

REDUCING IMPLICIT RACIAL BIAS IN PRESERVICE TEACHERS BY FACILITATING IMPACT AWARENESS

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TABLE OF CONTENTS

List of Tables	iv
List of Figures	v
Abstract	vi
Review of the Literature	1
What is Racism?.....	1
Aversive Racism and Implicit Bias.....	2
Measures of Implicit Bias	6
Impact of Aversive Racism and Implicit Bias	9
Reducing Implicit Racial Bias and Its Impact.....	14
Effective Teaching to Reduce Implicit Racial Bias	18
Current Practice in Anti-Racism in P-12 Schools.....	20
Current Practice in Anti-Racism in Teacher Education.....	23
Statement of the Problem	26
Theoretical Framework	26
Hypothesis	28
Methods.....	30
Participants.....	30
Materials.....	30
Teaching and Learning About Tolerance.....	31
Exploring the Complexity of Racism: The Case of Tim Hanks.....	31
Teachers’ Subtle Communications About Students’ Ability	32
Affect-Misattribution Procedure (AMP).....	33
Vignettes and Rating Scale	34
Procedure.....	37
Intervention Group	37
Control Group	39
Design.....	39
Results.....	40
Teaching and Learning About Tolerance.....	41
IAT Validity	42
Role of Past Experience	44
Improving Practice	44
Exploring the Complexity of Racism: The Case of Tim Hanks	45
Case Study, Part I: Tim Hanks	45
Home and Family Difficulties	45
Personal Issues.....	46
Resistance Culture	47
Information Seeking	48
Relationship Building.....	49
Teacher Limits.....	49
Case Study, Part II: Turnaround.....	50
Personal Responsibility	51

Relief	52
Clarifying Support Role	52
Problem Solving	53
Making Amends	53
Case Study, Part III: Racist?	53
Intention.....	53
Insignificance of Race	54
Implicit Racism	55
Equivalent Impact.....	56
Defending the Bus Driver.....	57
Feeling out of Place	57
No Difference	58
Sharing Perceptions	58
Importance of Context.....	59
Teachers’ Subtle Communications About Students’ Ability.....	59
Jerome	59
Leroy	60
Anthony.....	61
Unintentional Racism.....	62
Affect Misattribution Procedure	63
Vignettes and Rating Scale	64
Rating Scale.....	64
Written Responses to the Vignettes	65
Question 1.....	67
Between Groups.....	67
Within Groups	68
Question 2.....	70
Between Groups.....	70
Within Groups	71
Question 3.....	72
Between Groups.....	72
Within Groups	73
Discussion.....	75
References.....	81
Appendix A: Sex and Major of Study Participants.....	92
Appendix B: Consent Forms and Demographic Questionnaire.....	93
Appendix C: Vignettes and Rating Scale.....	97
Appendix D: Teaching and Learning About Tolerance Assignment.....	100
Appendix E: Exploring the Complexity of Racism – The Case of Tim Hanks.....	102
Appendix F: Teachers’ Subtle Communications About Students’ Ability.....	107
Appendix G: Prime and Target Images Used in the AMP.....	108

LIST OF TABLES

Table	Page
1. Procedures Completed by Study Participants	36
2. Mean Percent of “Pleasant” Responses Following AMP Stimuli by AMP Administration.....	64
3. Participant Mean Ratings of Student by Causal Dimension	65
4. Themes Identified in Participants’ Written Responses to Vignette Questions	66

LIST OF FIGURES

Figure	Page
1. Theoretical Framework for Reducing Implicit Bias	27
2. Percent of “Pleasant” Responses Following AMP Stimuli for Each AMP Administration	64

ABSTRACT

REDUCING IMPLICIT RACIAL BIAS IN PRESERVICE TEACHERS BY FACILITATING IMPACT AWARENESS

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Implicit racial bias has a measurable impact on the judgments and evaluations of Black individuals by Whites, as well as communication between these two groups. The purpose of this study was to develop an efficient, researched-based intervention for raising awareness about aversive racism in order to establish impact awareness (Gawronski, Hofmann, & Wilbur, 2006) and achieve measureable reductions in implicit bias in preservice teachers who were students in a public, regional comprehensive university in the Southeast. Participants in the experimental group were engaged in activities in which they learned about and discussed aversive racism and implicit bias, while the members of the control group was not exposed to this material. All participants then completed the Affect Misattribution Procedure (AMP) (Payne, Cheng, Govorun, & Stewart, 2005) as a measure of implicit racial attitudes, and they responded to vignettes describing a White or Black student with academic and behavioral difficulties to determine biases in participants' approach to these situations. Twenty-six days following the intervention, participants in the experimental group completed the AMP and responded to vignettes once more to determine changes to implicit bias over time.

CHAPTER ONE: REVIEW OF THE LITERATURE

What is Racism?

Racism has been defined in the psychology literature as negative beliefs, attitudes, and behaviors towards members of a particular race that are manifested in stereotypes, prejudice, and discrimination at the individual, institutional, social, and cultural levels (Dovidio, Brigham, Johnson & Gaertner, 1996; Henkel, Dovidio, & Gaertner, 2006). Additionally, racism has been characterized as including the social influence or power to disadvantage or negatively impact outcomes for certain groups, sometimes creating advantages for one's own group in the process (Feagin & Vera, 1995; Jones, 1997). Central to these conceptions of racism is the resulting unequal or unfair treatment of a group of people solely based on their race.

When racism is discussed in the current research, particularly research which addresses how racism affects interpersonal interactions, two manifestations of racism typically emerge: overt racism and aversive racism. Overt racism can be considered "old-fashioned" racism, and includes intentional acts of discrimination or support of such acts meant to disadvantage or harm members of a particular race (Dovidio & Gaertner, 2005). Examples of overt racism include denial of services or provision of lower quality services, harassment or violence, and denial of job and educational opportunities simply on the basis of a person's race. Belief in the superiority or inferiority of a particular race is also common in overt racism. On the other hand, aversive racism (Kovel, 1970) represents a more subtle and indirect form of racism that is difficult to detect because it frequently occurs in ambiguous contexts where one's actions can be justified by means other than prejudice. It is often perpetrated by well-meaning individuals who hold strong egalitarian and Liberal values but who nonetheless harbor (usually unconscious) negative

attitudes towards minorities which influence their evaluations of and subsequent interactions with these individuals (Gaertner & Dovidio, 1986).

Racism and racial discrimination in the United States have seen a significant change in presentation from the early and mid-1900's to the present (Dovidio & Gaertner, 2005; Gaertner & Dovidio, 1986; Henkel et al., 2006; Kovel, 1970). During the early 1900's, Black citizens experienced significant struggles in the social, economic, and political realms of American society, a reality that was extensively highlighted during this time by Gunnar Myrdal's *American Dilemma* (as cited in Sears & Henry, 2005). Alongside civil rights movements and federal legislation prohibiting discrimination in institutions and establishments across the country in the 1950's and 60's came widespread societal adoption of egalitarian values (including racial equality) and a decrease in overt expressions of prejudice and discrimination (Dovidio & Gaertner, 2000; Schuman, Steeh, Bobo, & Krysan, 1997). However, minorities have continued to experience discrimination and disadvantage despite these cultural changes by way of more contemporary forms of racism, including aversive racism (Dovidio & Gaertner, 2005). While overt racism is now far less prevalent than it was in the past, cases of overt discrimination continue to be documented. It has been suggested that current racial prejudice in the U.S. follows a "dual process" model (Devine, 1989) that distinguishes between explicit, self-acknowledged prejudice and the implicit bias that is characteristic of aversive racism, which is difficult for individuals to control.

Aversive Racism and Implicit Bias

The current body of literature regarding aversive racism and implicit bias focuses primarily on the interactions between White and Black individuals. This discussion will also primarily reference these groups, but findings regarding aversive racism and/or implicit bias

have been generalized to include women and Latinos in the U.S. as well (Hodson, Dovidio, & Gaertner, 2002).

The aversive racism framework (Gaertner & Dovidio, 1986; Dovidio & Gaertner, 1998, 2005) suggests that the conflict that exists between Whites' explicitly held egalitarian values and underlying negative attitudes towards Blacks generates internal discomfort and a fear of acting in ways that could be construed as prejudiced. Because this conflict arises as a result of normal psychological processes (categorization of individuals into ingroups and outgroups, motivational factors, socialization), it is believed to be experienced by the majority of Whites in the U.S. The framework further states that the situations in which discrimination occur are influenced by this conflict; when the norms for behavior in a given situation are ambiguous or poorly defined, discrimination is more likely to occur because this behavior cannot clearly be construed as prejudice. In contrast, when the norms for behavior in a given situation are clearly outlined, discrimination is less likely to occur, as violation of the norms is easily observable and poses a threat to the aversive racist's egalitarian self-image. However, even when the norms for behavior are well defined, an aversive racist will seek nonracial factors present in the situation that can be used to justify discriminatory behavior, as this would eliminate the threat of contradicting their prejudice-free self-image (Gaertner & Dovidio, 1986).

This is well illustrated in a study by Gaertner and Dovidio (1977) that was modeled after a classic study by Darley and Latané (1968) on bystander intervention. In Gaertner and Dovidio's study, college women were led to believe they were participating in an experiment about extrasensory perception (ESP) and that they were to attempt to receive telepathic messages from a "sender" in a cubicle across the hallway from them. An intercom in the subject's cubicle was presumed to allow the subject to hear the sender. The racial identity of the sender (White or

Black) was manipulated by varying vocal dialect as well as photo ID cards that were given to the subject at the beginning of the study. Furthermore, half of the subjects were told that two additional “receivers” (both of them White females, as indicated on provided ID cards) would be in an adjacent cubicle attempting to receive messages as well, while the other half were told that they were the only receiver. In all conditions, a few minutes after the start of the experiment, the sender interrupted the procedure over the intercom to indicate that a stack of chairs piled to the ceiling appeared to be falling. This was immediately followed by a crashing sound and the sender’s plea: “They’re falling on me!” The dependent variable of interest was whether or not the subject went to help the sender after hearing the emergency situation. In the condition where subjects believed they were the only one to hear the emergency, they helped Black victims slightly more often than White victims (95% vs. 81%). However, when subjects believed that other receivers had heard the emergency, they helped Black victims less frequently than White victims by a large margin (38% vs 75%). This substantial difference is attributed to (a) the race of the victim, and (b) whether or not remaining passive could be interpreted as prejudice. When subjects believed they were the only one to hear the emergency, inaction could very well be interpreted as prejudiced, as assisting the victim was the clear course of action. When subjects believed that others had heard the emergency (the two other receivers), they were able to diffuse responsibility for responding to the situation to others. For the subject, this means they are able to avoid interaction with the Black victim (and resulting discomfort produced by underlying negative attitudes) without violating their own non-prejudiced self-image, as inaction can now be rationalized as having believed that others would go to the victim’s aid; a belief that serves as a nonracial factor for justifying their behavior.

Similar to aversive racism are other overlapping theories of contemporary racism which make mention of the conflict between an individual's unbiased self-concept and underlying negative attitudes towards minorities, including symbolic racism (Henry & Sears, 2002; Sears & Henry, 1988, 2005) and modern racism (McConahay, 1986). Both aversive racism and symbolic racism posit contemporary racism in the U.S involves a set of beliefs that may be held by Whites about Blacks that justifies negative attitudes or opposition to social policies designed to support minorities. Such belief systems operate on the notion that racism and discrimination has been completely abolished and that social and economic difficulty on the part of minorities is the result of moral inferiority or poor effort, despite being given more than their fair share of assistance on the basis of their race. Whites subscribing to these beliefs frequently consider racism to be unacceptable, define racism mostly in terms of overt racism, and do not view the aforementioned beliefs as racist because they appear to be matters of empirical fact (McConahay, 1986). These theories of contemporary racism may help to explain recent poll research (Patten, 2013) which has detected large differences between Whites' and Blacks' perceptions of whether Black citizens are treated as fairly as Whites in their community. Poll respondents were asked whether they believed Black citizens were treated less fairly than Whites in a number of scenarios: in dealing with police, in the courts, on the job or at work, in stores or restaurants, in local public schools, in getting healthcare, and when voting in elections. Depending on the scenario, the percentage of Black respondents agreeing that Black citizens were treated less fairly than Whites ranged from 28%-40% higher than the percentage of White respondents agreeing with this statement. These results indicate a clear divide in the perception of equal treatment along racial lines, one that may originate from the relative invisibility of contemporary racism to those who perpetrate it.

Frequently discussed in aversive racism theory is the concept of implicit attitudes, which is sometimes referred to in the context of this line of research as implicit racial bias and is thought to represent the negative attitudes present in aversive racism despite explicitly expressed support for racial equality and denial of personal prejudice (Devine, 1989; Greenwald & Banaji, 1995). Implicit attitudes have been defined as “introspectively unidentified (or inaccurately identified) traces of past experience that mediate favorable or unfavorable feeling, thought, or action toward social objects” (Greenwald & Banaji, 1995). Dovidio, Gaertner, Kawakami, and Hodson (2002) described implicit attitudes as the often unconscious activation of beliefs and evaluations in response to the actual or symbolic presence of the “attitude object” to which the beliefs and evaluations belong (in this case, individuals of a certain race).

Measures of Implicit Bias

Measures of implicit bias have been typically been obtained using memory tasks, response latency procedures, physiological measures, and procedures examining affect misattribution (Dovidio, Gaertner, et al., 2002). Two of the most common and empirically validated measures used in research on implicit racial bias are the *Implicit Association Test* (IAT) (Greenwald, McGhee, & Schwartz, 1998) and the *Affect Misattribution Procedure* (AMP) (Payne et al., 2005). The IAT is a response latency procedure, whereas the AMP, as the name indicates, is an affect misattribution procedure.

The IAT procedure as described by Greenwald et. al (1998) requires participants to categorize stimuli representing two target concepts (e.g., White or Black) or two attributes (e.g., pleasant or unpleasant words) into left and right categories on a computer screen using two response keys on the keyboard (one for the left category and one for the right). Initially, participants complete two separate trials requiring them to sort only the target concept stimuli or

attribute stimuli into their assigned left or right category. On a third trial, the target concepts and attributes are assigned to the left and right categories as they were during the previous trials (e.g., White and unpleasant on the left, Black and pleasant on the right). On these “combined trials”, both target concept and attribute stimuli appear, and participants are asked to sort them into their respective categories. On a fourth trial, target concept stimuli are again sorted, but the original left-right categorization is reversed so that the target concept originally categorized on the right is now categorized on the left, and vice-versa. On a final fifth trial, both target concept and attribute stimuli are sorted (as in the third trial) with the reversed target concept left-right categorization. The left-right categorization of the attributes remains unchanged during the procedure. The third and fifth trials are of the most interest in this procedure. If the participant associates the target categories differentially with the attributes used during the procedure, they should find one of the trials more difficult to quickly and accurately respond to than the other, yielding a noticeable difference in response latency referred to as the “IAT effect”.

The IAT has demonstrated strong predictive validity separate from the predictive validity of explicit measures, especially for socially sensitive concepts that are subject to socially desirable responding (Greenwald, Poehlman, Uhlmann, & Banaji, 2009). It has also demonstrated adequate test-retest reliability and internal consistency (Nosek, Greenwald, & Banaji, 2005). However, the IAT continues to receive criticism over the potential impact of differing salience between target concepts and attributes on response latency (Rothermund & Wentura, 2004) and the presence of variability in IAT scores over multiple administrations, which has led some to suggest that the IAT measures situation-specific circumstances which influence the expression of implicit bias (Dasgupta & Greenwald, 2001). While the latter criticism is concerning, it is one that is likely to be shared by many measures of implicit bias and

suggests that implicit bias is malleable, offering hope for efforts to reduce or eliminate the destructive impact it may have in various social arenas, which will be discussed later. A recent study by Siegel, Dougherty, and Huber (2012) provided evidence that cognitive control (being able to deal with the cognitive interference that occurs when responding to the IAT, particularly in regard to task switching) can influence IAT scores. While several IAT validity concerns of this nature were addressed by a new scoring algorithm in Greenwald, Nosek, and Banaji (2003), the influence of cognitive control has persisted. Siegel et. al further found that participant knowledge of the purpose of an IAT designed to measure racial bias significantly increased subsequent IAT scores upon administration. This is a cause of concern for any study using the race IAT that may use participants who are familiar with the race IAT (e.g., undergraduate psychology students) or any study that intends to use the IAT as both a pre and post measure of implicit bias.

The AMP (Payne et al., 2005), like the IAT, is usually conducted using a computer to provide responses. In a typical AMP, participants are asked to make dichotomous judgments about Chinese pictographs (e.g., “is this pictograph more or less pleasant than the average pictograph?”). Participants complete multiple trials consisting of the presentation of an affect-laden or neutral prime image, followed by a blank or gray screen, a Chinese pictograph, and finally a screen filled with “noise” until the participant provides a response using the response keys. Prior to beginning the AMP, participants are told that the prime images serve as warnings that a Chinese pictograph is about to appear, and that they should make judgments based on the pictograph only. Differential ratings of the Chinese pictographs based on the preceding prime images (e.g., White or Black faces) would suggest differing implicit attitudes for those prime images. This method of measuring implicit bias is made possible when participants are unable to

separate the source of their affect (the prime image) from their judgment of an unrelated entity (the Chinese pictograph) (Payne et al. 2005; Winkielman, Zajonc, & Schwarz, 1997).

The AMP has demonstrated validity as a measure of implicit bias (Imhoff & Banse, 2009; Payne et. al, 2005) with strong internal consistency (Blaison, Imhoff, Hühnel, Hess, & Banse, 2012; Payne et al., 2005; Payne, Burkley, & Stokes, 2008), and as such has become a popular measure in research on implicit attitudes. Unlike the IAT, the AMP has been shown to be somewhat resistant to the effects of cognitive control, even when participants are explicitly warned about prime influence on their judgments (Payne et al., 2005). Because of this, the AMP becomes an ideal instrument in certain research on implicit attitudes where participants may be aware of the purpose of the AMP or study. A recent criticism of the AMP as a measure of affective misattribution by Blaison et. al (2012) suggests that for some constructs (such as the angry facial expressions used in their study), the AMP may actually measure semantic misattribution. This was previously suggested in Loersch and Payne (2011), which stated that both semantic and evaluative information is made readily available by priming. Researchers have thus been cautioned to carefully consider the prime images presented during the AMP to ensure that semantic misattribution is not occurring when an examination of affect is desired.

Impact of Aversive Racism and Implicit Bias

Continuing disparities in social, economic, and political success (among other things) along racial lines has been and continues to be a major subject of study in sociology and psychology in the decades following American civil rights movements in the 1960's. The literature on aversive racism and implicit bias in particular has produced findings that outline the potential impact that these forces have on decision-making processes and interpersonal communication that have the potential to contribute to these disparities.

In their field experiment, Bertrand and Mullainathan (2004) submitted approximately 5,000 resumes to over 1,300 job advertisements in the Chicago and Boston areas. The resumes were classified as either “high” or “low” quality based on content and were paired with either a distinctly Black or distinctly White sounding name. The callback rates for resumes were recorded. Analysis of the data revealed significant differences in callback rates depending on whether the application was paired with a White or Black sounding name. Resumes with White names received approximately 49% and 50% more callbacks than resumes with Black sounding names in Chicago and Boston, respectively. Furthermore, there was a significantly smaller difference in callback rates between high and low quality resumes for Black sounding names than for White sounding names, suggesting that a strong resume provides less of an advantage for Black job seekers than it does for White job seekers. Dovidio and Gaertner (2000), in their own study about employment selection decisions, required undergraduate students to evaluate applications in a simulated hiring scenario for employment in a “peer counseling program”. Applications reviewed by the participants indirectly indicated the race of the applicant via the applicant’s participation in certain university groups (Black Student Union or a primarily White fraternity). The strength of the applications was tailored so that they would appear either “strong”, “ambiguous”, or “weak”. Participants were asked to indicate whether they would recommend an application for the peer counseling position, as well as the strength of their recommendation on a scale of 1 to 10 (with 10 representing a very strong recommendation). Analyses of participants’ ratings were consistent with aversive racism framework theory (Gaertner & Dovidio, 1986; Dovidio & Gaertner, 1998, 2005). For strong and weak applications, no significant differences between Black and White applications were found regarding the percentage of applicants recommended and the strength of those recommendations. However,

when the applications were ambiguous, significant differences did appear, with Black applicants being recommended far less and with weaker recommendations. These studies provide evidence of the presence of discriminatory processes in hiring decisions both in field and simulated laboratory settings.

Research on the impact of aversive racism on racial discrimination, judgment, and decision-making extends beyond the topic of employment. Hodson, Hooper, Dovidio, and Gaertner (2005) conducted a study in which White participants were presented with an overview of a hypothetical legal case in which the defendant was accused of robbing a bank. This case included eye witness testimony, an officer's report, and other documents formatted to mirror official legal documents, lending authenticity to the exercise. All subjects were presented the same case with the exception of two variables that were manipulated between conditions. The first was whether the participants were led to believe that the defendant was Black or White. The second was whether DNA evidence implicating the defendant in the robbery with 98.5% accuracy was deemed admissible or inadmissible. In conditions where the DNA evidence was inadmissible, participants were warned beforehand to disregard the inadmissible evidence, although the evidence still appeared in the report crossed out (using the Microsoft Word double strikethrough function) and was legible for participants to read. Following review of the case, participants were asked to rate how guilty they felt the defendant was on a 1 to 9 scale (1 = *not at all*, 9 = *very much so*) and the length of sentencing they would recommend (0-25 years). Participants were also asked to rate their opinion (using the 1 to 9 scale) of whether the defendant was likely to reoffend, if the defendant would benefit from rehabilitation, and if the defendant should be offered a reduced sentence on the basis of later good behavior. The results of this study revealed that only when DNA evidence was inadmissible did participants

differentiate between Black and White defendants. In these cases, participants rated the Black defendant as guiltier, more likely to reoffend, less likely to benefit from rehabilitation, and handed down longer sentences compared to the White defendant. These differences were statistically significant, are consistent with aversive racism framework theory (Gaertner & Dovidio, 1986; Dovidio & Gaertner, 1998, 2005), and are consistent with the results of an earlier study in which inadmissible evidence was weighed more heavily for Black defendants (Johnson, Whitestone, Jackson, & Gatto, 1995).

Similar literature evidencing aversive racism and implicit bias in the biased treatment, evaluation, or interaction towards Blacks by predominantly White subjects reaches across a variety of situations and scenarios. Studies have found that Afrocentric facial features resulted in longer prison sentences (Blair, Judd, & Chapleau, 2004), police officers fire their weapon more readily at unarmed Black suspects than White subjects in a simulation (Plant & Peruche, 2005), and that implicit bias predicts Black's ratings of White's nonverbal friendliness in a conversational dyad, such that implicitly biased Whites exhibit nonverbal behavior that their Black partners perceive as less friendly compared to Whites who are not implicitly biased (Dovidio, Kawakami, et. al, 2002).

Like employment and jury decisions, college admissions decisions have also been found to be impacted by aversive racism and implicit bias. Hodson et al. (2002) conducted a study in which 78 undergraduate students were asked to review college applications containing information on college board scores and high school achievement and to make a decision about whether to admit or decline the application. Several weeks prior to the experiment, participants were screened using Brigham's (1993) Attitudes Toward Blacks Scale to classify them as low or high prejudiced. Scoring above or below the mean determined whether a participant was

classified as low or high prejudiced, and high prejudiced participants in this study (coming from a Northeastern liberal arts college) were best characterized as being low-moderately prejudiced compared to the average U.S. population. At the time of the study, participants were provided with six applications to review, each including a picture of the prospective student, but no other demographic information. Four of the applications were of primary interest, containing a combination of high or low college board and high school achievement scores (both high, both low, or one high and one low). Participants were randomly assigned into one of four conditions in which one of the four applications of interest was paired with a photo of a Black applicant. For each application, participants rated on a scale of 0 to 6 how strongly they would recommend the applicant and responded whether or not they would admit or deny the applicant. After rating all applicants, participants ranked eight pieces of information (including college board and achievement scores) based on how important they were in making admission decisions. Data analysis in this study revealed that when application profiles were uniformly strong or weak (both high or both low college board and achievement scores), Black applicants were not admitted or denied at rates different from those of White applicants. However, when application strength was mixed (either college board or achievement scores high, while the other is low), participants scoring high in prejudice in particular ranked the deficient score for the Black application to be more important than the higher score in the decision-making process and denied the Black applications more frequently than White applications with the same profile. These results are supportive of the aversive racism framework (Gaertner & Dovidio, 1986; Dovidio & Gaertner, 1998, 2005), which would predict that Whites' bias against Blacks occurs in situations in which negative responses can be justified by factors other than race. Low prejudiced participants on the other hand expressed a pattern of downplaying the importance of factors in

which the Black applicant was deficient and tended to recommend the Black applicant more often than White applicants. While this finding may appear to suggest a lack of bias against Blacks, Hodson et. al suggest that these low prejudice participants may actually be expressing a stereotype about Black students as low performers and acting in a compensatory manner, an assertion made on the basis of previous research suggesting that low prejudiced Whites are more likely to support compensation programs for Blacks such as affirmative action (Dovidio et. al 1996).

Regardless of whether the decisions of the low prejudiced participants in Hodson et. al (2002) reflected compensatory action on the basis of a low performance stereotype for Black students, past research has acknowledged the plausibility of this account as well as the negative impact such a stereotype may have on Black students. The shifting standards model proposed by Biernat, Vescio, and Manis (1998) would suggest that when individual performance is ambiguous or consistent with a stereotype for a given group, judgments made about that individual will default to the standard. Given the effects of implicit bias on Blacks' perceptions of their interactions with Whites (Dovidio, Kawakami, et. al, 2002) and the damaging effects of stereotype threat on academic test performance (Steele & Aronson, 1995) and school identification (Crocker & Major, 1989; Steele, 1997), it stands to reason that teachers and other education professionals who allow themselves to subscribe to low performance stereotypes for Black students or who are implicitly biased may overlook the true (often alterable) reasons for underperformance and risk relegating Black students to a lower academic standard or creating an environment conducive to disidentification with school achievement.

Reducing Implicit Racial Bias and Its Impact

Greenwald and Banaji (1995), in their discussion of implicit cognition, suggest some strategies for avoiding unintentional discrimination as the result of implicit bias, including racial bias. *Blinding* is the practice of withholding potentially stigmatizing information or attributes about an individual from those charged with making evaluations. Such information might include race, ethnicity, gender, location of residence, and names (which could cue images of a certain racial group). Given that knowledge of an individual's race appears to affect the way evaluators weigh information provided on an application (as discussed above), the value of blinding in such scenarios is clear. Goldin and Rouse (2000) highlighted the use of blinding procedures in increasing the rates of audition success among female musicians.

Also suggested by Greenwald and Banaji (1995) is fostering awareness of the source of potential bias, allowing an individual to anticipate and avoid bias when making judgments and evaluations. This notion is supported by research indicating that directing focus to cues irrelevant (but nonetheless influential) to an evaluation can attenuate their effects (Schwarz & Clore, 1983) and that possessing sufficient motivation as well as an appropriate theory as to how a factor biases one's judgments is essential in modifying those judgments appropriately (Petty & Wegner, 1993; Wegner & Petty, 1995). In the context of implicit racial bias, these findings offer direction for efforts to educate individuals about how race can implicitly bias evaluations (thus teaching an appropriate theory) and teach strategies for making judgments and evaluations that reduce the impact of implicit racial bias.

In challenging the prevailing assumptions surrounding use of the term "unconscious" in the literature on implicit bias, Gawronski, Hofmann, and Wilbur (2006) maintained in their review that a lack of *impact awareness*, or an individual's awareness of how an attitude can impact other psychological processes, is the clearest factor differentiating self-reported attitudes

and indirectly assessed attitudes. Gawronski et. al provide an example illustrated by Fazio, Jackson, Dunton, and Williams (1995) in which a White individual's nonverbal behavior towards a Black conversational partner is affected by their implicit bias towards Black people. Nonverbal behavior such as spatial distance or eye contact seem easy to control. However, when an individual lacks awareness of how their behaviors are affected by their implicit bias towards Black people, they may not attempt to control these nonverbal behaviors at all, regardless of their motivation to appear unprejudiced. This explanation underscores the link between behavior and implicit bias, as well as the necessity of understanding how implicit bias operates if one is to minimize its impact on their behavior.

Inzlicht, Gutsell, and Legault (2012) conducted a study in which they found decreases in implicit bias towards Blacks as measured by the AMP (Payne, et al., 2005) when participants were required to mimic the behavior of a Black actor in a video clip. Participants, who were non-Black, were separated into three conditions. In the first condition, participants watched a 140-second clip of a Black actor repeatedly reaching for and drinking from a glass of water. In a second condition, participants watched the same clip, but were asked to mimic the behavior of the actor in the video clip as it occurred. The third condition was the same as the second condition, except that the actor in the video clip was White. Following the video clip, all participants completed the AMP. The results indicated that participants who viewed and mimicked the video clip of the Black actor provided more favorable ratings following Black primes than the other two conditions and exhibited a similar preference for Black and White primes on the AMP, suggesting a reduction in implicit bias following mimicry of outgroup behavior, but not simple observation (Inzlicht et. al, 2012). This study demonstrates the concept of self-other overlap, or the overlap between one's cognitive representation of the self and that of

another individual or group, which is closely linked to mimicry (Galinsky, Ku, & Wang, 2005). Self-other overlap is common to a number of prejudice and stereotype reduction strategies, including perspective taking (Galinsky et. al, 2005; Vescio, Sechrist, & Paolucci, 2003), developing friendships with outgroup members (Page-Gould, Mendoza-Denton, Alegre, & Siy, 2010), and training individuals to approach outgroup members (Phills, Kawakami, Tabi, Nadolny, & Inzlicht, 2011).

Creating associations with the self to impact implicit bias has been shown to extend beyond associations with other people. Prestwich, Perugini, Hurling, and Richetin, (2010) found that simply associating oneself with a fictional drink yielded more favorable ratings of that drink on the IAT (Greenwald et. al, 1998) and AMP (Payne, et al., 2005) compared to an alternative fictional drink in the study. Given that most people demonstrate positive implicit attitudes about themselves (Greenwald & Farnham, 2000), self-associations can serve as tool for combating negative implicit racial bias by fostering associations with outgroup members.

Dasgupta and Greenwald (2001) found that by exposing participants in their study to photographs of positive Black exemplars (Dr. Martin Luther King Jr.) and negative White exemplars (Charles Manson), these participants' IAT scores were lowered immediately after and 24 hours after presentation of the exemplars, indicating a decreased automatic preference for Whites. However, presentation of the exemplars did not impact explicit measures of racial attitudes. It is possible that participants perceived the Black exemplars as atypical of most members of this group, and therefore did not accommodate them into existing schemes (Bodenhausen, Schwarz, Bless, & Wanke, 1995). While exposure to positive exemplars reduced implicit bias as measured by the IAT, attempts to ameliorate the impact of implicit racial bias using exemplars should make an effort to ensure that the exemplars are not being construed as

atypical. Highlighting the achievements of minority students and local community leaders may be an alternative that more effectively “normalizes” the success of minority outgroups.

While most proposed strategies for reducing implicit racial bias and controlling biased behavior involves awareness and some effort on the part of the individual, Olson and Fazio (2006) suggests that implicit racial bias can be combated using an evaluative conditioning procedure without the conscious knowledge of the participant. Evaluative conditioning is a variant of classical conditioning. By pairing a conditioned stimulus (e.g., an image of a Black individual) with an unconditioned stimulus (e.g., a positively valenced word or image) among many neutral stimuli, Olson and Fazio were able to reduce the implicit biases of participants without their awareness that these pairings were occurring. In their study, the effects of the evaluative conditioning were exhibited on measures of implicit bias even with a delay of two days between the conditioning procedure and the implicit measures.

Effective Teaching to Reduce Implicit Racial Bias

While the research on reducing implicit racial bias described above provides a number of avenues for approaching the issue, not all of these strategies can be gracefully integrated into practice. Classrooms are quite different from the highly controlled laboratory settings, and procedures such as evaluative conditioning can become difficult to implement without the underlying purpose becoming blatantly obvious. A more effective alternative, as certain research has suggested (Gawronski et. al, 2006; Petty & Wegner, 1993; Wegner & Petty, 1995), would be to hold an open discussion about the nature of aversive racism and implicit racial bias so that participants in the discussion can develop an appropriate theory for how their judgments and actions can be affected.

This is precisely what Derman-Sparks and Phillips (1997) describe in their discussion of a college course on racism and human development they co-taught for a decade. Designed for upper-level undergraduate and graduate students in early childhood education or human services programs, their course focuses first on introducing racism and racist attitudes within the context of student's lives by facilitating discussion and sharing of what students already know about racism, their experiences in learning about race as children along with societal and parental influences, and their experiences in interacting with people of a different race. For White students, this often involves confronting and coming to terms with their aversive racist attitudes, an uncomfortable but necessary step for holding honest discussion about how these attitudes have affected them. As the course progresses, students learn more about how racism operates within institutions and how it can affect the individual behavior of both majority and minority group members, including the pressure minority members may feel to assimilate with the majority group and suppress their own cultural values. Students are asked to complete "action projects", which revolve around efforts to address race and cultural issues in one's community by working with institutions or other individuals to help implement a change. Other activities revolve around perspective taking, discussion of how disenfranchised/oppressed groups can empower themselves and make a difference in their own lives, and presentations by guest speakers whose work has involved successful anti-racism efforts. Derman-Sparks and Phillips (1997) describe a journey undertaken by students that is aligned with research in reducing implicit bias which supports perspective taking (Galinsky et. al, 2005; Vescio et. al, 2003) and developing an understanding of racism and its underlying mechanisms that impact behavior and attitudes (Petty & Wegner, 1993; Wegner & Petty, 1995).

As noted by Derman-Sparks and Phillips (1997), resistance to discussion of racial inequalities and biases is not uncommon, especially when the topic is first being introduced. This is not surprising, given that the conflict that may exist between one's explicit egalitarian values and underlying racial bias serves to foster avoidance of situations in which one's behavior might be construed as prejudiced (Gaertner & Dovidio, 1986; Dovidio & Gaertner, 1998, 2005). Such direct discussion about racial attitudes threatens to reveal one's negative implicit biases. Students may protest that they are "colorblind", and that race does not factor into how they view or act towards others. Such an argument is defensive in nature; it is a claim that one is incapable of discrimination or prejudice, and therefore discussion of these concepts is irrelevant to them. However, this argument suggests that inequalities are the result of simply acknowledging race (Derman-Sparks & Phillips, 1997), which precludes any discussion about the actual causes of institutional racism and other forms of discrimination. As Bolgatz (2005) notes, those who practice and encourage colorblindness "generally do little to acknowledge or investigate, much less counter, the larger social, political, and economic forces that maintain and foster inequality among racial and other groups" (p. 8). In countering apprehension about discussing one's own biases, aversive racism and implicit bias could, at first, be discussed more generally to promote an understanding of how it originates, its prevalence, and strategies for reducing its impact on their judgment and interactions with outgroup members. This approach offers a chance for individuals to privately identify and understand their biases before confronting. In this learning process, individuals would come to realize that their biases are not something to be hidden or feared, but rather something they can keep in check to more fully live up to their explicitly held values of equality and social justice.

Current Practice in Anti-Racism in P-12 Schools

P-12 schools often attempt to address diversity, multiculturalism, and race in some way or another (Ladson-Billings, 1999, Chapter 1). This may be in line with a school's mission to create culturally competent students or build the school's image to reflect an acceptance and valuing of diversity. However, it has been lamented that such efforts are often superficial celebrations of diversity that provide a shallow view of the differences between cultures (foods, traditions, etc.) and omit discussion of the inconsistency between American ideals and the realities of members of various cultural groups living in this country and the promotion of an anti-racist ideology (Bolgatz, 2005, p. 24; Ladson-Billings, 1999, p. 26).

Polite and Saenger (2003) maintain in their discussion that children in elementary school are already well aware of racial differences, and that discouraging or avoiding frank discussion about the topic sends the message that these differences are not relevant and that it is inconsiderate to highlight them. It's not unreasonable to suggest that denying children this opportunity to develop an understanding of racial differences may serve to increase the discomfort and anxiety they feel when faced with these differences on a daily basis; the same feelings that are key features of aversive racism. Unfortunately, such discourse is infrequent at this age and is sometimes rebuked by parents who prefer a colorblind mentality or who desire time spent in school to focus on academics rather than discussion of social issues (Polite & Saenger, 2003).

Culturally relevant pedagogy (Ladson-Billings, 1995) can be described as the practices of culturally competent instructors who can effectively merge the cultural contexts of their students with the curriculum to provide an education that is relevant to their students. Gay (2010) outlines these acts as culturally responsive teaching (CRT), and identifies several key characteristics:

- CRT validates the importance of a student's cultural heritage and identity as it relates to the student's attitudes and approaches to learning, as well as acknowledges the student's heritage as a relevant topic of study.
- CRT fosters connections between students' experiences in school and at home, and makes clear links between curriculum material and the sociocultural reality in which students live.
- CRT uses a variety of instructional methods to appeal to students' varying approaches to learning.
- CRT teaches students to embrace the cultures of others as well as their own on the path to developing a multicultural ideology.
- CRT combines the subjects and skills commonly taught in schools with information, resources, and materials that are relevant to a student's culture.

By integrating students' varying cultures with academics, CRT creates a school climate in which learning reflects topics that impact the student, making the material easier to identify with. Combined with strong connections between students' school, home, and communities, CRT makes education relevant in several environments. Being able to identify with school in this way is related to positive achievement outcomes (Steele, 1997). Further, by virtue of multicultural nature of CRT, both students and teachers are exposed to numerous racial and cultural perspectives regarding a variety of subjects, which has been implicated in reducing implicit biases towards racial outgroups (Galinsky et. al, 2005; Vescio et. al, 2003).

Cooperative learning strategies have been supported in research as having a positive impact on academic and social outcomes for students as well as an improvement in race relations

(Banks, 2006; Schul, 2011). While several such strategies have been identified and are used in practice, they typically involve small groups of students working together both as a group and as individual members to perform tasks, hold discussions, reach a common goal, and/or share information with the group or others in the classroom. Cooperative learning strategies differs from simply dividing students into groups to complete work in that individual students are held personally accountable for the success of the group and each group member has a responsibility they must fulfill. For example, the *jigsaw technique* is described by Aronson and colleagues (as cited in Schul, 2011). In this strategy, students are divided into several groups, and each student in the group is given different academic material (such as a section of a textbook). For each group, the set of material provided is the same. Students are then asked to meet with members of other groups who share the same material. Members of these new groups spend time discussing and becoming experts on their material. After a time, students are asked to return to their original groups to discuss what they have learned. Each member of the group is now responsible for teaching the others and is therefore responsible for the success of that group. Inescapably, cooperative learning strategies lead to interaction between individuals who differ on demographic levels of all kinds who must work together for a mutual benefit. Slavin (2001) describes encouraging findings that indicate that cooperative learning strategies lead to increases in interracial friendship and more positive behaviors and attitudes towards racial outgroups. These findings describe the kind of self-associations that have been found to reduce implicit bias (Galinsky et al., 2005; Inzlicht et al., 2012).

Current Practice in Anti-Racism in Teacher Education

Logically, the practices used by teachers in their classrooms should in part originate from what they have learned or experienced in teacher education programs or during professional

development activities. It is not surprising, then, to find teacher education programs instructing their students on the use of cooperative learning strategies or engaging them in a course on CRT. However, such instruction may not always be present or even welcomed in some programs. In these programs, educators may feel discomfort or fear in breaching the subject of race in their program, while others may struggle to find a place in the curriculum to implement what they feel has not been shown to have value (Cochran-Smith, 2004). Leaders in teacher education programs have some justification for questioning the inclusion of CRT and a multicultural component in their programs, as little empirical research has been done to link the practice of teacher candidates and their actual work in classrooms and schools (Cochran-Smith, Davis, & Fries, 2008), nor has there been much research on the effect of multicultural teacher preparation on the work of teachers following the completion of preservice preparation (Lowenstein, 2009). However, the need for change in these programs exists; In a national report (Levine, 2006), a survey of teachers revealed that 62% felt that their education program did little to prepare them for the realities of teaching in the classroom. The same report included a survey of principals that found that only 28% of principals felt that the teachers in their school were very or moderately well prepared to meet the needs of diverse students from varied cultural backgrounds. This is a troubling finding given the continually increasing level of diversity in the population and of students attending schools in the U.S. However, the fact remains that some evidence in support of multicultural education for up-and-coming teachers does exist, such as that by Irvine (2003) who found that teachers who were part of multicultural teacher preparation programs were less likely to explain student performance as the result of a cultural deficit. Further, Whipp (2013) identified cross-cultural experiences during teacher education programs and program content that challenged previously established patterns of thinking as factors that contribute to new teachers'

understanding of socially just teaching in terms of consciousness raising, advocacy, and CRT which, as discussed in the previous section, can be implicated in reducing implicit bias against outgroup members.

The National Council for Accreditation of Teacher Education (NCATE) is recognized as an important accrediting body for teacher education programs. Among the various standards to which NCATE holds institutions seeking accreditation is their standard for diversity (National Council for Accreditation of Teacher Education, 2008). For a program to meet the NCATE diversity standard, it must be able to demonstrate that it is able to provide teacher candidates the opportunity to engage faculty, students in grades P-12, and other teacher candidates from diverse cultural backgrounds in the completion of their program's requirements. This includes working with these individuals during field experiences and during program activities. In addition, the program must provide candidates with experiences that allow them to learn the skills and acquire knowledge needed to be able to teach all students and provide opportunities for students to demonstrate these competencies in a manner that can be assessed and used to provide feedback to students. While NCATE's diversity standard addresses what has been seen for some time as a necessity in teacher education programs, it also provides flexibility in how programs choose to meet this standard, which does not guarantee that the topics of anti-racism, teaching for social justice, or implicit bias will surface for discussion.

For a teacher education program to effectively incorporate such components, the individuals (faculty) leading the discussion must be comfortable not only discussing race, but in mediating the conflict and reducing the tension and anxiety that is nearly guaranteed to surface during these discussions. Avoidance is not uncommon in students or teachers when discussing race (Bolgatz, 2005), but teachers must resist this urge if useful dialogue about racial differences

is to emerge. Avoidance on the part of instructors may reflect their own lack of self-knowledge in relation to racial dynamics, which has been emphasized as an important asset in teaching students about race and social justice (Bell, Love, Washington, & Weinstien, 2007). To this end, universities have held workshops, seminars, and conferences dedicated to the discussion of anti-racist pedagogy and strategies for engaging students with their personal experiences and empowering both faculty and students to make a difference in their practice. While many faculty and students may be self-motivated to attend, financial and time demands associated with these conferences may dissuade some from attending.

Villegas and Lucas (2002) recommend several activities that education students can engage in that are directly related to the topic of culture and race and that can be used to promote cultural responsiveness. These activities involve: (a) introspection on the part of the student as they explore their cultural and socioeconomic affiliations and the advantages or disadvantages they impose, (b) in-depth learning about the history and current experiences of different cultural groups, (c) participation in simulations or games designed to promote perspective-taking and empathy towards individuals of different cultures, and (d) examination of exemplary teaching and learning in diverse settings with diverse students, which provides education students with a vision of what cultural responsiveness in teaching looks like so they may identify it in their own practice. These activities are similar to those completed in the course described by Derman-Sparks and Phillips (1997), though for education programs that do not include a course devoted to discussion of anti-racism and raising awareness of how racial dynamic affect practice, these activities may be spread across the curriculum and not necessarily overtly linked.

Statement of the Problem

Theoretical Framework

The goal of this study was to investigate the effectiveness of a short-duration educational intervention for reducing implicit bias, specifically in preservice teachers, who presumably will go on to work closely with families and children from diverse backgrounds within schools. Given the wide ranging research on the impact of implicit bias on judgment and decision-making (Dovidio & Gaertner, 2005; Hodson et al., 2005), its effect on individual perceptions of intergroup communication (Dovidio, Kawakami, et. al, 2002), and the role implicit bias may have in strengthening threatening stereotypes (Steele & Aronson, 1995) that serve to reduce school identification (Crocker & Major, 1989; Steele, 1997), such an intervention is warranted for education students and teachers to work effectively and fairly with diverse populations.

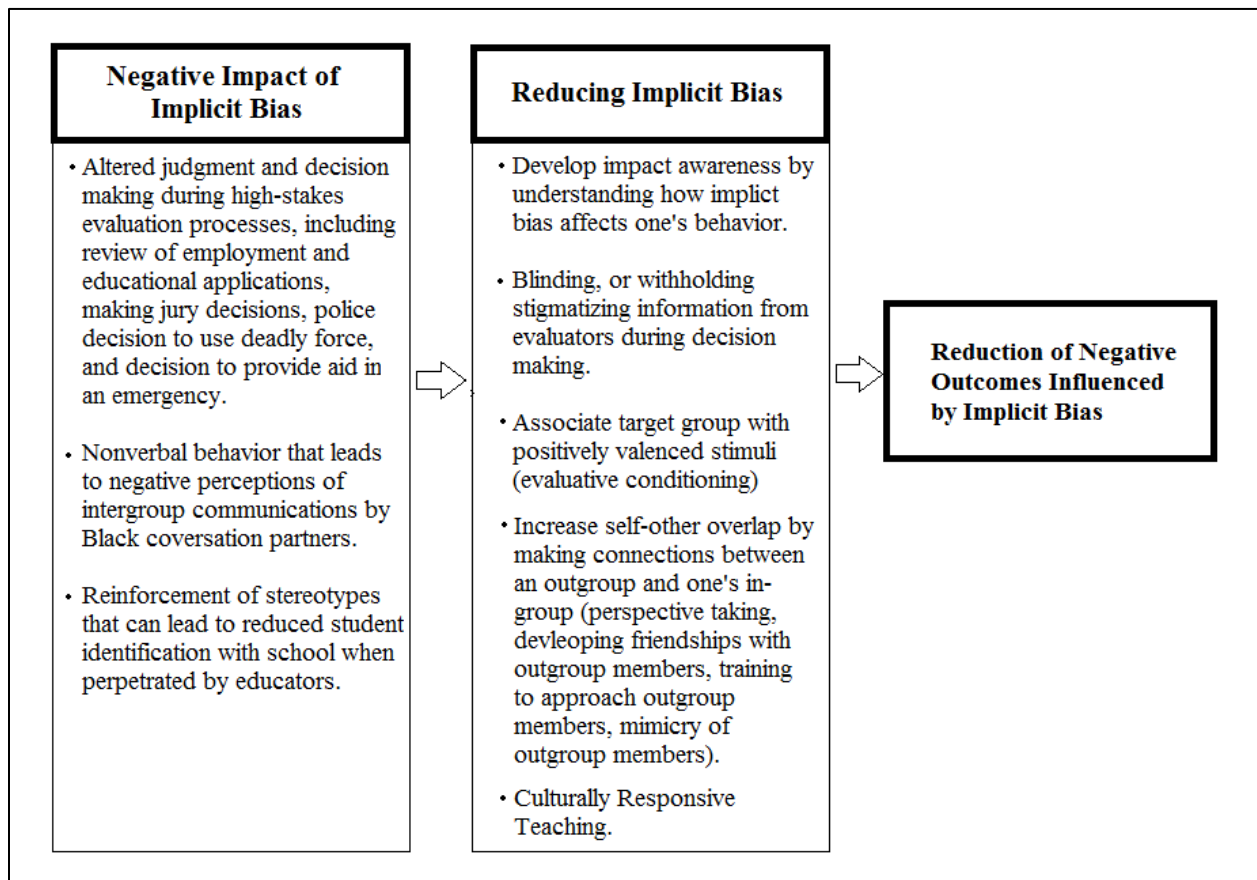


Figure 1. Theoretical framework for reducing implicit bias.

In addition, some have suggested that one reason for a lack of discussion about anti-racism or social justice in some education programs is time constraints within the existing curriculum (Cochran-Smith, 2004). A short-duration intervention can serve as a solution to this problem. While a full course on anti-racism would be desirable for discussing a broader range of topics, an intervention lasting only one or two class sessions is enough time to engage students in activities known to reduce implicit bias (Galinsky et al., 2005; Gawronski et al., 2006; Petty & Wegner, 1993; Vescio, Sechrist, & Paolucci, 2003; Wegner & Petty, 1995) and may foster independent learning about a subject which has a direct impact on students' future performance as teachers or professionals in a school system.

Hypothesis

I hypothesized that a short-duration educational intervention on the topics of aversive racism and implicit bias would result in: (1) an immediate reduction in implicit bias compared with a control group, (2) a sustained reduction in implicit bias measured after a 26-day follow-up period, and (3) a change in the way participants chose to respond to vignettes describing hypothetical scenarios involving minority students with discipline and academic problems, such that more attention would be paid to external factors that may be impacting the students, rather than initially implicating internal factors (which may be consistent with racial stereotypes). Changes in implicit bias were measured using the AMP (Payne et al., 2005), while participants' responses to the vignettes were coded and analyzed to determine participant opinion of the target student and how they chose to approach the presented situation. Written responses to classroom activities related to the topic of implicit bias (described in greater detail below) were also analyzed to uncover patterns and themes in participants' responses. The length of the follow-up

period was chosen because this study is concerned with developing an intervention that will confer a long-term impact. Few studies have investigated the stability of changes to implicit bias, though Olson and Fazio (2006) found stability in the reduction of implicit racial bias following a two-day follow up. A control group was used as a comparison. Participants in this group were administered the AMP and the vignettes, but were not exposed to other intervention materials that served to teach participants about aversive racism and help them to develop impact awareness.

CHAPTER TWO: METHODS

Participants

All of the participants were undergraduate preservice teachers who were students in an undergraduate educational psychology course in a public, regional comprehensive university in the Southeast. Intervention group (N = 21, 11 male) and control group (N = 13, 3 male) participants were obtained from one of two educational psychology course sections offered during Spring semester 2014. All intervention group participants were obtained from one section, while all control group participants were obtained from the other. While the ability to speak or read Chinese served as an exclusion criterion to ensure valid AMP results, no participants were excluded for this reason. Twenty-five participants originally provided consent in the intervention group, but 4 were dropped during the course of the study due to non-completion of intervention activities. Participants' major of study, sex, and assigned ID number as referenced in the results section can be found in Appendix A.

Materials

Questionnaires were provided to all participants to identify participant age, sex, major of study within education (e.g. music education, mathematics, English), and whether or not the participant could speak Chinese or read Chinese characters. Measures of implicit bias and materials used during the course of the intervention to promote discussion and learning about aversive racism and implicit bias are described below in the order in which they were presented to participants in the intervention group. It should be noted that these materials and activities were integrated into the educational psychology course section from which intervention group

participants were obtained, and all students enrolled in that section were required to complete these activities regardless of if they provided consent for their responses to be used in this study.

Teaching and Learning About Tolerance

Intervention group participants were asked to visit an educational webpage (<http://www.tolerance.org/activity/test-yourself-hidden-bias>) hosted by Teaching Tolerance, a project of the Southern Poverty Law Center (2014). This webpage provides a brief overview of information about prejudice, stereotypes, hidden biases, discrimination, the effects of implicit bias on behavior, and the IAT (Greenwald et al., 1998) as a measure of implicit racial bias. After reviewing the information on the webpage, participants were asked to visit an IAT demonstration website (<https://implicit.harvard.edu/implicit/demo/background/index.jsp>) in order to complete the Race IAT, as well as two additional IAT procedures of their choice. Following this experience, participants were asked to write an essay that detailed their thoughts about the IAT as a measure of implicit bias and were encouraged to comment on the accuracy of the measure, note anything new they had learned from the experience, and draw upon relevant reading material provided in class as part of their discussion. Finally, participants were asked to choose three classroom activities from the Teaching Tolerance website and describe how they would use them in their professional practice as educators (see Appendix C for participant instructions). Analysis of participant responses was limited to their reactions to the IAT as a measure of implicit bias.

Exploring the Complexity of Racism: The Case of Tim Hanks

Participants were asked to read and respond to a three-part narrative about a teacher who makes incorrect attributions about the causes of failure for Tim Hanks (the only Black student in a class of 120 students) and that teacher's realization that their actions were implicitly biased.

Participants were asked to respond in writing to a series of questions following each part of the narrative that aimed to elicit reflection on the events taking place as the story unfolds. Originally developed by Grossman and Ford (2004) for the purpose of discussing and exploring the complexities of unintentional racism with students, the revised narrative and questions (Grossman, Ford, & Habel, 2010) (see Appendix D) used in this study are nearly identical apart from alterations made to the narrative in order to reflect the experiences of a teacher working at a high school, rather than a community college. In addition, the number of questions following the third part of the narrative was reduced from six to four, and these questions were altered to elicit participant discussion about Tim Hanks' experience in a racially homogenous environment and the attributions made by his peers. In total, participants answered eight questions during the course of the activity: two questions following Part I of the narrative, two following Part II, and four following Part III.

Teachers' Subtle Communications About Students' Ability

Participants were asked to review a Microsoft Powerpoint presentation prior to completing this activity. This presentation was distributed to participants and provided a more in-depth explanation of the history and research surrounding aversive racism, how it might impact a teacher's behavior toward their students, and a brief overview of strategies for reducing one's biases. Following exposure to the presentation, participants were presented with a document (see Appendix E) containing the following scenario adapted from Graham (1990):

A teacher is circulating around the class while the students are involved in a homework activity. The teacher stops near **Jerome**, who appears to be having a bit of difficulty with a problem, but she says nothing. She stops near **Leroy** and comments, "Let me give you a hint," and makes a suggestion, even though Leroy had not asked for help and seems to be

making progress, although the progress is somewhat slow. The teacher stops near **Anthony**, who has made a mistake, and smiles, “Now, that’s a very good try. Here, let me show you how to solve the problem.”

Participants then were asked to respond in writing to the question: “What message is the teacher sending to each student about his ability?” The name of each student in the scenario, along with adequate space for responding, was provided directly below this question in order to prompt participants to comment on each student individually. Participants then responded to a final question: “Does this teacher’s behavior demonstrate implicit or unintentional racism? Why or why not?”

Affect Misattribution Procedure (AMP)

Following the procedures similar to those outlined by Payne et al. (2005, Experiment 6), participants were asked to complete the AMP. The AMP for this study was created using Inquisit ver. 4.0.6.0 (Millisecond Software, 2014). All visual stimuli used in this study were presented in black-and-white (see Appendix F). Prime images of White and Black faces were derived from the normed facial stimuli set developed by Kennedy, Hope, and Raz (2009). Twenty-four facial images were chosen for use (six White male, six White female, six Black male, six Black female), all of which displayed neutral facial expressions. Twelve neutral images not depicting faces (pictures of buildings, nature, art, or a blank gray frame) were interspersed among the prime images during the procedure and served to help mask the purpose of the AMP. Each facial and neutral image was used as a prime twice during the procedure. Seventy-two Chinese pictographs serving as target images were obtained from the Social Cognition Lab webpage at the University of North Carolina Chapel Hill (www.unc.edu/~bkpayne/index.htm). Participants completed 10 practice trials before completing a total of 72 experimental trials during the

procedure, which took approximately five minutes to complete. Upon beginning the AMP, participants were prompted with the following instructions and warning:

This study examines how people make simple judgments. You will see pairs of pictures flashed one after the other. The first is a real-life image. The second is a Chinese symbol. The real-life image simply serves as a warning signal for the Chinese symbol and should otherwise be ignored. Your job is to judge the visual pleasantness of the Chinese symbols. Put your middle or index fingers on the E and I keys of your keyboard. If the Chinese symbol is less visually pleasing than average, press the E key on the left. If the Chinese symbol is more visually pleasing than average, press the I key on the right. It is important to note that the real-life image can sometimes bias people's judgments of the symbols. Please try your absolute best not to let the real-life images bias your judgment of the symbols! Give an honest assessment of the symbols, regardless of the images that precede them. To get a feel for the task, we will begin with 10 practice trials. Again, your task is to judge whether the Chinese symbols are less visually pleasing or more visually pleasing than average by pressing either the 'E' or 'I' key.

Following completion of the 10 practice trials, participants received the following message:

Practice is now complete and the task will now begin. As a reminder, if the Chinese symbol is less visually pleasing than average, press the 'E' key. If it is more visually pleasing than average, press the 'I' key.

After completing all 72 trials, the AMP concludes with the message, "you have rated all of the Chinese symbols! Thank you for your participation!"

Vignettes and Rating Scale

Participants were provided vignettes describing a student presenting with discipline and academic problems (see Appendix B). Two versions of the vignette were created: one where the student was given a stereotypically Black name (Tyrone), and one where the student was given a stereotypically White name (Greg). The choice of names for the students in the vignettes was based on the results of a field survey conducted by Bertrand and Mullainathan (2004) that found Greg and Tyrone were not only common names for White and Black individuals respectively, but survey participants also identified over 95% of the time as belonging to a person of that race. The students in the vignettes were chosen to be male because of the disproportionate representation of male students in special education services compared to females (Sullivan & Bal, 2013). The purpose of the vignettes was to elicit responses from participants about how they would characterize the student and address the student's behavioral difficulties, which would provide insight into whether the participant viewed the student's behavior as the result of internal traits (characteristic of stereotyping and bias) or external causes. The vignette for Tyrone read as follows:

You are a 7th grade teacher at your local middle school. Tyrone is a student in your class. Tyrone is often late to arrive to your class or does not show up at all. He has been involved in fights with other students recently. Tyrone always seems to have trouble paying attention in your class. He does not regularly complete work in class or turn in his homework. You've tried talking to Tyrone, but he always leaves class before you have a chance to. His parents have told you that they have not seen any changes in Tyrone's behavior at home.

The vignette for Greg is nearly identical, but rearranges the order of the behavioral statements in the vignette in order to reduce the likelihood that participants completing both vignettes during

the study will become primed to provide identical responses. Participants were asked to read the vignette and rate nine items on a 9-point Likert scale reflecting their opinions on the causes of the student’s behavior. This rating scale was modeled on the Causal Dimension Scale (CDS) developed by Russell (1982). Like the CDS, this rating scale included items designed to provide scores for the three causal dimensions described by Weiner (as cited in Santrock, 2011): Locus of causality, controllability, and stability. However, the items used in this scale were modified from the CDS to reflect attributions about the behavior of the student in the vignette, rather than attributions about one’s own behavior. Two items were included in the rating scale for the locus of causality dimension, five for the controllability dimension, and two for the stability dimension. In addition to completing the rating scale, participants were asked to respond in writing to the vignettes by answering the following open-ended questions: (a) “How would you describe [name] as a student?” (b) “What do you think is causing [name]’s behavior?” and (c) “As [name]’s teacher, what actions would you take?”

Table 1

Procedures Completed by Study Participants

Measure/Activity	Intervention Group	Control Group
Teaching Tolerance	X	
Exploring the Complexity of Racism: The Case of Tim Hanks	X	
Teacher’s Subtle Communications about Students’ Ability	X	
Powerpoint Presentation on Aversive Racism and Implicit Bias	X	
Affect Misattribution Procedure	X	X

Note. The intervention group completed the Affect Misattribution Procedure, vignette, and rating scale twice during the course of the intervention.

Procedure

Participants in both the intervention and control groups were invited to participate in a study aimed at investigating the way that preservice teachers make judgments and form beliefs about their future students. For the intervention group, consenting to participate in the study represented permission to use their responses for the purpose of this study and involved no additional activities, as the intervention materials were integrated into existing coursework. Both intervention and control group participants were offered extra credit toward their grade in the educational psychology course for completion of required intervention activities.

Intervention Group

Participants in this group completed intervention activities during their enrollment in the educational psychology course, which met twice per week during the semester. Participants were first introduced to the Teaching Tolerance assignment and provided two weeks to compose a thoughtful essay that incorporated relevant course material. Though no length requirement was specified for the essay, most participants produced essays ranging from four to seven pages in length. Participants were asked to submit drafts of their essay to receive feedback from the course instructor and were allowed an additional two weeks to edit and expand on their essays before submitting a final product. Feedback provided by the instructor often included requests to clarify vague ideas, to be more specific about actions that might be taken to reduce personal bias, and to relate discussion to relevant course readings.

Following submission of the Teaching Tolerance essay, participants were presented with “Exploring the Complexity of Racism: The Case of Tim Hanks” during the following class period. Participants were informed that they would read a three-part story about a teacher’s interaction with a student in their classroom, and that they should take as much time as needed to provide thoughtful responses to the questions provided at the end of each part. Participants were asked to remain silent during the activity and to avoid discussing their thoughts with others until after the activity had concluded. Participants were provided with only one part of the case study at a time and were instructed to raise their hand to indicate that they had finished responding to the questions on each part. After all participants had completed part of the case study, the next part was provided. The activity took approximately 40 minutes to complete.

Approximately 28 days after the completion of the Tim Hanks case study, participants were provided access to the Powerpoint presentation on aversive racism and implicit bias, as well as the Teacher’s Subtle Communications about Students’ Ability activity. Participants were asked to review the presentation independently before completing the activity on their own outside of class. Each participant then submitted the activity the following day (either electronically or hard copy). Two days after exposure to the Powerpoint presentation, participants completed both the AMP and vignette during a regularly scheduled class meeting. Participants first completed the AMP procedure, followed by the vignette. Half of the participants received the Tyrone vignette, while the other half of participants received the Greg vignette. Completion of both of these activities required a combined total of 20 minutes to complete. Twenty-six days later, participants attended a follow-up during which they completed the AMP and a second vignette. Participants originally receiving the Tyrone vignette were now

provided with the Greg vignette, and vice versa. Participants were debriefed about the purpose of the study approximately a week later during a scheduled class meeting time.

Control Group

Participants in this group completed the AMP and a vignette during a 20-minute session outside of their educational psychology course meeting time, and these activities were not integrated into their course. The control group was not exposure to any intervention materials prior to or during this session. Procedures followed in completing these activities with the control group were identical to the intervention group. After completing these activities, participants were debriefed about the purpose of the study, and were told their responses would be compared with those of the intervention group.

Design

The primary independent variable in this study was whether participants were exposed to intervention activities designed to encourage impact awareness and reduce implicit bias. The dependent variables of interest in this study were the proportion of “pleasant” responses provided following Black prime images during the AMP procedure, as well as participants’ ratings on the vignette rating scale, both of which served as measures of implicit bias. The qualitative information obtained from participant’s written responses served to provide evidence of learning about implicit bias and, in the case of participants’ written responses to the vignettes, helped to highlight the extent to which participants implicated external rather than internal, innate factors for a student’s difficult behavior (which might be indicative of implicit bias).

CHAPTER THREE: RESULTS

Data collected using the instruments administered during this study are discussed below, with each measure being discussed separately. Data collected from measures administered to both intervention and control group participants include a between-groups comparison of results. Qualitative data were analyzed following a grounded theory framework. Grounded theory is a methodology in which discoveries are made by analyzing collected data prior to forming a hypothesis (Saldana, 2008). Data were collected through any number of different methods and instruments (in this case, the written responses of participants). The data are then analyzed using a process called *coding*, in which important or relevant elements are pulled from the data. An example of a code might include the nonverbal behavior of a subject during an observation or particular words used by a participant in a written response. These codes are then examined and often grouped into categories that allow easier detection of recurring themes within the data, which indicate similar responses between one or more participants. The coding strategy used in analyzing the data in the present study closely follows that described in Saldana (2008), which uses participant dialogue or written response as a model that closely resembles the data being examined in the present analysis.

In discussing the qualitative data in the present study, a distinction is made between *major* and *minor* themes. The criterion for designating a theme “major” was its presence in the responses of at least 11 participants (more than half of the intervention group sample). These themes were noteworthy based on the frequency of their appearance across participant data. Creswell (2012) elaborates on the role of frequency counts in qualitative research design, explaining that the frequency of a theme within data being analyzed may be used to gauge the

pervasiveness of a concept or behavior with its given context (in this case, elements of participants' responses). However, Creswell also cautions that frequency does not necessarily imply a level of importance or magnitude, and that themes and codes occurring with less frequency should still be considered if they have relevance to the data analysis. With this in mind, minor themes, which a number of participants ranging from two to 11 (representing less than half of the participant sample) mention, were identified and discussed based on their relevance to the study. Minor themes may represent opposing viewpoints, unique conceptualization of a scenario, evidence of learning, or other discussion relevant to the present study. Alternative criteria were selected for identifying major and minor themes in participants' responses to the vignettes, as these groups were split into two conditions during the activity. The criterion for designating a theme "major" for this activity was its appearance in the data of at least six participants in either intervention condition and at least four participants in either control condition. Minor themes appeared at least twice in any condition. While no clear guidelines appear in the literature regarding the utility of frequency counts and their use with qualitative data, the criterion for a theme to be identified as a major theme in this study was for it to occur in more than half of participant responses. This criterion was chosen because it indicates that the majority of participants shared a particular idea or area of consideration as they provided their responses. These patterns could inform how participants approach a given scenario or question and provide insight into participants' understanding of implicit bias.

Teaching and Learning About Tolerance

Participants' written reactions to the IATs they completed as part of the Teaching and Learning About Tolerance assignment were coded and analyzed. Two major themes were

uncovered in participant responses: *IAT validity* and *role of past experience*. One minor theme was also identified: *improving practice*.

IAT Validity

Fourteen participants explicitly stated their opinion regarding the validity of the IAT as a measure of implicit biases. Of these participants, three did not believe the measure was valid, six were unsure of its validity, and five stated that the measure was valid. Participants who felt the IAT was an invalid measure or who were unsure of its validity provided several different reasons for their opinions. Four participants noted that the format of the task, particularly the switching of stimuli pairings throughout the task, resulted in an increased number of errors that invalidated the test results. Participant 13 explained:

I thought the tests got harder as they went on. The reason the tests got harder was because you are in a routine and then the routine is stopped and changed. Once the directions changed, the keys used were different, which made it harder to differentiate between categories. I don't think that these tests are very reliable because the test lures you into a routine and by suddenly flip-flopping categories it throws you off your routine. If the test were to start out with Black people on the sides with the positive words and the White people with negative words instead of the opposite, I think I would get completely opposite results.

Three other participants questioned the validity of the IAT after taking the same test more than once and having received different results each time. Participant 24 responded:

I took [the race IAT] first and my result shocked me. The test said that I had a moderate automatic preference for African Americans. This didn't really seem right to me, so I

took it again. My result this time said that I have a moderate automatic preference for European Americans. At that point, I lost faith in the IATs.

While different results following multiple administrations was concerning to some, participant 7 addressed this concern by reviewing information regarding the validity of the IAT, and reflected on her initial reaction:

After completing the Implicit Association Test, I spent a few minutes in frustration [feeling] manipulated by the order in which the words, images, and categories were presented to me in taking the test. Upon reading some of the background information, I discovered that this question seems to pop up often, and that the influence of the “order effect” on one’s results is small. It was somewhat reassuring to know that the order of items presented on the test is generated at random. In another way, it was troubling to me that I was so quick to blame my hidden prejudices on the format of the test rather than accepting that they might indeed be true.

One of the participants who stated that the IAT is a valid measure supported this claim by discussing the factors relevant to the development of implicit biases. However, the majority of participants not explicitly stating whether they felt the IAT was a valid measure still discussed these factors in their essays. It is therefore difficult to speculate whether the majority of participants regarded the IAT as valid or invalid. Four of the five participants stating that the IAT is a valid measure referenced their IAT results, noting that they were consistent with their explicitly held beliefs. For example, participant 21 states:

My findings indicated that I have little to no automatic preference [for] European and African Americans. I certainly agree with the results of the IAT because I have never

experienced any feelings of preference based on race before, and I have always been taught to accept all people.

Role of Past Experience

Eighteen participants noted the role of past experiences or familiarity with people of various cultures as having an impact on the development of implicit biases, and thus their scores on the IAT. Participant 6's response illustrates this relationship:

In my middle school and high schools there were few African American students in the whole school. So growing up I did not spend any time around African Americans simply because there were none around me. I think this may have an effect on my [attitudes] toward African American groups because of unfamiliarity, although I have no bias against or problem with African Americans.

Participant 1, for whom the IAT suggested an implicit preference for European Americans, described her reaction by stating, "I believe that these results are somewhat accurate because I've grown up in a mostly European American family and only in some schools I've attended have I interacted with African Americans."

Improving Practice

Ten participants indicated in their responses that their IAT results served to make them more aware of potential implicit biases, and that they could use this knowledge to avoid prejudice and unfair treatment of their students and others. Participant 7 explained:

I also feel that race and ethnicity are some of the most commonly controversial issues [within] the public school setting, and I would want to acknowledge any hidden prejudices I might have so that I could strive to be above reproach in dealing with my students.

Similarly, participant 23 acknowledged the impact of her IAT results but recognized that the biases of her future students should be addressed as well:

From the IATs that I took, I learned that I do judge people when I first see them. The results showed that I tend to prefer younger people rather than old. I would say that the reason for this is personal reasons. As teachers, we cannot change a student's belief from what they have learned or experienced personally, but we can create a positive space and open up their minds to a new and different aspect of life.

Exploring the Complexity of Racism: The Case of Tim Hanks

Case Study, Part I: Tim Hanks

Participants answered eight questions during the course of the case study, “Exploring the Complexity of Racism: The Case of Tim Hanks”. Themes were identified in participants’ responses to each question. The questions following part I of the narrative asked participants to speculate about the reasons for the undesirable behavior exhibited by Tim Hank and offer their approach if they were to encounter a similar student in their practice.

Analysis of responses to the question “What are some of your thoughts about the possible reasons for Tim Hanks’ behavior?” yielded one major theme: *home and family difficulties*. Two minor themes were also identified: *personal problems* and *resistance culture*. The variety of causal factors proposed by the participants illustrates the speculative nature of the question, as participants were not asked to identify the most likely cause. Indeed, four participants explicitly noted in their responses that Tim Hanks’ behavior (a) could be due to any number of factors, or (b) is difficult to explain without additional information.

Home and family difficulties. Sixteen participants cited factors originating from Tim’s home environment or family as potential causes of his behavior, though not all participants were

specific about what those factors were. Several participants suspected problems at home due to the difficulty Tim's teacher had in establishing contact with Tim's parents. For example:

It is maybe poverty related because of the fact [school staff] were unable to reach him on the phone and were unable to deliver mail to his address. He may have been evicted and is struggling to get by and may have to work. (Participant 15)

Participants who implicated specific difficulties with Tim's home life and family varied in their responses. Such suggestions included homelessness, low parental involvement, lack of resources requiring Tim to maintain employment, and that Tim's family did not place value on education. Participant 4 summarized his concern about the potential impact such a home life might have on Tim's priorities:

Maybe Tim is experiencing difficulties at home or in a difficult living situation and/or neighborhood environment that is causing these behaviors and making it difficult for Tim to follow through with commitments and understand that efforts have to be made.

Personal issues. Nine participants suggested that internal or self-imposed difficulties may have facilitated Tim's behavior. One such difficulty was low motivation to succeed in education, a factor suggested by four participants. Participant 25 elaborated on this possibility, noting several potential reasons for Tim's poor motivation:

[Tim] could be treating his teachers and education in this manner because he may have some other social or emotional issues that take precedence, in his opinion. He also may not value his education or have a goal of going to college, but he may have other goals that would affect how he sees his daily participation in school.

Engagement in high-risk behavior was noted as a personal problem by Participant 1, who outlined a broad range of possible challenges in Tim's life. He specifically noted that these problems are faced by minority youth:

Tim Hanks might have fallen prey to one of many problems that minority youth face: lack of resources, a resistance culture, or low parental contact or support. Tim might also be facing more personal problems like drug use, teenage pregnancy, etc.

Two participants explicitly noted that while Tim's behavior may present as poor motivation or lack of interest, external stressors may be the true source of undesirable behavior. Participant 22 explained, "It would appear as if Tim doesn't care about his academic performance, but he may have other, more pressing issues to attend to in his family life."

Resistance culture. Four participants noted that Tim might be exhibiting behavior consistent with a culture of resistance against academic achievement. The resistance culture described by participants is similar to that offered by Fordham and Ogbu (1986), which suggests that Black students' opposition towards academic achievement is motivated by a desire to preserve one's identity and to distance oneself from the majority culture (Whites), which is perceived to treat Blacks unfairly in social, economic, and political domains, among others. Participant 11 described this kind of behavior as matter of identity and loyalty to one's culture:

Unfortunately, there is a view among some African American students that Black students who succeed academically are "acting White". [Tim] may feel (wrongly) that he can't achieve (learned helplessness) or that he would be dishonoring his family and his culture.

Participant 7 described the role of a resistance culture in terms of responding to perceived discrimination:

Tim Hanks may be [experiencing] “stereotype threat” in an effort to take part in resistance culture and ‘fit in’ somewhere else. This notably increased attention from his teachers due to the fact that he is a Black student could be counteracting itself by alienating him and actually making him feel as if he’s being discriminated against. This could explain his aversion and failure to meet with the teacher.

Though not directly identifying a resistance culture, two additional participants shared similar thoughts, noting that discrimination by Tim’s peers or teacher could impact his academic performance or willingness to engage in the educational environment.

The second question participants responded to was “If you were Tim Hanks’ teacher, what might you have done with him or any student who behaved this way?” Analysis of participant responses revealed one main theme: *information seeking*. Two minor themes were also identified: *relationship building*, and *teacher limits*.

Information seeking. Seventeen participants indicated that in response to Tim’s behavior, they would seek additional information about the student’s circumstances. The majority of these respondents indicated that they would attempt to hold a one-on-one conversation with Tim during class in order to gather additional information that would provide a direction for problem-solving or support efforts. A few participants also made mention of additional information sources. For example:

I would try to get him to talk to me about why he was late or absent a lot and try to come up with a plan to work with Tim if he was willing. Another thing I would do is go to the school’s office and the other teachers that Tim has to get information about him, his family, and possible living situation, then go from there. (Participant 20)

Two participants viewed the information gathering process not only as a tool for identifying Tim's difficulties, but also as an opportunity to reflect on their ability to connect to and engage students in the classroom. Participant 7 explained:

If I were Tim Hanks' teacher, I would make more of an effort to hold a casual conversation with him rather than an academic one – this may reveal his interests and the reasoning behind his academic issues. Once these were explained, a teacher would have a better chance at gaining Tim's attention in class and connecting lessons to his experiences (in order to effectively improve academic skills).

Relationship building. Nine participants indicated in their responses a desire to serve as a source of support and assistance for Tim in helping him to overcome his difficulties. Three participants specifically mentioned providing emotional support and approaching Tim's problems with warmth as being important. Participant 16 stated, "I would want to approach him in a loving manner and seek to understand rather than condemn him for his actions."

Three other participants expressed the need to ensure Tim recognizes that his teachers are invested in his success, with Participant 6 suggesting, "I would try to express interest in his situation while he was around so that he would see my interest and potentially open up about what was going on." Participant 24 noted that, "getting to know your students and where they come from is important, no matter how they behave."

Teacher limits. Seven participants made statements either indicating that there are limits to what teachers can do to address complex behavioral issues or that they would consult with other school professions to aid them in meeting student needs. These participants shared the view that some students' behavior cannot be managed by the teacher alone. However, several

participants emphasized continued efforts on the part of the instructor. Participant 24 paradoxically states, “although we cannot reach all students, we can still make an attempt.”

Participant 8 maintained that such efforts are part of building a supportive relationship with students:

To be honest, I would have done the same things. There is only so much a teacher can do.

I do think that if a teacher does not give up on a student and shows that they care, then the student might realize that they have more potential and they might change their behavior, especially if they have a bad home life.

Among participants who expressed a desire for consultation, three other professional roles were named in their responses: guidance counselors, administrators, and resource officers. The purpose of consultation varied. Participant 22, feeling that others might be more effective in meeting Tim’s needs, stated, “I would prefer to talk to a guidance counselor about the issue, because they will be better able to handle anything that could be happening.” Participant 2, who responded they would enlist the aid of a resource officer, suggested that the officer might “follow [Tim] after school to see where he goes and what he does.” Participant 23, concerned about Tim’s environment outside of school, noted that outside services may be needed:

If I was Tim Hanks’ teacher, I would go to the school principal. . . . If he is constantly missing classes and assignments, something deeper is going on. I think the principal should be contacted and maybe even the county’s child protective services to find out what’s going on.

Case Study, Part II: Turnaround

Part II of the narrative asked participants to reflect on the now evident reasons for Tim Hanks’ behavioral problems, and to suggest a course of action. Participants first responded to the

question, “How would you have reacted to these explanations? How does this affect your thoughts about the reasons for Tim Hanks’ behavior?” One major theme was identified: *personal responsibility*. One minor theme was also identified: *relief*.

Personal responsibility. More than half of respondents expressed shock or surprise in response to the real reasons for Tim’s behavior. While some expressed anger at the actions of the bus driver, seven participants indicated that they felt some measure of responsibility for not identifying the source of Tim’s problems sooner. Participant 21 viewed this as a failure to connect with a student in need:

First, I would feel like I had failed the kid [as he was] uncomfortable with talking to me about issues as serious as this. Secondly, I would be ashamed at any negative predispositions that I had regarding Tim as a student or his exhibited behaviors.

Participant 4 recognized the risk inherent in making assumptions without sufficient information:

I should not be so quick to assume anything about the lives and experiences of my students. I should only be supportive, unbiased, and empathetic in these in these situations by making sure that my students are equipped with the proper tools for success.

Participant 2 offered to provide material support if it meant it would help Tim succeed:

I would have assured him that no matter the situation, I would be there for him. I would offer my assistance with anything the student needed, even if I had to go pick him up myself if he ever had car trouble.

In contrast, three participants expressed confusion over Tim’s failure to seek out help that may have prevented him performing poorly in class. Participant 15 explained, “I think [Tim]

should have come forward and let someone know what was going on. Maybe his teachers or school administration could have helped him out.”

Relief. While many of the participants were caught off guard by Tim’s explanation, three participants indicated that they were relieved by this news. Specifically, these participants were pleased to find out that Tim’s behavior was not due to low motivation to succeed in school. Participant 25 responded, “I would be comforted to know that motivation wasn’t the issue, and I wouldn’t ever want embarrassment to be an issue with my students in regards to communicating with me.”

Participants responded to a second question in Part II of the case study: “What would you have done next?” One major theme was identified: *clarifying support role*. Two minor themes were also identified: *problem solving* and *making amends*.

Clarifying support role. Sixteen participants responded to this question by expressing to Tim that they, as his instructor, can serve as a support system by providing him with assistance, encouragement, and an ally whenever he finds himself faced with difficulty. For example:

I would have made it very clear to Tim that if he ever needs anything in regards to [obtaining] necessary resources in order to be successful in school, to not hesitate to ask me and I would be glad to help him in any way that I can. (Participant 21)

Three participants also noted that they would not only reaffirm their commitment to Tim as a student, but they would also take a moment to congratulate Tim on his success. Participant 6 stated, “I would have congratulated him on his grades and encouraged him for the effort he put in while trying to get to school the previous semester even though he was failing.”

Problem solving. Three participants, while still encouraging Tim to communicate any future difficulties, chose to contact the school directly in an attempt to eliminate one of the factors that contributed to Tim’s failure. Participant 15 explained:

I would have gone to whoever was in charge of the buses and filed a complaint. I would have tried to fix the problem so another student wouldn’t have to experience what Tim went through.

Making amends. Four participants, feeling in part responsible for the outcomes Tim experienced during the previous semester, noted that they would offer an apology to Tim for not acting sooner and for misattributing the cause of Tim’s difficulty. Participant 24 stated, “I would have apologized. The instructor came up with an incorrect assumption and owes Tim an apology for misjudging him and not trying to help.”

Case Study, Part III: Racist?

Part III prompted participants to discuss whether they felt Tim’s teacher’s assertion that he is racist is accurate. In addition, participants were asked to differentiate the actions of the teacher and the bus driver and discuss the prevalence and potential harm posed by these forms of racism. Lastly, participants were asked to reflect on how Tim might have felt as the only Black student in his class and what influence that may have had on his peers’ perceptions of him. Participants first responded to the question, “Do you agree with the teacher’s conclusion that he is racist? Explain your answer.” One major theme was identified: *insignificance of race*. Two minor themes were also identified: *intention* and *implicit racism*.

Intention. Three participants addressed intention to harm as a qualifying factor for being a racist. Participant 24 defended Tim’s teacher by noting the influence of a racially biased society:

Personally, the term racism [implies] intent. We can be by-products of a racial binary, but the connotation of the term “racist” holds intentional malice. I do not think the teacher is racist because he did not intend to be, but he is now aware of the racist system.

It can be argued that the teacher’s thoughts about Tim may have been influenced by racial stereotypes regarding the academic ability of Black students. However, participants’ views on whether this would constitute racism varied. This is illustrated by the contrasting responses provided by two participants:

In my time spent in schools and with students so far, the amount of unmotivated students is very high for kids of all races. Just because you assume what happens to be a stereotype does not necessarily make it/you racist. (Participant 22)

Yes, racism is often when one stereotypes a race of people to act a certain way. The teacher assumed Tim was like herself; she initially associated his race with his poor academic performance. (Participant 9)

Insignificance of race. Eleven participants indicated in their responses that they did not believe that race played a factor in influencing the teacher’s behavior, and therefore the teacher could not be racist. Participant 6 responded in this manner, writing, “If a White student was doing the same thing first semester that Tim did, the teacher may have assumed he was just being lazy or unmotivated as well.” Participant 14, arguing that the teacher was indeed racist, cited the ambiguous nature of the scenario:

To a certain extent, yes I do. If he had made the same assumptions about other students in his class who were performing poorly, I would be inclined to think differently, but nothing is said about the other students.

Implicit racism. Of participants agreeing with the teacher's self-assessment, three participants referenced or drew on their knowledge of implicit racism to support their position.

For example:

I agree to a degree because implicit racism, along with other attitudes/beliefs, are taught by what we see in society and how privileged we are. These beliefs can be subconscious and express themselves in less obvious ways at times. (Participant 7)

Participant 4 noted that while the teacher's actions were racist, the teacher appears to have gained awareness of the mechanisms underlying their biased behavior:

Yes, the teacher did commit racist assumption that were previously associated with the culture of African Americans from past experiences. Although these assumptions were made, the teacher realized the flaws [in them] and addressed them as wrong and based off of personal prejudice. These assumptions could have further negatively affected Tim's future.

Two participants specifically noted the importance of the teacher's nonverbal behavior in the classroom has having the potential to send unintended messages. This demonstrates some understanding of the role of impact awareness (Gawronski et al., 2006) in implicit bias. For example:

...he never went out of his way to talk with Tim and ask him why things in the classroom were going poorly. Sometimes we need to be overly proactive to ensure that we thoroughly understand each students' situation. (Participant 21)

No I do not think so, he was just assuming like most teachers would do. Not unless his body language said otherwise, but he was just assuming that Tim was lazy. Anyone can be lazy. (Participant 10)

The second question in Part III asked, “How would you characterize the difference between the racism of the bus drivers and the racism of the teacher? Are both kinds equally prevalent in our society, and to what degree are they both destructive?” Two minor themes were derived from participant responses: *equivalent impact* and *defending the bus driver*.

Equivalent impact. The title of this theme conveys that several participants indicated that overt racism (such as the actions of the bus driver) and implicit racism (such as the actions of the teacher) were both equally prevalent and equally destructive forces. Eight participants suggested the equivalent nature of these two forms of racism. Four participants responded that they believed implicit racism to be more prevalent than overt racism. There was no clear consensus or majority regarding whether overt or implicit racism posed a greater danger than the other (note that not all participants compared the two types in their responses). Participant 7, in stating the danger of implicit racism, explained, “Both kinds are equally prevalent...but implicit racism is more dangerous because that person can do a lot of harm without realizing it, and never change their ways because they don’t know they’re wrong.” Participant 11 provided an explanation of the different dangers posed by either type of racism:

I would also argue that though both types are harmful, overt racism is more harmful. This is because it can easily make a student feel scared or inferior. However, I would also argue that unknown racism is more dangerous because its hidden nature makes it harder to combat.

Participant 9 indicated that implicit racism could lead to poor outcomes for students when perpetrated by teachers, noting that, “when a teacher has subconscious racism, they can hurt students with ‘self-fulfilling prophecies’ or low expectations.”

Defending the bus driver. The nature of the question to which participants responded was leading, as it implied that both the teacher and bus driver in the scenario were racist to some degree. Despite this, two participants noted that it was unclear whether the bus driver's actions were racist. Participant 1 stated, "I don't know if the bus driver was racist. It's likely he was just a mean person." Participant 2 noted that, as with the teacher, not enough evidence was presented to make a case for racist behavior:

I'm not sure if the bus driver was racist either. An [explicit], yes, but [there is] no reason to say he splashed [Tim] because he was Black. Maybe it was because he was male, or because he was less than six feet tall.

The third question answered by participants for Part III asked, "How do you think being the only Black student in a class of 120 affected Tim? How do you think you would feel if you were Tim?" One main theme was identified: *feeling out of place*. One minor theme was also identified: *no difference*.

Feeling out of place. Fourteen participants speculated that Tim was likely to have felt anxious or out of place in his environment as the only Black student. Participant 24 wrote, "As the only Black student, Tim probably felt isolated and even ostracized at moments. This probably aided in his reluctance to be forward about his situation." Participant 25 sympathized with Tim's situation, professing that, "If I had experienced the racism of the bus driver, I would've had a hard time sitting in a room full of non-Black students without wondering if they also had racist feelings." Three participants mentioned that Tim's predicament was likely to cause him to become increasingly aware of his race. For example:

I am sure that Tim felt like he was being “that stereotypical Black man” in regards to his fellow White classmates. He probably felt that he was [perpetuating] the stereotype.

Whether I was Tim or any other person, I would be overly embarrassed. (Participant 21)

Participant 2, while noting that Tim may have felt awkward, indicated that his experience was a universal one:

I’m sure he felt a little awkward in class because there were no other students of the same ethnic group, but that is something we will all have to face in this world to be successful.

We all have to learn to be able to step out of our comfort zone.

No difference. While the majority of participants indicated that Tim was likely to have felt tension as a result of being the only Black student in a large classroom, two participants noted in their responses that they would have been ambivalent if faced with such a situation. These participants emphasized that they would remain focused on their education and feel unthreatened by the racial disparity. For example:

I do not think I could have cared either way if there were 119 White students or only 1, unless people constantly warned [Tim] against White people his entire life. I would feel happy to be in higher education, I think. (Participant 17)

The final question in Part III asked, “How do you think this affected the way the other students perceived him?” Two minor themes were uncovered: *sharing perceptions* and *importance of context*.

Sharing perceptions. Seven participants linked the perceptions of Tim’s peers with the perception of the teacher. While some noted that Tim’s peers may have harbored negative attitudes towards Tim that were similar to those held by his teacher, others implicated the teacher’s behavior in helping to foster those attitudes. For example:

The teacher, by allowing Tim's situation to continue, inadvertently sent a signal to everyone (including colleagues & classmates) that Tim lacked motivation and was a "bad student", effectively confirming many negative stereotypes about Black students.

(Participant 7)

Importance of context. Five participants emphasized the role of context in discussing the perceptions of Tim's peers. These participants maintained that without the knowledge that Tim was encountering transportation difficulties, Tim's peers were likely to have ascribed the cause of Tim's behavior to internal or stereotypical traits. For example:

Again, no one ever knows what is going on in someone else's life, so I would assume that the majority of his classmates thought of him as unreliable and lazy. I am not sure if they took his race into consideration, but maybe they did. (Participant 21).

Participant 25 noted that, "If any of the other students knew, they might have viewed Tim's predicament with more sympathy, and offered to help Tim," indicating that Tim's peers may serve as a source of support in addition to his teacher.

Teachers' Subtle Communications About Students' Ability

Participants' responses to this activity were coded and analyzed, and themes were identified in participants' responses about the messages being sent to each student (Jerome, Leroy, Anthony) by their teacher's actions as well as in their responses to the question, "Does this teacher's behavior demonstrate implicit or unintentional racism? Why or why not?"

Jerome

Two major themes were identified in participant responses about messages being sent to Jerome by his teacher's actions. The first theme identified was *low expectations*. Twelve participants indicated in their response that the teacher's actions described in the scenario sent

the message to Jerome that expectations for his success were low. For example, participant 3 responded:

Although the teacher doesn't say anything to Jerome, her actions coupled with her silence show that she does not care about his ability. By essentially ignoring Jerome, the teacher tells him silently that she does not value his ability to learn and therefore doesn't think he can do it.

The second theme identified was *confidence*. Eleven participants viewed the teacher's passiveness as a sign of confidence in Jerome's ability to correctly solve the problem in due time. Participant 23's response, which included both themes, indicated that the scenario left room for interpretation:

The teacher is not helping Jerome, who may need help. I think that you can look at her action in two ways. One: maybe she believes in Jerome and knows that eventually, he'll figure out the solution to the problem. Two: She is neglecting Jerome's needs.

Leroy

Two minor themes were identified in participant responses about messages being sent to Leroy by his teacher's actions. The first theme identified was *necessary hints*. Nine participants indicated in their response that Leroy's teacher sent the message that Leroy requires hints or assistance to be successful in class. Participant 7's response illustrates this theme:

Leroy may [think] that the teacher thinks he can't make progress without help. He did not ask for help initially, and was slowly but surely making progress on the task at hand. Since he received the hint from the teacher, he will not receive that "pleasurable rush" of solving the problem himself, and may receive the message that he will always need help, or that he doesn't have to work as hard to try to solve problems.

The second theme identified was *slow pace*. Four participants suggested that the teacher's actions sent Leroy the message that he was not working quickly enough. Participant 25 responded:

By giving Leroy a hint even though he is making progress, the teacher might make him feel as if his work pace isn't fast enough, or that he is having difficulties he is not. This may make him feel inadequate and as if the correct answer is all that matters (not understanding or the process), and could lead to feelings similar to Jerome's – the teacher should have used this time to check on him instead.

Anthony

Two major themes were identified in participants' responses about the messages sent by the teacher's actions. The first theme identified was *lack of confidence*. Thirteen participants responded by stating that the teacher's actions send the message that Anthony requires direct attention to be successful. Additionally, many participants noted that the teacher's actions might lead Anthony to put forth less effort with the knowledge that he will receive the answer from the teacher eventually.

Participant 1 responded:

The teacher really patronizes Anthony, who, although he made a mistake, has been given no time to realize how to solve it. The teacher might be better off telling him that he has made a mistake and allowing Anthony to come to a conclusion on his own.

The second theme identified was *valued student*. Eleven participants responded that the teacher's actions toward Anthony were a display of warmth and assurance that assistance would be available to Anthony if he needed it. Participant 6 describes the message sent by the teacher, specifically addressing the different standards being imposed on the students:

The message being sent to Anthony is that he is one of her favorite students and she likes him and wants to help him more than she does the other students in the class. It also shows him that he does

not have to try as hard as the other students in the class because if he needs help the teacher will give it to him and even show him how to do the assignment as the teacher did in this instance.

Unintentional Racism

One major and one minor theme were identified in participants' responses to the question of whether the teacher's actions constituted unintentional racism or implicit bias. The first theme identified was *resistance*. Sixteen participants indicated that they did not believe that the teacher's actions demonstrated unintentional racism, with the majority of participants qualifying this statement by noting that the scenario provided no information about the race of the students. Participant 9, in discussing whether the teacher demonstrated unintentional racism, stated "Not necessarily, because the scenario above never specifies if the students are different races. There could be other factors that [cause] the teacher [to] credit or discredit their students' abilities." Participant 23 suggested that ascribing race to a particular name is in itself a racist act. She states that "we would be demonstrating racism by assuming that Jerome would have been the black student who was neglected because of his name."

The second theme identified was *unintentional racism*. Despite the hesitance of most participants to assign race to the students' names, nine participants indicated that the teacher's actions demonstrated unintentional racism if Jerome were considered to be a Black student. Of these participants, several described the scenario in a hypothetical sense without providing any indication of whether they personally believed Jerome to be a Black student. For example, participant 16 stated:

I think it depends. I feel like this scenario is making the names of the students fit into a certain race. I do not know for certain if Jerome, Leroy, or Anthony is white [sic], black [sic] or another race. If I were to assume that Jerome is a Black student, while Leroy and Anthony are White students- I would definitely agree that racism has seemed to take

place. It was obvious in the level of the teacher's assistance to the students that he/she was more willing to help Leroy and Anthony compared to Jerome.

Affect Misattribution Procedure

The data of three participants in the intervention group were removed from the first administration of the AMP to the intervention group and data from four participants in the second administration due to these participants providing the same answer for every trial. A 3 (White, Black, and neutral prime) x 2 (intervention first administration and control conditions) ANOVA was performed on the mean percentage of participants' pleasant responses when provided AMP prime images. Analysis revealed a main effect of condition, $F(1,30) = 9.22, p < .05$, with participants of the intervention first administration group providing a greater percentage of pleasant ratings for all three prime variants than the control group. Planned contrasts indicated that the differences for White primes ($t(30) = 1.6, p = .12$), Black primes ($t(30) = 1.95, p = .06$), and neutral primes ($t(30) = .52, p = .61$) were non-significant by traditional standards ($p < .05$), though the difference between conditions for Black primes was marginally significant. The main effect of the prime was not found to be significant, and no Prime X Condition interactions were found in this analysis. While these results partially support the hypothesis that the intervention would cause an immediate change in implicit bias, this hypothesis is not supported throughout the full experimental design, as the proportion of pleasant responses for each prime variant did not vary significantly by condition. When the second administration of the AMP to the intervention group was included in the analysis, a significant difference in mean pleasant ratings for White primes was found between the second administration and control conditions, $t(50) = 2.833, p < .01$, an unexpected result. Figure 1 displays the percentage of pleasant responses for each prime within each administration of the AMP.

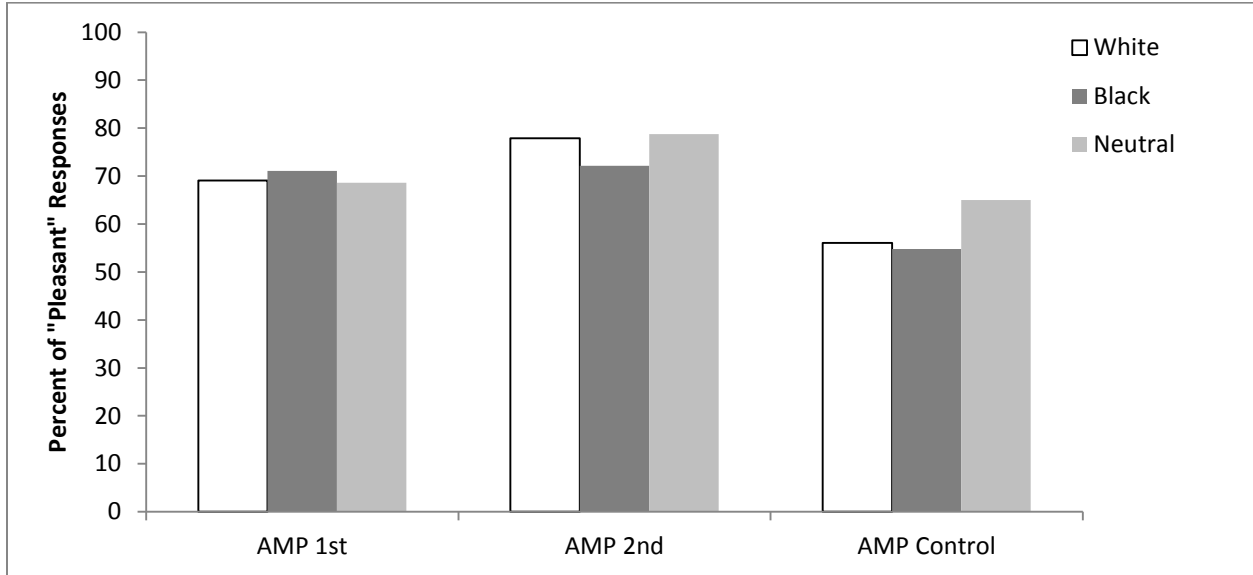


Figure 2. Percent of “pleasant” responses following AMP stimuli for each AMP administration. AMP 1st and AMP 2nd refer to administrations of the AMP to the intervention group.

Table 2

Mean Percent of “Pleasant” Responses Following AMP Stimuli by AMP Administration.

Prime	AMP 1st		AMP 2nd		AMP Control	
	Mean	SD	Mean	SD	Mean	SD
White	69.1	22.5	77.9	20.8	56.1	22.7
Black	71.1	25.1	72.2	29.9	54.8	20.3
Neutral	68.6	22.3	78.8	20.4	65.0	13.7

Note. AMP 1st and AMP 2nd refer to administrations of the AMP to the intervention group.

Vignettes and Rating Scale

Rating Scale

A 2 (student name) x 3 (intervention first administration, intervention second administration, control) x 3 (locus of causality, controllability, stability) factorial ANOVA was performed on the mean participant ratings of rating scale dimensions, which were averaged from

participant ratings of the items contributing to each dimension score. Lower ratings indicate attributions for student behavior that are the result of external, changeable causes, as opposed to stable, internal student traits. No significant main effects of student name or condition were identified. Within the intervention first administration and control groups, participants provided higher mean ratings for all three dimensions when the student’s name in the vignette was stereotypically Black than when the name was stereotypically White, though these differences were non-significant. Additionally, the intervention group first and second administrations revealed lower ratings of the stereotypically Black name than the control group for the controllability and stability dimensions, but not for locus of causality, which was an unexpected result. The intervention group second administration mean ratings of the student with the stereotypically Black name were lower than the first administration mean ratings for the locus of causality and controllability dimensions, but not for the stability dimension. Table 2 displays participants’ mean ratings for each dimension by student name.

Table 3

Participant Mean Ratings of Student by Causal Dimension

Dimension	Tyrone			Greg		
	IntA	IntB	Control	IntA	IntB	Control
L.O. Causality	5.32	4.90	4.86	4.40	4.55	4.83
Controllability	4.46	4.06	4.77	4.38	5.07	3.95
Stability	3.68	4.05	4.07	3.40	3.46	3.75

Note. IntA = Intervention group first administration; IntB = Intervention group second administration; L.O. Causality = Locus of Causality

Written Responses to the Vignettes

Intervention and control group participants provided written responses to three questions after being presented with a vignette and rating scale. Themes identified in participant responses were compared between the first and second intervention group administrations (henceforth referred to as IntA and IntB) as well as the control group for each question. Themes were also examined within each group to identify any differences in participant responses between the two versions of the vignette. In discussing difference in participant responses between groups, this analysis focuses primarily on responses to vignettes that used the stereotypical Black name (Tyrone) in order to most effectively address the hypothesis that participants in the intervention group will explore external factors when faced with minority students with academic and behavioral difficulties, rather than attributing difficulty solely to internal traits of the student. Table 3 lists all of the themes identified during analysis of participant responses.

Table 4

Themes Identified in Participants' Written Responses to Vignette Questions

Group	Question 1	Question 2	Question 3
IntA Tyrone	Low academic motivation (4); Objectivity (2)	Disability (3); Social issues (3); Troubled home (6)	Contacting colleagues (4); Diagnostic testing (2); Meeting with the student (8)
IntA Greg	Requiring academic assistance (3); Unknown problems (3)	Low academic motivation (3); Social issues (5)	Contacting colleagues (5) Meeting with the student (7)
IntB Tyrone	Low academic motivation (2); Objectivity (3)	Social issues (7); Troubled home (3);	Contacting colleagues (5); Meeting with the student (4)
IntB Greg	Distractions (3); Low academic motivation (2); Potential (2)	Social issues (3); Troubled home (5)	Contacting colleagues (3); Meeting with the student (9)

CtrlTyrone	Low academic motivation (3); Potential (2)	Troubled home (4)	Contacting colleagues (3); Meeting with the student (6) ; Motivate (2)
CtrlGreg	Low academic motivation (2)	Poor self-concept (2); Troubled home (2)	Meeting with the student (6)

Note. The number of participant responses in which a theme was identified is indicated by the number in parentheses. Boldface indicates a major theme.

Question 1. The first question that participants responded to after reading the vignette was, “How would you describe [name] as a student?”

Between groups. Across all groups, several participants described Tyrone as having *low academic motivation* (IntA = 4, IntB = 2, control = 3). Participants differed in their explanations for why they believed Tyrone was unmotivated. For example, participant 14 (IntB) stated that Tyrone “doesn’t see or understand the importance of education,” while participant C13 suggested, “He doesn’t seem to like school or want to do work.” Participant 5 (IntA) indicated that Tyrone’s poor motivation may not necessarily be internal in nature, explaining, “Tyrone seems uninspired to behave and complete schoolwork. This could be a result of teacher actions or something going on at home.”

Two participants in the control group indicated in their description of Tyrone that he has *potential* as a student despite his present difficulties. Participant C8 noted, “He can still be a great student, he just needs to apply himself more.” While this response suggests that Tyrone is not putting forth enough effort, Participant C3 implicated situational factors as hindering the student’s potential, stating, “Tyrone seems to be troubled by some aspect in his life. He is probably a bright student, but he feels he can’t express himself because of a situation.”

Participants in the IntA and IntB groups showed a greater level of *objectivity* in their responses compared to the control group. Two participants in the IntA group and three participants in the IntB group explicitly stated that not enough information was available in the vignette to allow for an accurate description of Tyrone, whereas no participants in the control group made this statement. In addition, participants in the IntA and IntB groups generally restated information from the vignette or remained vague in their description of Tyrone, avoiding speculation about specific reasons for Tyrone's difficulties. To illustrate, participant 15 (IntA) responded, "He is not the best student because he is late and isn't paying attention in class, but there could be an underlying issue. There is not enough information here for me to make assumptions." In contrast, participant C7 provided a speculative response:

He is a student with little motivation to complete his school responsibilities. He obviously is struggling with something personal, but feels like school work is pointless in comparison. He is aggressive and needs to have a behavior change before he can be a successful student.

Within groups. Within the control group, the minor theme of low academic motivation also appeared in the responses of participants who received the vignette with the stereotypically White name (Greg). Two such participants explicitly described Greg as unmotivated to do well in school. Participant C6 noted that, "[Greg] is unmotivated to do school work, and is probably more concerned with how he is viewed by his peers than how he performs academically." The implication that social factors impacted the target student's motivation to achieve academically was not evident in any of the responses of control group participants who were asked to describe Tyrone as a student.

Within the IntA group, three participants receiving the vignette with Greg as the target student described Greg as *requiring academic assistance* or having trouble understanding academic material. For example, participant 7 confidently states, “Greg is definitely a struggling student who needs academic help to succeed in his classwork.” No participants in the IntA group describing Tyrone as the target student made mention of academic ability. Additionally, three participants describing Greg noted that his difficulties were due to *unknown problems*, indicating that Greg’s parents and teacher are unaware of the cause of his behavior. For example, participant 2 states:

I would describe Greg as a student that seems to be having some issues in his personal life. He is clearly dealing with some sort of problem that he is hiding from his parents and is uncomfortable communicating to a teacher.

This response is similar to those provided by several IntA group participants who described Tyrone in that it primarily avoids attributing a specific cause for the student’s behavior. That the focus of this type of response is on the teacher and parents’ lack of insight into the source of the student’s difficulty suggests that these participants view these adult figures as having a potential role in helping to solve the student’s problems.

Within the IntB group, two participants describing Tyrone as a student noted that he has the potential to become a better student. Participant 11 explained, “I’d say Greg has potential, but he’s troubled. If we could fix his behavioral issues and get him to do his work, he could be a fantastic student.” Additionally, three participants cited *distractions* while describing Greg, but were hesitant to discuss specifically what these distractions might be. For example, participant 9 stated, “Greg is a student who is troubled and seemingly preoccupied with a situation outside of school.” Two participants cited low academic motivation in their description of Greg. This minor

theme was shared by participants within the IntB group who received the vignette with Tyrone as the target student.

Question 2. The second question that participants responded to after reading the vignette was, “What do you think is causing [name]’s behavior?”

Between groups. Across all groups, a number of participants attributed Tyrone’s behavior to a *troubled home* (IntA = 6; IntB = 3; control = 4). The majority of these participants’ responses did not specify any particular problem occurring in the home, making it difficult to speculate what participants had in mind when referring to such problems. Participant C8, who offered a more detailed response, suggested, “[Tyrone’s] parents may be the cause, because they may not be providing and caring enough for him.”

Three participants in the IntA group and seven participants in the IntB group indicated in their responses that *social issues* were to blame for Tyrone’s behavior. Participant responses in the IntA group focused primarily on bullying as a cause for Tyrone’s behavior. For example, participant 11 responded, “Tyrone’s behavior is probably due to bullying at home or at school or some kind of need for attention.” While IntB group participants noted bullying as a possible factor in their responses, two participants indicated that Tyrone had become involved with the “wrong crowd”, and participant 2 suggested that “it sounds like Tyrone has joined a gang and is persuaded by others to act the way is in order to fit in in with his ‘new friends.’”

Three participants in the IntA group indicated in their responses that a *disability* may be the cause of Tyrone’s behavior. While two of these participants did not suggest a specific disability, participant 8 elaborated that Tyrone “could even have ADHD.” No participants from the IntB or control group suggested disability as a cause of Tyrone’s behavior in their responses.

Within groups. Within the control group, two participants describing the cause of Greg's behavior noted the influence of a troubled home life, a theme shared with those who described the causes of Tyrone's behavior. Additionally, two participants proposed that Greg's behavior was due to a *poor self-concept*, a causal factor not mentioned by participants asked to describe Tyrone's behavior. For example, participant 1 indicated that the cause of Greg's behavior was "Maybe some emotional disruption and self-esteem issues," while participant C9 responded that Greg "may feel inadequate, and may be a defeatist."

Within the IntA group, five participants cited social issues as a cause of Greg's behavior. Like participants who were asked to describe Tyrone's behavior, several of these participants indicated that they believed bullying to be a cause of Greg's behavior. However, participant 2 suggested gang activity as an influence. Note that participant 2 also implicated gang activity in his description of Tyrone's behavior during the second administration of the vignette.

This sounds a lot like Greg has joined a gang. He does not see the importance of school and is feeling like he needs somewhere to fit in. Because of the gang, he feels the need to 'prove himself' by fighting others.

Low academic motivation was found to be a minor theme in the responses of three participants asked to describe Greg. While low academic motivation was not described by IntA participants receiving the Tyrone vignette in their responses to question 2, it was identified as a minor theme for this group during question 1.

Within the IntB group, the same themes were revealed in participant responses for both target students. Five participants asked to describe Greg's behavior cited problems at home as the source of Greg's behavior, while three participants suggested social issues as a cause. Participant 11 included both themes in his response:

Most likely, there is some kind of emotional disturbance. Perhaps he's being bullied and so he avoids class to avoid the bully and gets into fights to seem strong. Alternatively, his home life could be troublesome. If his parents don't notice a change then either the cause isn't at home or they don't care or are too busy to pay attention to him.

Question 3. The third question that participants responded to after reading the vignette was, "As [name]'s teacher, what action would you take?"

Between groups. Several participants from each group who received the Tyrone vignette noted that they would hold a *meeting with the student* in order to gather more information about Tyrone's difficulties or to work out a solution directly with the student (IntA = 8; IntB = 4; control = 6). A number of these participants chose to include Tyrone's parents in these meetings, as was the case with participant C10, who stated that she would "Talk to Tyrone and meet with his parents. [I would] find out some of the problems he is facing and come up with ways to help him." Participant 15 noted in his response that speaking with Tyrone might serve as part of the solution, explaining, "I would continue to try and help Tyrone. I think he might just need to talk. I might suggest that the school counselor help as well."

Several participants from each group also suggested *contacting colleagues* within the school setting for assistance in working with Tyrone (IntA = 4; IntB = 5; control = 3). Participants referred to several different colleagues in their responses, including fellow teachers, administrators, counselors, and school psychologists. Participant C4 responded, "I would have Tyrone see the school's counselor and talk with them to see if he could verbalize any of the issues, or explain why he is behaving the way he is." While participant C4 appears to appeal to the counselor for guidance in her response, participant 14 indicated that colleagues might serve as sources of context in uncovering the cause of student behavior. Participant 14 stated the she

would “Discuss the student with his other teachers to see if the problem is an overall issue or classroom specific and try to find out more about the student from talking to him about something other than school.”

Two participants in the control group indicated that they would take steps to *motivate* Tyrone to improve his behavior in school. These participants had also responded to question 1 by describing Tyrone has having low academic motivation. Participant C7 explains her course of action:

I would try to have a meeting with Tyrone and his parents to find out the cause of his behavior and lack of motivation. If this can’t happen, I would try to include Tyrone more in class and find ways I could motivate him myself.

Consistent with the responses of participants in the IntA group to question 2, two participants in this group suggested *diagnostic testing* to rule out any disability that may be contributing to Tyrone’s behavior. This suggestion unequivocally implicates internal factors as a potential cause of Tyrone’s difficulties. Participant 23 states, “I would encourage his parents to get him diagnosed,” while participant 8 included testing within a series of steps, noting, “I would consult with colleagues, have him tested for ADHD, and I would try talking to him before class.”

Within groups. Within the control group, six participants receiving the Greg vignette indicated that they would meet with Greg in order to identify the source of his behavior and work on a solution with the student. Compared to those receiving the Tyrone vignette, this theme occurred with similar frequency. The themes of contacting colleagues for assistance or attempting to motivate the student did not appear in the responses of control group participants receiving the Greg vignette.

Within the IntA group, participants receiving the Greg vignette offered responses with similar themes as those receiving the Tyrone vignette. Five participants receiving the Greg vignette suggested contacting colleagues for assistance in their response, while seven suggested meeting with the student. Compared with those receiving the Tyrone vignette, participants receiving the Greg vignette opted to include parents as part of their meetings with the student far more frequently (no participants receiving the Tyrone vignette included parents in these meetings). Participants receiving the Greg vignette also did not include any discussion of diagnostic testing in their responses, while two participants receiving the Tyrone vignette suggested this course of action.

Within the IntB group, similar themes were identified between participants receiving either version of the vignette. Three participants receiving the Greg vignette suggested contacting colleagues for assistance, while nine participants suggested meeting with the student to discuss his difficulties. Participants receiving the Greg vignette suggested meeting with the student more than twice as frequently as those receiving the Tyrone vignette.

CHAPTER FOUR: DISCUSSION

The purpose of this study was to develop a brief, researched-based intervention for raising awareness about aversive racism in order to establish impact awareness and achieve measureable reductions in implicit bias in preservice teachers who were students in a public, regional comprehensive university in the Southeast. The hypothesis that a reduction in implicit bias as measured by the AMP would be evidenced in the intervention group following the conclusion of intervention activities was only partially supported. While the intervention group provided a higher proportion of pleasant responses following all AMP prime variants, these differences were not statistically significant between conditions (though the difference for Black primes was marginally significant). The hypothesis that a sustained reduction in implicit bias as measured by the AMP would be evidenced in the intervention group following a 26-day follow-up period was rejected, and only an unexpected significant difference between the proportion of pleasant responses following White prime images was found between the intervention and control group.

The hypothesis that intervention group participants would attribute the behavioral and academic difficulties of the minority students described in the vignettes to external factors rather than internal factors (which may be consistent with racial stereotypes) receives mixed support. Given the themes identified during analysis of the vignettes, it can be said that participants in the intervention group displayed a higher level of objectivity in their description of the target students, for whom participants were given limited background information. However, three participants in the IntA group receiving Tyrone as a target student suggested that the cause of the students behavior may be due to a disability; a bold assumption given limited information about

the student. With consideration to the rating scales included with the vignettes, no statistically significant results were obtained when comparing the causal dimensions (Weiner, 2010) across conditions.

While it is unclear whether the intervention used in this study facilitated the differences in implicit bias as measured by the AMP between the intervention and control groups, the qualitative data obtained from the Teaching and Learning about Tolerance activity, the Tim Hanks case study, and the Teachers' Subtle Communications about Students' Ability offer clues as to the mechanisms of implicit bias that are the most difficult for students to conceptualize, as well as the barriers to learning about aversive racism. For example, themes uncovered during the Teaching and Learning about Tolerance activity indicated that among participants who claimed the IAT to be an invalid measure of implicit bias, several cited concerns about the format of the test and variability of their results following multiple illustrations, although these have been adequately addressed in the literature (Nosek, Greenwald, & Banaji, 2005). Similarly, several participants appeared to justify their claim regarding the validity of the IAT based on whether their IAT results were consistent with their explicitly held beliefs. This might reflect defensiveness on the part of the participant, or possibly a misunderstanding of what the IAT measures.

The data obtained from the portions of the Tim Hanks case study and the Teachers' Subtle Communications About Students' Ability activity that asked participants to make judgments about whether the teacher in the activity had acted in a racist manner illustrated the power of ambiguous situations in diffusing accusations of racism. In both cases, well over half of participant responses stated that the teachers' actions could not be considered racist or biased because the potential for non-racial motives existed. For example, in the Tim Hanks case study,

many participants declined to label the teacher a racist, asserting that the teacher might treat a White student with identical behaviors in the same manner. Without information about how the teacher treats White students, the verdict of whether the teacher was a racist was unclear. Similarly, in the Teachers' Subtle Communications About Students' Ability activity, participants were informed that three students in the scenario were treated differently by the teacher, but were not explicitly provided the racial demographic of the students. More than half of the participants then indicated that the teacher's actions did not demonstrate unintentional racism because there was no way of identifying the student's race. This result was interesting in that one of the three students names (Leroy) was considered to be stereotypically Black and likely to be identified with a high percentage rate as belonging to a Black person in the pilot study conducted as part of a larger study by Bertrand and Mullainathan (2004). This might suggest that many participants suspected that at least one student described in the activity was Black, but yet the majority of participants refused to label the teacher's actions as racist. One might speculate that this refusal stems from a desire to avoid discussion or accusations of racism, which would likely generate conflict or heated response when directed at others given that such beliefs are widely considered socially unacceptable in the United States. Another possibility might be that participants identified with the teachers in the activities and, seeing themselves as likely to act in a similar manner without racist intent, refused to acknowledge that student race played a factor. Both possibilities fit within the realm of aversive racism framework (Gaertner & Dovidio, 1986; Dovidio & Gaertner, 1998, 2005).

The qualitative data also offers insight into what skills, resources, and acceptable solutions preservice teachers perceive themselves to have when dealing with troubled students. For example, in the Tim Hanks case study, participant responses to the question, "If you were

Tim Hanks' teacher, what might you have done with him or any student who behaved this way?" revealed information seeking, relationship building, and teacher limits as themes. From this information, one might hypothesize that these particular preservice teachers view learning about and building supportive relationships with students as important steps in addressing undesirable behavior. They may also feel that they are limited in their expertise when it comes to more severe behavioral problems and see this as the realm of other school professionals.

Limitations to this study should be noted. The intervention took place over the course of approximately two months. Given the brief time frame in which changes in implicit bias have been found to be sustained (Olson & Fazio, 2006), it is possible that any reductions following the intervention may have regressed prior to the first administration of the AMP, which took place two days following the final intervention activity. Additionally, intervention group participants were not given the opportunity to discuss and explore implicit racism and related concepts during the intervention activities. Allowing this discussion between participants may have facilitated participant learning about implicit racism. Another limitation was the small sample sizes obtained during the study (particularly within the control group), which limited the statistical power of the quantitative analyses of the AMP and rating scale data. It should be restated here that participants in the intervention group received both versions of the vignette used during the intervention; one version during the first administration, and the other during the second. For this reason, analysis of the data from these two administrations was conducted between groups. This made it difficult to ascertain whether changes in participant responses took place over time. Furthermore, participants were not randomly assigned to the intervention and control groups; rather, they were selected for the intervention and control groups based on their enrollment in specific sections of an educational psychology course.

Further research into finding the most effective intervention for preparing future teachers to combat implicit biases and aversive racism may benefit from consideration of data collection measures designed to avoid participant reluctance to explicitly identify racism in ambiguous scenarios. This reluctance is problematic because it precludes researchers from obtaining clear information regarding the participant's understanding of implicit bias. A solution may be to provide a scenario much like the one in the Teachers' Subtle Communications About Students' Ability activity, followed by "hypothetical" questions that identify the race of particular students described in the activity. This removes the ambiguity from the scenario and may allow participants to feel more certain about identifying implicit racism where it exists. However, such an activity may also serve as a starting point for a discussion about the role that ambiguity plays in allowing implicit racism to occur and can reinforce the point that identifying implicit racism cannot always be done with certainty. Such discussions naturally take on a psycho-educational perspective, and it is possible that participant learning may be facilitated to a greater degree by activities that link (1) how psychological phenomena manifest themselves in the world at large and (2) the cognitive processes that operate on an individual level and are targeted during the process of increasing impact awareness.

Ultimately, the purpose of developing an effective means to raise impact awareness in preservice teachers (and other professionals, for that matter) is two-fold. First, these efforts aim to minimize the negative impact on educational and social outcomes that have been described in the implicit racism literature. The effects of implicit biases on high-stakes decision-making are, in many cases, entirely preventable with procedures designed to limit the influence of bias. When they cannot be entirely prevented, the effects can be limited by appropriate efforts to foster impact awareness within the individuals passing judgment. Second, efforts to raise impact

awareness can encourage more culturally responsive practices by including activities that involve cooperation with or learning about individuals from varied cultures. For teachers, becoming more culturally responsive could involve training experiences in creating lessons for their students that acknowledge students' cultural and life experiences and allow them to share this with others. Galinski et. al (2005) and Vescio et. al (2003) suggest these shared experiences between teachers and their students reduce implicit biases within both students and their instructors. Additionally, teaching programs might involve cross-cultural experiences (such as working with outgroup community leaders or organizations) and activities that challenge preexisting patterns of thinking, both of which Whipp (2013) asserts are valuable for supporting cultural competency in teachers and reducing the impact of existing implicit biases.

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APPENDIX A: SEX AND MAJOR OF STUDY PARTICIPANTS

Participant Number	Sex	Major of Study
1	M	English Education
2	M	Music Education
3	F	English Education
4	M	Music Education
5	F	Elementary Education
6	M	Secondary Science Education
7	F	Music Education
8	F	Secondary Science Education/Chemistry
9	F	Elementary Education
10	M	Science Education (Biology)
11	M	Secondary Chemistry Education/Applied Mathematics
14	F	Music Education
15	M	Science Education
16	F	Elementary Education
17	M	Music Education
20	F	Secondary Science Education (Earth Science)
21	M	Spanish
22	M	Music Education
23	F	Music Education
24	F	Elementary Education
25	F	Music Education
C1	F	History/Social Sciences
C2	F	English Education
C3	F	Elementary Education
C4	F	Special Education
C5	F	Elementary Education
C6	F	English Education
C7	F	Special Education
C8	F	Social Science Education/History
C9	M	Music Education
C10	F	Middle Grades Math/Science Education
C11	F	Middle Grades Education
C12	F	Elementary Education
C13	F	Elementary/Inclusive Education

Note. C# denotes control group participant.

APPENDIX B: CONSENT FORMS AND DEMOGRAPHIC QUESTIONNAIRE

Intervention group consent form outlining information to be collected during the study.

PSY 323 Classroom Case Study Informed Consent

The purpose of this study is to learn more about how education majors make judgments and about their beliefs about their future students. The activities involved in this study are already part of the PSY 323 course. This consent form constitutes your permission to allow your responses during these activities to be used as part of this study. These activities will be completed for a grade in your PSY 323 course regardless of your choice to consent to participation in this study.

You will be asked to complete:

- A brief demographic survey
- A short online procedure requiring you to make judgments about a set of images
- A case-study discussion requiring you to respond orally and in writing to a hypothetical scenario involving a student in your classroom
- The writing assignment in which you explore the “Teaching Tolerance” website (www.Tolerance.org), dedicated to improving intergroup relations and supporting equitable school experiences for school children.
- An in-class discussion in which you will provide feedback about a fictional instructor’s unique experience and respond to written discussion questions.

Three weeks following the conclusion of these activities, you will be asked to once again complete the online procedure and respond to a second hypothetical scenario involving a student in your classroom. Together, these two follow-up activities should take approximately 20 minutes to complete. All activities will take place during the regular PSY 323 class period.

Your participation in this study is voluntary. Your responses during this study will be kept strictly confidential, and any potentially identifying information will not be included in any report. Your instructor will not be informed of who has or has not provided informed consent to participate in this study. In addition, all information collection procedures and learning activities included in this study are built into the course. Therefore, whether or not you provide your informed consent to participate in the study, you will complete all the activities included in this study and earn points in the course for doing so. If you choose not to participate in this study, your course grade and the way you are treated in this course will not be affected. You may withdraw at any time. If you choose to withdraw from this study, any information collected as a result of your participation will not be included in this study, and your course grade and the way you are treated in this course will not be affected. Participants who consent to this study will receive extra credit points, which will be assigned by Dr. Habel at the end of the semester once

the course has been completed. If you choose not to participate in this study, there will be additional opportunities to receive extra credit during the semester.

If you have any questions, please ask at this time or contact Jeff Gagliardi at jagagliardi@wcu.edu. You may also contact your instructor. If you have any questions or concerns about your treatment as a participant in this study, you can reach the Chair of the Western Carolina University Institutional Review Board through WCU's Office of Research Administration at 828-227-7212.

Please complete the portion of the consent form below:

I do or do not give my permission to the investigators to collect my responses during this study for use in their research.

Date: _____

Name: _____
print

Name: _____
signature

Control group consent form outlining information to be collected during the study.

Classroom Case Study Informed Consent

The purpose of this study is to learn more about how judgments are made and about education majors' beliefs about students.

You will be asked to complete:

- A brief demographic survey
- A short computerized procedure requiring you to make judgments about a set of images
- An activity requiring you to respond to a hypothetical scenario involving a student in your classroom.

Together, these activities should require approximately 20 minutes to complete.

Your participation in this study is voluntary. Your responses during this study will be kept strictly confidential, and any potentially identifying information will not be included in any report. You may withdraw at any time. If you choose to withdraw, any information collected as a result of your participation will not be included in this study. There are no foreseeable risks to

you for participating in this study. You will receive 5 extra credit points in your PSY 323 course for your participation in this study. If you choose not to participate in this study, there will be other opportunities for extra credit throughout the semester.

If you have any questions, please ask at this time or contact the primary investigator, Jeff Gagliardi, at jagagliardi@wcu.edu. You may also contact Dr. John Habel in the Department of Psychology, the member of the faculty who is supervising this study. If you have any questions or concerns about your treatment as a participant in this study, you can reach the Chair of the Western Carolina University Institutional Review Board through WCU's Office of Research Administration at 828-227-7212.

Please complete the portion of the consent form below:

I do or do not give my permission to the investigators to collect my responses during this study for use in their research.

Date: _____

Name: _____
print

Name: _____
signature

Demographic information questionnaire provided to all participants in the study.

Demographics

Name: _____

Age: _____

Sex: _____

Major of Study: _____

Can you speak Chinese or read Chinese characters?

Yes: _____ No: _____

APPENDIX C: VIGNETTES AND RATING SCALE

Vignette and rating scale using a stereotypical White name. Administered to intervention and control group participants.

Classroom Case Study

You are a 7th grade teacher at your local middle school. Greg is a student in your class. Greg always seems to have trouble paying attention in your class. He does not consistently turn in his homework or complete work in class. Often, Greg will be late to your class or will not show up at all. Lately, he has been involved in fights with other students. You’ve tried talking to Greg, but he always leaves class before you have a chance to. His parents have told you that they have not seen any changes in Greg’s behavior at home.

The items below concern your impressions or opinions of the cause or causes of Greg’s behavior. Circle one number for each of the following questions:

Is the cause of Greg’s behavior something:

That reflects an aspect of Greg	1	2	3	4	5	6	7	8	9	Reflects an aspect of the situation
Manageable by Greg	1	2	3	4	5	6	7	8	9	Not manageable by Greg
Permanent	1	2	3	4	5	6	7	8	9	Temporary
Greg can regulate	1	2	3	4	5	6	7	8	9	Greg cannot regulate
Over which I, as his teacher, have control	1	2	3	4	5	6	7	8	9	Over which I, as his teacher, have no control
Inside of Greg	1	2	3	4	5	6	7	8	9	Outside of Greg
Stable over time	1	2	3	4	5	6	7	8	9	Variable over time
Greg has power over	1	2	3	4	5	6	7	8	9	Greg has no power over
Unchangeable	1	2	3	4	5	6	7	8	9	Changeable

Consider the following questions. Use the back of this sheet for additional space.

How would you describe Greg as a student?

What do you think is causing Greg’s behavior?

As Greg's teacher, what actions would you take?

Vignette and rating scale using a stereotypical Black name. Completed by intervention and control group participants.

Classroom Case Study

You are a 7th grade teacher at your local middle school. Tyrone is a student in your class. Tyrone is often late to arrive to your class or does not show up at all. He has been involved in fights with other students recently. Tyrone always seems to have trouble paying attention in your class. He does not regularly complete work in class or turn in his homework. You've tried talking to Tyrone, but he always leaves class before you have a chance to. His parents have told you that they have not seen any changes in Tyrone's behavior at home.

The items below concern your impressions or opinions of the cause or causes of Tyrone's behavior. Circle one number for each of the following questions:

Is the cause of Tyrone's behavior something:

That reflects an aspect of Tyrone	1	2	3	4	5	6	7	8	9	Reflects an aspect of the situation
Manageable by Tyrone	1	2	3	4	5	6	7	8	9	Not manageable by Tyrone
Permanent	1	2	3	4	5	6	7	8	9	Temporary
Tyrone can regulate	1	2	3	4	5	6	7	8	9	Tyrone cannot regulate
Over which I, as his teacher, have control	1	2	3	4	5	6	7	8	9	Over which I, as his teacher, have no control
Inside of Tyrone	1	2	3	4	5	6	7	8	9	Outside of Tyrone
Stable over time	1	2	3	4	5	6	7	8	9	Variable over time
Tyrone has power over	1	2	3	4	5	6	7	8	9	Tyrone has no power over
Unchangeable	1	2	3	4	5	6	7	8	9	Changeable

Consider the following questions. Use the back of this sheet for additional space.

How would you describe Tyrone as a student?

What do you think is causing Tyrone's behavior?

As Tyrone's teacher, what actions would you take?

Assignment provided to intervention group participants.

Refer to the following web sites maintained by www.Tolerance.org, a program of the Southern Poverty Law Center. The *Teaching Tolerance* web site is dedicated to reducing prejudice, improving intergroup relations and supporting equitable school experiences for our nation's children. As you explore the links in parts A and B below, develop your responses to the questions or tasks described in a well-written report. Please begin with a brief and *interesting* introduction in which you state the purpose and introduce the contents of your essay.

A. <http://www.tolerance.org/activity/test-yourself-hidden-bias>

Test Yourself for Hidden Bias: Refer to the general information about hidden bias and draw on main points in your paper. Next, follow the link near the top of the page to Project Implicit's website. When you get to this site, go to the "Demonstration" site and click on the link, "Go to the Demonstration Tests". After you review the preliminary information, click on the link, "I wish to proceed." Select any three of the Implicit Association Tests (IATs) that address categories of diversity that are relevant to your professional practice. If you would like to dig even deeper, go to the "Research" site, but doing this is purely voluntary. You can complete this assignment at the "Demonstration" site.

Complete the three tests and discuss your results. Are they accurate? Why or why not? What did you learn? How can you apply what you learned to your professional practice? As you discuss your results, make direct reference to material in the following resources.

1. The Project Implicit Background Information

(<https://implicit.harvard.edu/implicit/demo/background/index.jsp>) You will find a brief description of how IATs measure *implicit* attitudes and beliefs that people are either unwilling or unable to report. In addition, you will find the following links:

- Origins and measurement with the IAT
- Answers to frequently asked questions about the IAT
- Understanding and interpreting IAT results

Please submit via catamount email the printouts of the results of the three IATs you completed or bring print copies to class.

2. "The Warren Harding Error: Why We Fall for Tall, Dark and Handsome Men," a chapter from Malcolm Gladwell's best-selling book, *Blink*, published in 2005. (posted in the "Teaching Tolerance" folder on our course Blackboard page)
3. "Southern Schools Mark Two Majorities," an article in a recent issue of *The New York Times* (posted in the "Teaching Tolerance" folder on our course Blackboard page)

B. <http://www.tolerance.org/activities>

Classroom Activities: Consider what you have learned about your implicit associations as a result of completing Part A above. Armed with this new knowledge and these insights into your implicit attitudes and beliefs about some of the students with whom you will work, explore the various links at this site and select at least three activities you could use in your professional practice. Discuss your reasons for

selecting these activities by referring to the results of your IATs. In addition, explain, with examples, how you could use these resources in your professional practice.

As you discuss the sites listed above in parts A and B be sure to make direct reference to relevant information in our textbook, *Educational Psychology*.

Format: Your essay should include both an *interesting* introduction and a conclusion. In addition, it should be typed or word-processed, double-spaced, and have one-inch margins. Your essay also should be a minimum of three pages in length and no longer than five pages. You may write a longer essay if you discuss this possibility with me after you submit your draft.

The polished and complete draft of the essay you will submit for my review will be awarded up to 100 total points. The final draft you submit after you receive my feedback on your draft also will be awarded up to 100 total points. The total points you will earn for this assignment I will use to calculate your final grade in our course will be the average of the points you earn on your draft and on your final paper. Please submit the polished and complete draft of your essay in electronic form by using the SafeAssign software on our course Blackboard site.

Exploring the Complexity of Racism
The Case of Tim Hanks

Robert W. Grossman, Psychology Department, Kalamazoo College
Thomas E. Ford and John Habel, Department of Psychology, Western Carolina University

Introduction

This case study is designed to help you explore the complexity of racism. The case consists of several parts. After reading each part, we will discuss the issues raised in each part before moving on to the next part.

Part I—Tim Hanks

I was an instructor at a in a unique magnet high school for students who could be admitted to college if they made up for weak academic performance in the past. As both a “sixties liberal,” and the social studies instructor for 120 students, I worked to make a contribution to racial integration and take a strong stand against racism. Tim Hanks, one of the few Black students in my courses, wasn’t helping any. He was frequently absent from class, turned assignments in late, missed others altogether, and performed poorly on tests. When he did come to class, he was usually late and always left before I had a chance to talk to him.

Like the other teachers at our school, I felt it was my responsibility to pull each student, through. I wouldn’t lower standards but was prepared to do everything in my power to help all students meet the requirements. Nothing that worked with other students seemed to work with Tim. He made appointments to meet with me and his other teachers, only to fail to show up. Offers of extra time and assistance on assignments didn’t help either. Attempts to phone, text, and email Tim elicited no responses, and letters to his listed address were returned as undeliverable.

Discussion Questions

Please take a moment to provide a thoughtful response to the following questions.

1. What are some of your thoughts about the possible reasons for Tim Hanks’ behavior?

2. If you were Tim Hanks' teacher, what might you have done with him or any student who behaved this way?

Part II—Turnaround

Eventually I came to the conclusion that Tim simply lacked the motivation to complete assignments and attend class regularly. He didn't have the academic skills to do the work nor the drive to correct his deficiencies.

As the semester drew to a close, it was clear that Tim would fail the course. It was painful to flunk any student, but this was doubly so; something was obviously deficient in me. I didn't have what it took to succeed with Black students. Shaking my head, I wrote an F on the grade sheet.

When I received my class list for the next semester I saw that Tim Hanks was in my class again. Feeling somewhat uncomfortable, I wondered why Tim didn't try some other instructor. Tim obviously couldn't get motivated to do the work in my class the previous semester. Was he just a glutton for punishment?

Seven or eight weeks later Tim came in to get his midterm test from me. It was an A-. He had earned no lower than a B+ on any of his assignments. As he sat down to talk (a big smile on his face after seeing the grade on his midterm), I asked him, "What makes the difference between someone I had to fail last fall and someone I'll have to give an A to this spring?"

"I have a car," he said.

“How can a car make such a difference?” I asked, puzzled.

“Well, I live a long way from school. In a car it’s a thirty-minute trip. On a bus it’s an hour and half each way on a good day.” Embarrassed, he looked down at the floor as he said, “On a bad day I would be OK ‘til I got out here to Main Road. Then it would be hit or miss whether the bus drivers would pick me up. On rainy days a couple of them would even swerve to splash puddles all over me. If they did, I’d feel so bad I’d just get on a bus going back home.” When I asked Tim why he hadn’t come in and tell me about these difficulties he said, “I was so embarrassed about doing so poorly in your class, I just couldn’t get myself to come in.”

Discussion Questions

Please take a moment to provide a thoughtful response to the following questions.

1. How would you have reacted to these explanations? How does this affect your thoughts about the reasons for Tim Hanks’ behavior?

2. What would you have done next?

Part III—Racist?

I was crushed! I admitted to Tim that I had assumed he didn't come to class regularly and had trouble with his assignments because he didn't like my course. Tim said, "Oh no! I really liked your course

I didn't say that I'd thought Tim had no motivation and poor academic skills. In fact, at that moment, though I was too embarrassed to admit it to him, I realized how racist my assumptions were. I attributed Tim's behavior to the things that would have caused me to behave as he had. If I didn't get to class on time or failed to get my homework done, it would be due to my low motivation. By implicitly assuming Tim was just like me, I had dramatically misunderstood Tim's behavior in a very racist way.

But worst of all was the realization that my attributions were simply intellectualized versions of unconscious racist stereotypes about African-Americans. I'd thought, "Tim doesn't have the academic skills to do the work nor the drive and motivation to correct his deficiencies." "Lack of academic skills" was my way of covering the unconscious feeling that Tim wasn't bright enough to do college work. In essence I was saying he was lazy. If the school had consulted me on a decision to let Tim have a second try, my attributions could have ruined Tim's chances. Luckily they didn't ask me. If he had come in to see me during his first semester, would I have confronted him on his "low motivation"? Ironically, he missed his appointments, so I hadn't confronted him. If I had, what effect would that have had on him and his willingness to relate to me in the future? Here I was, both a "sixties liberal" and a self-convicted racist!

I wondered if my nonverbal communication gave Tim any hint of these underlying feelings. If so, did they in any way contribute to his hesitancy to communicate about his transportation problems the term before? I would have to guess that my nonverbal signals, and those of my colleagues, probably did contribute to Tim's uneasiness. I wondered if my fear of making a mistake with a minority person and deeper discomfort being around someone who looked so different made me more hesitant to ask why he was having trouble in my class in the first place.

What I learned was one didn't have to be a bigoted bus driver to be part of the system of racism. All I had to do to was to make a "natural" "assumption of similarity" and give in to my "normal" fear of difference. I didn't have to hate Blacks or consciously discriminate against them all. All I had to do was be myself, and the racism operated.

Discussion Questions

Please take a moment to provide a thoughtful response to the following questions.

1. Do you agree with the teacher's conclusion that he is a racist? Explain your answer.

Teachers' Subtle Communications about Students' Ability

A teacher is circulating around the class while the students are involved in a homework activity. The teacher stops near **Jerome**, who appears to be having a bit of difficulty with a problem, but she says nothing. She stops near **Leroy** and comments, "Let me give you a hint," and makes a suggestion, even though Leroy had not asked for help and seems to be making progress, although the progress is somewhat slow. The teacher stops near **Anthony**, who has made a mistake, and smiles, "Now, that's a very good try. Here, let me show you how to solve the problem."

What message is the teacher sending each student about his ability?

1. Jerome

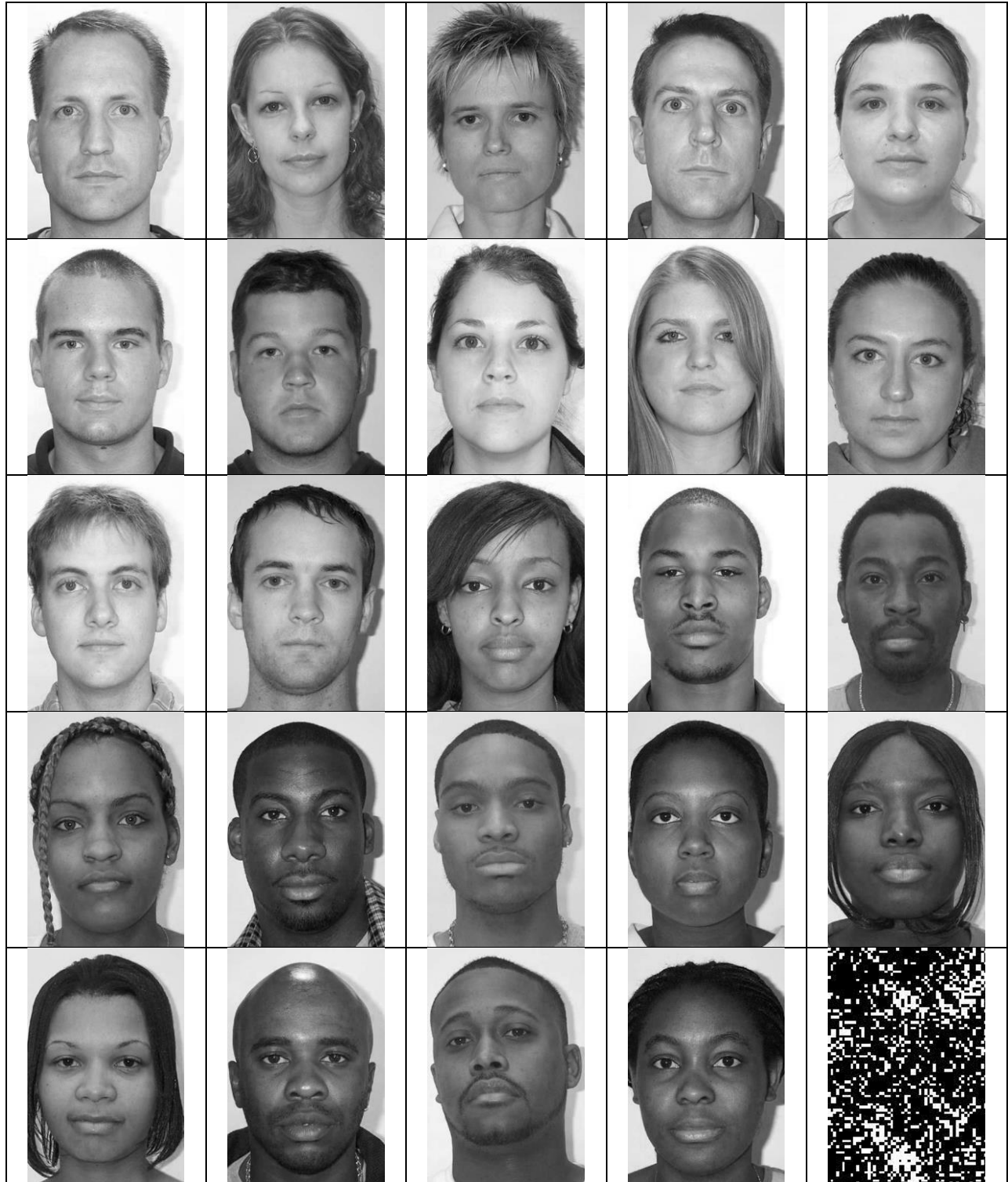
2. Leroy

3. Anthony

Does this teacher's behavior demonstrate implicit or unintentional racism? Why or why not?

APPENDIX G: PRIME AND TARGET IMAGES USED IN THE AMP

Facial primes and “mask” used during the AMP.



Target images (Chinese symbols) used during the AMP

池	氏	名	动	副	虎	罪	铁
代	词	助	介	连	荣	昨	归
量	简	声	数	称	旁	笔	扁
地	人	姓	成	感	律	制	堆
普	国	口	文	昔	毛	彩	波
精	半	愿	令	答	承	射	皮
雄	票	曲	假	舟	键	赶	释
术	卖	百	火	往	注	树	判
松	刻	纪	退	既	莫	制	含