

Illinois State University

ISU ReD: Research and eData

Theses and Dissertations

6-8-2020

The Impact Of Colorblind Racial Attitudes And Implicit Bias In Evaluations Of Student Behavior

Khyati Verma

Illinois State University, khyatiiverma@gmail.com

Follow this and additional works at: <https://ir.library.illinoisstate.edu/etd>



Part of the [Psychology Commons](#)

Recommended Citation

Verma, Khyati, "The Impact Of Colorblind Racial Attitudes And Implicit Bias In Evaluations Of Student Behavior" (2020). *Theses and Dissertations*. 1315.

<https://ir.library.illinoisstate.edu/etd/1315>

This Thesis is brought to you for free and open access by ISU ReD: Research and eData. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of ISU ReD: Research and eData. For more information, please contact ISUREd@ilstu.edu.

THE IMPACT OF COLORBLIND RACIAL ATTITUDES AND IMPLICIT BIAS
IN EVALUATIONS OF STUDENT BEHAVIOR

Khyati Verma

50 Pages

Racism is a deep-rooted, systemically prevalent structure of social divide evident in various aspects of the American society, including schools. Previous researches have focused on racism occurring in classrooms, its effects on teacher behavior, as well as negative outcomes for students of color. However discriminatory and prejudiced behaviors towards students of color have become more implicit due to shift in the course of racist attitudes to what is now known as modern racism. The current study focused on the effects of race, colorblind racial attitudes, and implicit racial bias on problem behavior and punishment severity ratings. Data collected online from 198 White undergraduate students were analyzed. Additionally, data were analyzed for 55 teacher education majors. Results indicated that condition, colorblind attitudes and implicit bias did not significantly predict problem behavior ratings but did predict punishment severity ratings. Condition did not surface as moderator for the relation between colorblind racial attitudes and implicit bias on problem and punishment severity ratings. Implication, limitations, and future directions are discussed.

KEYWORDS: colorblind racial attitudes, implicit racial bias, student behavior

THE IMPACT OF COLORBLIND RACIAL ATTITUDES AND IMPLICIT BIAS
IN EVALUATIONS OF STUDENT BEHAVIOR

KHYATI VERMA

A Thesis Submitted in Partial
Fulfillment of the Requirements
for the Degree of

MASTER OF SCIENCE

Department of Psychology

ILLINOIS STATE UNIVERSITY

2020

© 2020 Khyati Verma

THE IMPACT OF COLORBLIND RACIAL ATTITUDES AND IMPLICIT BIAS
IN EVALUATIONS OF STUDENT BEHAVIOR

KHYATI VERMA

COMMITTEE MEMBERS:

Brea M. Banks, Chair

Gregory Braswell

ACKNOWLEDGMENTS

Many people have played an important role in the compilation of my thesis, both directly and indirectly. I would like to extend my gratitude and sincere thanks to my thesis chair, Dr. Brea Banks for her constant encouragement, support, patience and for guiding me in the right direction. I would also like to thank Dr. Gregory Braswell for his insightful inputs and suggestions, which helped me shape this document. I'd also like to thank my parents for their guidance, encouragement and significantly aiding the development of my skills and abilities. Further, I would like to thank all the persons who helped me in the process and contributed towards this work.

K. V.

CONTENTS

	Page
ACKNOWLEDGMENTS	i
CONTENTS	ii
CHAPTER I: INTRODUCTION	1
CHAPTER II: LITERATURE REVIEW	3
Modern Racism	3
Colorblind Racial Attitudes	4
Implicit Bias	7
School Climate	10
Present Study	15
CHAPTER III: METHODS	16
Participants	16
Measures	17
Demographic Questionnaire	17
Color-Blind Racial Attitudes Scale (CoBRAS)	17
Implicit Association Test (IAT)	18
Problem Behavior and Punishment Severity Ratings	18
Procedure and Design	20
CHAPTER IV: RESULTS	22
Preliminary Analyses	22
Primary Analyses	23

Additional Analyses	24
CHAPTER V: DISCUSSION	26
Limitations and Future Directions	28
REFERENCES	30
APPENDIX A: DEMOGRAPHIC ITEMS	42
APPENDIX B: COLOR-BLIND RACIAL ATTITUDES SCALE	43
APPENDIX C: PROBLEM BEHAVIOR SCENARIOS	44
APPENDIX D: CONDITION ASSIGNED TO PARTICIPANTS	45
APPENDIX E: FIGURES	46
APPENDIX F: TABLES	50

CHAPTER I: INTRODUCTION

“Racism is a longstanding system of dominance, power, privilege, inequity, and oppression based on socially constructed racial hierarchies, which continues to be a social and political reality resulting in maltreatment, unjust burden, and disparities for people of color in the United States” (Miller et al., 2018, p. 669). The systematic practice of racism was brought into existence and is encouraged to date through the practice of racial prejudice, which occurs via exercising power against a so-called inferior racial group (Jones, 1997). This includes a wide range of acts, from subtle microaggressions and discrimination to overt acts of physical threat, social exclusion, and stigmatization (Brondolo et al., 2009). Given the ever-changing demographics of the United States and the fact that most of today’s teachers are White, educators must be well equipped to teach children from various backgrounds (Frankenberg, 2012). In fact, research indicates that many White teachers find it difficult to address the topic of race and take a colorblind approach to instruction (Schofield, 1982). As a result, teachers may overlook or ignore crucial differences and engage in conversations that are important for the students in their classrooms (Morris, 2005; Sleeter, 1996 as cited by Frankenberg, 2012).

Implicit preferences for same-group group members further strengthen this social hierarchy. These preferences are unconscious and automatic and may be a result of family, media or life experiences (Dunham et al., 2008; Kang, 2012; Reskin, 2000). When such preferences are relevant for teachers, this can be disadvantageous for students of color (Staats, 2014). Teachers often depend on their unconscious beliefs to guide their decisions and behaviors when faced with circumstances that require high cognitive demands (Glock & Karbach, 2015). As a result, students of color may be subjected to harsh disciplinary actions and overall more severe punishment in comparison to White students (Okonofua & Eberhardt, 2015). The purpose of the current study

was to explore colorblind racial attitudes and implicit bias in White preservice teachers. Specifically, this study aimed to examine the impact of colorblind racial attitudes and implicit racial bias on rating on problem behaviors as well as severity of disciplinary action for 5-year-old White and Black boys.

CHAPTER II: LITERATURE REVIEW

Modern Racism

Although research has noted an increase in hate crimes in the U.S. since the election of Donald Trump in 2017 (Rushin & Edwards, 2018), the racial attitudes of White Americans has evolved from Jim Crow Racism to what is known as Laissez Faire Racism in the period after World War II (Bobo et al., 1997). This includes resistance to efforts that can improve America's racist social conditions, as well as purposeful negative stereotyping of African American individuals (Bobo et al., 1997). Bonilla-Silva (2015) labeled the emergence of this system or racial structure as “new racism,” which includes the following facets: “(1) the increasingly covert nature of racial discourse and practices, (2) the avoidance of direct racial terminology, (3) the elaboration of a racial political agenda that eschews direct racial references, (4) the subtle character of most mechanisms to reproduce racial privilege, and (5) the rearticulation of some racial practices of the past” (p. 1362). Today, institutionalized racism and covert forms of racism are more likely to impact African American individuals, and these seemingly non-racist practices continue to maintain racial hierarchy and inequality (Bonilla-Silva, 2015). Regarding institutionalized racism, policies that increase opportunities for individuals from underrepresented backgrounds, such as affirmative action, have been faced with intense public opposition (Wingfield, 2015). Further, racism enacted through adoption practices (e.g., the belief that African American children are less desirable and hence placed in a “difficult to adopt” category), school discipline (e.g., overrepresentation of Black children in special education), the school-to-prison pipeline, and mass incarceration continues to be relevant (Isaacs, 1994; Hannsen, 1998; Wald & Losen, 2003; Pettitt & Western, 2004). More related to the purpose of the current study, covert forms of interpersonal racism like colorblindness and implicit racial bias

permeate through the society, hence maintaining the social distance between the “racial elite” and “non-elite” (Coates, 2007).

Colorblind Racial Attitudes

Aspects of modern covert racism are demonstrated via racial colorblindness or colorblind racial attitudes (Gushue & Constantine, 2007). McConahay (1986) theorized four essential inferences that lead to attitudes rooted in covert or modern racism. First, there exists a firm belief that racism and discrimination do not exist today; rather they are problems of the past because people of color have the freedom to compete in the same marketplace and enjoy the same privileges as White people. Second, individuals believe that people of color are pushing too much, too quickly and too adamantly into spaces where they are not wanted. Third, some believe that people of color use “unfair tactics” (e.g., affirmative action) to gain access into places they are not wanted. Finally, these ideas lead to the conclusion that recent gains and increasing societal status by people of color are undeserved (McConahay, 1986 as cited by Dovidio & Gaertner, 1986). Individuals who hold these beliefs may not feel that they are racist, because they consider the aforementioned assumptions to be facts (Awad et al., 2005).

The first part of McConahay’s (1986) theory surrounding the belief that overt racism no longer exists is most relevant to the current study. Specifically, racial colorblindness implies that race should not and does not matter today, in addition to the assumption that individuals from all races have an equal chance to social and economic opportunity and success (Gushue & Constantine, 2007; Frankenberg, 1993). Racial colorblindness was introduced as a concept to explain racial attitudes held by White Americans in the period following the Civil Rights Movement (Manning et al., 2015). Specifically, those holding colorblind beliefs ignore data suggesting White individuals gain benefits from the racial hierarchy (Neville et al., 2000).

Adoption of a racially colorblind perspective allows one to believe that an individual's race has no effect on their place in the social hierarchy, as colorblindness offers a simple framework for managing the issues of race in contemporary society: if one does not notice race, then race will no longer matter (Apfelbaum et al., 2012; Gallagher, 2003). As a result, boundaries between "race should not matter" and "race does not matter" have become unclear (Neville et al., 2000). Some argue that racial colorblindness is responsible for conscious and intentional avoidance of acknowledging race in order to prevent the appearance of prejudice, due to which many Americans might purport not to "see" color all together (Wingfield, 2015).

Colorblind racial attitudes negate or deny the negative outcomes of racism by conveniently reframing inequality as issues of individual ability or choice (Hartmann et al., 2017). Racial colorblindness allows individuals to boast tolerance and progressive views because one feels that their beliefs support a notion of not seeing or judging people by their skin color, hence opposing interventions that could be helpful in combating racial inequality just to appear moral (Bonilla-Silva, 2015).

Colorblindness is rooted in the belief that racial group membership and race-based differences should not be taken into account when decisions are made, impressions are formed, and behaviors are enacted. The logic underlying the belief that colorblindness can prevent prejudice and discrimination is straightforward: if people or institutions do not notice race, then they cannot act in a racially biased manner (Apfelbaum et al., 2012, pp. 205).

The Colorblind Racial Attitudes Scale (CoBRAS; Neville et al., 2000) was developed to assess racial colorblind attitudes. Most of the research using this measure has examined the experiences of university students. For example, Worthington and colleagues (2008) explored perceptions of

campus climate in students enrolled at a Predominantly White Institution. These researchers found that colorblind racial attitudes prevailed across all participants, independent of race. Further, those providing higher scores on the CoBRAS (Neville et al., 2000) reported more positive perceptions about the campus climate. To provide another example, Gushue and Constantine (2007) examined the relationship between colorblind racial attitudes and racial identity in White students enrolled in a clinical-counseling psychology program and found that higher scores on the CoBRAS (Neville et al., 2000) and low awareness of racism were more likely to occur for those reporting White racial identity. One purpose of the current study was to examine the relation between colorblind racial attitudes and ratings of student behavior in pre-service teachers.

Kreamelmeyer and colleagues (2016) evaluated the colorblind racial attitudes of 85 undergraduate pre-service teacher candidates. Participants completed an item at the start and end of a semester to assess colorblind racial attitudes: “I don't think of my students in terms of their race or ethnicity; I am color-blind when it comes to my teaching.” Results indicated that teacher ratings improved from the start to the end of the semester, as they provided scores indicating less colorblind racial attitudes at the end of the semester. Qualitative analyses were conducted for those who had provided a reason for their numeric ratings, indicating patterns of intentional colorblindness and conscious bias. Peters and colleagues (2016) studied White identity and racial colorblind attitudes in pre-service teachers who spent a semester teaching in a diverse classroom, in addition to their take on working with students of color. Researchers found that pre-service teachers held more colorblind attitudes about institutionalized discrimination as well as blatant racial issues. Further, data suggested that participants had negatively biased expectations from students of color, which were rooted in their negative beliefs about students of color.

Implicit Bias

Individuals engage in social categorization for quick and easy placements of targets into social groups for more efficient cognitive processing (Bernstein et al., 2007). These social groups can further be broadly classified as “us” or “them,” where individuals typically favor the “us” (Rutland et al., 2015). Research suggests that individuals develop in-group implicit preferences very early in life and that these preferences are automatic and unconscious, fueled by early life experiences and the media (Dunham et al., 2008; Kang, 2012; Reskin, 2000). Further, research suggests, “one does not have to be a racist with a capital R ... to harbor implicit racial biases” (Lee, 2013, p. 1577). Instead, we hold automatic cognitive associations about social groups that are not always at the forefront of our awareness (Gawronski & De Houwe, 2014). These biases become problematic, particularly in situations that require high cognitive demands, as individuals often rely on their developed implicit attitudes to guide perceptions, judgments, and behaviors, often times without recognizing that bias has even occurred (Glock & Karbach, 2015).

The Implicit Association Test (IAT; Greenwald et al., 1998) is well-researched instrument used to measure implicit bias. Stepanikova and colleagues (2011) studied the relationship between implicit racial bias and pro-social behavior using the IAT and found that racial bias towards African American individuals was negatively correlated to generosity towards this group. McConell and Leibold (2001) studied the relationship between the IAT, explicit racial attitudes, and as well as discriminatory behavior in 42 White psychology undergraduate students. Participants interacted with Black and White researchers before completing the IAT and other measures of explicit bias. Researchers coded participant behaviors and found that those who had more negative interactions with a Black researcher were more likely to have high implicit racial bias scores on the IAT.

Most relevant to the focus on of the current study, implicit racial biases can have disadvantageous consequences for students of color when teacher perceptions of student behavior are influenced by the biases they hold (Staats, 2014). Specifically, teachers may hold biases that may spark racism in the classroom (Atwater, 2008). Warikoo and colleagues (2016) suggest that implicit bias in the classroom may come as a result of three major observations. First, there may be educational bias (e.g., lack of teacher attention or effort) that exists as a result of negative implicit racial bias towards students belonging to underrepresented racial group. Second, explicit and implicit attitudes are not highly correlated, meaning that teachers' unconscious racial bias towards underrepresented students may overshadow the intentional efforts they make to include those holding marginalized identities. Third, implicit attitudes are also related to increased anxiety, discomfort and problematic feelings that surface during interracial interactions (Dasgupta & Rivera, 2008). This could lead to teachers retracting warmth and responsiveness during interactions with racially underrepresented students, which may impact student outcomes surrounding peer relationships, academic performance and having a sense of belonging (Warikoo et al., 2016; Gehlbach et al., 2016).

Jacoby-Senghor and colleagues (2016) explored the role of instructor racial implicit bias as a core factor leading to racial inequality in academic settings. These authors also explored the relationship between implicit bias, curriculum quality, and test performance. Participants were 200 undergraduate students from underrepresented racial backgrounds, and researchers found that instructor bias in the form of anxiety and poor lesson quality led to decreases in performance levels of Black students but not White students. Additionally, anxiety and quality of teaching mediated the relationship between students' test performance and the instructor's implicit racial bias. More recently, Glock and Böhmer (2018) studied stereotyped attitudes of teachers and pre-

service teachers as well as their explicit attitudes towards racially underrepresented students' positive and negative behaviors. Researchers found that teachers held negative implicit stereotypes about racially marginalized students and associated these students with negative working and learning behaviors. Glock and Kleen (2019) explored attitudes of pre-service teachers towards the same population of students in 216 pre-service teachers and found that in comparison to White teachers, teachers of color held more positive and favorable implicit and explicit bias for students holding racially minoritized identities.

Based on research by Goff and colleagues (2014), Black boys are viewed as older and less innocent, which in turn leads others treating them like adults. Specifically, these researchers recruited participants who were primarily White women from a public school and used their self-constructed innocence scale to assess their perceptions of Black and White children's innocence. Researchers found that for children younger than 10 there were no differences in participants' innocence ratings across race. However, participants provided varied ratings dependent on race for children who were older than 10, as Black children ages 10-13 were rated more similarly to White children ages 14-17, indicating that participants viewed Black children as older than they were. Research also suggests that students of color are considered to be more culpable and more likely to be subjected to disciplinary actions for minor offences in comparison to White students (Skiba et al., 2002). In a study by Okonofua and Eberhardt (2015), 57 K-12 teachers were recruited in the last academic month. They were given a disciplinary record of a male student who had engaged in two minor school offences. The record was labeled with either a stereotypical Black or a stereotypical White name. After viewing each offence, teachers provided ratings on a 1 ("not at all") to 7 ("extremely") Likert scale surrounding the following: (1) their opinion on the severity of the incident, (2) the extent of hindrance it caused in maintaining class

discipline, (3) if they felt irritated, and (4) the severity of punishment they thought was apt for the student. Teachers also provided Likert ratings from 1 (“not at all”) to 5 (“extremely”) surrounding the views of the student as a troublemaker. Researchers found that teachers felt more “troubled” by the problem behavior committed by the Black student and recommended more severe punishment (e.g., suspension) for the Black students as compared to their White counterpart. In an extension to this study, the present study focuses on how covert racial attitudes of teachers (i.e., racial colorblindness and implicit racial bias) contribute to teacher perceptions of problem behavior and the discipline they choose for White and Black boys. Given what we know about racial colorblindness and implicit bias, these concepts are pivotal indicators of racial attitudes held by an individual. Another purpose of the current study is to add to the research literature surrounding the impact of attitudes such as racial colorblindness and implicit bias, particularly surrounding its impact on teacher perceptions of student behavior.

School Climate

According to The National School Council (2007), school climate refers to the quality of school life and deals with various aspects of school, such as goals, norms, relationships between students and teachers, teaching and learning practices, and the organizational structure. Based on work conducted by Thapa and colleagues (2013), there exists 5 domains of school climate: safety, relationships, teaching and learning, the institutional environment, and the progression of school improvement. Research has demonstrated several outcomes associated with positive and negative school climate. For example, positive self-esteem and self-concept (Cairns, 1987; Hoge, et al., 1990), diminished self-criticism (Kuperminic et al., 2001), decreased substance use (LaRusso et al., 2008), and higher school attendance have been linked to positive school climate (Rumberger, 1987). On the other hand, lack of supportive norms, structures, and relationships

have been associated with more student experiences of violence, peer-victimization, and punitive disciplinary actions, as well as higher levels of absenteeism, and reduced academic achievement (Astor et al., 2010).

Given the purpose of the current study, interpersonal relationships are the most relevant component of school climate, particularly as it relates to student-teacher relationships. Research suggests that the student-teacher relationship is a powerful predictor of many aspects of student outcomes, such as social functioning, behavioral problems, engagement in academic activities, as well as their academic achievements. A positive student-teacher relationship is important for effective teaching and learning, especially in later school years (Allen et al., 2006; Cornelius-White, 2007; Wubbels et al., 2006), particularly for students belonging to underrepresented groups (Roorda et al., 2011). According to teachers, a robust relationship with their students gives them the motivation to put in extra time and effort towards their students' success (Pianta et al., 1995). On the contrary, relationships strained with conflict may cause hindrance to promote a positive, healthy and secure environment, which could be a possible reason for exclusion of children from the classroom (Pianta et al., 1995). A positive student-teacher relationship may safeguard students from poor academic performance (Cicchetti & Lynch, 1993).

In a longitudinal study conducted by Hamre and Pianta (2001), kindergarten teachers rated student behavior and quality of the relationship with their students in a sample of 179 children who were followed from kindergarten to eight grades. Researchers found that negative relationship variables in kindergarten predicted behavioral and academic outcomes, as well as disciplinary violations in elementary school. Results of the study also focus on early intervention and prevention along with implication towards those theories that certify a student's success in

school, adult-child relationship development.

Given the changing demographics of the U.S., the American school population is becoming increasingly diverse and multilingual. According to the US Census Bureau, 52.9 percent students are non-Hispanic white in comparison to 59.7 percent in 2007 (United States Census Bureau, 2018). As a result, cross-racial student-teacher relationships will become more common. However, the demographic of teachers continues to be largely White and monolingual (Young et al., 2010). Research suggests 90 percent schools consist of primarily White teachers, while as large as 30 percent schools have a vast majority of students of color (Keller & Manzo, 2003; Howard, 2003 as cited by Hinojosa & Moras, 2009). Given what we know about colorblindness and implicit bias, it is possible that teachers' beliefs and attitudes about race affect their outlook towards students of color. As such, the blooming diversity in American classrooms necessitates that teachers be well equipped for teaching children coming from varied cultural and racial backgrounds (Frankenberg, 2012).

Unfortunately, research suggests that students of color are treated differently, which encourages and leads to racial categorization in schools (Okonofua et al., 2016). Some teachers believe students from minority races are "difficult" (Morris, 2005). These students are seen to be less mature and are subjected to low academic expectations (Alexander et al., 1987). Teachers also tended to use less positive or neutral language while addressing African American students, while they gave more positive referrals, held more positive expectations, and used more positive language with White students (Tenenbaum & Ruck, 2007). This also means low response opportunity and positive feedback for those coming from diverse ethnic backgrounds, which leads to negative effects on students' learning (Tenenbaum & Ruck, 2007).

Further, research suggests that some teachers and school professionals use the cultural deficiency model for explaining the student's academic performance (Davis, 1995; Avery & Walker, 1993 as cited by Hinojosa & Moras, 2009). Specifically, the deficiency model assumes that a minority group's culture is inferior (e.g., genetically and intellectually) to that of the majority group in significant ways (Salkind, 2008). For example, Marx (2002) studied the interactions of female pre-service teachers with Hispanic English Language Learners they tutored using observations, detailed interviews, and journal entries. Although participants were fully devoted to their work and gave full time and attention to their job, results showed that all participants were impacted by a sense of White identity, which affected the beliefs they held about the students they tutored (e.g., Hispanic culture is a deficit to students' success). These beliefs surfaced in their interactions with the students in the form of low academic expectations, antipathy, and resentment.

On the other hand, some teachers believe talking about race openly brings about teacher prejudice (Schofield, 1982 as cited by Frankenberg, 2012) and instead find it more appropriate to be "colormute" (Pollock, 2004 as cited by Frankenberg, 2012), causing teachers to overlook or not address differences that might be important (Morris, 2005; Sleeter, 1996 as cited by Frankenberg, 2012). Some teachers believed that it lowered the chance of explicit racial conflict; reduced the chance of embarrassment or discomfort in a school environment (Schofield, 1986). In contrast, studies have shown that teaching effectiveness increases when teachers have a good understanding about their student's backgrounds, contributing to their success as well (Hawley, 2007 as cited by Frankenberg, 2012). In educational settings, the "should not matter" philosophy means not discriminating against students of color, while the "does not matter" philosophy means that teachers completely ignore racial differences, despite knowing well that skin color

plays a major role in how an individual is treated (Atwater, 2008). An ethnographic study conducted by Schofield (1986) studied consequences of colorblind perspective in 1200 middle school students of a desegregated school with an equal number of Black and White students. Researchers found that teachers consistently reported that they do not notice race and that they felt that students held similar beliefs. Over the course of the study, it was found that the topic of race was stigmatized. Black and White were not commonly used words and when they were, they were seen as racial epithets. Evidence of racial stereotypes also surfaced. For example, White was meant to mean “success,” While the word Black was correlated with academic weakness. A similar study was conducted by Lewis (2001) in a predominantly White, middle class school. Researchers studied teachers’ multicultural attitudes, given participants’ lack of interaction with people of color in the school setting. Researchers found that participants held beliefs that race is not a salient feature.

Studies show that teachers treat students of color differently. McCormick and Noriega (1986) studied teacher expectation and their effects and found that African American students are often subjected to discrimination and negative treatment by their teachers in comparison to White students. It has also been demonstrated that Black students are more likely to be considered as ill behaved, perform poorly, and be subjected to negative treatment, such as belittlement and minimum verbal interaction from teacher (Hinjosa, 2008; Guerra et al., 1997; McCormick & Noreiga, 1986). In addition, perceived teacher bias by students of color is correlated with student dropout rates (Wayman, 2002).

In a study conducted by Sbarra and Pianta (2001) on 190 African American students and 350 Caucasian students, a significant main effect for race was found for both behavior problems and competencies. African American students were rated to be less competent in terms of task

orientation and frustration tolerance as compared to their White peers. Cullinan and Kauffman (2005) studied how perception of teachers might vary depending on race of the student in Black and White teacher ratings of 769 students with Emotional Disturbance (ED) to find that overrepresentation of African American students was a result of teacher racial bias and their bias in perception of emotional and behavioral problems among students belonging to a particular race. On the contrary, Chang and Sue (2003) presented written vignettes that included a photograph of either an African American, White, or Asian American child to 197 teachers to test the interaction between the race of the child and problem behavior ratings of the child by teachers. Contrary to other research, researchers found that no bias was found with respect to African American boys, but stereotypes were prevalent for Asian American boys.

Present Study

Given that there exists some discrepancy in the literature, the primary purpose of the current study was to examine the difference in behavioral ratings of White and Black boys. Specifically, the researcher aimed to investigate the impact of child race, colorblind racial attitudes, and implicit bias on participant assessment of the problematic nature of behaviors and their selection of punishment severity. Specifically, it was hypothesized that problem behavior and punishment ratings would be more severe for the Black boy in comparison his White counterpart, that higher ratings would be predicted by elevated colorblind racial attitudes and implicit racial bias. In addition to this, the researcher also wanted to explore the impact of condition (i.e., child race) as a moderating factor in predicting the relationship between colorblind racial attitudes and implicit racial bias on both problem behavior and punishment severity ratings. It was hypothesized that the relation between these attitudes and ratings would be stronger for participants assigned to the Black boy condition.

CHAPTER III: METHODS

Participants

Initially, pre-service teachers enrolled at a Midwestern university were recruited to participate in the study. There were no limitations placed on gender, sexual orientation, race/ethnicity, socio-economic status or other demographic characteristics. Due to constraints that surfaced as a result of the COVID-19 pandemic, the in-person administration of the study was stopped and students across the university were then invited to participate instead of restricting engagement to preservice teachers. Given the researcher's interest in the attitudes of White preservice teachers, data were only examined for those indicating their race as White. As such, participants were undergraduate students recruited from the sampled university via email mass email. Participants were able to enter in a raffle to win one of 20 \$10 Amazon e-gift cards after completion of the online survey.

A total of 258 participants completed the online survey of which, only the 198 who identified themselves as White were used for analyses. Out of all participants recruited, 55 were teacher education majors (21.3%). Participant age ranged from 18-47 ($M = 20.63$, $SD = 3.43$). Based on participant self-report, 154 identified their gender as woman or female (77.8%), 40 reported identification as men or male (22.1%), 3 identified as gender non-conforming or transgender (1.5%), and 1 did not report their gender identification. Regarding sexual orientation, 157 participants identified their sexuality as heterosexual (79.3%), 37 as bisexual/homosexual/questioning (18.7%), and 4 did not report their sexual orientation.

Measures

Demographic Questionnaire

Demographic characteristics of participants were recorded using a pre-designed questionnaire, which included items to assess age, gender, sexual orientation, and race/ethnicity (see Appendix A).

Color-Blind Racial Attitudes Scale (CoBRAS)

Color-blind racial attitudes were assessed using the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000; see Appendix B). The CoBRAS (Neville et al., 2000) is a 20-item instrument that measures the extent to which racism is ignored or denied by an individual, as well as the effect of race on their own and others' lives (Neville et al., 2000). The scale is composed of three dimensions of colorblindness: (a) racial privilege, or non-recognition of privileges one has as a White person (e.g., "White people in the U.S. have certain advantages because of the color of their skin"), (b) institutional discrimination, or diminished awareness about racist practices prevailing in institutions (e.g., "Due to racial discrimination, programs such as affirmative action are necessary to help create equality"), and (c) blatant racial issues, or denying the existence of racial discrimination and exclusionary practices in the society (e.g., "Social problems in the U.S. are rare, isolated situations"). Participants were prompted to respond to each item on a 6-point Likert scale, ranging from 1 ("strongly disagree") to 6 ("strongly agree").

The initial study conducted by Neville and colleagues (2000) indicated that the CoBRAS is a reliable measure (α ranged from .84 to .91). Another study by Neville and colleagues (2006) exploring the relationship between racial colorblind ideologies and multicultural counseling competencies in 130 mental health workers and students studying applied psychology also

indicated an acceptable α coefficient of .85. The current sample's Cronbach's α was .93. Participants' scores ranged from 1 to 5.20 ($M = 2.50$, $SD = .92$, 95% CI [2.37, 2.63]).

Implicit Association Test (IAT)

The Implicit Association Test (IAT; Greenwald et al., 1998) is a well-researched task that is used to reveal attitudes and other automatic associations about specific groups, such as race, gender, religion, sexual orientation, disability, and so forth. The task rests on the principle that highly associated categories make the sorting task easier, providing insight into the implicit associations held by the participant (Greenwald & Nosek, 2001; Reskin, 2005). For the purpose of the current study, the IAT was used to evaluate associations between a target category (i.e., race) and attribute category (i.e., attitudes). To measure racial implicit bias, the IAT was used to identify associations between race (i.e., White and Black) and positive (e.g., pleasant) and negative (e.g., unpleasant) attitudes (Gattol et al., 2011). The IAT was embedded into the Qualtrics survey using iatgen (Carpenter et al., 2019) software. The program removed data from 7 participants due to completion of the task with excessive speed. The reliability for the current sample was acceptable ($\alpha = .81$). Carpenter and colleagues (2019) provide an online tool that is referenced in their paper to calculate each participants' score, which "divides the difference between test block means by the standard deviation of all latencies in the two test blocks" (Greenwald et al., 2003, p. 201). Positive scores reflect higher racial bias, negative scores reflect a lower bias, and scores close to zero reflect neutral implicit racial attitudes. In the present study, participants' scores ranged from -1.16 to 1.80 ($M = .33$, $SD = .39$, 95% CI [.28, .38]).

Problem Behavior and Punishment Severity Ratings

Participants' attitudes towards classroom problem behavior was assessed using an instrument that includes 10 brief scenarios of classroom problem behaviors. These presented

scenarios depicted a commonly encountered behavioral problem in the classroom, such as talking out of turn or use of inappropriate language (see Appendix C). These scenarios were presented on the computer screen with a picture of a 5-year-old male child who was either Black or White and displaying a neutral expression. The researcher conducted a pilot examination prior to data collection for the current study to gather likeability ratings of 6 selected pictures of same-age White and Black boys (i.e., 3 pictures of each race). These pictures were obtained from the Child Affective Facial Expression Set (CAFÉ; LoBue & Thrasher, 2015; LoBue, 2014), which is a collection of 1192 photographs of 154 children of varying racial backgrounds ranging from 2 to 8 years old ($M = 5.3$). Children posed for a total of 7 facial expressions including a neutral face, which was used for the purpose of this study. A total of 18 participants completed the survey and provided ratings from 1 (i.e., “strongly disagree”) to 10 (i.e., “strongly agree”) across the following descriptors: attractive, well-behaved, calm, angry, troublemaker, mean, and nice. The pictures that were utilized for the current study yielded similar ratings from pilot participants.

Participants in the current study were prompted to respond to each item on a Likert scale ranging from 1 (“not at all problematic”) to 7 (“very problematic”) for the severity of the problem behavior and from 1 (“minimal punishment”) to 7 (“severe punishment”) for the severity of disciplinary action or punishment they thought was appropriate for each behavior exhibited. A “Problem” and “Punishment” composite was created to facilitate interpretation. These composites were calculated by averaging the scores on the two scales. The Cronbach’s α for the “Problem” and “Punishment” scales were acceptable at .91 and .89, respectively. Participants’ scores ranged from 2.00 to 7.00 ($M = 5.24$, $SD = .99$, 95% CI [5.11, 5.39]) for the

“Problem” scale and from 2.00 to 6.30 ($M = 3.85$, $SD = .96$, 95% CI [3.72, 3.99]) for the “Punishment” scale.

Procedure and Design

Data collection for the proposed study was initially implemented in the lab setting. However, due to the COVID-19 pandemic, the research project was switched to an online data collection mode. Further, researchers opened up the study to all undergraduate students given limited means and time to collect data from teacher education majors. Undergraduate students across the university were sent an invitation to participate in the study via mass email. The invitation contained a brief description of the purpose of the study that did not explicitly mention that researchers were studying “racial attitudes” in order to avoid participant bias. The online survey and computer task were administered through online survey tool Qualtrics. Students who were interested in participating selected the link to the online Qualtrics survey that allowed them to complete the study. Participants first viewed the consent form, before providing ratings on the “Problem” and “Punishment” subscales for the Black or White boy. Random condition assignment was managed using the Qualtrics “randomizer” function, with 127 participants assigned to the Black boy condition and 131 assigned the White boy condition. Participants then completed demographic items that assessed for age, race/ethnicity, gender, sexual orientation. Next, participants’ colorblind racial attitudes were measured using the CoBRAS (Neville et al., 2000).

Lastly, participants completed the Implicit Association Test (Greenwald et al., 1998) which was embedded into the Qualtrics survey using iatgen (Carpenter et al., 2019). Specifically, participants completed 4 trials, as they viewed “positive” and “negative” attribute words and White and Black faces in equal numbers (7 trials of each stimulus type). In the first trial, they

were first asked to classify the stimuli presented to them on the basis of race. This included Black and White faces which were presented in the middle of the computer screen, one at a time and participants were asked to classify each stimulus as Black using the “E” and White using the “I” keys on the computer keyboard. Next, participants classified stimuli by positive or negative attribute. Specifically, participants viewed words (e.g., pleasant, love, excitable, horrible, friend, hate, abuse, bomb) that were presented one at a time in the middle of the screen and were instructed to press a specific key, similar to the previous trial, in response to words that were associated with a positive meaning and the other one in response to words associated with a negative meaning. The next set of trials required categorization of four classes of items with the help of two keys, each for either target or attribute concept. This measured the strength of association between the two categories: attribute concept (i.e., attitude) and the target concept (i.e., race). In the third trial, target concept A was partnered with attribute concept A and target concept B were matched with attribute concept B. For example, participants were tasked with pressing key “E” when a Black face or a good word is presented and key “I” when a White face and a bad word was presented. In the fourth trial, the target concept B was matched with attribute A and target concept A with attribute B (e.g., White face with a good word and Black face with a bad word). The third and fourth trials were counterbalanced. Response latency was recorded automatically (i.e., when the stimulus was presented until the participant gave a response). After the completion of this task, each participant was debriefed and encouraged to contact the research team if they had any queries.

CHAPTER IV: RESULTS

Preliminary Analyses

Before examining the main research questions, collected data were cleaned and preliminary analyses were conducted. Specifically, condition assignment was dummy coded as 1 for the Black boy condition and 0 for the White boy condition. Additionally, since the primary goal of the study was to explore the racial attitudes of White individuals, initial analyses were only conducted for those participants who self-identified as White. Regarding skewness statistics, the “Problem” composite was at $-.64$, with the normality curve skewed towards the right. The skewness for the “Punishment” composite was $.17$ and was $.55$ for the CoBRAS (Neville et al., 2000), both slightly skewed towards the left. Shapiro-Wilk tests of normality indicated that the “Problem” ($W = .97, p < .01$) and “CoBRAS” ($W = .96, p < .01$) composites were not normally distributed, indicating the conducted analyses should be interpreted with caution. The “Punishment” scale was normally distributed ($W = .99, p = .08$).

Independent Samples t-tests were conducted to assess group differences in IAT and CoBRAS scores given random condition assignment. For the IAT, results suggest that means were not significantly different for the Black boy ($M = .36, SD = .37$) or White boy ($M = .41, SD = .36$) conditions, $t(194) = .93, p = .35$. The same was true for CoBRAS ratings for the Black ($M = 2.52, SD = .94$) and White ($M = 2.47, SD = .91$) boy conditions, $t(194) = -.37, p = .71$. Two-tailed Pearson correlations were conducted to assess the association between the predictor variables and dependent variables. Colorblind racial attitudes were significantly correlated with punishment severity ratings, $r = .21, p < .05$, and implicit bias scores, $r = .15, p < .05$. Additionally, punishment severity ratings and problem behavior ratings were significantly correlated, $r = .52, p < .05$.

Primary Analyses

Multiple Regression analyses were conducted to examine the first research question surrounding the degree to which implicit bias, colorblind racial attitudes, and condition predicted participants' ratings for the "Problem" and "Punishment" scales (Tables 1 and 2). Condition (i.e., Black or White boy), colorblind racial attitudes and implicit racial bias did not predict a significant portion of variance on the "Problem" scale, $R^2 = .02$, $F = (3, 190) = 1.21$, $p = .31$. Overall colorblind racial attitudes, implicit racial bias and condition predicted a significant portion of variance in punishment severity ratings, $R^2 = .05$, $F = (3, 190) = 3.54$, $p = .012$ however, only the CoBRAS accounted for a significant portion of variance in ratings when controlling for the IAT (Greenwald et al., 1998) and condition, with a positive relationship between the two variables, ($B = .21$, $p < .01$). In other words, participants who provided high ratings of colorblindness attitudes allocated more severe punishment ratings to the student irrespective of condition and implicit bias.

Using Hayes' (2018) PROCESS, condition was examined as a moderator of the relation between colorblind racial attitudes and implicit bias on the "Problem" and "Punishment" scales. Regarding the relation between colorblind racial attitudes and participant problem and severity ratings, condition did not surface as a significant moderator for the "Problem" ($\Delta R^2 = .00$, $F[1, 192] = .27$, $p = .87$) or "Punishment" ($\Delta R^2 = .00$, $F[1, 192] = .01$, $p = .94$) scales. Similarly, condition did not significantly moderate the relation between the "Problem" ($\Delta R^2 = .00$, $F[1, 192] = .06$, $p = .81$) or "Punishment" ($\Delta R^2 = .00$, $F[1, 192] = .16$, $p = .69$) scales on implicit racial bias. Results of these analyses are depicted in Figures 1-4.

Additional Analyses

The initial aim of the study was to focus on the attitudes of pre-service teachers (i.e., undergraduate students training in teacher education majors). Due to the COVID-19 pandemic, limitations were placed on the planned methodology. Hence, the study was made available to all undergraduate students across the university. As mentioned previously, out of 258 participants, only 55 were teacher education majors. Since this was initial goal of the study, the researcher also conducted analyses on this sample, although the small sample lends to very low power.

Similar to analyses conducted on the full sample, multiple regression analyses were conducted to examine the first research question surrounding the degree to which implicit bias, colorblind racial attitudes, and condition predicted participants' ratings for the "Problem" and "Punishment" scales (Tables 3 and 4). Condition (i.e., Black or White boy), colorblind racial attitudes and implicit racial bias did not predict a significant portion of variance on the "Problem" scale, $R^2 = .07$, $F(3, 49) = 1.29$, $p = .29$. Colorblind racial attitudes, implicit racial bias as well as condition assigned to the participant did not predict a significant portion of variance in the punishment severity ratings given by the participants, $R^2 = .10$, $F(3, 49) = .16$, $p = .93$.

Using Hayes' (2018) PROCESS, condition was examined as a moderator of the relation between colorblind racial attitudes and implicit bias on the "Problem" and "Punishment" scales for those reporting their major as teacher education. Regarding the relation between colorblind racial attitudes and participant problem and severity ratings, condition did not surface as a significant moderator for the "Problem" ($\Delta R^2 = .01$, $F[1, 50] = .49$, $p = .49$) or "Punishment" ($\Delta R^2 = .05$, $F[1, 50] = 2.40$, $p = .13$) scales. Similarly, condition did not significantly moderate the relation between the "Problem" ($\Delta R^2 = .00$, $F[1,50] = .23$, $p = .63$) and "Punishment" ($\Delta R^2 =$

.01, $F[1, 50] = .46, p = .50$) scales on the IAT (Greenwald et al., 1998). Results of these analyses are depicted in Figures 5-8.

CHAPTER V: DISCUSSION

The present study examined the impact of colorblind racial attitudes, implicit racial bias, and child race (i.e., White or Black boy) on problem behavior and punishment severity ratings. In addition, the researcher explored the moderating effect of child race on the relation between colorblind racial attitudes and implicit racial bias for both problem and punishment severity ratings. The initial aim of the study was to examine the impact of colorblind racial attitudes and implicit racial bias on problem behavior and punishment severity ratings of a Black and a White boy in pre-service teachers. However, due to outbreak of COVID-19 pandemic, the researcher was not able to obtain a large enough sample of teacher education majors, so White undergraduate students irrespective of major were recruited.

Prior research has been conducted surrounding colorblind racial attitudes and implicit racial bias of K-12 teachers. Many of these studies have focused on the implications of these attitudes on students holding marginalized identities and their effects on various domains of student functioning, such as academic achievement, drop-out rates, decreased learning and working behaviors (Warikoo et al., 2016, Jacoby-Senghor et al., 2016; Wayman, 2002; Glock & Bohmer, 2018). However, there still exists gaps in the current literature pertaining to how these factors contribute to differential treatment of students of color and White students, as well as the combined effects of colorblind racial attitudes and implicit racial bias towards problem behavior perceptions.

Primary findings of the current study suggest that colorblind racial attitudes, implicit racial bias, and child race together did not significantly predict problem or punishment severity ratings. Although the overall model examining the impact of these variables on punishment severity ratings was significant, further examination demonstrated that participants' colorblind

racial attitudes accounted for majority of variability in these ratings. In other words, it was participants' colorblind racial attitudes that primarily influenced punishment severity ratings. Further, analyses assessing condition (i.e., child race) as a moderator did not significantly impact the relations between predictors (i.e., colorblind racial attitudes and implicit racial bias) and ratings for problem behavior and punishment severity ratings. Although the sample size for participants majoring in teacher education was relatively small, the researcher still analyzed it as that was the original goal of the study, although significant findings did not emerge.

Many U.S. schools are primarily taught by White teachers (Landsman & Lewis, 2006). There is hesitation in acknowledging existence of race due to the fear of appearing racist, and hence school personnel generally avoid bringing up or talking about it (Schofield, 1982). This results in over-looking the role of race in academic settings and the implication it has on students of color (Atwater, 2008). Although findings of the present study do not suggest that behavioral ratings were influenced by child race or participant implicit bias, color-blind racial attitudes emerged as a significant predictor of punishment severity ratings. This implies that modern racial biases in the form of colorblind racial attitudes predicted harsher punishment ratings independent of race or implicit bias. These results were unexpected since the concept of racial colorblindness primarily revolves around race. However, it should be noted that the CoBRAS (Neville et al., 2000) is highly correlated with the Global Belief in a Just World Scale (Lipkus, 1991) and Multi-dimensional Belief in a Just World Scale (Furnham & Proctor, 1988), both of which measure attitudes surrounding the degree to which people get what they deserve. As such, a possible explanation for these findings could be that because colorblind racial attitudes are directly related to the belief that people get what they deserve, they too may be associated with the dissemination of harsher punishment. However, more research to examine these relationships is required.

Limitations and Future Directions

There were several limitations to the present study. Relevant to internal validity, there may have been several unknown factors or confounding variables that were not measured that might have directly impacted out the outcome of the relationship between variables in focus. For example, the IAT (Greenwald et al., 1998) is a commonly used research task. Although test-rest data suggest that the task is reliable, participants knew they were answering questions about race, which could have primed them about the true nature of the study. However, it is unlikely that this influenced other study tasks since this task was completed by the participant towards the end of the study. However, we cannot overlook the possibility of participants responding in a socially desirable way when asked about problem and punishment ratings. Hence, inclusion of a tool to assess social desirability may have been useful to control for participant attempts to provide “politically correct” responses. Also relevant to the use of the IAT, an in-person administration of the IAT was preferred, but not possible due to impact of the COVID-19 pandemic. Although results suggest that the utilized measure was valid, an online implementation method could have impacted the participants’ understanding and performance. Finally, the “Problem” scale was significantly negatively skewed, impacting the degree to which one can interpret the analyses. On the other hand, given the normal distribution of the “Punishment” scale, it may have been a better measure of participants’ reactions towards the presented scenarios.

There were also limitations relevant to external validity. Specifically, participants for the study were mainly women, White and heterosexual. Hence, the study findings may not be generalized to different populations with varying identities (e.g., people of color). The study included only undergraduate students from a PWI which raises the question of whether a more diverse college and sample would yield similar findings. Data were collected online and

therefore included participants who have access to a computer device and internet so, results may vary for those who do not have access to these items. Additionally, the study focused on differences in attitudes between two groups (i.e., White and Black boys). As such, findings from this study may not be replicable on other race and ethnicities (e.g., Latinx individuals). Further, since White participants were included in the analysis, those results cannot be generalized to participants holding marginalized racial or ethnic identities. Finally, the sample was between 18 and 22 years old, which makes it difficult generalize study results to older adults.

Future research should be pursued to compare White and non-White pre-service teachers attitudes to examine difference in their problem behavior and punishment severity ratings. In addition to that, difference between the two groups on each independent variable would help to get better insight into main components responsible for increased problem behavior ratings as well as punishment severity. Further research on colorblind racial attitudes occurring in academic settings and its relationship with problem behavior and punishment severity ratings should be conducted to find out which specific elements of colorblind attitudes that led to findings similar to the current study.

REFERENCES

- Alexander, K. L., Entwisle, D. R., & Thompson, M. S. (1987). School performance, status relations, and the structure of sentiment: Bringing the teacher back in. *American Sociological Review*, 665-682. doi: 10.2307/2095602
- Allen, M., Witt, P. L., & Wheelless, L. R. (2006). The role of teacher immediacy as motivational factor in student learning: Using meta-analysis to test a causal model. *Communication Education*, 55(1), 21–31. doi: 10.1080/03634520500343368
- Apfelbaum, E. P., Norton, M. I., & Sommers, S. R. (2012). Racial color blindness: Emergence, practice, and implications. *Current Directions in Psychological Science*, 21, 205–209. doi: 10.1177/0963721411434980
- Astor, R. A., Guerra, N., & Van Acker, R. (2010). How can we improve school safety research?. *Educational Researcher*, 39(1), 69-78. doi: 10.3102/0013189X09357619
- Atwater, S.A.C. (2008). Waking up to difference: Teachers, color-blindness, and the effects on students of color. *Journal of Instructional Psychology*, 35(3), 246-253.
- Avery, P. G., & Walker, C. (1993). Prospective teachers' perceptions of ethnic and gender differences in academic achievement. *Journal of Teacher Education*, 44(1), 27-37.
- Awad, G. H., Cokley, K., & Ravitch, J. (2005). Attitudes toward affirmative action: A comparison of color-blind versus modern racist attitudes. *Journal of Applied Social Psychology*, 35(7), 1384-1399. doi: 10.1177/0022487193044001005
- Bernstein, M. J., Young, S. G., & Hugenberg, K. (2007). The cross-category effect: Mere social categorization is sufficient to elicit an own-group bias in face recognition. *Psychological Science*, 18(8), 706-712. doi: 10.1111/j.1467-9280.2007.01964.x

- Bobo, L., Kluegel, J. R., & Smith, R. A. (1997). Laissez-faire racism: The crystallization of a kinder, gentler, antiblack ideology. *Racial Attitudes in the 1990s: Continuity and Change*, 15, 23-25.
- Bonilla-Silva, E. (2015). The structure of racism in color-blind, "Post-Racial" America. *American Behavioral Scientist*, 59(11), 1358-1376. doi: 10.1177/0002764215586826
- Brondolo, E., Brady, N., Pencille, M., Beatty, D., & Contrada, R. J. (2009). Coping with racism: A selective review of the literature and a theoretical and methodological critique. *Journal of Behavioral Medicine*, 32(1), 64-88. doi: 10.1007/s10865-008-9193-0
- Cairns, L. G. (1987). Behavior problems. *International Encyclopedia of Teaching and Teacher Education*, 446-452. New York, NY: Pergamon.
- Carpenter, T. P., Pogacar, R., Pullig, C., Kouril, M., Aguilar, S., LaBouff, J., Isenberg, N., & Chakroff, A. (2019). Survey-software implicit association tests: A methodological and empirical analysis. *Behavior Research Methods*, 51(5), 2194–2208.
<https://doi.org/10.3758/s13428-019-01293-3>
- Chang, D. F., & Sue, S. (2003). The effects of race and problem type on teachers' assessments of student behavior. *Journal of Consulting and Clinical Psychology*, 71(2), 235.
- Cicchetti, D., & Lynch, M.M. (1993). Toward an ecological/transactional model of community violence and child maltreatment: Consequences for children's development. *Psychiatry*, 56(1), 96-118 .
- Coates, R. D. (2007). Covert racism in the US and globally. *Sociology Compass*, 2(1),208 – 231. doi: 10.1111/j.1751-9020.2007.00057.x

- Cornelius-White, J. (2007). Learner-centered teacher–student relationships are effective: A meta-analysis. *Review of Educational Research*, 77(1), 113–143. doi: 10.3102/003465430298563
- Cullinan, D., & Kauffman, J. M. (2005). Do race of student and race of teacher influence ratings of emotional and behavioral problem characteristics of students with emotional disturbance?. *Behavioral Disorders*, 30(4), 393-402.
- Dasgupta, N., & Rivera, L. M. (2008). When social context matters: The influence of long–term contact and short–term exposure to admired outgroup members on implicit attitudes and behavioral intentions. *Social Cognition*, 26(1), 112-123. doi: 10.1521/soco.2008.26.1.112
- Davis, K. A. (1995). Multicultural classrooms and cultural communities of teachers. *Teaching and Teacher Education*, 11(6), 553-563. doi: 10.1016/0742-051X(95)00003-3
- Dunham, Y., Baron, A. S., & Banaji, M. R. (2008). The development of implicit intergroup cognition. *Trends in Cognitive Sciences*, 12(7), 248-253. doi: 10.1016/j.tics.2008.04.006.
- Frankenberg, E. (2012). Exploring teachers’ racial attitudes in a racially transitioning society. *Education and Urban Society*, 44(4), 448–476. doi: 10.1177/0013124510392780
- Frankenberg, R. (1993). *The social construction of whiteness: White women, race matters*. Routledge.
- Frankenberg, R. 1993. *White Women, Race Matters*. Minneapolis: University of Minnesota Press.
- Furnham, A., & Procter, E. (1988). The multi-dimensional just world belief scale. *London, United Kingdom: London University (mimeograph)*.
- Gallagher, C. (2003). Color-Blind privilege: The social and political functions of erasing the color line in post race America. *Race, Gender & Class*, 10(4), 22-37.

- Gattol, V., Sääksjärvi, M., & Carbon, C. C. (2011). Extending the implicit Association Test (IAT): Assessing consumer attitudes based on multi-dimensional implicit associations. *PloS one*, 6(1), e15849. doi:10.1371/journal.pone.0015849
- Gawronski, B., & De Houwer, J. (2014). Implicit measures in social and personality psychology. *Handbook of Research Methods in Social and Personality Psychology*, 2, 283-310.
- Gehlbach, H., Brinkworth, M. E., King, A. M., Hsu, L. M., McIntyre, J., Rogers, T. (2016). Creating birds of similar feathers: Leveraging similarity to improve teacher-student relationships and academic achievement. *Journal of Educational Psychology*, 108(3), 342–352. doi: 10.1037/edu0000042
- Glock, S., & Böhmer, I. (2018). Teachers' and preservice teachers' stereotypes, attitudes, and spontaneous judgments of male ethnic minority students. *Studies in Educational Evaluation*, 59, 244-255.
- Glock, S., & Karbach, J. (2015). Preservice teachers' implicit attitudes toward racial minority students: Evidence from three implicit measures. *Studies in Educational Evaluation*, 45, 55-61. doi: 10.1016/j.stueduc.2015.03.006
- Glock, S., & Kleen, H. (2019). Attitudes toward students from ethnic minority groups: The roles of preservice teachers' own ethnic backgrounds and teacher efficacy activation. *Studies in Educational Evaluation*, 62, 82-91.
- Goff, P. A., Jackson, M. C., Leone, D., Lewis, B. A., Culotta, C. M., & DiTomasso, N. A. (2014). The essence of innocence: Consequences of dehumanizing Black children. *Journal of Personality and Social Psychology*, 106(4), 526. doi: 10.1037/a0035663

- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology*, 74(6), 1464-1480. doi: 10.1037//0022-3514.74.6.1464
- Greenwald, A. G., & Nosek, B. A. (2001). Health of the Implicit Association Test at age 3. *Zeitschrift für Experimentelle Psychologie*, 48(2),85-9. doi: 10.1026//0949-3946.48.2.85
- Greenwald, A. G., Banaji, M. R., & Nosek, B. A. (2003). Understanding and using the implicit association test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85(2), 197-216. <https://doi.org/10.1037/0022-3514.85.2.197>
- Guerra, N., B. Attar, and R. Weissberg. (1997). "Prevention of Aggression and Violence Among Inner-City Youths." Pp. 375–383 in *Handbook of Antisocial Behavior*, edited by D. M. Stoff J.Breiling , and J. D. Maser . New York: Wiley.
- Gushue, G. V., & Constantine, M. G. (2007). Color-blind racial attitudes and White racial identity attitudes in psychology trainees. *Professional Psychology: Research and Practice*, 38, 321-328. doi: 10.1037/0735-7028.38.3.321
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child development*, 72(2), 625-638. doi: 10.1111/1467-8624.00301
- Hanssen, E. (1998). A white teacher reflects on institutional racism. *Phi Delta Kappan*, 79(9), 694.
- Hartmann, D., Croll, P. R., Larson, R., Gerteis, J., & Manning, A. (2017). Colorblindness as identity: Key determinants, relations to ideology, and implications for attitudes about race and policy. *Sociological Perspectives*, 60(5), 866 888. doi: 10.1177/0731121417719694

- Hawley, W. D. (2007). Designing schools that use student diversity to enhance learning of all students. *Lessons in integration: Realizing the promise of racial diversity in American schools*, 31-56.
- Hinojosa, M. S. (2008). Black-white differences in school suspension: Effect of student beliefs about teachers. *Sociological Spectrum*, 28(2), 175-193. doi: 10.1080/02732170701796429
- Hinojosa, M. S., & Moras, A. (2009). Challenging colorblind education: a descriptive analysis of teacher racial attitudes. *Research and Practice in Social Sciences*, 4(2), 27-45.
- Hoge, D. R., Smit, E. K., & Hanson, S. L. (1990). School experiences predicting changes in self-esteem of sixth and seventh-grade students. *Journal of Educational Psychology*, 82, 117–127. doi:10.1037//0022-0663.82.1.117
- Howard, T. C. (2003). Culturally relevant pedagogy: Ingredients for critical teacher reflection. *Theory into Practice*, 42(3), 195-202. doi: 10.1207/s15430421tip4203_5
- Isaacs, A. D. (1994). Interracial Adoption: Permanent Placement and Racial Identity-An Adoptee's Perspective. *Nat'l Black LJ*, 14, 126.
- Jacoby-Senghor, D. S., Sinclair, S., & Shelton, J. N. (2016). A lesson in bias: The relationship between implicit racial bias and performance in pedagogical contexts. *Journal of Experimental Social Psychology*, 63, 50-55. doi: 10.1016/j.jesp.2015.10.010
- Jones, J. M. (1997). Prejudice and racism (2nd ed.). New York, NY: McGraw-Hill.
- Kang, J. (2012). Communications Law: Bits of Bias. In J. D. Levinson & R. J. Smith (Eds.), *Implicit Racial Bias Across the Law* (pp. 132-145). Cambridge, MA: Cambridge University Press.

- Keller, B., & Manzo, K. K. (2003). Teachers: White female, middle-aged. *Education Week*, 23(2),10.
- Kreamelmeyer, K., Kline, A., Zygmunt, E., & Clark, P. (2016). To see or not to see: Preservice teacher attitudes toward color blindness. *Teacher Educator*, 51, 136–152.
- Kuperminic, G. P., Leadbeater, B. J., & Blatt, S. J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School Psychology*, 39, 141–159. doi.org/10.1016/S0022-4405(01)00059-0
- LaRusso, M., Romer, D., & Selman, R. (2008). Teachers as builders of respectful school climates: Implications for adolescent drug use norms and depressive symptoms in high school. *Journal of Youth & Adolescence*, 37, 386–398. doi: 10.1007/ s10964-007-9212-4
- Landsman, J., & Lewis, C. W. (2006). White teachers, diverse classrooms: A guide to building inclusive schools, promoting high expectations, and eliminating racism. Stylus Publishing, LLC..
- Lee, C. (2013). Making race salient: Trayvon Martin and implicit bias in a not yet post-racial society. *North Carolina Law Review*, 91(5), 1555-1612.
- Lewis, A. E. (2001). There is no “race” in the schoolyard: Color-Blind ideology in an (almost) all-White school. *American Educational Research Journal*, 38(4), 781-811. doi: 10.3102/00028312038004781
- Lipkus, I. (1991). The construction and preliminary validation of a global belief in a just world scale and the exploratory analysis of the multidimensional belief in a just world scale. *Personality and Individual Differences*, 12(11), 1171–1178. [https://doi.org/10.1016/0191-8869\(91\)90081-L](https://doi.org/10.1016/0191-8869(91)90081-L)

LoBue, V., & Thrasher, C. (2015). The Child Affective Facial Expression (CAFE) set: Validity and reliability from untrained adults. *Emotion Science*, 5, 1532.

<http://doi.org/10.3389/fpsyg.2014.01532>

LoBue, V. (2014). The Child Affective Facial Expression (CAFE) set. Databrary.

<http://doi.org/10.17910/B7301K>

Manning, A., Hartmann, D., & Gerteis, J. (2015). Colorblindness in Black and White: An Analysis of core tenets, configurations, and complexities. *Sociology of Race and Ethnicity*, 1(4), 532-546. doi: 10.1177/2332649215584828

Marx, S. (2002). Entanglements of Altruism, Whiteness, and Deficit Thinking: Preservice Teachers Working with English Language Learners of Color. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

McConahay J. B. Modern racism, ambivalence, and the modern racism scale. In: Dovidio JF, Gaertner SL, editors. *Prejudice, Discrimination and Racism*. New York: Academic; 1986. pp. 91–126.

McConnell, A. R., & Leibold, J. M. (2001). Relations among the Implicit Association Test, discriminatory behavior, and explicit measures of racial attitudes. *Journal of Experimental Social Psychology*, 37(5), 435-442. doi: 10.1006/jesp.2000.1470

McCormick, T. E., & Noriega, T. (1986). Low versus high expectations: A review of teacher expectations effects on minority students. *Journal of Educational Equity and Leadership*, 6(3), 224-234.

Miller, M. J., Keum, B. T., Thai, C. J., Lu, Y., Truong, N. N., Huh, G. A., . . . Ahn, L. H. (2018). Practice recommendations for addressing racism: A content analysis of the counseling psychology literature. *Journal of Counseling Psychology*, 65(6), 669 – 680.

- Morris, E. W. (2005). From “middle class” to “trailer trash”: Teachers’ perceptions of White students in a predominately minority school. *Sociology of Education*, 78(2), 99-121. doi: 10.1177/003804070507800201
- Neville, H. A., Lilly, R. L., Duran, G., Lee, R. M., & Browne, L. (2000). Construction and initial validation of the Color-Blind Racial Attitudes Scale (CoBRAS). *Journal of Counseling Psychology*, 47(1), 59-70. doi:10.1037/0022-0167.47.1.59
- Neville, H., Spanierman, L., & Doan, B. T. (2006). Exploring the association between color-blind racial ideology and multicultural counseling competencies. *Cultural Diversity and Ethnic Minority Psychology*, 12(2), 275-290. doi: 10.1037/1099-9809.12.2.275
- Okonofua, J. A., Walton, G. M., & Eberhardt, J. L. (2016). A vicious cycle: A social-psychological account of extreme racial disparities in school discipline. *Perspectives on Psychological Science*, 11(3), 381-398. doi:10.1177/1745691616635592
- Okonofua, J.A., & Eberhardt, J.L. (2015). Two strikes: Race and the disciplining of young students. *Psychological Science*, 26, 617-624. doi:10.1177/0956797615570365
- Peters, T., Margolin, M., Fragnoli, K., & Bloom, D. (2016). What's race got to do with it?: Preservice teachers and white racial identity. *Current Issues in Education*, 19.
- Pettit, B., & Western, B. (2004). Mass imprisonment and the life course: Race and class inequality in US incarceration. *American Sociological Review*, 69(2), 151-169. doi:10.1177/000312240406900201
- Pianta, R. C., Steinberg, M. S., & Rollins, K. B. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. *Development and Psychopathology*, 7(2), 295-312. doi: 10.1017/S0954579400006519

- Pollock, M. (2004). *Colormute: Race talk dilemma in an American school*. Princeton, NJ: Princeton University Press.
- Reskin, B. F. (2000). The proximate causes of employment discrimination. *Contemporary Sociology*, 29(2), 319-328. doi:10.2307/2654387
- Reskin, B. F. (2005). Including mechanisms in our models of ascriptive inequality. In *Handbook of employment discrimination research* (pp. 75-97). Springer, Dordrecht.
- Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher–student relationships on students’ school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81(4), 493–529. doi: 10.3102/0034654311421793
- Rumberger, R. (1987). High school dropouts: A review of issues and evidence. *Review of Education Research*, 57, 1–29. doi:10.2307/1170232
- Rushin, S., & Edwards, G. S. (2018). The Effect of President Trump's Election on Hate Crimes. *Available at SSRN 3102652*.
- Rutland, A., Hitti, A., Mulvey, K. L., Abrams, D., & Killen, M. (2015). When does the in-group like the out-group? Bias among children as a function of group norms. *Psychological Science*, 26(6), 834-842. doi: 10.1177/0956797615572758
- Salkind, N. J. (2008). Cultural deficit model. *Encyclopedia of Educational Psychology*, 2, 217-217. doi: 10.4135/9781412963848.n60
- Sbarra, D. A., & Pianta, R. C. (2001). Teacher ratings of behavior among African American and Caucasian children during the first two years of school. *Psychology in the Schools*, 38(3), 229-238.

- Schofield, J. W. (1982). *Black and White in school: Trust, tension, or tolerance?* New York, NY: Praeger
- Schofield, J. W. (1986). Causes and consequences of the colorblind perspective. In J. F. Dovidio & S. L. Gaertner (Eds.), *Prejudice, Discrimination, and Racism* (pp. 231-253). San Diego, CA, US: Academic Press.
- Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review*, 34(4), 317-342. doi: 10.1023/A:1021320817372
- Sleeter, C. E. (1996). *Multicultural education as social activism*. Albany, NY: SUNY Press.
- Staats, C. (2014). Implicit racial bias and school discipline disparities. Retrieved from Columbus, OH: <http://kirwaninstitute.osu.edu/wp-content/uploads/2014/05/ki-ib-argument-piece03.pdf>.
- Stepanikova, I., Triplett, J., & Simpson, B. (2011). Implicit racial bias and prosocial behavior. *Social Science Research*, 40(4), 1186-1195. doi: 10.1016/j.ssresearch.2011.02.004
- Tenenbaum, H. R., & Ruck, M. D. (2007). Are teachers' expectations different for racial minority than for European American students? A meta-analysis. *Journal of Educational Psychology*, 99(2), 253. doi:10.1037/0022-0663.99.2.253
- Thapa, A., Cohen, J., Higgins-D'Alessandro, A., & Guffey, S. (2013). School climate research summary, *Review of Educational Research*, 83(4). doi: 10.3102/0034654313483907
- Wald, J., & Losen, D. J. (2003). Defining and redirecting a school-to-prison pipeline. *New directions for youth development*, 2003(99), 9-15. doi: 10.1002/yd.51

- Warikoo, N., Sinclair, S., Fei, J., & Jacoby-Senghor, D. (2016). Examining racial bias in education: A new approach. *Educational Researcher*, 45(9), 508-514. doi: 10.3102/0013189X16683408
- Wayman, J.C. (2002). Student perceptions of teacher ethnic bias: A comparison of Mexican American and Non-Latino White dropouts and students. *The High School Journal*, 85(3), 27-37. doi: 10.1353/hsj.2002.0006
- Wingfield, A. (2015, September 13). Color-Blindness Is Counterproductive. Retrieved from <https://www.theatlantic.com/politics/archive/2015/09/color-blindness-is-counterproductive/405037/>
- Worthington, R. L., Navarro, R. L., Loewy, M., & Hart, J. (2008). Color-blind racial attitudes, social dominance orientation, racial-ethnic group membership and college students' perceptions of campus climate. *Journal of Diversity in Higher Education*, 1(1), 8-19. doi: 10.1037/1938-8926.1.1.8
- Wubbels, Th., Brekelmans, M., den Brok, P., & van Tartwijk, J. (2006). An interpersonal perspective on classroom management in secondary classrooms in The Netherlands. In C. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice and contemporary issues* (pp. 1161–1191). New York: Erlbaum
- Young, B. L., Madsen, J., & Young, M. A. (2010). Implementing diversity plans: Principals' perception of their ability to address diversity in their schools. *NASSP Bulletin*, 94(2), 135-157. doi: 10.1177/0192636510379901

APPENDIX A: DEMOGRAPHIC ITEMS

Please answer the following questions honestly:

1. How old are you?
2. What is your gender identity?
3. What is your sexual orientation (e.g., gay, lesbian, straight)?
4. What is your race/ethnicity?
 - a. American Indian/Alaska Native
 - b. Asian (American)
 - c. Black/African American
 - d. Latinx
 - e. Middle Eastern
 - f. Native Hawaiian/Pacific Islander
 - g. White
 - h. Other

APPENDIX D: CONDITION ASSIGNED TO PARTICIPANTS



APPENDIX E: FIGURES

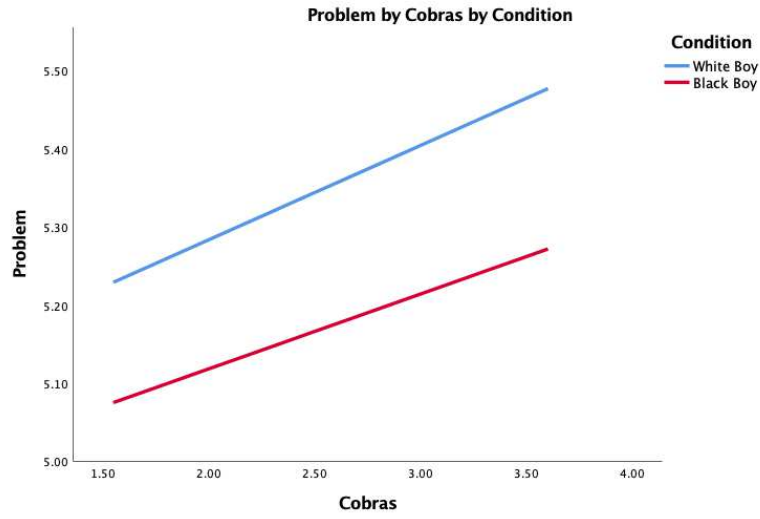


Figure 1. Moderation analyses for CoBRAS predicting “Problem” ratings for White participants

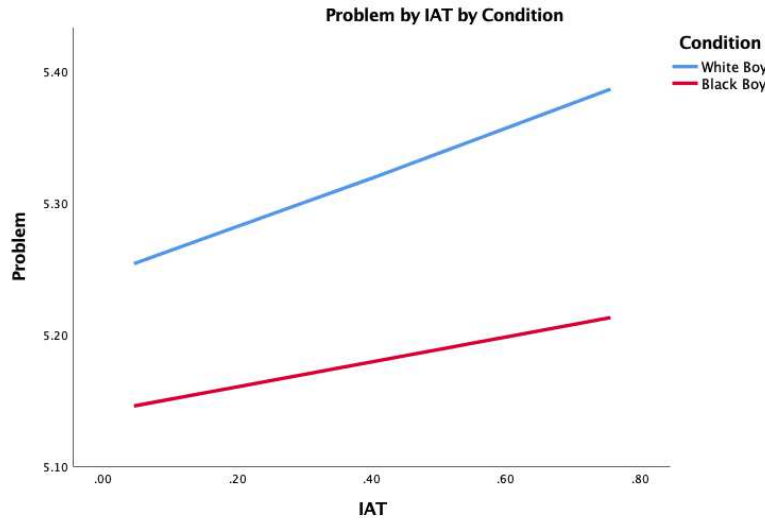


Figure 2. Moderation analyses for IAT predicting “Problem” ratings for White participants

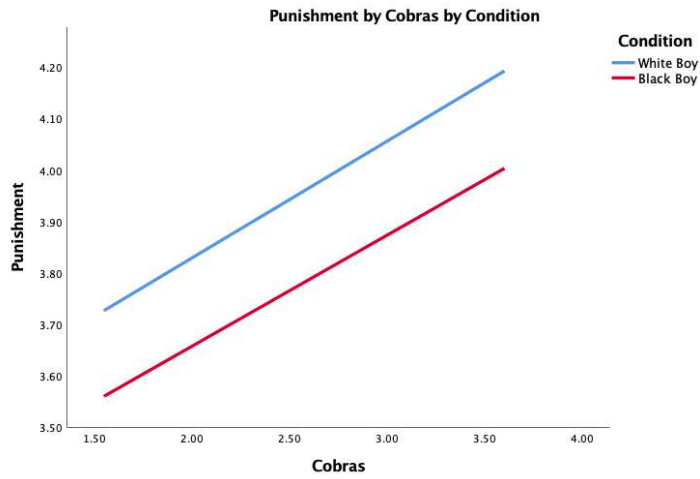


Figure 3. Moderation analyses for CoBRAS predicting “Punishment” ratings for White participants

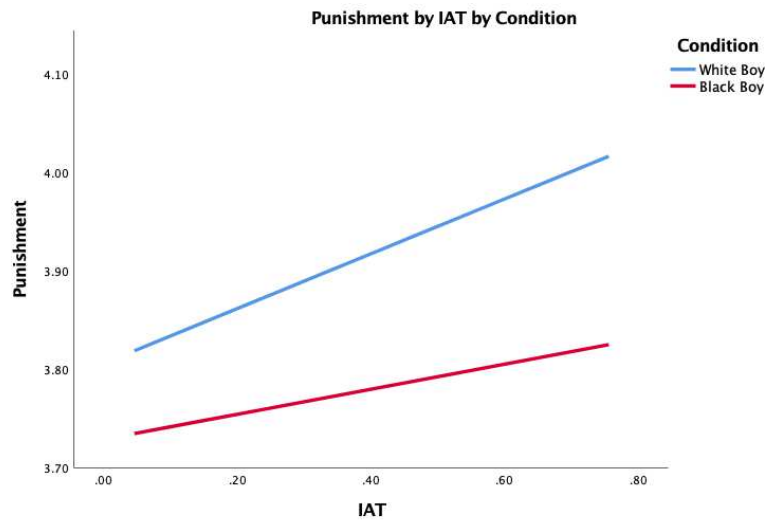


Figure 4. Moderation analyses for IAT predicting “Punishment” ratings for White participants

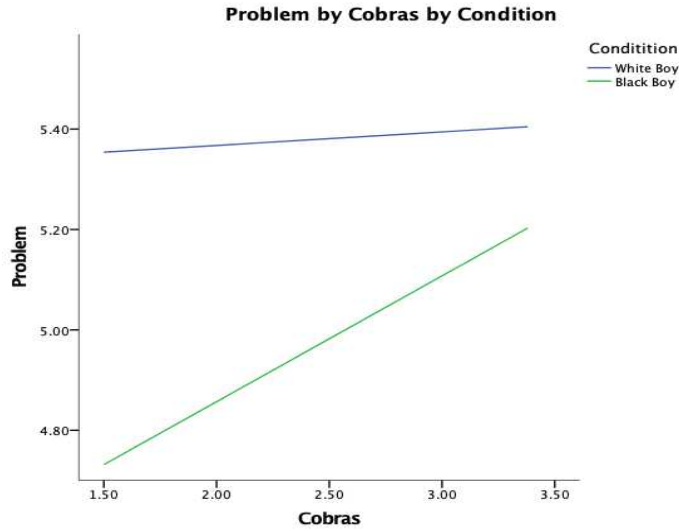


Figure 5. Moderation analyses for CoBRAS predicting “Problem” ratings for teacher education major participants

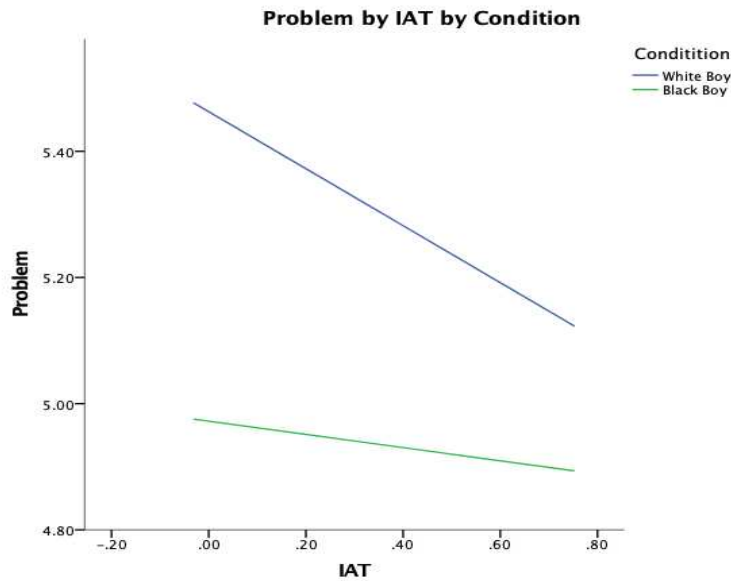


Figure 6. Moderation analyses for IAT predicting “Problem” ratings for teacher education major participants

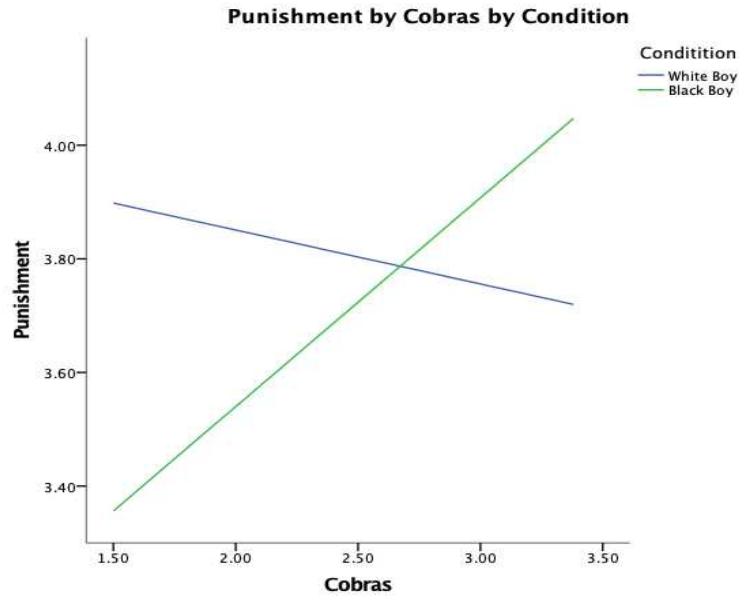


Figure 7. Moderation analyses for CoBRAS predicting “Punishment” ratings for teacher education major participants

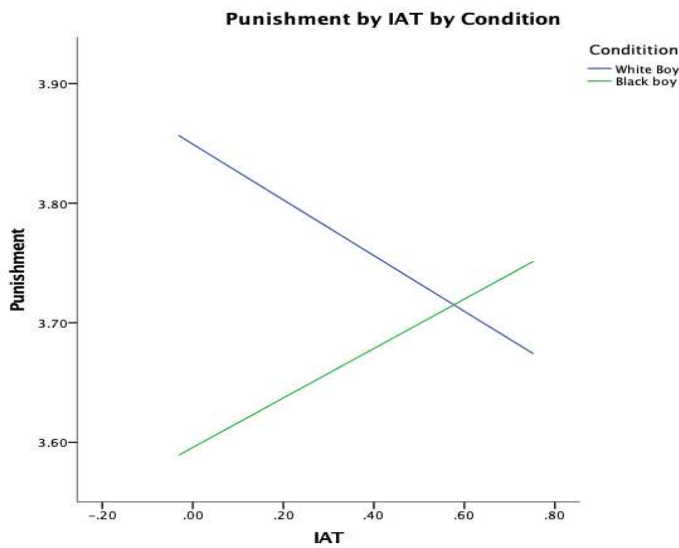


Figure 8. Moderation analyses for IAT predicting “Punishment” ratings for teacher education major participants

APPENDIX F: TABLES

Table 1

Multiple Regression Analysis for Problem Behavior Ratings (N= 194)

	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
IAT Score	.075	.193	.028	.387	.699
CoBRAS Total Score	.115	.077	.108	1.491	.138
Condition	-.142	.140	-.073	-1.012	.313

Note. df = 3, 190.

Table 2

Multiple Regression Analysis for Punishment Severity Ratings (N= 194)

	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
IAT Score	.122	.186	.047	.659	.511
CoBRAS Total Score	.213	.074	.207	2.893	.004
Condition	-.138	.134	-.073	-1.030	.304

Note. df = 3, 190.

Table 3

Multiple Regression Analysis for Problem Behavior Ratings by Pre-service Teachers (N= 53)

	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
IAT Score	-.415	.378	-.162	-1.099	.277
CoBRAS Total Score	.185	.172	.159	1.080	.286
Condition	-.443	.273	-.226	-1.627	.110

Note. df = 3, 49.

Table 4

Multiple Regression Analysis for Punishment Severity Ratings by Pre-service Teachers (N= 53)

	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
IAT Score	-.029	.343	-.013	-.086	.932
CoBRAS Total Score	.093	.156	.090	.594	.555
Condition	-.091	.248	-.053	-.367	.715

Note. df = 3, 49