disadvantages to Black Americans compared to Pre-ME and Phase 1-3 ME cohorts.

Educational Attainment, Multicultural Education, & Racial Perceptions

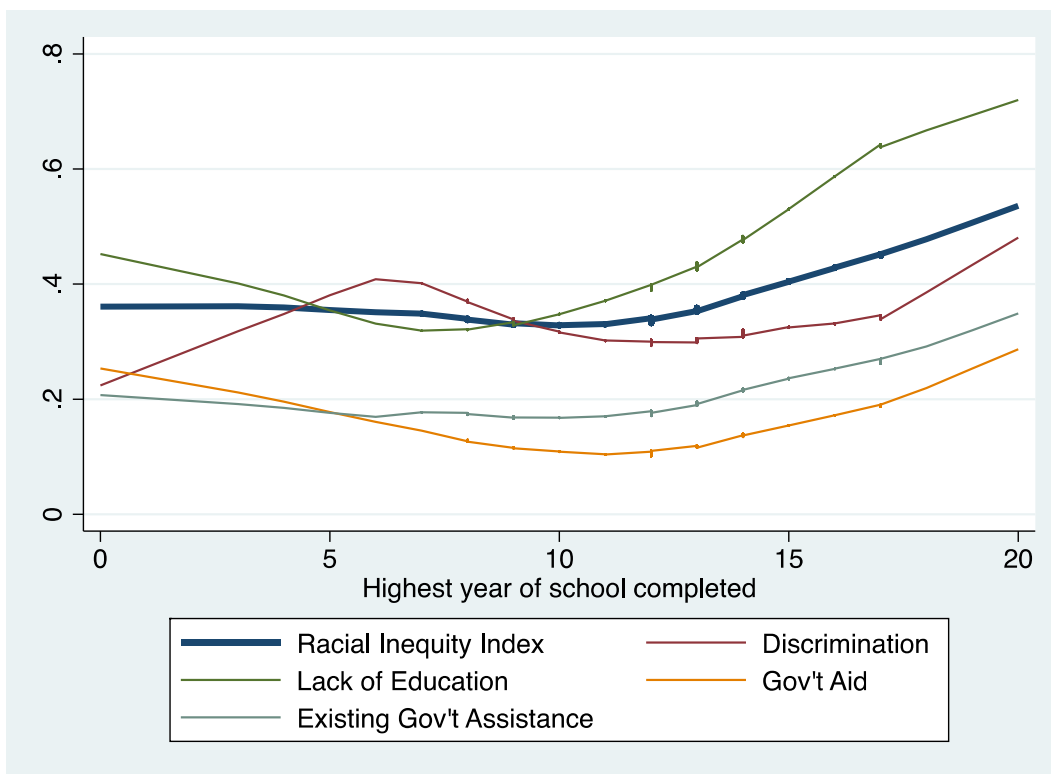


Figure 5.2 Perceptions of Racial Inequity across Levels of Education
Source: General Social Survey (1986-2018)

Expanding on the findings of Bobo and Kluegel (1997) and Kuppens and Spears (2014), the present study examines the effects of educational attainment on perceptions of racial inequity. Based on previous research, I anticipate respondents with higher educational attainment

to exhibit more progressive racial perceptions (Bobo & Kluegel 1997; Kuppens & Spears 2014; Wodtke 2018). Preliminary evidence of this association is presented in Figure 5.2. While there is not a clear pattern in racial perceptions in levels of education below a high school degree, across all indicators, perceptions begin to improve around the level of high school degree attainment (roughly 12 years).

It is widely proposed that increased engagement with the institution of public education broadens an individual's perspective of the world; through the continually introduction of new content and information about society and history, progressing with depth with every additional year of educational experience, higher educational attainment affects and individual's worldview in several ways. I suspect that with increasingly new and enlightening information on the social world and race relations, racial perceptions change. As such, the present study hypothesizes the following:

H₂: Educational attainment is positively associated with acknowledgement of structural disadvantages toward Black Americans among White Americans.

Given this anticipated relationship between educational attainment and perceptions of racial inequity, the present analysis is interested in how the introduction of multicultural education into public education expectations affects the association between educational attainment and racial perceptions. Building off of Oyoke-Johnson's (2011) findings of the positive effect of multicultural education on racial attitudes, the following analysis anticipates that this positive effect is amplified with additional years of education. The shift in intention and purpose behind teaching practices and content as the fourth phase of multicultural education institutionalized tenets of equitable pedagogy, content integration, and prejudice reduction, it is reasonable this form of education further intensifies education's positive effect on perceptions of

racial inequity (Banks 1993a). As an individual is increasingly exposed to racially diverse and equitable material and environments, acknowledgement and perception of racial inequities of the social world should be stronger compared to the educational experience of generations prior.

Therefore, I anticipate the following:

H3: The positive association between educational attainment and perceptions of racial inequity is amplified in the post-stage four ME cohort of White Americans.

Southern Socialization, Multicultural Education, & Racial Perceptions

As discussed in Chapter 2, theories of socialization argue the historical and political contexts of a child's learning environment impacts racial attitudes. When considering determinants of racial attitudes and perceptions, regional socialization is invaluable to consider given the history of the United States, particularly the history of Black slavery in the Southern states of the U.S., and the persistent racialized political and cultural contexts (Kuo 2019).

Although racism pervades numerous facets of the nation, stagnant policy and ideological shifts toward racial egalitarianism have persisted the most explicitly in Southern states. Because of the deep history of unequal race relations in the Southern U.S., it has been suspected and proven stagnant in improving racial attitudes compared to the rest of the nation (Quillian 1996).

Although Quillian (1996) determined that this difference is not due to education, these findings have aged. The present study analyzes this relationship contemporarily, in the context of contemporary reforms in education.

Evidence of an overall lower acknowledgement of racial inequity among Southern White respondents is evident in Figure 5.3. Among all five indicators of perceptions of racial inequity used presently, respondents who reported residing in the South at the age of 16, on average, have lower scores compared to every other region of the U.S. Because of notably higher levels of

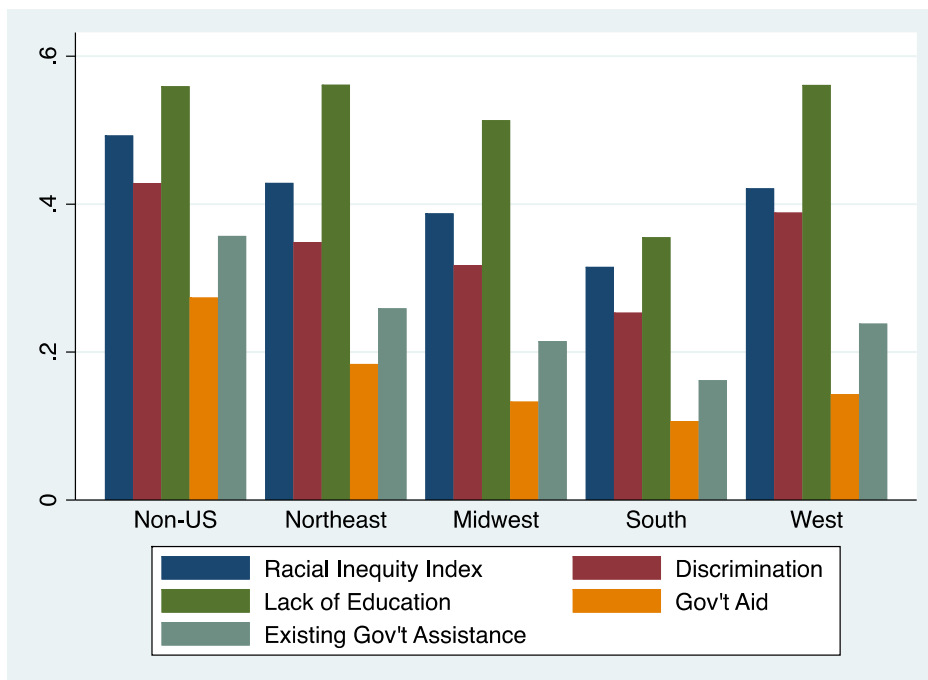


Figure 5.3 Perceptions of Racial Inequity Across U.S. Region
Source: General Social Survey (1986-2018)

discrimination and legitimation of unjust policy and resource distribution in the South, born out of a long history of racial injustice, perceptions of racial inequity remain much lower than in the rest of the country where discrimination and injustice lack as much normalization. Based on this evidence, the present study hypothesizes that:

H₄: White respondents who were living in the South at the age of 16 will have generally lower acknowledgement of structural disadvantages to Black Americans compared to White respondents who resided outside of the South at age 16.

Additionally, I content that the institution of education also is reflective of resistant policy and ideological upgrades. What is broadly recognized as a positive relationship between educational attainment and racial perceptions may be diminished in context of a less just environment of socialization. Given the stagnant cultural and political contexts of the South, the present study anticipates a reflection of such in education and the learning experience for students in the South:

H5: The association between educational attainment and acknowledgment of structural disadvantage of Black Americans will be suppressed among White Americans who lived in the South at the age of 16.

Relatedly, although multicultural education was implemented as a reform effort to educational inequity across the nation. Despite any efforts to improve racial attitudes and move toward equitable learning environments, if implemented in a content historically defined by unjust race relations and heightened discriminatory ideologies and behaviors, the positive impact of such reform may not be as powerful as elsewhere in the country. As such, it is intelligible that, while within the context of southern socialization and its negative effect on perceptions of racial inequity in general, being in more recent cohorts, those exposed at higher levels to multicultural education, mitigates the negative association. It is suspected that the negative effect of southern adolescence on racial perceptions is suppressed among respondents born after the 1980 because of educational reform efforts implemented to reduce prejudice, integrating racially diverse and inclusive content, and promote equitable pedagogy (Banks 1993a).

Given the previously described context of the South, the present study anticipates the following:

H6: The negative association between southern adolescence and acknowledgement of structural disadvantages to Black Americans is suppressed in the post-stage four ME cohort of White Americans.

ANALYTICAL STRATEGY

The hypotheses described above are tested in two stages. In the first stage, I examine the bivariate association between the focal covariates and indicators of perceptions of racial inequity. In the second stage, I estimate a series of multivariate regression models designed to account for

the APC problem. This previous empirical chapter estimated the information criteria and outcome differences for five models based on constraining on age, period, and cohort with random and fixed effects. As discussed in Chapter 4, the model with period fixed-effects and omitting age is preferred because of its better fit with the data. Accordingly, I use the following model to estimate the effects of multicultural education cohort, educational attainment, Southern socialization on perceptions of racial inequity:

$$(1) Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \sum \beta_k \gamma_{kit} + Z_t + \varepsilon_{it}$$

Equation 1 shows the period fixed-effect model of racial perceptions and components. Y is respondent i 's score on the perception of racial inequity or agreement with the following statements in survey year t : differences in housing, income, and jobs among Black and White Americans are due to discrimination; differences in housing, income, and jobs among Black and White Americans are due to lack of education; the government should assist Black Americans; existing government aid toward Black Americans is insufficient. In the above equation, X_1 represents educational attainment, X_2 represents multicultural education cohort, and X_3 indicates Southern adolescence. The final component β_k is a vector of coefficients for k vector of control covariates. This model addresses the age-period-cohort dilemma by excluding any observation of age and including a vector of fixed intercepts (Z) for each year t of the GSS to act as a restraint on any conflation between year and cohort that may be present in the data.

I also utilize the following model to estimate the interactions effects between the focal covariates:

$$(2) Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{1it} * X_{2it} + \sum \beta_k \gamma_{kit} + Z_t + \varepsilon_{it}$$

Equation 2 shows an example interaction model. In the first iteration of this model, X_1 represents educational attainment while X_2 represents multicultural education cohort. In the second iteration

of this model, X_1 represents educational attainment while X_2 represents southern adolescence. Finally, in the last iteration of this interaction model, X_1 represents Southern adolescence while X_2 represents multicultural education cohort.

RESULTS

Bivariate Analysis

In the first stage of the analysis, I examine the bivariate associations between multicultural education cohorts and racial perceptions. Table 5.1 presents estimates of the zero-order correlations between the covariates and outcomes of the study. Based on these results, a generally positive, significant association is present between educational attainment and acknowledgement of structural inequity against Black Americans ($p < 0.05$). In fact, both the racial inequity index and its components are associated positively with educational attainment, although the associations appear weak. Relatedly, the association between Southern adolescence and perceptions of racial inequity across all five dependent variables is negative and significant. While these results mirror anticipated associations, the magnitude of these associations are miniscule, although such small correlations may be attributable to differences in levels of measurement. Specifically, Pearson correlations tend to under-estimate the magnitude of the associations with non-continuous variables.

As seen in Table 5.1, the correlations between the most recent multicultural education cohort and perceptions of racial inequity holds some nuance. The most recent multicultural education cohort and the perceptions of racial inequity index are associated positively and significantly, although not of a large magnitude. Similarly, perceptions of discrimination and perceptions of existing government assistance are associated with the most recent multicultural education cohort positive and significantly. Notably, no significant associations are found

Table 5.1 Correlations of Dependent Variables & Covariates

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Education	1.00										
(2) Southern Adolescence	-0.093*	1.00									
(3) Political Views	-0.11*	0.061*	1.00								
(4) Respondent Income	0.27*	-0.033	0.065*	1.00							
(5) Female	0.044*	-0.007	-0.10*	-0.22*	1.00						
(6) Recent ME Cohort	0.004	0.025	-0.056*	-0.089*	-0.006	1.00					
(7) Racial Inequity Index	0.21*	-0.16*	-0.32*	0.004	0.073*	0.063*	1.00				
(8) Perceptions of Discrimination	0.069*	-0.090*	-0.19*	-0.043*	0.078*	0.046*	0.67*	1.00			
(9) Perceptions of Education	0.22*	-0.17*	-0.19*	0.054*	0.056*	0.010	0.66*	0.32*	1.00		
(10) Perceptions on Gov't Assistance	0.12*	-0.063*	-0.26*	0.017	0.023	0.026	0.60*	0.33*	0.26*	1.00	
(11) Perceptions on Existing Gov't Aid	0.12*	-0.084*	-0.23*	0.010	0.028	0.082*	0.64*	0.32*	0.29*	0.35*	1.00

Note: N = 2,936; * p < 0.05

between the most recent multicultural education cohort and perceptions of education and government assistance in general. However, I also examine the association between multicultural education cohorts and perceptions of racial inequity by estimating and testing the mean differences of perceptions across the cohorts. When evaluating mean comparisons across multicultural education cohorts, as shown in Table 5.2, a pattern begins to emerge.

Overall, there is a general positive increase in the mean perceptual values as multicultural education progresses. While the mean perceptions of discrimination and lack of education do not increase in-between the introduction of multicultural education and the implementation of the first three phases, these are not notable shifts. On the other hand, on average, perceptions of racial inequity on the index improved from the pre-multicultural education cohort (37.13) to the cohort of multicultural education phases 1-3 (39.18), but even

Table 5.2 Perceptions of Racial Inequity by Multicultural Education Cohorts (ME)

	Racial Inequity Index	Discrimination	Lack of Education	Gov't Aid	Existing Gov't Assistance
pre-ME	37.13	0.32	0.50	0.13	0.18
SE of mean	0.66	0.011	0.012	0.0083	0.0095
n	1667	1667	1667	1667	1667
ME phases 1-3	39.18	0.31	0.46	0.15	0.25
SE of mean	0.82	0.014	0.015	0.011	0.013
n	1063	1063	1063	1063	1063
Post-ME Phase 4	44.56	0.40	0.50	0.17	0.34
SE of mean	1.99	0.034	0.035	0.027	0.033
n	206	206	206	206	206
F-ratio	7.63**	3.33*	2.17	1.99	17.74**

Note: * p < 0.05, ** p < 0.005

more substantially improved on average among the post-phase 4 multicultural education cohort (44.56); what was roughly a 2-point jump after the introduction of multicultural education turned into over a 5-point increase after its institutionalization.

Following a similar pattern, perceptions of discrimination did not change substantially between the pre-ME cohort (0.32) and the ME phases 1-3 cohort (0.31), but the post-phase 4 multicultural education cohort noticeably improved on this measure, as well (0.40). The last significant difference in mean comparison lies in perceptions of existing government assistance across multicultural education cohorts; following the same pattern, improvements emerged following the pre-multicultural education cohort (0.18) into the multicultural education phases 1-3 cohort (0.25) but improved even further following the institutionalization of multicultural education after the fourth phase (0.34).

Additionally, an F-ratio test suggests that all of these noted mean differences are significant ($p < 0.05$). Such findings may suggest that perceptions of existing government aid as insufficient and perceptions of discrimination are most associated with multicultural education and may be driving the association between multicultural education and the racial inequity index. The multivariate analysis to follow tests these associations while controlling for confounders in order to reduce the likelihood of spuriousness in the associations between the focal variables and measures of racial perceptions. The analysis to come utilizes an indicator variable for whether the respondent is in the fourth phase of multicultural education reform (1980 cohort and beyond), given that this analysis suggested the most distinctive change in perceptions following this junction in time.

Multivariate Analysis

Based on the evidence in the first stage of analysis, I estimated a series of multivariate regression models to measure the *partial* associations between the focal covariates and perceptions of racial inequity. Table 5.3 shows the estimated effects of the covariates on the racial perception index and the indicators of racial perceptions. Model 1 shows a positive effect of being in the most recent multicultural education cohort on the racial inequity index ($p < 0.05$). Specifically, the average score of the most recent multicultural education cohort is

Table 5.3 Models of Perceptions of Racial Inequity with Year Fixed-Effects

	(1) Racial Inequity Index	(2) Discrimination	(3) Lack of Education	(4) Gov't Aid	(5) Existing Gov't Assistance
Youngest ME Cohort	4.811* (2.12)	0.0639 (1.55)	0.0592 (1.41)	0.0343 (1.09)	0.0947* (2.48)
Education Level	1.552*** (7.48)	0.0119*** (3.37)	0.0318*** (7.81)	0.0100*** (3.42)	0.00992** (3.14)
Southern Adolescence	-8.934*** (-8.02)	-0.0915*** (-4.57)	-0.164*** (-7.69)	-0.0399** (-2.83)	-0.0739*** (-4.60)
Female	1.653 (1.57)	0.0486* (2.46)	0.0354 (1.72)	0.0111 (0.77)	0.0132 (0.79)
Conservative	-5.312*** (-13.83)	-0.0513*** (-7.50)	-0.0530*** (-7.58)	-0.0600*** (-11.13)	-0.0602*** (-10.19)
Log-income	-0.908 (-1.79)	-0.0276** (-2.87)	0.0121 (1.21)	0.00207 (0.31)	-0.00495 (-0.59)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Constant	47.91*** (8.78)	0.655*** (6.51)	0.210 (1.96)	0.241*** (3.31)	0.339*** (3.82)
R ²	0.165	0.061	0.107	0.086	0.093

Note: $n = 2936$; t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

predicted to be about 5 points higher than older cohorts. However, I find this effect was only significant in Model 5. Model 5 shows that the most recent multicultural education cohort displays greater agreement with the statement that the government is not providing enough assistance to Black communities ($p < 0.05$). Specifically, a respondent's likelihood of reporting that the government is currently spending too little on assistance toward Black Americans was almost 10% higher in the most recent multicultural education cohort compared to older cohorts.

Based on these findings alone, Hypothesis 1 is supported. It can be concluded that there is evidence of a positive effect of being in the most recent multicultural education cohort on perceptions of racial inequity, which was expected to be the case as educational practices and curricula were improving at this junction in time. Importantly, this conclusion is not supported for every indicator of racial perception. Rather, it appears that multicultural education cohort is positively impacting student's perceptions on existing government assistance and its insufficiency, which is contributing to the overall rise in perceptions of racial inequity and scores on the racial inequity index.

The models in Table 5.3 also show the positive effect of educational attainment on perceptions of racial inequity and its components. Across all of the models, educational attainment a positive and significant effect on perceptions. In Model 1, I find that for every year of additional education, the respondent's score on the index of perceptions of racial inequity increased by 1.5 points ($p < 0.001$). The likelihood of a respondent to report positively charged perceptions toward improving racial inequity and the existence thereof increases across the indicators of perceptions of racial inequity which make up the index compared to cohorts prior. In Model 2, I find for every additional year of education, a respondent's likelihood of perceiving discrimination as a cause of unequal income, job, and housing opportunities to Black Americans

increases by 1.2% ($p < 0.001$). In Model 3, for every additional year of education, a respondent's likelihood of perceiving lack of education as a cause of unequal income, job, and housing opportunities to Black Americans increases by 3.2% ($p < 0.001$). In Model 4, for every additional year of education, a respondent's likelihood of perceiving existing government assistance to Black communities as insufficient increases by 1% ($p < 0.001$). It is safe to deem these results supportive of Hypothesis 2, which anticipated a positive effect of education on perceptions of racial inequity.

These models also indicate an indisputable negative effect of Southern adolescence on the index of perceptions of racial inequity and its components. Based on the findings from Model 1 in Table 5.3, respondents who were living the South at the age of 16 have a lower average score on the index of perceptions of racial inequity by almost 9 points compared to respondents from non-Southern regions ($p > 0.001$). As shown in Models 2 and 3, respondents who resided in the South at the age of 16 are 9.2% less likely to report that discrimination is a cause of inequality between Black and White Americans ($p > 0.001$), while they are 16.4% less likely to report that lack of education is a cause of such inequality ($p > 0.001$). Relatedly, as demonstrated in Models 4 and 5, respondents who resided in the South at the age of 16 are 4% less likely to support any government aid of Black Americans ($p > 0.01$) and 7.4% less likely to report that the government is spending too little on this community ($p < 0.001$). These findings are supportive of Hypothesis 4, concluding that there is in fact a negative association between Southern adolescence and perceptions of racial inequity among White Americans.

An important consideration is which of these covariates exerts the strongest effect on racial perceptions. Figure 5.4 shows the standardized coefficients of the covariates on the

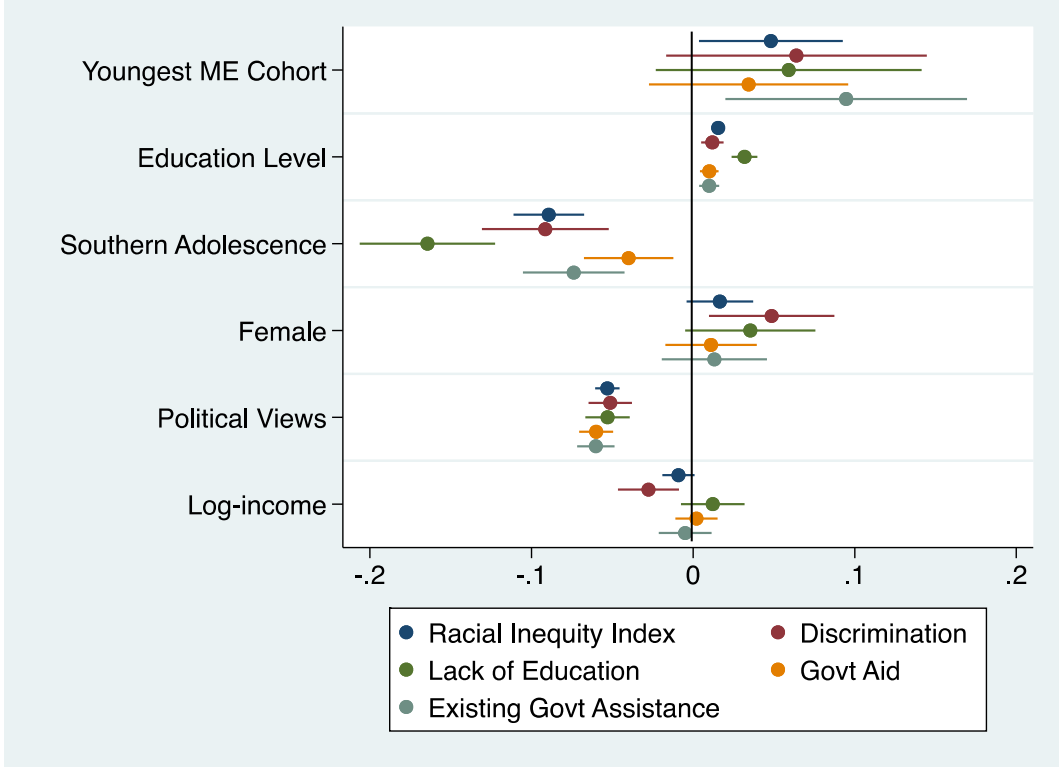


Figure 5.4 Standardized Coefficient Plot of Dependent Variables and Covariates
Source: General Social Survey (1986-2018)

index of perceptions of racial inequity and its components to determine the most salient factors behind White perceptions of racial inequity. For the index of perceptions of racial inequity, Southern adolescence exerts the largest effect compared to all other covariates. Again, for perceptions of discrimination, Southern adolescence exerts the strongest effect.

On perceptions of lack of education, the greater impact again is exerted from Southern adolescence. This same trend is true for perceptions of government assistance and existing government insufficiencies. Figure 5.4 shows the importance of Southern adolescence in determining one's perceptions of racial inequity but underscores the importance of education on determining all covariates and one's multicultural education cohort on determining one's score on the index of perceptions of racial inequity and perceptions on existing government assistance as insufficient.

The next set of FEMs are shown in Table 5.4 and are designed to estimate and test the interaction between the most recent multicultural education cohort and a respondent's level of education. Surprisingly, I find the effect of educational attainment is not moderated by multicultural education cohort. This suggests that the effect of educational attainment on perceptions of racial inequity is statistically equivalent across the multicultural education

Table 5.4 The Conditional Effects of Multicultural Education Cohort and Educational Attainment on Perceptions of Racial Inequity with Year Fixed-Effects

	(1) Racial Inequity Index	(2) Discrimination	(3) Lack of Education	(4) Gov't Aid	(5) Existing Gov't Assistance
Youngest ME Cohort * Education Level	-0.453 (-0.56)	-0.00490 (-0.33)	0.00554 (0.36)	0.00764 (0.61)	-0.0103 (-0.69)
Youngest ME Cohort	11.14 (0.95)	0.132 (0.62)	-0.0182 (-0.08)	-0.0724 (-0.42)	0.239 (1.12)
Education Level	1.577*** (7.39)	0.0121*** (3.37)	0.0315*** (7.55)	0.00960** (3.21)	0.0105** (3.27)
Southern Adolescence	-8.946*** (-8.03)	-0.0916*** (-4.58)	-0.164*** (-7.69)	-0.0397** (-2.81)	-0.0741*** (-4.63)
Female	1.667 (1.58)	0.0488* (2.47)	0.0352 (1.71)	0.0109 (0.75)	0.0135 (0.81)
Conservative	-5.318*** (-13.84)	-0.0513*** (-7.51)	-0.0529*** (-7.56)	-0.0599*** (-11.10)	-0.0603*** (-10.21)
Log-income	-0.903 (-1.78)	-0.0276** (-2.86)	0.0121 (1.20)	0.00199 (0.30)	-0.00483 (-0.58)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes
Constant	47.55*** (8.66)	0.651*** (6.44)	0.214* (1.97)	0.247*** (3.36)	0.331*** (3.72)
R ²	0.165	0.061	0.107	0.086	0.093

Note: n = 2936; t statistics in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

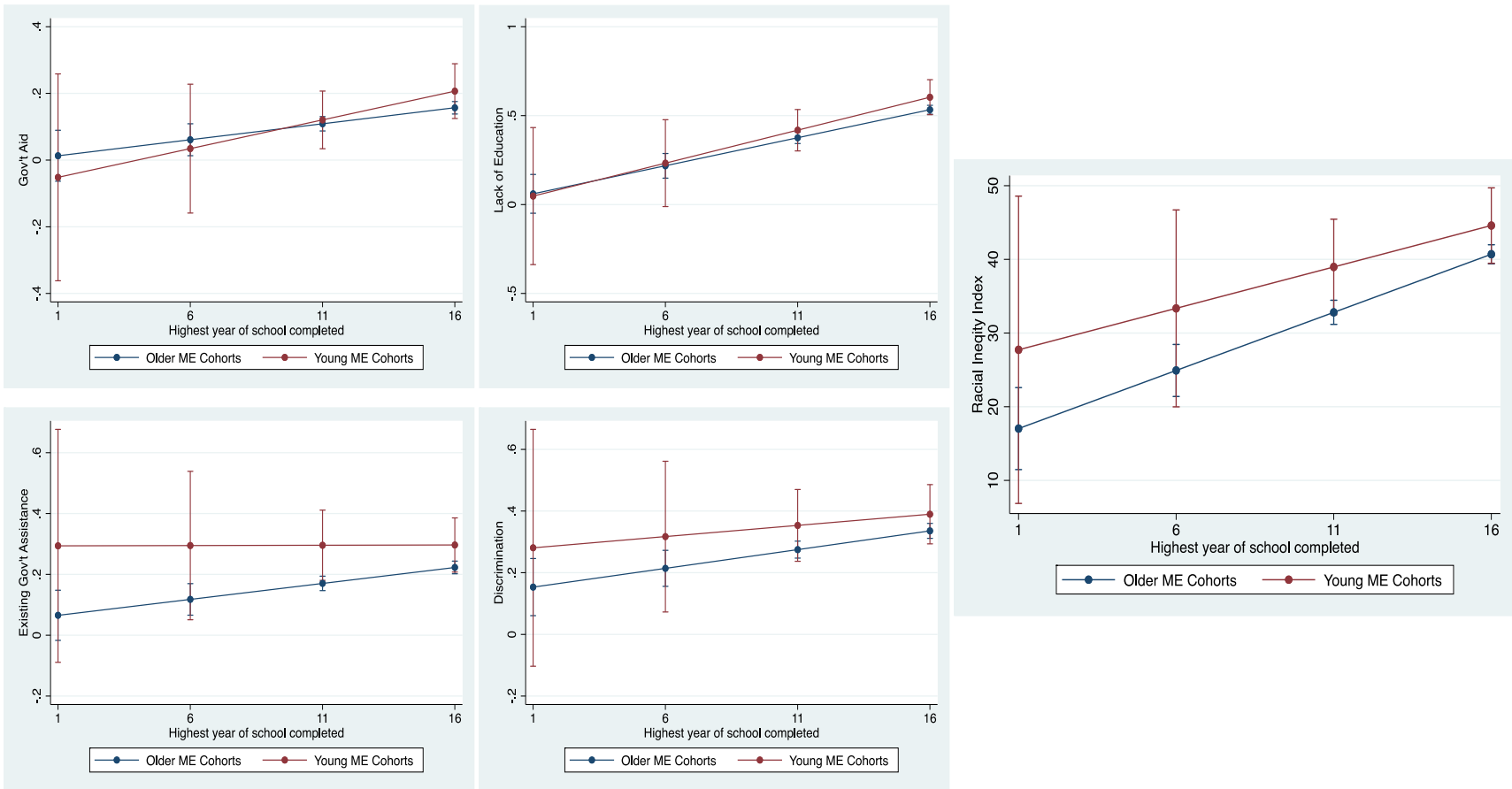


Figure 5.5 Marginal Effect of Educational Attainment by Multicultural Education Cohort

cohorts. For example, the coefficient for educational attainment shows an additional year of education increases racial perceptions by 1.6 units among respondents in early multicultural education cohorts ($p < 0.001$). The effect of education in the early multicultural education cohorts remains significant across all dependent variables. Figure 5.5 illustrates the constant effect of educational attainment across the multicultural education cohorts. Specifically, Figure 5.5. shows the marginal effects of educational attainment for old and young multicultural education cohorts. As measured in the Models 1-5 in Table 5.4, the estimated positive effect of educational attainment does not differ between cohorts.

Similarly, the models in Table 5.5 measure the interaction between Southern adolescence and the most recent multicultural education cohort did not yield any significant effects. When evaluating the coefficients of multicultural education cohort, shown in Models 1, 2, and 5, the effects of ME on the index of perceptions of racial inequity, perceptions of discrimination, and perceptions of existing government aid is positive and significant ($p < 0.05$) for non-Southern respondents. When evaluating the coefficients of Southern adolescence, or the effect of Southern adolescence in the early multicultural education cohorts, I find a significant negative effect across all dependent variables ($p < 0.05$).

As can be seen in the plotted predicted values in Figure 5.6, models using the racial inequity index, perceptions of existing government assistance, and perceptions of lack of education lack any demonstration of multicultural education cohort moderating the effect of southern adolescence. While the predicted values of each cohort using perceptions of government aid and discrimination appear to converge with one another for those with southern adolescence, these effects are not significant as can be seen by the overlapping confidence intervals. The effect of Southern adolescence is not statistically different across cohorts. From

these findings, Hypothesis 5 is not supported; these is lack of any support for a negative interaction between Southern adolescence and multicultural education cohort.

Table 5.5 The Conditional Effects of Multicultural Education Cohort and Southern Adolescence on Perceptions of Racial Inequity with Year Fixed-Effects

	(1) Racial Inequity Index	(2) Discrimination	(3) Lack of Education	(4) Gov't Aid	(5) Existing Gov't Aid
Youngest ME Cohort * Southern Adolescence	-1.692 (-0.40)	-0.109 (-1.46)	0.000662 (0.01)	-0.0384 (-0.67)	-0.0458 (-0.64)
Youngest ME Cohort	5.406* (1.96)	0.102* (1.99)	0.0589 (1.21)	0.0478 (1.16)	0.111* (2.32)
Education Level	1.551*** (7.47)	0.0118*** (3.34)	0.0318*** (7.81)	0.00999*** (3.41)	0.00989** (3.13)
Southern Adolescence	-8.782*** (-7.63)	-0.0817*** (-3.94)	-0.164*** (-7.45)	-0.0365* (-2.52)	-0.0698*** (-4.31)
Female	1.668 (1.59)	0.0496* (2.51)	0.0354 (1.72)	0.0114 (0.79)	0.0136 (0.82)
Conservative	-5.312*** (-13.83)	-0.0513*** (-7.50)	-0.0530*** (-7.58)	-0.0600*** (-11.12)	-0.0602*** (-10.19)
Log-income	-0.901 (-1.77)	-0.0272** (-2.82)	0.0121 (1.21)	0.00223 (0.33)	-0.00476 (-0.57)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Constant	47.82*** (8.75)	0.650*** (6.43)	0.210 (1.96)	0.239** (3.26)	0.358*** (4.30)
R ²	0.165	0.062	0.107	0.086	0.093

Note: n = 2936; t statistics in parentheses; * p < 0.05, ** p < 0.01, *** p < 0.001

Rather, the stagnant political and cultural contexts of the South around race and relations is not mitigated by the introduction of multicultural education. This also shows that on the index of

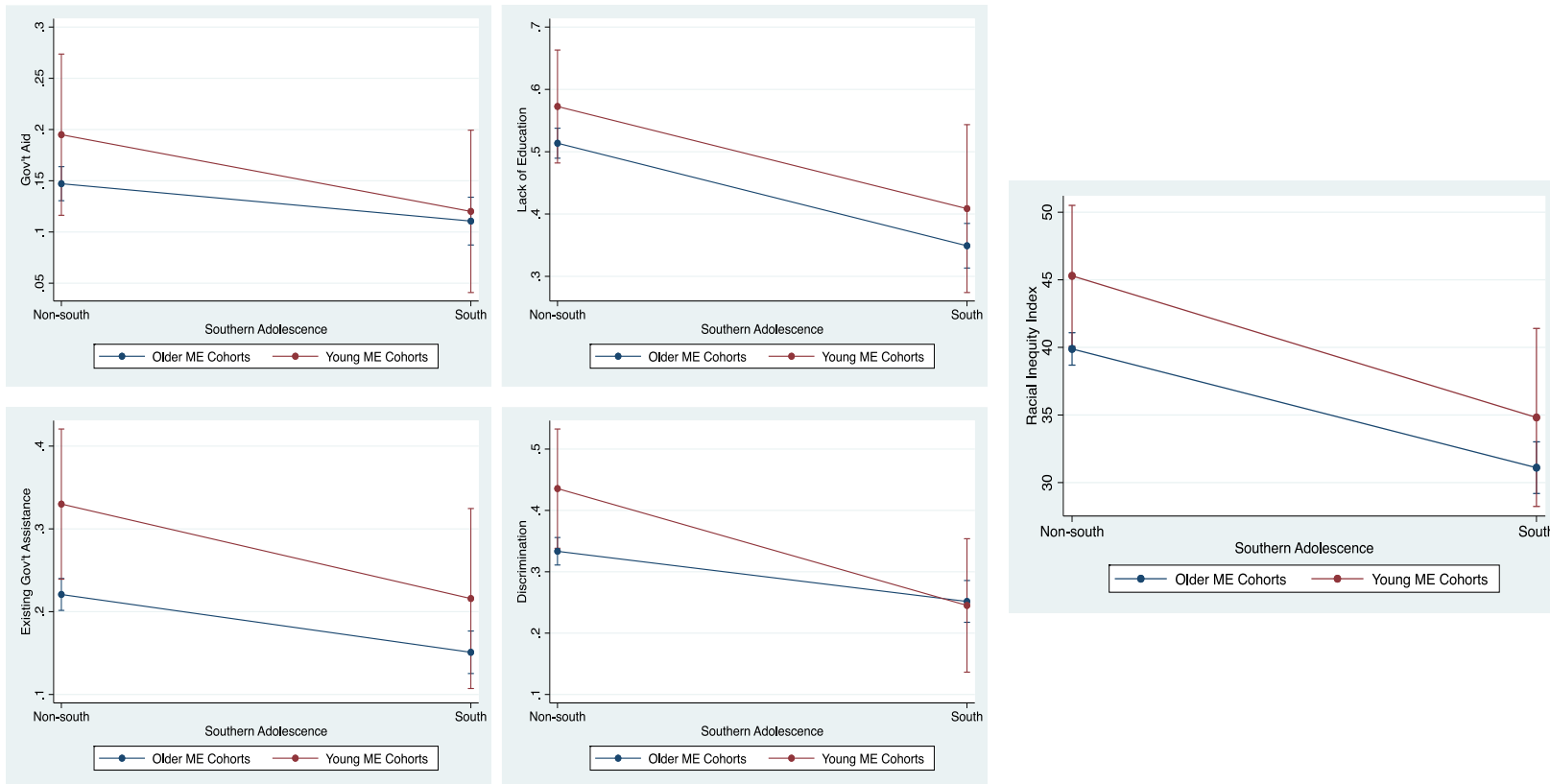


Figure 5.6 Marginal Effect of Sothern Adolescence by Multicultural Education Cohort

Table 5.6 The Conditional Effects of Educational Attainment and Southern Adolescence on Perceptions of Racial Inequity

	(1) Racial Inequity Index	(2) Discrimination	(3) Lack of Education	(4) Gov't Aid	(5) Existing Gov't Assistance
Education Level *					
Southern Adolescence	-0.320 (-0.75)	-0.00201 (-0.28)	-0.000645 (-0.08)	-0.00311 (-0.56)	-0.00690 (-1.11)
Youngest ME Cohort	4.787* (2.11)	0.0638 (1.55)	0.0591 (1.41)	0.0341 (1.08)	0.0942* (2.47)
Southern Adolescence	-4.553 (-0.76)	-0.0640 (-0.64)	-0.156 (-1.34)	0.00256 (0.03)	0.0204 (0.23)
Education Level	1.655*** (6.74)	0.0125** (2.95)	0.0320*** (6.71)	0.0110** (2.95)	0.0121** (3.18)
Female	1.660 (1.58)	0.0487* (2.46)	0.0354 (1.72)	0.0112 (0.77)	0.0133 (0.80)
Political Views	-5.294*** (-13.72)	-0.0512*** (-7.45)	-0.0529*** (-7.54)	-0.0599*** (-11.03)	-0.0598*** (-10.09)
Log-income	-0.915 (-1.81)	-0.0277** (-2.87)	0.0121 (1.21)	0.00201 (0.30)	-0.00509 (-0.61)
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes
Constant	46.46*** (7.85)	0.646*** (6.07)	0.207 (1.80)	0.227** (2.79)	0.329*** (3.67)
R ²	0.165	0.061	0.107	0.086	0.093

Note: n = 2936; *t* statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

perceptions of racial inequity and existing government aid especially, the effect of multicultural education is not overridden by Southern adolescence.

Lastly, the final set of models in Table 5.6 measure the interaction effect between Southern adolescence and education level and did not yield any significant effects, which can be

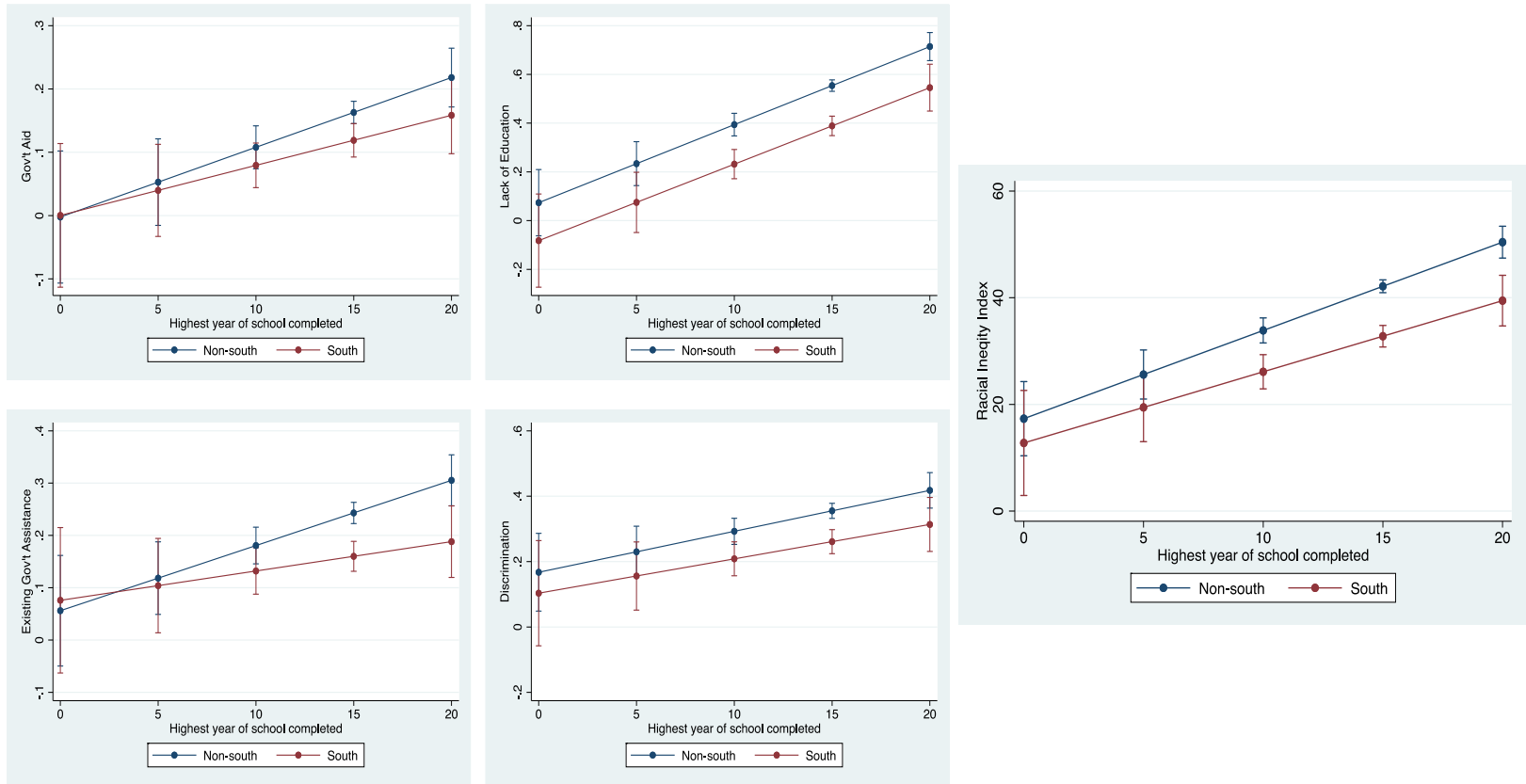


Figure 5.7 Marginal Effect of Educational Attainment by Southern Adolescence

visualized in the predicted values plotted in Figure 5.7. According to these models, the effect of education is the same in the South and all other regions; for example, the effect of education in non-Southern regions is 1.65 units for every additional year of education completed ($p < 0.001$), and this positive significant effect is evident across all dependent variables.

DISCUSSION & CONCLUSION

As previous studies have shown, educational attainment is an important factor in illuminating determining racial attitudes (Bobo & Kluegel 1997; Kuppens & Spears 2014; Wodtke 2018). The present study extends on this existing research by examining the association between educational attainment and perceptions of racial inequity. Additionally, I examined whether the effect of cohort may be implicated in the strong positive relationship known between educational attainment and racial attitudes. The present study does demonstrate that there is a strong association between educational attainment and perceptions of racial inequity and this association is not moderated by ME cohort.

However, to address the question of the existence of a cohort effect motivating this study, I investigated how the implementation of multicultural education impacted such perceptions of racial inequity. Being that multicultural education was created and implemented as a solution to inequitable experiences and learning processes across races, it was anticipated that its full embeddedness into public school curriculum and teaching practices would have a positive effect on White perceptions of racial inequity. The results of the present study confirmed the progressive improvement of perceptions of racial inequity among White Americans and supports an association between the most recent multicultural education cohort and improving perceptions. These findings support the theory of generational replacement as a factor motivating

the steady improvement of racial perceptions in White Americans. Growing up with multicultural education does in fact improve racial attitudes.

On the other hand, this effect does not moderate the effect of education on perceptions of racial inequity; the effect of education is the same across cohorts. This shows that any exposure to the multicultural education curriculum during a person's educational career improves racial perceptions. Accordingly, it demonstrates the utmost importance of multicultural education for reshaping racial attitudes in the United States.

Additionally, the present study confirmed a negative relationship between perceptions of racial inequity and adolescent socialization in the South. Southern socialization, because of stagnant political and cultural environments regarding racial inequity, is strongly associated with less acknowledgement of structural disadvantages and a desire to improve them. Contrary to the anticipated findings, this effect is not moderated by the implementation of multicultural education. The positive effect of education on perceptions of racial inequity is not impacted by Southern socialization, either.

These findings have interesting implications for how the role of education is to be made sense of moving forward in understanding the formation of racial attitudes. While formally understood as a determinant of racial attitudes, education as it's been refined with the intention of further improving racial attitudes has not amplified the positive effect of education on an individual's perception of race relations based on the present findings. Instead, it is likely that alternative influences toward racial attitudes have facilitated the generally improving perceptions of racial inequity. Although likely facilitated by the positive effect of education, a period effect more so than a cohort effect is attributable to the vasty improving perceptions of racial inequity, which is evident through the lack of significant findings pertaining to multicultural education

cohorts. The following chapter will discuss the implications of these findings and make suggestions for future research.

CHAPTER 6

DISCUSSION & CONCLUSION

Perceptions of racial inequity have been steadily across cohorts of White Americans with an increasingly more progressive understanding of racial inequality among Millennials and Generation Z. The research presented thus far has explored the relationship between educational attainment, cohort replacement, and their effects on perceptions of racial inequity, particularly within the framework of multicultural education (ME). Prior studies on racial attitudes have yet to investigate whether the introduction of multicultural education affected racial perceptions in the United States. This is important because the relationship is vital for understanding the nature of multicultural education and how this reform effort shaped views about race and racism. Being that multicultural education was implemented as an effort to improve inequitable experiences and learning experiences across races in public education, it is sensible to anticipate that its full embeddedness into curriculum and teaching practices would have a positive effect on White perceptions of racial inequity.

The present study utilizes a two-step approach for examining the cohort effect of racial perception. The first step entailed a thorough examination of approaches to modeling age, period, and cohort effects as they pertain to racial attitudes, which are a set of confounding variables that prior studies have neglected to empirically evaluate in relation to racial attitudes. Due to the inherently confounding nature of these time-sensitive variables, restraints must be placed within the presence of more than one of these variables which when modeled simultaneously naturally account for the other's effect (Ekstam 2021). Many studies have fixed this dilemma by omitting age effects, while others have broken the linear dependency of the three variables by including random and fixed effects (HAPC-CCREM) (Yang & Land 2006, 2008, 2013). Through the

assessment of five models with variations of such constraints, this research determined a model with period fixed-effects and omitted age was the most appropriate for estimating the cohort effect on racial attitudes.

The preliminary bivariate analysis established a positive relationship between multicultural education cohort and perceptions of racial inequity but illuminated some nuances within this relationship that motivated the subsequent multivariate analysis. Specifically, correlations and mean comparisons showed that ME cohort is associated with the index of perceptions of racial inequity and its components. However, these associations are possibly spurious because of confounding effects of independent variables, such as education, southern adolescence, gender, or political ideology. To address such possibilities, the subsequent multivariate analysis addresses these associations.

The multivariate analysis was based on estimating fixed-effects model for the racial inequity index and its components -perceptions of discrimination, perceptions of lack of education, perceptions of government aid, in addition to perceptions of existing government assistance. The first findings confirm one of the main hypotheses of the study: being in the most recent multicultural education cohort increases one's acknowledgement of racial inequity, although this effect is not significant across all indicators of perceptions of racial inequity. Rather, the results suggest that increasing perceptions of existing government assistance as insufficient to supporting Black Americans is significantly associated with the newest cohort of multicultural education.

Alternatively, perceptions of discrimination, lack of education, and government aid generally do not present significant associations. With these results in mind, multicultural education does not appear to reshape perceptions of discrimination or opportunities for

education, nor general support for government assistance for Black communities. Rather, multicultural education may be informing students of current insufficiencies within government aid to this community. Evidently, such a perception is not tied to perceiving of other disadvantages, like discrimination and lack of educational opportunities. Multicultural education has mattered as a framework assisting students, particularly White students, with beginning to illuminate governmental shortcomings.

Additionally, the results confirmed findings in the literature regarding determinants of racial attitudes. Educational attainment has a positive and significant partial association with perceptions of racial inequity (Bobo & Kluegel 1997; Kuppens & Spears 2014; Wodtke 2018). Southern adolescent socialization maintains a negative partial association with perceptions of racial inequity (Quillian 1996). These results support the anticipated findings, meaning that while higher education increases a respondent's perception and acknowledgement of racial inequity while growing up in the political and cultural context of the South decreases it.

I additionally estimated models with interactions between cohort, educational attainment, and Southern socialization. The results show multicultural education does not moderate the effect of educational attainment on perceptions of racial inequity. Put another way, contrary to the anticipated findings, multicultural education does not in fact improve the positive association between education and perceptions of racial inequity; the effect of educational attainment on racial perceptions does not change with the institutionalization of multicultural education.

Similarly, the results show the effect of multicultural education does not suppress the negative effect of southern adolescence on perceptions of racial inequity, meaning that the negative effect of Southern adolescence on perceptions of racial inequity is the same for both cohorts before and after the institutionalization of multicultural education. The last interaction

model analyzed an interaction effect between southern adolescence and educational attainment, which also lacked support for the anticipated findings. Southern adolescence does not significantly moderate the positive effect of education on perceptions of racial inequity. These findings underscore the central role that educational attainment plays in improving an individual's perceptions of racial inequity.

These findings illuminate interesting implications for the effect of multicultural education. Although generalizable suggestions may not be made based on the nature of the data, this analysis suggests that multicultural education is increasing White perceptions of existing government assistance as insufficient but lacking a significant effect on perceptions of broader disadvantages such as discrimination and lack of educational opportunities. Particularly interesting is the lack of a significant effect on perceptions of government assistance in general.

Based on these findings, multicultural education is making an impact by way of informing students of government insufficiencies in assisting Black communities in need. Importantly, this effect is not contingent on educational attainment or southern socialization. While educational attainment continues to improve perceptions of racial inequity among White Americans, this effect has not amplified with the introduction of multicultural education as one may anticipate. This suggests that the effect of education on perceptions of racial inequity has remained steady across cohorts; the increased exposure to alternative perspectives on society that links educational attainment with increased perceptions of racial inequity has maintained the same.

Traditionally, with higher levels of education have come increased unacceptance of society as it is because of a destabilization of normative structures in society through educational content. Although multicultural education was implemented with improving race relations in

mind, it did not significantly change this already positive partial association between educational attainment and perceptions of racial inequity. This suggests that although while both educational attainment and multicultural education separately improve racial perceptions, the exposure mechanism working toward improving perceptions of racial inequity through increased educational attainment is not the same mechanism improving these perceptions through multicultural education. Alternatively, rather than working through generational replacement, it may be concluded that general periodic changes occurring within and around education, a major change being the implementation of multicultural education, has increased acknowledgement of disadvantages to Black communities in the U.S.

Relatedly, multicultural education did not positively or significantly improve the negative effect of southern adolescent socialization on perceptions of racial inequity, meaning southern adolescence maintained the same effect across cohorts. Similarly, the positive effect of educational attainment on perceptions of racial inequity does not falter in accounting for the moderation of southern adolescence. These findings have interesting implications for future understandings of education's effect on racial attitudes. While overall, southern adolescence has a very large, significant effect on perceptions of racial inequity among White Americans, increased levels of education do not significantly impact this association, nor does the introduction of multicultural education. From these findings alone, it becomes clear that the political and cultural context of the South has extremely negative implications for perceptions of racial inequity, beyond which the institution of education alone can be of solution. Given the salience of Southern adolescence as a determinant which negatively impacts racial perceptions, major shifts in ideological foundations that premise socialization in the South must happen in

order to overcome the stifling effect the region has on individual's acknowledgment of the disadvantages endured by Black communities.

All findings taken together paint an illuminating picture of education as a determinant of racial attitudes. A cohort effect plays a role in the increased perceptions of racial inequity, but it may not be as closely tied to the introduction as multicultural education as one may hope to believe given the purpose of its implementation. While perceptions of racial inequity have steadily been increasing with new generations, there are likely other strong forces improving acknowledgment of racial inequity. It can be speculated, particularly based on the significantly negative relationship southern adolescence has with perceptions of racial inequity, that broader political and cultural contexts are making improvements in these perceptions. What may be concluded based on these findings that rather than generational replacement improving perceptions of racial inequity, it may instead be periodic effects, or shifts in the wider societal context, that is illuminating instances of racial inequity in the eyes of White Americans.

Such findings offer a multitude of avenues for future research. Primarily, based on the limitations of the General Social Survey (GSS), a subsequent analysis may improve upon and build off of the methodologies presented in this research. Although the GSS is a nationally representative dataset, because of the sampling filters used presently, the sample of White respondents was relatively small and possibly lacking representativeness as a result. The smaller sample size can theoretically reduce statistical power, and thus future research should strive to further optimize sample size and representation.

Relatedly, the scope of this research was focused on perceptions of racial inequity among solely White respondents. Understanding how the privileged, dominant racial group in the country perceives Given the present findings, future research may endeavor to make sense of

racial perceptions across a diverse pool of races. Although this would change the research questions to be answered, such an analysis would illuminate patterns of change in perceptions of racial inequity across the wider population as well as possibly improve upon the significance of the associations determined in this study.

Another major caveat to be acknowledged in this research is the lack of GSS variables questioning a respondent's perceptions and attitudes of races outside of Black Americans. While the GSS is cited as a very frequent and honorable source of attitudinal data, it has not routinely asked questions aimed toward the attitudes towards races outside of Black Americans. Parallel questions exist regarding attitudes of Asian Americans and Latin Americans, although such variables exist in less than four years of data collection, inhibiting cohort analysis. This limitation is a call for the GSS to expand their racial attitude variables to be more diverse, inclusive, and reflective of the increasingly diverse population of the United States. Only following such improvements can a comprehensive picture be painted of trends in perceptions of racial inequity as they have changed with new generations.

Lastly, to understand the true effect of multicultural education, the literature would benefit from a direct analysis of an individual's contact with multicultural education and perceptions of racial inequity. While this has been done and suggested a positive association in racial attitudes generally (Oyoke-Johnson 2011), multicultural education's effect on perceptions of racial inequity specifically is clearly nuanced based on the present findings, and future research should aim to empirically understand this complicated relationship.

Despite these limitations, the results of this research have confirmed the need for educational content and experiences which promote equality in race relations and critical understandings of the social world. Multicultural education has initiated an improvement in

uncovering and recognizing racial inequities, particularly through illuminating existing insufficiencies of the government; for non-southern students, acknowledgement of discrimination as a facet contributing to racial inequity is associated with multicultural education, as well. Given that evidence presented here supports multicultural education as a mechanism of improvement of racial perceptions.

This point is vital to moving forward with educational reform. For instance, the ongoing debate on the inclusion of Critical Race Theory (Delgado & Stefancic (2017) in public education can be partially informed by these findings. Many parents and administrators are currently fighting to diminish children's engagement with the reality of inequality that pervades the U.S. As suggested presently, education plays a central role in the development of racial perceptions. While educational attainment works independent of educational content and is a crucial determinant of an individual's perceptions of racial inequity, the importance of curriculum and the opportunity to enlighten students of structural inequities should not be overlooked. The opportunity presented in public education to highlight disadvantaged communities and the source of inequity is an essential point of contact which can inform a student's worldview and the ways one engages with and navigates the social world, one which is gearing toward improving race relations. This proof that multicultural education has had a critical impact on perceptions of racial injustice underscores the importance of perpetuating this kind of content in public education to raise a generation of children susceptible to understanding and making changes necessary for all races to live equitably.

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