PERCEIVED CRIMINAL: HOW DOES ATTIRE INFLUENCE THE CRIMINAL PERCEPTION OF BLACK MEN

by

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(Under the Direction of Justine Tinkler)

ABSTRACT

Previous experimental research has shown that black men are perceived as more criminal than white men. Community leaders and the media claim that urban dress such as hoodies and wearing pants below the waist contribute to this perception. Yet, there is no empirical evidence that attire has this effect. In this study, I used the Implicit Association Test to investigate whether professional dress reduces the association of black men with criminality. I found that regardless of attire, participants more strongly associate black men with criminality as compared to white men.

INDEX WORDS: criminality, experiment, implicit, bias, stereotype, race, social psychology

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B.A., University of Florida, 2015

A Thesis Submitted to the Graduate Faculty at the University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF ARTS

ATHENS, GEORGIA

2017

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August 2017

ACKNOWLEDGMENTS

I would like to thank the individuals who have supported and encouraged me during this project. First, I would like to thank Justine Tinkler who has believed in this research since its inception. Your feedback and guidance is invaluable to me. I would also like to thank Jody Clay-Warner and Dawn Robinson for providing important and critical feedback to this work. Furthermore, I would like to acknowledge the generous support of the Research and Engagement in Diversity Seed Grant Program (funded by UGA President's Venture Fund, the American Psychological Association, and The Franklin College of Arts and Sciences). This grant allowed me to pay participants for this study. I would like to extend gratitude to Louis and Nick for posing as models for the images in the study. Additionally, I would like to thank the Laboratory for the Study of Social Interaction for providing me the resources to run my study and the student researchers for their attentiveness and participation in collecting the data. Finally, I would like to thank my fiancée, Jean-Israel Jerome, for his motivation and unending support during this project.

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CHAPTER 1

INTRODUCTION

In 2012, Trayvon Martin walked home on a cool dark night with his hoodie covering his head. George Zimmerman, a self-appointed neighborhood watchman, perceived Martin as dangerous and fatally shot him. There was national attention brought to this case and subsequent discourse about race relations in the United States. One comment that stood out was from Fox News commentator, Geraldo Rivera. Rivera (2012) stated, "I think the hoodie is as much responsible for Trayvon Martin's death as George Zimmerman was." While controversial, Rivera's statement is not outside the admonishment Black men may face from the media or their parents for their attire. These statements hold that wearing a hoodie and sagging pants cause people to perceive Black men as dangerous and potentially criminal. Yet, there is no evidence to demonstrate that individuals perceive Black men as less criminal when they follow these politics of respectability. This criminogenic perception also has other consequences for black men. They are more likely to be randomly stopped by the police (Morrow, 2017) and even receive less job call-backs than white men with a criminal record (Pager, 2003).

In this paper, I seek to understand the relationship between attire and criminal perception. Prior research has demonstrated that individuals perceive Black men as more criminal, or threatening, than White men (Correll, Park, Judd, & Wittenbrink, 2007; Eberhardt, Purdie, Goff, & Davies, 2004; Noymer, Penner, & Saperstein, 2011). As it relates to attire, clothing can be used as a social cue to social class and status. Thus, individuals may perceive wearing a hoodie as representative of lower class African Americans and a business suit as representative of upper

class White men. This is due to the utility of those types of attires in the workplace, which closely relate to social class. I seek to understand how race and class work both independently and together to influence the criminal perception of Black men. More specifically, my research question is: “How does attire influence the criminal perception of Black men?” To investigate, I use an experimental approach comparing black and white men in both professional and casual attire and associating them to weapons or harmless objects using the Implicit Association Test. Using three separate samples, I conclude that attire has a different relationship with race than the media perpetuates.

In Chapter 2 I introduce a literature review of relevant research, especially those with experimental methods, conducted on the topic of race and perceived criminality. I also discuss previous research as to how race and social class operate as it relates to perceived criminality. I then use a theoretical framework about how status dimensions intersect to shape stereotypic perceptions to develop my hypotheses in Chapter 3. Chapter 4 delineates the methodology and research design I use for this study. Chapter 5 describes the data analytic plan and Chapter 6 reports the results from the three studies. Finally, in Chapter 7, I discuss future directions and implications of this research.

CHAPTER 2

LITERATURE REVIEW

I begin the literature review with a summary of the experimental research on the criminal perception of Black men and then turn to a discussion of research relevant to the interaction of race and class.

Criminal Perception of Black Men

Experimental research of various designs has shown that most people more strongly associate black men with criminality and threat than white men. Correll, Park, Judd, & Wittenbrink (2002) conducted an experiment using a videogame to test the effect of race on the decision to shoot. The participants were instructed to shoot a black or white person if they held a weapon and to not shoot if they held an object. In this study, participants were quicker to shoot an armed black person than an armed white man. They were also faster to not shoot an unarmed white man, indicating that they took longer to decide if a black character was non-threatening. This study was replicated using both police officers and community members (Correll, Park, Judd, & Wittenbrink, 2007). The police officers performed better on the task in speed and accuracy than the community members overall. However, police officers working in places with high violent crime and a greater concentration of black people had increased bias toward blacks in the experiment. Still, the officers made better decisions to ultimately shoot or not shoot compared to the citizen portion of the sample. These results further demonstrate that blackness is associated with criminality.

Corell et al. (2002; 2007) were not the only ones to test the relationship between Black faces and a weapon. Eberhardt, Purdie, Goff, & Davies' (2004) experiment lends evidence to this idea. Their study consisted of a sample of police officers and undergraduate students. The respondents viewed 50 pictures of either black or white men and then had to label 14 sets of degraded images. The pictures flashed quickly on the screen and were told they would be seeing flashes and made no mention that they were actually pictures. They found that respondents who saw a picture of a black person was faster to label the degraded object as a crime-relevant object than those who saw a white face. There was no relationship between the participant's explicit prejudice and their responses, demonstrating that stereotype bias affected people who reported low levels of prejudice.

Furthermore, exposing participants to primes about criminality may lead to them demonstrating more bias towards black people in the decision to shoot in a videogame simulation (Correll, Park, Judd, & Wittenbrink, The influence of stereotypes on decisions to shoot, 2007). Participants were instructed to read newspaper stories about black or white criminals. Those who read the stories about black criminals had an increased bias in the decision to shoot black individuals in the subsequent videogame simulation. Another study conducted by Plant and Peruche (2005) showed differing results. A sample of police officers was gathered to investigate the decision to shoot black and white criminal suspects in a computer simulation (Plant & Peruche, 2005). In this study, police "officers were initially more likely to shoot unarmed Black suspects than unarmed White suspects" (p. 182 Plant & Peruche, 2005). However, the errors decreased as the officers became more familiar with the simulation.

As discussed above, blackness is associated with aggression and criminality to a much higher degree than whiteness. Black men are perceived as more dangerous when participants are

exposed to stereotypical primes as well as when there is no prior intervention. These studies demonstrate that blackness is used as a frame to interpret situations, especially those that are ambiguous, as dangerous. Therefore, this leads to an implicit shaping of an individual's perception and behavior in social relational contexts (Macrae and Quadflieg, 2010). Additionally, stronger stereotypes are applied to those who appear more prototypical of that racial category (Macrae & Quadflieg, 2010). Using data from actual death-eligible defendants, Eberhardt (2004) found that Black criminals who were rated as more prototypical were more likely to receive the death penalty. Therefore, it can be surmised that stereotypes can vary and do not apply to all members of a group in the same degree. A potential cause for variation of the degree to which stereotypes are applied is social class presentation.

Intersection of Race and Class

Social class status influences interpersonal relations especially when it is considered with race or gender (Ridgeway & Kricheli-Katz, 2013). Freeman, Penner, Saperstein, Scheutz, & Ambady (2011) conducted a study to test how social status cues shape race perception when the race of the person was ambiguous. Freeman et. al (2011) used clothing to signal status cues of social class. A business suit was meant to designate high-status, or upperclass, and a janitor's uniform signaled low-status, or lower-class. The experimenters also morphed faces on a 13-point white face to black face continua. Their findings revealed that low status cues (janitor's uniform) raised the likelihood of a black categorization and the high status marker of a suit raised the likelihood of a white categorization. This relationship was exacerbated when the race of the face was more ambiguous. These results indicate that lower-class status is applied more readily with Blacks rather than Whites. This suggests that not only is race and class intertwined, but individuals may use social cues like attire in interpersonal relations to determine race.

Another example of the way social class influences how individuals perceive race is Penner and Saperstein's 2012 study. Penner and Saperstein (2008) used the National Longitudinal Survey of Youth to test whether the interviewer recorded the participant's race differently from a previous year based on socioeconomic status (incarcerated, unemployed, impoverished). In addition, they the used respondent's self-reported race to observe any changes in self-classification over time. They concluded that participants who were previously labeled as white were less likely to be labeled as white in the current year if they were incarcerated, unemployed, or living in poverty. When black respondents were not incarcerated, unemployed, or poor they were less likely to be labeled as black. Penner and Sapertein's (2008) findings suggest that social class is sometimes used as an indicator of race. Furthermore, a low social class is associated with Black people, as discussed in Freeman et. al (2001). Social status cues are even applied to racially categorize descedents (Noymer, Penner, & Saperstein, 2011). Noymer et. al (2011) found that being a victim of homicide increased the likelihood that a person would be categorized as black in a study of comparisons of official reports to subsequent surveys of next of kin.

In sum, social class cues such as socioeconomic status, attire, and even cause of death are used cognitively to create assumptions of racial classification. This is especially true in ambiguous situations when race cannot be determined. These studies also indicate that a lower social class is associated with black people. Conversely, a higher social class is associated with whites. These studies fail to acknowledge how high status and low status black people differ in how they are perceived criminally by others. Or in other words, they do not focus on how variations in the protypicality of Black men influence this perception. This is due to the fact that they mainly focus on comparisons between the criminal perceptions of Blacks versus Whites.

This leads to my research question: “How does attire influence the criminal perception of Black men?” To understand this research question I use a framework that joins race and class as intersecting statuses.

CHAPTER 3

THEORETICAL FRAMEWORK AND HYPOTHESES

As I discussed previously, studies have demonstrated that black people are perceived more criminally than whites are. This is due to the higher status of whites in our society and the stereotypic portrayals of blacks as dangerous. In the U.S. context, individuals view race as static and inherent to an individual. This notion of criminality becomes viewed as an essentialist characteristic because of the ascribed nature of race. Thus, stereotypes associated with a racial group transfers to individuals. In general, these stereotypes hold the dominant group (whites) as higher in status and more competent than other racial categories (Fiske, 2010). Therefore, I hypothesize:

Hypothesis 1: Participants will more strongly associate Black men with criminality than White men, regardless of clothing attire.

I expect this to occur because race is a primary frame individuals use in social interaction (Ridgeway & Kricheli-Katz, 2013). This primary frame is then used to give meaning to other symbolic cues. Therefore, race will shape how individuals perceive attire as opposed to attire shaping how people understand race. Due to the strong association of Black men with criminality as compared to Whites, I expect this perception to hold regardless of attire when compared to Whites.

Attire is a useful symbolic marker of class as demonstrated in Freeman (2011). It is an important symbol to highlight because it is present and given meaning in our everyday interactions. Therefore, we can use clothes to cognitively form social class impressions of others.

However, social class perceptions do not stand alone as a primary frame used to shape interaction. In fact, there is evidence demonstrating that class constructs, like attire, are embedded within race (Ridgeway & Kricheli-Katz, 2013; Collins 1999, Crenshaw, 1989; McCall, 2005). Additionally, the implicit overlap of social class and race meanings combine to increase inequality or status for individuals.

When social class and race are taken together, they create differing stereotypes for each race-class category. Poor whites are held fully accountable for their personal social standing because of their high status race (Ridgeway & Kricheli-Katz, 2013). With seemingly vast opportunities in regards to their race, there is more contempt towards them. In contrast, poor black people do not face this level of contempt due to societal knowledge of the historical racism against blacks. However, white privilege also affords poor whites protection from racial discrimination, while poor blacks face both structural racial and class-based discrimination.

As mentioned previously, stronger stereotypes are applied to those who are more prototypical, or appear more stereotypic of that category. Therefore, black men who are gay (Pedulla, 2014), baby-faced (Livingston & Pearce, 2008), and light-skinned (Uzogara, Lee, Abdou, & Jackson, 2014) are perceived as less threatening and more competent. Research suggests that this is due to the hypermasculine perception of black men as compared to white men (Ridgeway & Kricheli-Katz, 2013). Therefore, from an intersectional perspective, individuals adjust their stereotypic racial perceptions in light of other variables and do not apply stereotypes equally. As a result, we can expect this to occur in the relationship between professionally dressed Black men and the perception of criminality.

Social class is another factor that tends to ignore the variation in Black men. White Americans tend to dramatically overestimate the porportion of poor African Americans. In

addition, news media outlets tend to inaccurately overrepresent the poor as comprising of mostly black individuals. Thus, a stereotype of poverty is applied to black people as a group. Even among those who view racial discrimination as persisting express anti-black stereotypes the larger they perceive the economic difference between blacks and whites (Brezina & Winder, 2003; Kaplowitz & Broman, 2006). Therefore, we can expect that black men who are perceived as poor would be granted the full weight of negative stereotypes. In contrast, those who appear higher in status through their attire may receive reduced perceptions of criminality. This is the assumption underlying a politics of respectability as it pertains to how black men dress, but it has yet to be tested. Therefore, I hypothesize:

Hypothesis 2: Professional dress will weaken the perception of criminality for black men.

Due to the strong association of black men with perceived criminality, more can be done to weaken this relationship than strengthen it. I believe professional attire will weaken the association of black men with perceived criminality because that style is commonly related to white business men. As a result, this attire will increase status for black men making them appear less criminal when compared to whites than black men in casual attire. The higher status of whites relative to black people causes the relationship between race and attire to differ for both groups. In other words, the differential associations of perceived criminality of Blacks and Whites results in varying effects of attire on this relationship.

These hypotheses allow me to understand how race and class influence each other in regards to criminality. I am particularly interested in understanding whether attire can reduce the criminal perception of Black men.

CHAPTER 4

METHODOLOGY

To understand the relationship between social class and race, I employ an experimental design. An experiment is the most appropriate for this study because I seek to isolate the effects of race and attire that is not possible to do using other qualitative and quantitative methods. An experiment gives this research high internal validity so that I can identify how attire is moderating the relationship between race and criminality. I conducted a pilot study to develop my instruments and two studies to test my hypotheses. All studies used a variant of an Implicit Association Test (IAT) that measured participants' unconscious associations of black and white men with criminality. The pilot study and Study 1 utilized undergraduate student participants recruited to participate in laboratory studies through their psychology classes. Study 2 used a sample of Amazon Mechanical Turk workers, which is an online crowdsourcing site where researchers can pay a more socio-demographically diverse pool of workers to participate in their study.

Pilot Study

Overview

The pilot study was conducted to test the validity of the modified race-weapon IAT and the reliability of my measure of explicit attitudes about black men.

Sample

I sampled 83 participants using an undergraduate psychology research pool. This research pool is hosted by the psychology department and students receive course credit for participation.

Students must earn 6.5 hours of research studies to complete the requirement for their class. The sample consisted of 42 men and 40 women with a mean age of 19. Over half of the sample were first year students. In regards to racial composition of the sample, 70% were non-Hispanic white, 13% were African-American/Black, 5% were Asian, 1% was Native American, 6% were white Hispanic, and 5% indicated mixed-race or other.

Experimental Design

Participants were randomly assigned to two conditions in the Race-Weapon Implicit Association Test (IAT). In these conditions, participants match images of black and/or white men to labels for harmless objects and weapons. On average, the Race-Weapon IAT results have demonstrated that participants more strongly associate Caucasian faces with everyday objects and African-American faces with weapons (Smith-McLallen, Johnson, Dovidio, & Pearson, 2006;Banaji & Greenwald, 2016). I modified the Race-Weapon IAT for this experiment to utilize pictures of black and white men in either casual or professional dress. In the black-white professional condition, participants matched pictures of a white male dressed professionally and a professionally dressed black man to weapons or harmless objects. The black-white casual condition featured pictures of white and black males dressed casually and categorized in the same way. These two styles of dress offer differences in how social class is presented. Professional clothing, like suits, are typically associated with middle or upper class individuals. In contrast, casual clothing, like a hoodie, may be more closely associated with a lower status.

Procedures

The pilot study was conducted in the Laboratory for the Study of Social Interaction (LaSSI). Participants signed a consent form, which explicates the study in vague terms. To reduce the effect of social desirability in responses due to sensitivity surrounding racial topics, I

used White experimenters. At the end of the experiment, participants were debriefed by reading information pertinent to the real purpose of the experiment. The experimenter was also available for additional questions about the nature of the study. An example of the IAT conditions are depicted in Figure 1.

<table>
<tr><td colspan="2">Race-Weapon IAT</td></tr>
<tr><td>Casual Condition Stereotypical Round
(correct answer is e)</td><td>Professional Condition Stereotypical Round
(correct answer is e)</td></tr>
<tr><td>(press ‘e’) African-American or weapon
 
(press ‘i’) White American or harmless object</td><td>(press ‘e’) White American or harmless object
 
(press ‘i’) African-American or weapon</td></tr>
<tr><td>Casual Condition Stereotypical Round
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<tr><td>Casual Condition Counter-Stereotypical Round
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(press ‘i’) White American or weapon</td><td>(press ‘e’) White American or weapon
 
(press ‘i’) African-American or harmless object</td></tr>
</table>

Pictures used for harmless object: bottle, camera, coke can, ice cream, phone, Walkman, wallet
Pictures used for weapons: axe, cannon, grenade, mace, revolver, rifle, sword
Pictures used for professional dress: suit and patterned tie, shirt and patterned tie, suit and solid tie, white shirt and solid tie
Pictures used for casual dress: hoodie and pants, hoodie and shorts, white tee shirt and pants, white tee shirt and shorts

Figure 1 Example Screenshot of Race-Weapon IAT Conditions

Materials

The experiment was hosted on Inquisit 4.0.8 (Inquisit 4) in a laboratory setting and I used the Race-Weapon IAT script provided by the Millisecond library. The IAT is a computerized category task that measures implicit bias using the speed by which participants associate concepts. Participants must use the "e" and "i" keys to match words or pictures to labels as quickly as possible. In addition, the test balances hand dominance effects and order effects. In this study, I use the Race-weapons IAT (Inquisit 4). This IAT measures the speed by which respondents match pictures of African-American or Caucasian faces to labels of harmless objects (e.g., cell phone) or weapon (e.g., grenade).

Participants viewed black and white images of black and white men dressed either in professional or casual clothing. One black male and one white male agreed to be models for the experiment. The photos were edited to remove any background and to use one body for both men. The hands and legs were edited so they corresponded to the person's skin tone in the black and white image. Additionally, the men were instructed to keep a neutral face in the photos with no exaggerated emotive expressions. The men were rated by 14 student raters on attractiveness, age, education level, and masculinity. Students rated the black male as appearing younger, slightly more masculine, and slightly more attractive. Each male was categorized appropriately to their respective racial classification. In addition, participants also viewed black and white images of weapons and everyday objects. The professional attire consisted of a 1) dark suit and solid tie, 2) dark suit and plaid tie, 3) white oxford shirt, dark pants, and plaid tie, and 4) white oxford shirt, plaid pants and solid tie. The casual attire consisted of a 1) light colored tee shirt and dark pants, 2) light colored tee shirt and dark shorts, 3) dark hoodie and dark pants, and 4) dark hoodie and dark shorts.

The Attitudes toward Black Males Scale (ATBM) (α=.94) was also used for the purposes of this study (Bryson, 1998). This scale consists of eight subscales that include intellectual ability, criminal justice, expectations of preferential treatment, personality, sociability, employment, self-confidence, and global characteristics (Bryson, 1998). Intellectual ability discusses how black men perform academically. Criminal justice describes whether respondents feel black men are treated differently by the criminal justice system. Expectations of preferential treatment describes whether respondents feel black men expect to be treated more favorable than others and if they are given lower standards to meet. Personality describes item relating to the temperament of black men. The sociability subscale describes whether black men are friendly and irritating. Employment items are related to opinions like whether black men should be fired from jobs. Self-confidence consists of items about whether black men are confident or get discouraged easily. Finally, global characteristics consists of many items that pertain to black men overall.

Responses to the 47 items are captured in a six-point Likert scale ranging from "I agree very much" to "I disagree very much." Bryson (1998) found that there were statistical differences between how Black and White respondents evaluated Black men. White respondents were more likely to agree with negative stereotypes of intellectual ability, criminal justice, sociability, and global characteristics than their Black counterparts were. While most respondents tended to disagree with the negative statements about Black men, a majority of white respondents agreed with 11 of the negative stereotypes. These findings suggest that race shapes how individuals view Black men.

Measures

I measured both explicit and implicit bias in this study. The implicit bias measure is a direct test of the hypotheses, while the explicit bias measure offers insight into how these two measures compare.

D-score. The D-score, also referred to as an IAT effect, is a measure that allows for an interpretation of the results of the IAT. This is calculated by dividing the difference between test block means by the standard deviation of the latencies in the two test blocks (Greenwald, Nosek, & Banaji, 2003). D-scores range from -2 to +2, with breakpoints of .15 for a slight effect, .35 for a moderate effect, and .65 for a strong effect (Greenwald, Nosek, & Banaji, 2003).

Explicit Bias. I measured explicit bias by averaging the means of each subscale of the ATBM scale. Means that are closer to 6 indicate less explicit bias, while those closer to 1 indicate greater bias.

Reliability. To test the reliability of the modified IAT and ATBM, I piloted the study. The results from this pilot study demonstrated favorable reliability and validity of the measures. First, I averaged the D-scores, or IAT effect, for each condition. The average D-score for the white-black professional condition was .25 with a standard error of .04. This value is significantly different from 0 and is associated with a faster sorting of black men with weapons. Contrastingly, the average D-score for the IAT condition for the black-white casual condition was .27 with a standard error of .07. This D-score demonstrates a moderately faster sorting of black men with weapons than white men with weapons. This value is also significantly different from 0. Therefore, the pilot test shows preliminary support for my first hypothesis: participants more quickly associate black men with weapons and white men with everyday objects. To test if the higher D-score in the casual condition is significant, I performed a two-tailed t-test. The t-

statistic for this test was .29 (p=.77). Therefore, the difference between these means is not significantly different from each other. Thus, the pilot results do not provide preliminary evidence to support hypothesis 2 that professional attire weakens the relationship between criminal perception and black men as indicated by the sorting of black men with weapons.

I next assessed the reliability and validity of the explicit measure, the Attitudes toward Black Males scale. The Cronbach alpha value for the scale was .87. The alpha values for each of the subscales were: intellectual ability (.83), criminal justice (.34), preferential treatment (.71), personality (.80), sociability (.65), employment (.34), self-confidence (.71), and global characteristics (.84). The alpha for the criminal justice scale in this study is much lower than the .62 inter-reliability coefficient that Bryson (1998) reports. The mean score for the ATBM scale was 4.8 for women and 4.7 for men. The difference between the means is not statistically different (p=.15). I also tested for differences in the explicit measure between black and white participants. The mean score for blacks is 4.6 and 4.8 for whites (p>.10). Therefore, whites and blacks are both demonstrating less explicit bias toward black men.

Study 1

Overview

After analyzing the results from the pilot study, I conducted another study with a few modifications. In this study, I sought to test how participants associate race with weapons as well as the association of attire with weapons. To accomplish this, I added additional IAT conditions.

Sample

Similar to the pilot study, I recruited my sample using the undergraduate psychology pool. There were 90 participants sampled in this study. The racial backgrounds of participants are Asian (10), non-Hispanic white (65), Hispanic-white (3), non-Hispanic black (7), Hispanic-

black (4), and Pacific Islander (1). There are 48 first-year students, 23 second-year students, 14 third-year students, and 5 fourth-year students. The average age is 19, with a range of 18-22 years old. Finally, there are 59 women, 31 men and 1 who did not disclose their gender in the sample.

Design

After reviewing the results from the pilot study, two conditions were added. In the pilot study, the black-white casual and professional dress conditions compared black and white men together, making the effect of race outpower any opportunity for dress to reduce the association of race with criminality. To understand the effect of attire, I created the professional-casual black male and professional-casual white male conditions. In the professional-casual black male condition, a black man dressed both professionally and casually were compared to labels of weapons or harmless objects. Similarly, in the professional-casual white male condition, a white man dressed both professionally and casually were compared to labels of weapons or harmless objects. Using these four conditions, I can test both the effects of race and attire.

Procedures

In this study, participants were randomly assigned to four IAT conditions, which are the white-black casual condition, white-black professional condition, professional-casual white condition and the professional-casual black condition. Like the pilot study, participants completed a demographic survey, then the ATBM scale, and finally the IAT. This study was also conducted in LaSSI with trained student researchers. An example of the IAT conditions that were added are depicted in Figure 2.

<table>
<tr><td colspan="2">Attire-Weapon IAT</td></tr>
<tr><td>Black Male Condition Stereotypical Round
(correct answer is e)</td><td>White Male Condition Stereotypical Round
(correct answer is i)</td></tr>
<tr><td>(press ‘e’) Casual Dress or weapon
 
(press ‘i’) Professional Dress or harmless object</td><td>(press ‘e’) Casual Dress or harmless object
 
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Pictures used for professional dress: suit and patterned tie, shirt and patterned tie, suit and solid tie, white shirt and solid tie
Pictures used for casual dress: hoodie and pants, hoodie and shorts, white tee shirt and pants, white tee shirt and shorts
Figure 2 Example Screenshot of Attire-Weapon IAT

Measures

The measures of this study were the same as the pilot study in that the D-scores and averages of the ATBM subscales were both measured.

Study 2

Overview

I replicated Study 1 using an online sample and added two more conditions for additional analysis. These additional conditions are able to capture an interaction between race and attire.

Sample

I gathered a sample of 152 online Amazon mechanical Turk workers who were each compensated $1.50. There were 58 women and 94 men who participated in this study. The racial composition of this study was 21 black, 123 white, and 10 Asian participants.

Design

The four IAT conditions from Study 1 were also present in this study. The two additional conditions I added were the black male professional/white male casual condition and the black male casual/white male professional condition. In the first, participants matched either a black man dressed in professional clothing or a white man dressed in casual clothing to weapons or harmless objects. In the latter, participants matched a casually dressed black man and a professionally dressed white man to weapons or harmless objects.

Procedures

This study had the same procedures as the pilot study. Participants began the computerized task by completing a demographic survey about their age, gender, year in school and race. Unlike Study 1, participants took the study using their personal computers and were instructed to be free of any distractions. An example of the two additional conditions is depicted in Figure 3.

<table>
<tr><td colspan="2">Race & Attire-Weapon IAT</td></tr>
<tr><td>Black Professional/White Casual Condition
Stereotypical Round
(correct answer is i)</td><td>Black Casual/White Professional Condition
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(correct answer is e)</td><td>White Male Condition Counter-Stereotypical Round
(correct answer is i)</td></tr>
<tr><td>(press ‘e’) African-American or harmless object
 
(press ‘i’) White American or weapon</td><td>(press ‘e’) White American or weapon
 
(press ‘i’) African-American or harmless object</td></tr>
</table>

Pictures used for harmless object: bottle, camera, coke can, ice cream, phone, Walkman, wallet
Pictures used for weapons: axe, cannon, grenade, mace, revolver, rifle, sword
Pictures used for professional dress: suit and patterned tie, shirt and patterned tie, suit and solid tie, white shirt and solid tie
Pictures used for casual dress: hoodie and pants, hoodie and shorts, white tee shirt and pants, white tee shirt and shorts
Figure 3 Example Screenshot of Race-Attire Weapon IAT

Measures

Similar to Study 1, the D-scores and means of the ATBM scales were collected to measure implicit and explicit bias.

CHAPTER 5

DATA ANALYTIC PLAN

To test the first hypothesis that race is associated with a criminal perception, I test for an IAT effect by observing the average D-score of each condition using Stata 14.0 (StataCorp, 2015). An IAT effect with positive values, in this study, indicates stronger sorting of black men with weapons and D-scores with negative values indicate stronger sorting of white men with weapons. Next, to understand how attire is moderating the relationship between criminality and race, I perform t-tests to compare the average D-scores between conditions. In addition, I analyzed the effects of race and gender on the IAT effect to understand how they influence performance on the race-weapon IAT.

To understand how explicit anti-black attitudes, as measured by the Attitudes toward Black Males scale, is associated with performance on the IAT, I first reduced the items into subscales. Then, I created a correlation matrix between D-scores and the subscales to measure their association. A correlation of over .30 is evaluated to have a medium strength of association. Additionally, negative correlations indicate that those with higher amounts of explicit bias toward black men are associated with more implicit bias, or higher D-scores.

CHAPTER 6

RESULTS

Study 1

This study replicated the results from the pilot study and gives insight into the criminal perception of attire. Tables 1 and 2 delineate the number of individuals by race and gender in each of these conditions for this study.

Table 1. Participants for Race-Weapon IAT Conditions.

	Casual Condition	Professional Condition
Women	15	17
Men	9	7
Black	4	4
White	17	18
Asian	4	2

Table 2. Participants for Attire-Weapon IAT Conditions.

	Professional-casual white male condition	Professional-casual black male condition
Women	14	13
Men	8	7
Black	2	1
White	17	16
Asian	2	2

Implicit Bias Towards Black Men

To begin the analysis, I checked how well participants performed on the Implicit Association Test. The average percentage of correct responses in the IAT was 92.8% for the white-black casual condition, 95.1% for the white-black professional condition, 94% for the professional-casual black male condition and 92.5% for the professional-casual white male condition, demonstrating an overall good performance on the Implicit Association Test.

Next, I averaged the D-scores, or IAT effect, for each condition. The IAT effect reveals whether participants have more implicit bias toward black or white men. The average D-score for the black-white professional condition was .213 with a standard error of .072. This value is significantly different from 0 and is associated with a faster sorting of black men with weapons ($p<.01$). Similarly, the average D-score for the white-black casual dress IAT condition in which participants viewed images of black and white men dressed casually was .207 with a standard error of .069. This D-score also demonstrates a moderately faster sorting of black men rather than white men with weapons. This value is also significantly different from 0 ($p<.01$). These results replicate the pilot study results and provide support for the first hypothesis that black men will be more strongly associated to weapons than white men, regardless of attire.

Effect of Dress on Implicit Bias

Next, I tested hypothesis 2 to examine whether professional dress weakened the association of black men with criminality. A significantly lower IAT effect for the professional dress condition would provide support for the hypothesis that professional dress can weaken a perception of criminality for black men. To analyze this, I performed a two-tailed t-test to examine whether there is a significant difference between the D-scores in the professional and casual conditions. The t-statistic for this test was -.06 ($p=.96$). Therefore, the difference between

these means is not significantly different from each other. Additionally, the difference in the percent of correct responses between the black-white professional and black-white casual conditions was close to significant (p=.08), with more errors in the casual dress condition (92.8% correct) than the professional dress condition (95.1%). However, these errors did not result in a significant difference between the IAT effect of the conditions. As a result, we can conclude that there is not enough evidence to support hypothesis 2 that professional attire weakens the relationship between criminal perception and black men. The effect of race was more powerful in influencing bias towards black men regardless of how the model was dressed.

Implicit Bias Towards Attire

To understand how professional or casual attire alone is associated with criminality, I added two additional conditions- the professional-casual white and black conditions. By comparing a professionally dressed black man to a casually dressed black man, we can isolate the effect of attire within race. I hypothesized that professional dress will not be as strongly associated to weapons for both black and white men.

First, I analyzed the IAT effect for the professional-casual black male condition. The value of the D-score is positive if casually dressed men are more strongly associated to weapons and negative if professionally dressed men are more strongly associated to weapons. The average D-score for the professional-casual black male IAT condition directly comparing black men dressed either professionally and casually is -.26 with a standard error of .08. This value demonstrates a moderately faster sorting of professionally dressed black men with weapons. Thus, this does not provide support to the hypothesis that professionally dressed black men will be perceived as less criminal than casually dressed black men.

Next, I analyzed the IAT effect for the professional-casual white male condition. The professional-casual white male condition generated a D-score of -.58 and standard error of .08, demonstrating a close to strong association of professionally dressed white men to weapons. Similarly, these findings do not lend support to the hypothesis that professional dress is perceived as less criminal. In fact, it demonstrates that professional dress is perceived as more criminal. I discuss possible implications for these findings in the discussion section.

To gain a further understanding of these results, I compared the IAT effect between the black and white male conditions. Using a two-tailed t-test, I can analyze whether participants perceive white men dressed professionally as more criminal than black men dressed professionally. The difference in the D-scores of those conditions is .31 and is significantly different from each other ($p<.01$). This demonstrates that individuals more strongly associate professionally dressed white men (-.58) to weapons in that condition than professionally dressed black men in the other condition (-.26). There is also no significant difference in the error rates of the IAT between the two conditions ($p>.10$).

Table 3. Mean score of ATBM scale.

Variable	*M* (SD)
Overall	4.7 (.52)
Men	4.6 (.47)
Women	4.8 (.54)
Black	4.7 (.40)
White	4.8 (.52)
Asian	4.8 (.45)

Table 4. Mean IAT effect for race-weapon IAT conditions.

	Black-white casual condition	Black-white professional condition
	M (SD)	*M* (SD)
Overall	.21 (.35)	.21 (.34)
Men	.22 (.28)	.28 (.33)
Women	.21 (.40)	.18 (.35)
Black	.19 (.43)	.26 (.68)
White	.17 (.36)	.14 (.33)
Asian	.52 (.15)	.35 (.25)

Table 5. Mean IAT effect for attire-weapon IAT conditions.

	Professional-casual white male condition	Professional-casual black male condition
	M (SD)	*M* (SD)
Overall	-.58 (.31)	-.26 (.43)
Men	-.73 (.24)	-.21 (.46)
Women	-.49 (.31)	-.29 (.43)
Black	-.23 (.33)	-.79 (.)
White	-.60 (.31)	-.27 (.38)
Asian	-.72 (.13)	-.45 (.54)

Additional Analyses

I explored these findings by conducting additional analyses focusing on the participants' race and gender to measure how they impacted performance on the IAT. First, I conducted a t-test to observe the mean differences overall of D-scores by gender. There was no significant difference between men and women ($p=.77$). Next, I tested differences between men and women in each condition. In the professional-casual black male condition, there was no significant difference between the implicit bias of men and women ($p=.605$). There was also no difference between them in the black-white casual dress condition ($p=.91$). There is no significant difference between genders in the black-white professional dress condition ($p=.55$). Finally, there is a significant difference between men and women in the white male condition ($p<.001$). The difference between the D-scores is .25, with a value of -.49 for women and -.73 for men. This demonstrates more bias towards professionally dressed white men by the men in the sample.

I also tested the impact of participant's race on the IAT effect. However, the amount of black, Asian, and Hispanic participants in the sample is very small so these results are not able to make much sense of racial differences in the implicit bias of black men. I focused primarily on black, white, and Asian participants in this analysis to compare with the results of previous studies and because they are the largest groups in the sample. The IAT effect for white participants is .17 in the black-white casual condition and .14 in the black-white professional condition. The higher effect size in the casual condition is not significant. Additionally, for white participants, the IAT effect in the professional-casual white male condition was -.60 and -.27 in the professional-casual black male condition. Therefore, whites who participated in the condition with white males dressed professionally or casually demonstrated more bias towards professional dress when the wearer was white. However, all white participants demonstrated greater bias towards professional dress.

Black participants had an IAT effect of .19 in the black-white casual condition and .26 in the black-white professional condition. This difference is not significantly different (p=.78). Conversely, the IAT effect for black participants in the professional-casual black male and professional-casual white male conditions was -.79 and -.23, respectively. While these differences are stark, it is not statistically significant (p=.62). There was only 1 black participant in the black male condition and 2 in the white male condition, making the sample size too small to interpret. Among Asian participants, the IAT effect was .15 and .35 in the black-white casual and black-white professional conditions, respectively (p=.09). Additionally, the D-scores for Asian participants in the professional-casual white male and professional-casual black male conditions were -.72 and -.45, respectively (p=-.42). Again, the number of Asian participants in each condition are small so these results should be interpreted conservatively.

The finding that black men are more quickly associated to weapons than white men is congruent with previous work and supports hypothesis 1. Thus, I have provided more evidence in support of this finding. However, I desired to test whether efforts to reduce a criminal perception through clothing has any merit. My findings reveal that black men were categorized with weapons at about the same effect whether they were dressed professionally or casually. The IAT effect is similar for both black, white, and Asian participants. However, there may have not been enough power to accurately measure racial differences since there were only 11 blacks in the study as compared to 65 whites. Therefore, conclusions in regards to race are very conservative. Surprisingly, professional attire was more strongly linked to criminality than casual attire. I discuss possible explanations for this in the discussion section.

Explicit Measure

After observing the IAT effect sizes of the implicit measure, I analyzed the Attitudes toward Black Males scale. The purpose of this explicit measure is to understand how individuals' implicit biases relate to their explicitly stated biases towards black men. The Cronbach alpha value for the scale was .92. The alpha values for each of the subscales were: intellectual ability (.90), criminal justice (.54), preferential treatment (.64), personality (.82), sociability (.64), employment (.41), self-confidence (.71), and global characteristics (.71). The ATBM scale ranged from strongly agree (1) to strongly disagree (6). The mean score for the ATBM scale was 4.7 out of 6, which corresponds with less explicit bias towards black men. The means for men and women were 4.6 and 4.8, respectively ($p=.20$). Cohen's *d* correcting for uneven groups for gender is .29, demonstrating a small to medium difference between the means of men and women. Thus, men and women do not differ very much in their responses to the scale. I also tested for differences in the explicit measure between black and white participants. The mean score for black participants is 4.7 and 4.8 for white participants ($p>.10$), indicating no significant difference in the explicit bias of black and white participants toward black men.

Next, I analyzed the correlations of the IAT effect and subscales of the ATBM scale for each of the four conditions. I discuss the white-black casual and professional conditions because those conditions are measuring racial bias and therefore relates theoretically to the ATBM scale. In the casual black-white condition the correlation between the IAT and the ATBM scale is -.10 and not significant ($p>.10$). Additionally, the correlation between the professional white-black conditions and the ATBM scale is .26 and is also not significant ($p>.10$).

In terms of the subscales, the criminal justice scale and IAT effect have a correlation of .32 ($p=.12$) for the black-white casual condition and one of .50 ($p<.05$) in the black-white

professional condition. This means that those in the black-white professional condition who demonstrate more implicit bias towards black men are associated with being more likely to agree that black men receive different treatment from police (5.0), agree that they serve longer jail terms (2.8), and disagree that they commit more sex crimes (4.8). The mean ATBM score for the white-black professional condition is 4.65 and it is 4.69 for the white-black casual condition, demonstrating no significant difference in explicit bias across those conditions. Therefore, those who are more likely to admit that black men are treated differently in the criminal justice system are associated positively with a higher D-score. Many of the subscales are associated differentially with D-scores based on the condition. Some correlations, like personality and D-score, are in opposite directions in the casual and professional conditions. The explicit measure was taken prior to the IAT in the study so there is no priming effect that is present in one condition over the other.

Table 6. Correlation of black-white casual condition IAT effect with ATBM subscales.

	D-score	Intellectual	Criminal Justice	Personality	Sociability	Global Characteristics	Preferential Treatment	Empl-oyment	Self-Confidence	ATBM
D-score	1.0									
Intellectual	-.08	1.0								
Criminal Justice	.32	.29	1.0							
Personality	-.14	.32	.51*	1.0						
Sociability	-.36	.44*	.11	.15	1.0					
Global Characteristics	-.31	.51*	.35	.38	.38	1.0				
Preferential Treatment	-.01	.78**	.41*	.52**	.34	.52**	1.0			
Employment	-.14	.50*	.04	-.00	.49*	.15	.26	1.0		
Self-confidence	.12	.69**	.42*	.31	.26	.44*	.72**	.33	1.0	
ATBM	-.10	.88**	.53**	.55**	.58**	.66**	.85*	.55**	.78**	1.0

*p<.05 **p<.01

The only subscale with a significant association to the D-score is criminal justice in the black-white professional condition. Additionally, the ATBM scale is not significantly correlated with the race IAT conditions. The disconnect between the explicit and implicit measure is not surprising due to adults being more influenced by social desirability and not wanting to appear racist. Baron and Banaji (2006) found this in their experiment using a sample of White American 6-year olds, 10-year olds and adults. All age groups participated in an implict bias test as well as recorded self-reported attitudes about Blacks and Whites. They found that self-reported attitudes about anti-Black sentiments were apparent in the youngest age group, less biased in older children and were not observed in adults. However, the implicit bias measure revealed similar levels of anti-Black bias in all of the age categories, demonstrating the asymmetricality of explicit and implicit attitudes. Therefore, to uncover biases like criminal perceptions, implicit measures are necessary because older individuals worry more about appearing prejudiced in their responses.

Table 7. Correlation of black-white professional condition IAT effect with ATBM subscales

	D-score	Intellectual	Criminal Justice	Person-ality	Sociability	Global Characteristics	Preferential Treatment	Employment	Self-Confidence	ATBM
D-score	1.0									
Intellectual	.21	1.0								
Criminal Justice	.50*	.48*	1.0							
Personality	.24	.64**	.59**	1.0						
Sociability	-.05	.41*	.40*	.67**	1.0					
Global Characteristics	.09	.47*	.42*	.82**	.66**	1.0				
Preferential Treatment	.31	.75**	.65**	.89**	.68**	.76**	1.0			
Employment	.04	.09	.28	.28	.53	.24	.22	1.0		
Self-confidence	.33	.80**	.67**	.82**	.61**	.76**	.89**	.29	1.0	
ATBM	.26	.77**	.70**	.91**	.78**	.81**	.94**	.44*	.94**	1.0

*p<.05 **p<.01

Study 2

I replicated Study 1 using a sample of MTurk workers. I added two more conditions to interact race and attire. These conditions are the black professional/white casual and the black casual/white professional conditions. Conditions were randomly assigned and Table 8 provides a description of the number of each gender and race in the IAT conditions.

Table 8. Total participants by race and gender in each condition for MTurk sample

	Casual Condition	Professional Condition	White male Condition	Black male Condition	Black (Professional) White (Casual)	Black (Casual) White (Professional)	Total
Women	8	14	10	6	10	10	58
Men	16	23	21	10	12	12	94
Black	0	8	1	3	5	4	21
White	22	26	28	12	17	18	123
Asian	3	2	2	2	1	0	10

Implicit Measure

The mean D-score for the black-white casual condition was .17 and .23 for the black-white professional condition. These values are significantly different from 0 ($p<.01$) and demonstrate greater bias towards black men. Similar to the laboratory sample, there is no significant difference between the black-white casual and professionally dressed conditions, giving no support to hypothesis 2. Additionally, the professional-casual white male condition was -.36 and -.23 for the professional-casual black male condition, demonstrating significantly greater bias towards professionally dressed men ($p<.01$). However, the difference between these two conditions is not significant ($p=.182$) as it was in the laboratory sample.

The first of the two additional conditions that were added in this sample compared a professionally dressed black man and a casually dressed white man. The IAT effect for this condition was .22, demonstrating greater bias towards the professionally dressed black man. This bias may either be due to the professional dress of the black man due to the association of professional dress with criminality in this study or may be a result of race. The second additional condition comparing a casually dressed black man to a professionally dressed white man sheds light on this. The D-score for this condition was .19, consistent with greater bias towards casually dressed black men than professionally dressed white men. Therefore, casual dress was not enough to overcome the effect of race in driving the relationship between criminality and black men. There is also no significant difference between these two conditions ($p=.74$). This is discussed in further detail in the discussion section.

Table 9. Mean of ATBM scale for MTurk sample.

Variable	*M* (SD)
Overall	4.4 (.85)
Men	4.4 (.93)
Women	4.4 (.71)
Black	4.7 (.68)
White	4.4 (.86)
Asian	4.1 (.78)

Table 10. Mean IAT effect of race-weapon conditions for MTurk sample.

	Black-white casual condition	Black-white professional condition
Variable	*M* (SD)	*M* (SD)
Overall	.17 (.25)	.23 (.33)
Men	.16 (.19)	.26 (.30)
Women	.20 (.36)	.18 (.38)
Black	N/A	.18 (.34)
White	.16 (.25)	.24 (.35)
Asian	.28 (.23)	.15 (.54)

Table 11. Mean IAT effect of attire-weapon conditions for MTurk sample.

	Professional-casual white male condition	Professional-casual black male condition
Variable	*M* (SD)	*M* (SD)
Overall	-.37 (.33)	-.23 (.30)
Men	-.44 (.31)	-.25 (.24)
Women	-.21 (.33)	-.21 (.39)
Black	.13 (.)	-.24 (.49)
White	-.39 (.33)	-.19 (.22)
Asian	-.25 (.09)	-.58 (.32)

Table 12. Mean IAT effect of race-attire weapon conditions for MTurk sample.

	Black (Professional) White (Casual)	Black (Casual) White (Professional)
Variable	*M* (SD)	*M* (SD)
Overall	.23 (.31)	.19 (.39)
Men	.20 (.30)	.24 (.46)
Women	.26 (.26)	.14 (.28)
Black	.29 (.44)	.21 (.25)
White	.18 (.30)	.17 (.39)
Asian	.29 (.)	N/A

Explicit Measure

The explicit measure, the Attitudes toward Black Males Scale had an average of 4.4 out of 6, with the range being 1 to 6. This indicates a small amount of explicit bias towards black men. The inter-item reliability for this scale was .85, indicating high reliability. The means for the subscales are: 3.4 for personality, 4.7 for sociability, 4.6 for self-confidence, 4.6 for global characteristics, 3.95 for criminal justice, 4.3 for employment, and 4.7 for preferential treatment. The personality scale demonstrates the most bias towards black men and consists of items regarding black men being grouchy, irritable, and having a different personality. The ATBM scales and the IAT effects are not highly correlated. The correlation matrix of the D-score and ATBM scale is in the appendix.

CHAPTER 7

DISCUSSION AND CONCLUSIONs

Concurrent with previous research, this study found that individuals exhibit more implicit bias towards black men. I sought to understand how attire influences the relationship between perceived criminality and black men. The results of the study did not provide evidence that professional attire weakens the strength of this stereotype. Black, white, Asian, female, and male participants demonstrated a small to moderate amount of implicit bias toward black men regardless of how they were dressed. This may point to the strength of race when interacting with other variables such as class. Professional dress is typically associated with those of a higher status and presumably black men who dress professionally should be viewed less criminally than those who dress casually.

Due to the strong effect of race, I created two additional conditions to directly compare black and white men dressed both professionally and casually within race. These results were surprising in that greater bias was shown towards professionally dressed men. This may be due to the association of professionals with status and power. This power may be interpreted as negative and produce a higher association with criminality than casually dressed men. Alternatively, these results may be driven by the proximity of participants with casually dressed men. Casually dressed men may be closer in status to college students and MTurk workers than the professionally dressed men so it makes sense why they would view casually dressed men as less threatening. This can be seen in the differences in the D-scores between race in the professional-casual white male condition. White participants in the psychology pool sample had

a much stronger IAT effect in the white male condition (-.60) than black participants (-.27), demonstrating greater proximity towards casually dressed white men than casually dressed black men. This finding is also similar for black and white participants in the black male condition. Black participants had a stronger IAT effect in the black male condition (-.79) than white participants (-.27). Again, revealing more proximity to casually dressed black men than casually dressed white men. This sheds light on how much the participant's race could be driving how the perform on the Race-Weapon IAT, although the sample of black participants is too low to make conclusive statements.

To understand these results further, I replicated the study using an MTurk sample and added two additional conditions. These conditions comparing a professionally dressed black man to a casually dressed white man and a professionally dressed white man to a casually dressed black man were implemented in order to test how powerful the bias is toward professional dress when interacting with racial differences. The condition where the white man is dressed professionally is most surprising because of the strength of the bias toward professional white men in the sample. Even though the black man was dressed casually and casual dress was shown less bias, the casually dressed black man was still moderately associated with criminality as compared to the professionally dressed white man. This provides further evidence to the strength of race in implicit bias even when there are contextual factors present like clothing differences. In fact, this IAT effect was not significantly different than the professional and casual dress conditions. The race and attire-weapon IAT conditions should be replicated using the attire style as the label rather than "African-American" or "White American" to test the effect of the label when keeping the photos the same.

Limitations

This study was limited by the lack of racial diversity in the sample. The small number of racial minorities in the sample resulted in difficulty making conclusive remarks about the effects of race in associating black men with criminality. Additionally, this study is not able to capture the evaluative process of attaching a stereotypical perception of criminality to black men. While, ultimately, participants still associate black men with criminality, we are not able to measure whether attire causes them to take longer or use other cues to determine criminality. In other words, we are only able to capture the result and not the process. Future research should focus on the process by which individuals apply stereotypes of criminality to black men. This study also did not have a high correlation between the implicit and explicit measures. A different scale that considers social desirability may reveal higher correlations.

Implications

These studies point to the need for more research on bias toward professionals to understand why individuals have greater bias towards professional dressed men. This finding is surprising because professionals have higher status in society. It is not certain whether participants were reacting to the image of the professionally dressed men or the label of "professional." These two items may result in differing meanings for individuals. Further research into this may give further insight into what the IAT is truly capturing. Researchers have long debated whether the racial bias so consistently captured in white-black IATs is due to prejudice or a lack of familiarity with black people among mostly white subjects (Pettigrew, 1998; Zajonc, 1968;Kinoshita & Peek-O'Leary, 2005;Tinkler, 2012). While research has dismissed familiarity as the only explanation for the strong evidence of bias (Phelps, et al., 2000; Hart, et al., 2000; Brendl, Markman, & Messner, 2004; Dasgupta, 2004; DeSteno, Dasgupta, &

Cajdric, 2004; Ito, Chiao, Devine, Lorig, & Cacioppo, 2006; Smith-McLallen, Johnson, Dovidio, & Pearson, 2006; Tinkler, 2012), this study suggests familiarity or proximity still may affect how people perform on the IAT. By doing this, we can understand whether this result is methodologically or theoretically driven as I proposed.

The societal implications of this research demonstrate a need for a de-emphasis on respectability politics in the media and by community members. Race has such a strong effect that attempts to disarm the criminal perception of black men through dressing up does not significantly reduce this association. We should look toward making societal change to reduce this perception overall. On a tangible level, this can be done through sensitivity training with law enforcement, mentors, and parents who are in frequent contact with black men. While suggestions to "dress for success" or "pull up your pants" may be well-intentioned, it perpetuates the narrative that this will cause black men to be seen as less dangerous. There is no empirical data that this is true and this study did not provide any support to this notion. Therefore, efforts to reduce a criminal perception should not solely be placed on black men, but on those who hold this perception. This can be accomplished through more meaningful interactions with black men as previous studies have indicated. However, these interactions may result in individuals seeing non-threatening black men as exceptions rather than the norm. Therefore, more awareness of how biases arise through the education system or job training coupled with opportunities for interaction with black men can have a significant impact on reducing the criminal perception of black men.

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APPENDIX A: Additional Tables

Table 13. Correlation of White Male Condition IAT Effect with ATBM Subscales

	D-score	Intellectual	Criminal Justice	Personality	Sociability	Global Characteristics	Preferential Treatment	Employment	Self-Confidence
D-score	1.0								
Intellectual	.72	1.0							
Criminal Justice	.34	.70	1.0						
Personality	.24	.43	.38	1.0					
Sociability	.42	.65	.49	.31	1.0				
Global Characteristics	.43	.53	.50	.54	.58	1.0			
Preferential Treatment	.13	.38	.35	.38	.37	.29	1.0		
Employment	.06	.14	-.00	-.02	.07	.08	.05	1.0	
Self-confidence	.32	.46	.34	.65	.64	.76	.37	-.06	1.0

Table 14. Correlation of Black Male Condition IAT Effect with ATBM Subscale

	D-score	Intellectual	Criminal Justice	Personality	Sociability	Global Characteristics	Preferential Treatment	Employment	Self-Confidence
D-score	1.0								
Intellectual	.17	1.0							
Criminal Justice	-.08	.37	1.0						
Personality	-.34	.37	.51	1.0					
Sociability	-.38	.36	.40	.53	1.0				
Global Characteristics	-.11	.36	.41	.73	.42	1.0			
Preferential Treatment	.20	.33	.52	.46	.49	.56	1.0		
Employment	-.23	.53	.06	.07	.31	.21	.11	1.0	
Self-confidence	-.01	.51	.68	.79	.31	.77	.58	.06	1.0

Table 15. Correlation of Casual Condition IAT Effect with ATBM Subscales for MTurk Sample

	D-score	Intellectual	Criminal Justice	Personality	Sociability	Global Characteristics	Preferential Treatment	Employment	Self-Confidence
D-score	1.0								
Intellectual	-.21	1.0							
Criminal Justice	-.15	.83	1.0						
Personality	-.10	.05	.42	1.0					
Sociability	.13	.83	.73	.01	1.0				
Global Characteristics	-.10	.82	.74	.00	.81	1.0			
Preferential Treatment	-.13	.80	.75	.10	.74	.84	1.0		
Employment	-.10	.53	.37	-.21	.5	.48	.54	1.0	
Self-confidence	-.13	.44	.41	-.00	.48	.51	.46	.17	1.0

Table 16. Correlation of Professional Condition IAT Effect with ATBM Subscales for MTurk Sample

	D-score	**Intellectual**	**Criminal Justice**	**Personality**	**Sociability**	**Global Characteristics**	**Preferential Treatment**	**Employment**	**Self-Confidence**
D-score	1.0								
Intellectual	-.04	1.0							
Criminal Justice	.05	.58	1.0						
Personality	.09	.09	.27	1.0					
Sociability	.09	.73	.72	.29	1.0				
Global Characteristics	17	.75	.81	.24	.90	1.0			
Preferential Treatment	.14	.75	.75	.21	.79	.89	1.0		
Employment	-.01	.46	.58	.16	.64	.71	.69	1.0	
Self-confidence	.25	.30	.38	.05	.26	.39	.40	.17	1.0

Table 17. Correlation of White Male Condition IAT Effect with ATBM Subscales for MTurk Sample

	D-score	Intellectual	Criminal Justice	Personality	Sociability	Global Characteristics	Preferential Treatment	Employment	Self-Confidence
D-score	1.0								
Intellectual	-.08	1.0							
Criminal Justice	.01	.51	1.0						
Personality	.05	.13	.42	1.0					
Sociability	-.03	.82	.62	.22	1.0				
Global Characteristics	-.07	.77	.69	.41	.85	1.0			
Preferential Treatment	-.00	.83	.72	.32	.89	.89	1.0		
Employment	-.04	.81	.65	.17	.78	.77	.82	1.0	
Self-confidence	-.03	.74	.63	.44	.60	.73	.76	.67	1.0

Table 18. Correlation of Black Male Condition IAT Effect with ATBM Subscales for MTurk Sample

	D-score	Intellectual	Criminal Justice	Personality	Sociability	Global Characteristics	Preferential Treatment	Employment	Self-Confidence
D-score	1.0								
Intellectual	-.41	1.0							
Criminal Justice	-.32	.78	1.0						
Personality	.19	.45	.26	1.0					
Sociability	-.24	.78	.66	.61	1.0				
Global Characteristics	-.22	.86	.87	.50	.92	1.0			
Preferential Treatment	-.25	.81	.84	.33	.80	.94	1.0		
Employment	-.38	.55	.44	.27	.72	.63	.68	1.0	
Self-confidence	.51	-.11	-.07	.28	.28	.14	.09	.36	1.0

Table 19. Correlation of Black Professional White Male Condition IAT Effect with ATBM Subscale for MTurk Sample

	D-score	Intellectual	Criminal Justice	Personality	Sociability	Global Characteristics	Preferential Treatment	Employment	Self-Confidence
D-score	1.0								
Intellectual	.09	1.0							
Criminal Justice	-.01	.74	1.0						
Personality	-.01	-.07	-.01	1.0					
Sociability	.05	.60	.63	.00	1.0				
Global Characteristics	.02	.81	.89	.15	.78	1.0			
Preferential Treatment	-.01	.61	.68	.09	.81	.83	1.0		
Employment	.15	.21	.27	-.22	.31	.26	.39	1.0	
Self-confidence	-.34	-.11	-.08	.12	.02	.12	.22	-.12	1.0

Table 20. Correlation of Black Male Casual/White Male Professional Condtion IAT Effect with ATBM Subscales for MTurk Sample

	D-score	Intellectual	Criminal Justice	Personality	Sociability	Global Characteristics	Preferential Treatment	Employment	Self-Confidence
D-score	1.0								
Intellectual	-.41	1.0							
Criminal Justice	-.28	.35	1.0						
Personality	.09	.06	.02	1.0					
Sociability	-.43	.59	.27	.22	1.0				
Global Characteristics	-.40	.72	.40	.06	.75	1.0			
Preferential Treatment	-.52	.74	.49	-.02	.1	.77	1.0		
Employment	-.32	.56	.32	.14	.64	.71	.63	1.0	
Self-confidence	.01	.12	-.11	.37	.35	.50	.19	.26	1.0

APPENDIX B: ATTITUDES TOWARD BLACK MALES SCALE

1. Black males score lower on intelligence tests

I AGREE VERY MUCH I DISAGREE VERY MUCH

1 2 3 4 5 6

2. On average, black males are less intelligent.

I AGREE VERY MUCH I DISAGREE VERY MUCH

1 2 3 4 5 6

3. Black males receive no difference in treatment by police.
   I AGREE VERY MUCH I DISAGREE VERY MUCH
   1 2 3 4 5 6

4. Black males are more likely to commit sex crimes.
   I AGREE VERY MUCH I DISAGREE VERY MUCH
   1 2 3 4 5 6

5. Black males usually serve longer jail terms.
   I AGREE VERY MUCH I DISAGREE VERY MUCH
   1 2 3 4 5 6

6. Black males cannot be as successful.
   I AGREE VERY MUCH I DISAGREE VERY MUCH
   1 2 3 4 5 6

7. Black males want more affection and praise.
   I AGREE VERY MUCH I DISAGREE VERY MUCH
   1 2 3 4 5 6

8. Black males tend to want more sympathy.
   I AGREE VERY MUCH I DISAGREE VERY MUCH
   1 2 3 4 5 6

9. Black males are not expected to meet the same standards.
   I AGREE VERY MUCH I DISAGREE VERY MUCH

1 2 3 4 5 6

10. Others should not expect too much from black males .
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

11. Black males expect special treatment.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

12. Black males are more emotional.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

13. Black males are more self-conscious.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

14. Black males are usually more sensitive.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

15. Black males are not as conscientious.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

16. Black males have different personalities.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

17. Black males are not the same as others.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

18. Black males are often grouchy.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

19. Black males show less enthusiasm.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

20. Black males become upset easier.

I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

21. Black males worry more.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

22. Black males are not as happy.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

23. Black males are no more sociable than other groups.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

24. Black males are irritating.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

25. Black males are not usually friendly.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

26. Black males are only interested in having a good time.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

27. Black males are usually harder to get along with.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

28. Black males cannot lead a normal social life.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

29. Black males do not have to compete for jobs.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

30. Black males are not willing to work as hard.
I AGREE VERY MUCH I DISAGREE VERY MUCH
1 2 3 4 5 6

31. Black males have the same opportunities of getting a job.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

32. Employers should not be allowed to fire Black males .

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

33. Black males are discouraged easily.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

34. Black males are not as ambitious.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

35. Black males are not as self-confident.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

36. Black males feel sorry for themselves more.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

37. Black males are not as good as other groups.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

38. Black males do not contribute to society.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

39. There are more misfits among Black males.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

40. Black males resent other people.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

41. Black males are different than other groups.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

42. Black males have a chip on their shoulder.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

43. Black males are oversexed.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

44. Black males are less honest than other groups.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

45. It is impossible for black males to lead normal lives.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

46. You have to be careful what you say around black males.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6

47. Black males make others uncomfortable.

I AGREE VERY MUCH					I DISAGREE VERY MUCH
1	2	3	4	5	6