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# REVERSING THE ERROR: THE ROLE OF CAUSAL ATTRIBUTIONS IN INHIBITING PREJUDICE

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# REVERSING THE ERROR: THE ROLE OF CAUSAL ATTRIBUTIONS IN INHIBITNG PREJUDICE

# A THESIS APPROVED FOR THE DEPARTMENT OF PSYCHOLOGY

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#### Abstract

There are a wide variety of explanations for why a person may hold prejudicial attitudes. For example, prior research suggests that those who hold more prejudicial views partake in the fundamental attribution error in regard to outgroup members, attributing certain outcomes to dispositional as opposed to situational factors. The current study was designed to explore one mechanism through which low-prejudice individuals are able to inhibit prejudicial thoughts. Utilizing a sample of 271 undergraduates, we hypothesized that low-prejudice participants (i.e., scored low in symbolic racism) would make more situational attributions in comparison to dispositional attributions in a racially-charged police aggression scenario. Results of the study suggest that low-prejudice participants reverse the fundamental attribution error and tend to take situational factors into account. Furthermore, this reversal predicts less support for the police's use of physical force in this scenario. Implications for the inhibition of prejudice are discussed.

*Keywords*: outgroup prejudice, inhibition, attributions, symbolic racism, police aggression



#### Introduction

Racism, prejudice, and discrimination have been the focus of many researchers' work for quite some time now. While these topics are arguably of extremely high import, do they necessarily coincide with the realities of modern society? With the decrease in overt discrimination and the higher levels of racial equality in modern times, one may argue that racism is no longer an issue in Western culture, or perhaps that modern racism is not racism at all, but merely an artifact of group conflict (McConahay, Hardee, Batts, 1981; Pettigrew & Meertens, 1995; Sidanius, Pratto, & Bobo, 1996). Unfortunately, contemporary research has indicated otherwise. While overt racism is no longer a socially acceptable worldview (in most social spheres), subtler forms of prejudice have emerged as a means for anti-black affect to be transmitted in a variety of social situations. Due to this, modern theories of racism have changed the way we conceptualize and analyze prejudicial tendencies (McConahay, 1982; Sears, 1988; Devine & Elliot, 1995; Dovidio & Gaertner, 2004). Additionally, development of implicit measures has allowed us to analyze prejudicial views at a deeper level; measures such as the implicit association task (IAT) have verified that many selfproclaimed unprejudiced Americans do, in fact, still hold implicit preferences for whites over blacks (Greenwald, McGhee, & Schwartz, 1998).

Looking deeper into the extant literature on modern forms of prejudice, one finds that a key form in which people transmit prejudicial views manifests in one's support (or lack thereof) for various forms of social policy and various social processes. For example, heightened levels of racism have been linked with opposition to affirmative action policy, opposition to diversity in work and education settings,



opposition to pro-immigrant policy, greater support for punitive crime policies, and less support for preventive crime policies (Brandt & Reyna, 2012; Berg, 2013; Green, Staerkle, & Sears, 2006). In regards to social processes that lie outside of the sphere of social *policy*, racism levels have also been linked with discrimination against African Americans in hiring practices, higher guilt attributions for African American defendants in criminal cases, opposition to reparations for race-based injustices, less perceived racial police bias, and voting practices in the 2008 presidential election between Barack Obama and Mitt Romney (Blatz & Ross, 2008; Greenwald et al., 2009; McConohay, 1983; Pfeifer & Bernstein, 2003; Matsueda & Drakulich, 2009). The aforementioned findings provide empirical support for the claim that racism *does* still exist in Western culture, and is being exhibited in a subtler, albeit still detrimental manner.

# **Symbolic Racism**

One of the key theories involved in the development of modern racism research is Sears' (1988) theory of symbolic racism. While "old fashioned racism" pertains to blatant, overt bigotry, and a belief that African Americans are inherently "lesser" than whites (McConohay & Hough, 1976; McConohay, 1982), symbolic racism theory asserts that current racist attitudes are expressed as the combination of a general antiblack affect as well as a support for traditional American values (Sears, 1988). These beliefs stem from the "cultural belief system that many whites have about blacks in American society" (Henry & Sears, 2002, p. 256), which can include a multitude of facets, including endorsement of the belief that prejudice no longer exists in the U.S., that any forms of inequality must be solely attributed to the lack of African American work ethic along with the personal responsibility African Americans have for their



status, and that inherent systemic difficulties experienced by African Americans in comparison to whites are nonexistent or non-influential (Henry & Sears, 2002). As aptly summarized by Mellor and colleagues (2001), whites may have nonracist, egalitarian "racial consciousness", but due to long-existing societal structures, this is "underpinned by a broader racist framework that is used to process their social world" (pp. 473-474).

In regards to the "traditional American values" in the latter of the two dimensions of symbolic racism, symbolic racism generally utilizes the values outlined by the Protestant work ethic; primarily that if a person works hard, and is a good, moral person, they should be able to achieve in society (Weber, 1905). This notion has been incorporated heavily into ideals about American culture and "the American dream" (for a review, see Furnham, 1984). Unfortunately, in regards to social consequences, endorsement of the Protestant Work Ethic (PWE) has been linked with lower levels of egalitarianism, lower levels of prosocial behavior, lower support for welfare programs, and in the scope of the current study, higher levels of racism (Levy, West, Ramirez, & Karafantis, 2006; Furnham, 1982; Swim, Aikin, Hall, & Hunter, 1995). This aspect of PWE becomes detrimental as it inhibits one from acknowledging systemic differences that may contribute to the success of certain groups in modern society.

# The Inhibition of Prejudice

Although it is easy to become enveloped in the negative nature of some of the aforementioned findings, one can change perspective by acknowledging that modern society has, in fact, altered its values to some extent in regards to racism (Firebaugh & Davis, 1988; Smith, Marsden, Hout, & Kim, 2006). To this point, inhibition of prejudice has become a key focus of modern research, in trying to pinpoint exactly what



mechanisms are engaged in those who have a tendency to inhibit prejudice and act in a more egalitarian fashion. The current study looks to further the research from this vantage point; that there is inherent value in observing the manner in which low-prejudice people inhibit expression of prejudicial views.

One may think that the mere label of "low-prejudice" indicates that a person has entirely eliminated stereotypical associations from their cognition. However, this is not the case; in a study by Devine (1989), it was found that both low-prejudice and highprejudice participants both had the same levels of knowledge of stereotypes regarding minority groups, and that presentation of these stereotypes activated those knowledge structures in a similar fashion for both groups. The key difference between the two prejudice groups was seen when analyzing the thoughts expressed regarding African Americans when each group was presented with stereotype-congruent information; while high-prejudice participants expressed stereotype-congruent thoughts, lowprejudice participants inhibited these thoughts and, instead, expressed stereotypeincongruent thoughts that validated their nonprejudiced personal beliefs. When given the time to manage stereotype expression, it was the low-prejudice participants who expressed nonprejudicial attitudes and endorsed more egalitarian views. Findings such as this indicate that there is clearly a mechanism involved in low-prejudice people that allows them to actively inhibit negative racial attitudes.

Further support for this mechanism lies in the way in which implicit measures seemingly bypass the conscious control of the expression of prejudicial views. When implicit measures such as the IAT are used to assess racial bias, even those who proclaim to be entirely unprejudiced often exhibit the same racial biases as high-



prejudice participants (Blair, 2001; Rudman, Greenwald, Mellott, Schwartz, 1999; Vanman, Saltz, Nathan, & Warren, 2004). Seemingly, a downfall of the mechanisms involved in inhibiting prejudice is that they do require some level of conscious processing. To this end, inhibition of automatically-activated knowledge structures has been shown to be suppressed by the use of cognitive busyness tasks (Devine et al., 2002) time constraints (Neely, 1977), and even when participants are placed in a position of social power (Richeson & Ambady, 2002). The difficulty of inhibiting prejudicial attitudes is likened to "breaking a habit" by Devine (1989, p. 15), in that one must actively assess the attitudes they have, reassess the attitude, and begin to form a new cognitive structure to access when presented with a scenario that activates their egalitarian, nonprejudiced values and ideals.

Eliminating one's prejudicial attitudes is a long process, one that requires consistent conscious processing (Devine, Monteith, Zuwerink, & Elliot, 1991), and one must realize that this is a *difficult* process to maintain. Consider just one of the aforementioned methods in which inhibition of prejudice is bypassed, and prejudicial tendencies are increased; cognitive load. In those studies, cognitive load was achieved by telling participants to hold an 8-digit number in memory (Gilbert & Hixon, 1991; Wigboldus, Sherman, Franzese, & Knippenberg, 2004), putting them through the Stroop task (naming the "ink" color of words that spell other color names; see Govorun & Payne, 2006), or by simply making participants read through the vignettes at a faster pace (Van Knippenberg, Dijksterhuis, & Vermeulen, 1999). Recognizing that these are merely a small sample of tasks, from just one of many methods conscious processing can be bypassed, one can now consider these tasks in comparison with the complexities



of real-world tasks and obligations. To this end, the active management of inhibitory processes is somewhat impressive, given the wide range of cognitive constraints one is consistently put under.

# **Attribution Management**

Does conscious processing interfere with the way in which we interpret social scenarios? A key component of the current research involves the way in which one makes attributions about the world. Attribution theorists have developed an extensive literature on the way in which we make situational (context-related) and dispositional (person-related) attributions in a variety of contexts, including assessments of coping skills in severe accident victims (Bulman & Wortman, 1977), levels of stigma in regards to mental illness (Corrigan et al., 2000), overall marital satisfaction (Bradbury & Fincham, 1990), and intergroup attitude formation (for a review, see Hewstone, 1990). To this end, one can clearly see that we, as interpreters of the social world, utilize attributions as a means of making sense of a broad range of situations and events presented before us.

However, as with many frequently used cognitive mechanisms, the attributions one makes are often subject to bias. Humans often partake in the use of "cause and effect thinking", predisposing us to regard causation as something *individuals* are responsible for; in turn, this can lead one to disregard situational factors that may have contributed to the outcome of a situation (Allport, 1954, pp. 169-170). Development of this predisposition led Heider (1958) and Ross (1977) to develop the concept of the fundamental attribution error, or one's tendency to make causal attributions to the disposition of a person as opposed to situational factors (see Teo & Febbraro, 2002).



This concept was further validated in a classic study by Jones and Harris (1967), in which participants (erroneously) attributed the attitude expressed in an anti or pro-Castro essay to the *writer*, despite knowing that the writer was obligated to write an essay of that nature. In interpreting these findings, Jones and Nisbett (1972) later indicated that in attributing the attitude in the essay to the writer, participants entirely disregarded the situational constraint that was placed on the writer in the first place.

Another more modern example of the fundamental attribution error was portrayed in Pope and Meyer's (1999) study on juror's attributions in a criminal case. Looking at the effect of "attributional complexity", conceptualized by Fletcher and colleagues (1986) as the individual difference characteristic that may allow one to process a situation in a more attributionally-complex manner, it was found that participants high on the attributional complexity scale were more likely to attribute situational and contextual causes to the actions outlined in an ambiguous court case. An important aspect that the current research intends to include in its own design is the aforementioned idea of ambiguity in the court case scenario. Prior research in the field of attribution error has emphasized the importance of maintaining ambiguity in the scenarios presented for participants to make causal attributions. For example, in a study by Phares and Wilson (1972) on the link between responsibility attributions and severity of outcomes, it was found that in all of the ambiguous scenario conditions, the link between responsibility attributions and severity of outcomes was essentially eliminated, in comparison to conditions where the court case was structured in a manner that leaned in the direction of either "guilty" or "not-guilty". While this finding seems rather intuitive, it provides an important piece of information for the current study: ambiguity



must be achieved in presented scenarios in order for the vignette-based experimental design to be effective, particularly in designs where attributions involve an aspect of blame or responsibility. Without ambiguity, there is no way of knowing what aspect of the scenario is contributing to a study's effects.

# **Attributions and Outgroup Prejudice**

The fundamental attribution error has been shown in a variety of contexts, but of greatest interest to the current study is demonstration of the error in an outgroup context. The fundamental attribution error in an outgroup context is what is described by Pettigrew (1979) as the ultimate attribution error, or the "systematic patterning of misattributions shaped...by prejudice" (p. 464). A few empirical studies have shown scenarios in which the ultimate attribution error may occur. Stephan (1977) showed attributions of positive and negative behaviors differed as a function of ingroup or outgroup affiliation, with lower dispositional attributions for positive outcomes to outgroup members. Power, Murphy, and Coover (1996) showed that participants exposed to black stereotype primes tended to succumb to the ultimate attribution error in regard to the Rodney King beating and Magic Johnson revealing his HIV status. Multiple studies have shown an increase in dispositional attributions in criminal trials when the defendant was of a different race (Klein, & Creech, 1982; Johnson et al., 2002; Sweeney & Haney, 1992; Whitesmith, Smith, & Eichorn, 1982). Finally, those who identified as strong Democrats or Republicans tended to discount positive political behavior to outgroup members when a suspicious motive was salient, but did not discount positive behavior of an ingroup member in the same scenario (Munro, Weith, Tsai, 2010).



However, perhaps the most relevant finding has to do with outgroup attributions in a study by Sommers and Ellsworth (2000). Under the hypothesis that whites are motivated to appear nonprejudicial when race is salient, race-saliency was manipulated in a series of 2 studies where participants were asked to record situational/dispositional attributions, along with guilt attributions to a defendant in a criminal trial. When race was salient, it appeared whites showed no outgroup bias; however, when race was manipulated to no longer be salient, whites then displayed higher attributions of aggression, violence, and guilt to a black defendant as opposed to a white defendant- in other words, the ultimate attribution error. In discussing these findings, Sommers and Ellsworth indicate white jurors only tended to "demonstrate bias when race [was] a salient trial issue" (p. 1376); race-salience produced an opposite effect, where nonprejudicial attitudes were activated and inhibition of prejudice was engaged. It is under this mechanism we intend to create the racially-charged, experimental condition's police aggression vignette in the current study.

In summary, the aforementioned effect fits into Gilbert's (1989) claims regarding causal inferences, in that they follow a sequential pattern; from behavior categorization, to dispositional inference, to situational *correction*. The conscious nature of managing one's attributions and partaking in situational correction is validated by a variety of studies that show situational correction can be bypassed through lack of empathy (Wiener, Wiener, & Grisso, 1989), lack of cognitive capacity (D'Agostino & Fincher-Kiefer, 1992; Gilbert, Pelham, & Krull, 1988), lack of motivation (Krull, 1993), and in suspicious scenarios (Fein, 1996).



# **Summary**

Overall, modern research has shown that levels of prejudice do exist, even amongst those who are self-proclaimed nonprejudiced people (Blair, 2001; Henry & Sears, 2002; McConohay, 1981; Vanman, Saltz, Nathan, & Warren, 2004). Yet, we find that inhibition of prejudice does occur with some members of society (Devine, 1989; Devine, Monteith, Zuwerink, & Elliot, 1991). Perhaps one way in which one inhibits prejudice is through the attributions one makes in racially-charged scenarios. Prior research has shown that attribution errors do occur in a variety of contexts (Jones & Nisbett, 1972; Jones & Harris, 1967; Follett & Hess, 2002; Power, Murphy, Coover, 1996), but mechanisms such as attributional complexity, heightened empathy, and greater need for cognition can aid a person in reversing the error by actively taking into account situational factors and discounting dispositional factors in ambiguous scenarios (D'Agostino & Fincher-Kiefer, 1992; Fletcher et al., 1986; Pope & Meyer, 1999; Pettigrew, 1979; Wiener, Wiener, & Grisso, 1989). However, the extant literature has not given a clear model to explain how people use a balance of situational/dispositional attributions to inhibit prejudice, particularly in police-aggression scenarios, which have become increasingly salient in recent times. The current study intends to determine if low-prejudice participants inhibit racism in a racially-charged police aggression scenario by managing the attributions they make.

The goal of the current study was to find the effect that low-prejudice people do, in fact, exhibit the *reversal* of the fundamental attribution error in a racially charged scenario. Given findings in the aforementioned research, we predict that low-prejudice participants will be less likely to make the fundamental attribution error than high-



prejudice participants. More specifically, we predict that low-prejudice participants will make more situational attributions and less dispositional attributions in a police aggression scenario which has activated their nonprejudicial worldview (i.e. a black driver and a white police officer), in comparison to their high-prejudice counterparts. In a scenario with which a nonprejudicial worldview has not been activated (i.e. a white driver with a black police officer), we expect no difference in the balance of attributions between low and high-prejudice participants. Furthermore, we expect this balance of attributions to predict support for the use of physical force and the drawing of a weapon in the given scenarios.

### Method

# **Participants**

Participants were 271 undergraduate psychology students (106 males, 165 females) selected from the undergraduate research participation pool. Approximately 70% of participants were Caucasian. Participants were collected from the undergraduate research pool, and all measures were distributed through a Qualtrics survey presented on the SONA research participation website.

### Procedure

Participants who signed up for the study were directed to the study link through the SONA psychological research website. Upon agreeing to the terms of the informed consent, participants were then directed to the series of questionnaires contained in the study. By means of the Qualtrics website, participants were randomly distributed between the experimental condition and the control condition. The sole difference between these two conditions was the race of the characters in the vignette participants



would read for them to make judgments of. The experimental condition received the police aggression article involving a white officer and a black driver, while the control condition received an identical police aggression article, only with a black police officer and a white driver. Following the article, participants filled out a set of questions regarding attributions of blame in regards to the news article they had just finished reading. Further details regarding the news article are outlined below.

### Materials

The fake news article used in the current study was based loosely off of the recent Sandra Bland case, in which a scenario of police aggression occurs at a routine traffic stop. The article was approximately 1 page long, and outlined an ambiguous scenario at a traffic stop in which the police officer aggressively removes the driver from the car and throws them to the ground, all while his gun is drawn. However, this occurs only after the driver expresses irritation and makes an ambiguous movement towards the center of the vehicle. 137 participants received a white officer-black driver scenario, while 132 participants received an identical scenario, only where the officer was black and the driver was white. The latter scenario served as a means of control, as it is a scenario in which the mechanisms used to inhibit prejudice would not be particularly salient. Character race was manipulated by clearly indicating the race of the officer or driver in the midst of the scenario ("...a Caucasian officer in his 14th year on the force"; "an African American resident of the city"), as well as by utilizing traditionally African-American or Caucasian character names (Jalen Parker, Jerry Smith).



Ambiguity of the scenario was achieved by offering information outlining not only the use of excessive force ("...is then seen opening his door, dragging Smith out of the driver's seat, and throwing him to the ground, placing his knee on his back"), but also outlining a possible justification for the use of force ("...Smith is seen beginning to open his door, as if he was going to step out, but suddenly shifts direction and leans forward, reaching towards the middle of his car"). The intention of this ambiguity was to give participants difficulty in placing blame heavily in one direction based solely on the nature of the actions that took place. For the full vignettes, see Appendices A and B.

#### Measures

Symbolic Racism. In order to separate participants into groups of high vs. low prejudice, Sears' (2002) symbolic racism scale was utilized. Participants were told to answer a variety of questions (i.e. "Over the past few years, blacks have gotten more economically than they deserve") on a 4-point Likert-type scale ranging from 1 (Strongly Disagree) to 4 (Strongly Agree), along with 3 questions with more fitting choices [i.e. "How much discrimination against blacks do you feel there is in the United States today limiting their chances to get ahead?", ranging from 1 (None at All) to 4 (A lot of It)]. A sum score was calculated, with higher scores indicating higher levels of prejudice; possible scores could range from 8 to 28. The current sample displayed acceptable variation, with participant scores ranging from 9 to 27. Participants exhibited moderate levels of prejudice overall (M = 17.41). This scale exhibited high reliability ( $\alpha = .82$ ). For the full Symbolic Racism Scale, see Appendix C.

Attribution Scale. In order to assess the level of situational vs. dispositional attributions made in reference to the respective news article, participants were provided



with a set of questions, asking them to indicate attributions of blame regarding both the police officer and the driver. Situational attribution was captured utilizing the item, "Overall, to what extent was the officer responsible for what happened to the driver?"; this item was intended to measure how much situational factors would have justified the officer to behave in such a manner. Dispositional attribution was captured utilizing the item, "How responsible was the driver for the outcome of this situation?"; this item was intended to measure how much the driver's disposition as an individual was responsible for the outcome of the scenario. Each of these questions were answered on a scale from 1 (*Not at All*) to 7 (*Completely*), with higher scores indicating higher situational or dispositional attribution, respectively. An attributions difference score was calculated as well, which subtracted the situational attribution from the dispositional attribution, so that lower scores indicated more situational attribution in comparison to dispositional attribution.

Physical Force. Two items were included to address how justified the police officer was to use physical force in this scenario. These items addressed both the justification of drawing a weapon as well as the justification of using physical force to throw the driver to the ground. These questions were answered on a scale from 1 (Not at All) to 7 (Completely), with higher scores indicating greater support for the use of physical force in this scenario. For the attribution and physical force items, see Appendix D.

Other Measures. Pratto et al.'s (1994) Social Dominance Orientation Scale was included (see Appendix E), along with a modified 13-item Right-Wing Authoritarianism Scale (Rattazzi, Bobbio, & Canova, 2007; see Appendix F), and



Rubin and Peplau's (1975) Belief in a Just World Scale (see Appendix G): these scales were included to replicate previous findings in the field of prejudice research. A few unrelated questionnaires were included as fillers as well, including Rosenberg's (1965) Self-Esteem Scale, Budner's (1962) Tolerance for Ambiguity Scale, Caccioppo and Petty's (1982) Need for Cognition Scale, Kay and Jost's (2003) System Justification Scale, and Epstein and colleagues' (1996) Faith and Intuition Scale. These items were included so as to mask the participants from making inferences about the nature of the study.

#### Results

Participants were split into low prejudice (M = 13.52, SD = 3.13) and high prejudice (M = 20.50, SD = 2.58) groups. Bivariate correlations indicated that symbolic racism scores were positively linked with both the attributions difference score [r (271) = .265, p < .001] and the support for use of physical force in these scenarios [r (271) = .259, p < .001]. Bivariate correlations of the variables of interest are included in Table 1.

A multiple regression analysis was conducted to predict the attribution difference score from symbolic racism scores, condition number, and their interaction term. The overall model was found to be significant [F(3, 267) = 9.75, p < .001]; as shown in Table 2, significant main effects of symbolic racism scores ( $\beta = .74, p < .001$ ) and condition ( $\beta = .67, p < .001$ ) were also found. However, a significant symbolic racism by condition interaction term ( $\beta = -.81, p < .001$ ) rendered these main effects uninterpretable.



In order to further interpret the symbolic racism by condition interaction, independent samples t-tests were conducted to compare situational and dispositional attributions between symbolic racism groups in each condition. In the experimental condition (white cop, black driver), those scoring low in symbolic racism had significantly lower dispositional attributions than their high prejudice counterparts [t (136) = -2.50, p = .01], and had significantly higher situational attributions as well [t (136) = 2.90, p = .001]. In the control condition (black cop, white driver), low and high prejudice participants did not differ in dispositional attributions [t (131) = .34, p = .74], although low-prejudice participants did still score significantly higher in situational attributions [t (131) = 2.18, p = .03]. The scores for dispositional and situational attributions for both high and low symbolic racism groups, separated by condition, are shown in Figure 1.

Using the attributions difference score, with lower values indicating higher situational attribution scores, those low in prejudice had significantly lower difference scores than their high-prejudice counterparts in the experimental condition [t (136) = -3.37, p = .001]. No significant difference was found in the control condition [t (136) = -1.11, p = .27]. The balance of difference scores for high and low-prejudice participants in each condition is shown in Figure 2.

In regression formulas predicting support for use of physical force and drawing of a weapon from symbolic racism scores and attribution difference scores, a marginally significant main effect of symbolic racism scores was found ( $\beta$ s < .10, ps = .05 and .06, respectively). Those high in symbolic racism, in comparison to their low-prejudice counterparts, scored significantly higher in support for physical force and drawing a



weapon in the experimental condition [ts (136) = -2.54 and -3.13, ps < .01], and scored marginally higher in the control condition [ts (131) = -1.88 and -1.58, ps > .06]. However, the attribution difference score significantly predicted support for use of physical force ( $\beta$  = .54, p < .001) and support for the officer drawing their weapon ( $\beta$  = .46, p < .001), above and beyond the contribution of symbolic racism scores, indicating a unique contribution of the attribution variable to the variance of support for certain actions taken by the police officer in the given scenarios.

## Discussion

The purpose of this study was to determine whether those of low explicit prejudice levels utilize the attributions they make in racially-charged police aggression scenarios to inhibit prejudicial attitudes. Furthermore, we intended to analyze if the balance of attributions predicted support for use of physical force and a support for the drawing of a weapon in the given scenarios. We found supporting evidence for our hypotheses, in that low-prejudice participants held significantly lower attribution difference scores (indicating more situational attribution) than their high-prejudice counterparts. No significant differences were found between low and high prejudice participants in the control condition, supporting the hypothesis that for scenarios in which nonprejudicial worldviews are activated, the attribution mechanism acts as a tool with which low prejudice participants inhibited negative racial stereotypes. Furthermore, the attribution difference score significantly predicted support for use of physical force and support for drawing of a weapon, above and beyond symbolic racism scores. This data indicates that the link between symbolic racism and support for certain policies, at least in the given scenarios, runs through the attribution mechanism.



The data in the current study coincides appropriately with Gilbert's (1989) claims regarding the sequential nature of causal inferences; beginning with behavior categorization, which leads to dispositional inference, and finally, situational correction. Low prejudice participants appeared to reach the final stage, situational correction, when a scenario activates the nonprejudicial worldview and initiates the attribution mechanism to correct for situational forces. In the control condition, low prejudice participants did not appear to entirely initiate the attribution mechanism and displayed a similar balance of attributions to their high prejudice counterparts. However, it should be noted that low prejudice participants did still have significantly higher situational attribution scores in the control condition, although the similar levels of dispositional attribution scores made the difference scores between low and high prejudice participants nonsignificant. This finding is not entirely surprising; Devine (1989) describes the management of preexisting attitudes as similar to breaking a habit, one that requires consistent conscious processing. It is very likely that low prejudice participants are simply more likely to have further internalized the "situational correction" aspect of the attribution mechanism than their high-prejudice counterparts.

To this end, it is understandable that low prejudice participants in the control condition exhibited a trend in a similar direction as they did in the experimental condition; increased use of the full attribution mechanism increases the likelihood that the mechanism would be used more frequently overall, regardless of the scenario being presented. We would expect that low prejudice participants would probably exhibit similar trends in different contexts, although the salience of the experimental condition in the current study presumably made it inevitable that low prejudice participants would



activate the attribution mechanism to inhibit prejudicial attitudes and replace them with an egalitarian, situationally-centered set of attributions. Monteith and colleagues (2002) found supporting evidence for what was labeled as "cues for control", or situational characteristics that alert a person to engage in prejudice inhibition mechanisms. It is clear that the experimental condition contained specific cues for controlling prejudice:

1) a white person aggressing against a black person and 2) a cop aggressing against black driver. In the control condition, it is possible that the system became activated by a very similar "cop aggressing against a driver" cue, which could explain the slight trend in higher situational attributions even in the control condition. The application of Monteith and colleagues' (2002) cues for control would be beneficial for further development of this paradigm.

The current study also found that the attribution difference score significantly predicted support for use of physical force and support for use of a weapon, above and beyond the contribution of symbolic racism scores. This finding contributes to a growing body of research that analyzes racism's effect on support for various policies (Blatz & Ross, 2008; Greenwald et al., 2009; McConohay, 1983; Pfeifer & Bernstein, 2003; Matsueda & Drakulich, 2009), by detailing how symbolic racism levels have an effect on support for very specific police action through an attribution mechanism. This is also consistent with Sommers and Ellsworth's (2000) findings regarding a racial component affecting dispositional attributions in a criminal trial, although the current study furthers this research by incorporating the effect of both dispositional and situational attributions on police aggression scenarios, a perspective that has not been extensively researched in this manner.



The data in the current study provides interesting insight into the mechanisms one may use to inhibit prejudice. However, the data cannot make a strong claim that participants low in prejudice are inherently *less* racist. A burgeoning field of research on the motivation to avoid appearing racist indicates that modern Western culture has placed an increased emphasis on nonprejudicial behavior being a societal norm a modern culture must strive for (Gaertner & Dovidio, 2004; Norton et al., 2006; Plant & Devine, 1998). In fact, Plant and Devine's (1998) validated scale on internal and external motivations to respond without prejudice addresses this issue quite succinctly, and the use of this scale is certainly a future direction to help explain the current findings. While one could argue the nature of attitude change in this realm is merely for the sake of appearing nonprejudicial to others, or even to oneself (Crosby, Bromley, & Saxe, 1980; Dovidio & Gaertner, 1986), the current study does not intend to take this stance in a negative light. As implied by Festinger's (1957) cognitive dissonance theory, expression of egalitarian attitudes (a form of behavior) will hopefully lead to a disconnect between one's behavior and the deep-seeded, racist framework as mentioned by Mellor and colleagues (2001). One could imagine that this, over repeated instances, will initiate attitude change to minimize dissonance effects, thus creating a more egalitarian, nonprejudicial worldview. In fact, cognitive dissonance has been used in prior studies to induce changes in racial and intergroup attitudes (Gorski, 2009; Hing, Li, & Zanna, 2002; McFalls & Cobb-Roberts, 2001; Tatum, 1992), and the full process of how dissonance can reduce expression of negative stereotypes is outlined concisely in a set of studies by Monteith (1993). This perspective provides a hopeful outlook for



the data in the current study, in that explicit attitudes could, over time, lead to changes in implicit attitudes, to some degree.

One clear limitation of the current study is that the sex of the characters in the vignettes were held constant (two males). While this was done to simplify the design and analytic approach to the current study, the authors do not by any standard intend to implicate that these findings would necessarily be consistent in a female-female, malefemale, or female-male interaction. Further research should be done to pick apart the intricacies of police interactions with civilians; given that the current vignettes were modeled off of the recent Sandra Bland case, which was an interaction between a white, male officer and a black, female civilian, differential perceptions of mixed-sex vignettes and all-female vignettes are also of high import.

Furthermore, as the sex composition of the vignettes changes, one must also take into account *participant* sex. Prior research has demonstrated mixed outcomes from study to study regarding perceptions of police, with some finding no significant differences between males and females (Hadar & Snortum, 1975; Winfree & Griffiths), and others finding more negative perceptions of police in males as opposed to females (Correia, Reisig, & Lovrich, 1996; Wilson, 1985). Furthermore, work has been done establishing sex differences for the causal attribution mechanism in other areas; these include perceptions of occupational barriers, perceptions of female managers, perceptions of friendliness in the opposite-sex, and beliefs regarding academic performance (Abbey, 1982; Feldman-Summers & Kiesler, 1974; Jabes, 1980; Luzzo & Hutcheson, 1996; Parsons, Meece, Adler, & Kaczala, 1982). While the current study did not find significant differences between male and female participants, this is not to say



that other variations of the character's respective sexes would yield similar results. To this end, future research is needed to further establish the veracity of participant sex differences in perceptions of police, and the current study's attribution mechanism, particularly as the sex-composition of the presented vignettes changes.

Finally, future research should begin to focus not only on the intricacies of the attribution management mechanism and its effect on inhibiting racism, but also on methods with which we can instigate high prejudice participants to engage in similar processes as their low prejudice counterparts. Just as inhibition of prejudice can be bypassed through cognitive busyness tasks, time constraint, and being put in a position of social power, (Devine et al., 2002; Neely, 1977; Richeson & Ambady, 2002), we would expect there are conditions where the opposite effect can be achieved. For example, the link between attributions of guilt and severity of outcomes was mitigated when participants were held accountable for their responses in a study by Lerner, Goldberg, and Tetlock (1998). Accountability is a mechanism that Tetlock (1985) previously argued could either "transform participants into more complex, self-critical information processors" or simply make participants more cautious, creating a "generalized unwillingness to make dispositional attributions that might later prove awkward or difficult to justify" (p. 229). Regardless, this is a possible mechanism that could be applied to make high prejudice participants in the current paradigm engage in mechanisms similar to those of their low prejudice counterparts. Another possible route could be in the realm of empathy induction; Vescio, Sechrist, and Paolucci (2003) demonstrated that participants who were given instruction to take the perspective of the characters in the upcoming vignettes displayed more favorable intergroup attitudes, and



this link was mediated by the level of situational attributions made. It would certainly be of interest to apply this model to the current paradigm given its close parallel with the study by Vescio and colleagues (2003). While the long-term effects of empathy induction are likely context-specific, a handful of studies have shown evidence supporting the claim that empathy inductions can induce long-term changes in intergroup attitudes (Batson et al., 1997; Clore & Jeffrey, 1972; Galinsky, Maddux, Gilin, & White, 2008; Malhotra & Liyanage; 2005). Therefore, this route forward could certainly give further insight into the findings derived from the current study, could lead to a wide variety of novel research questions, and could allow for unique experimental designs to be introduced to the current paradigm. However, and perhaps most importantly, the continuation of this line of research can help to unravel the complex, dynamic nature of police-civilian interactions. Hopefully, with sound, steady research, the scientific community can shed light not only on the formation of attitudes regarding these police aggression scenarios, but how those attitudes lead to support for certain institutional policies, changes in law and judicial action, and alterations to our society's state of intergroup relations as a whole.



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Table 1.

Bivariate Correlations Between Variables of Interest

Measure	1	2	3	4	
1. Symbolic Racism	-	.265*	.247*	.225*	
2. Attributions		-	.564*	.485*	
3. Support Force			-	.648*	
4. Support Weapon				-	

Note: \*p < .001; N = 271. Attributions = dispositional – situational; lower scores indicate higher situational attribution.



Table 2.
Attributions Predicted by Symbolic Racism, Condition, and the SR by Condition
Interaction

mieraciion				
Variables	В	SE	Beta	t
Symbolic Racism	0.39	0.10	0.74	3.94**
Condition	3.19	1.12	0.67	2.86*
SR x Condition	-0.17	0.06	-0.81	-2.68**

Note: F(3, 267) = 9.75, p < .001.  $R^2 = .099$ . \*\*p < .001, \*p < .01. Dependent variable: Attribution difference score.



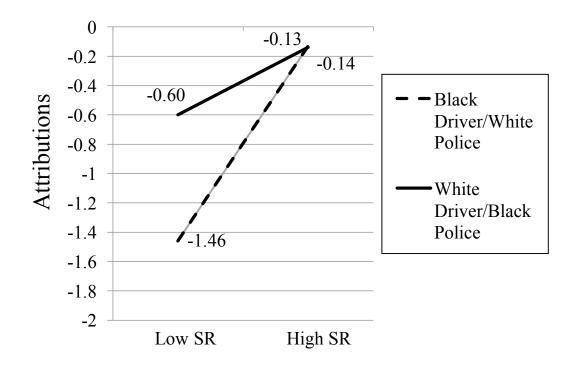
7 6 5.09 4.84 Attributions 5 4.25 4.42 4.39 4.27 4.31 3.67 2 1 HSR LSR LSR **HSR** Black Driver/White Police White Driver/Black Police dispositional **■** situational

Figure 1. Situational and Dispositional Attributions Separated by Condition and SR Group.

Note: LSR/HSR = Low/High Symbolic Racism.



Figure 2. Attribution Difference Score as a Function of SR Group.



Note: Attributions = Dispositional – Situational. Lower scores indicate higher situational attribution.



#### Appendix A

Police Vignette (White Cop, Black Victim)

The local community is demanding answers after a dash cam video was released to the public regarding Officer Jerry Parker's arrest of 28 year-old Jalen Smith after a routine traffic stop last Thursday.

In the dash cam video, Parker's police car is seen pulling away from an earlier traffic stop, doing a U-turn and following Smith's car for about 30 seconds, stopping him after his car changes lanes to the right without signaling.

After telling Smith, an African American resident of the city, why he has been stopped, he asks some questions and then walks away, apparently to complete paperwork or make inquiries. Parker, a caucasian officer in his 14th year on the force, then is shown returning to the vehicle.

"You seem very irritated," Parker says at one point after returning.

"I am, I really am," he replies, "because I feel like it's crap, what I'm getting a ticket for; I was getting out of your way, you were speeding up, tailing me, so I moved over and you stopped me so yeah, I am a little irritated but that doesn't stop you from giving me a ticket, so."

At this point in the video, Smith is seen beginning to open his door, as if he was going to step out, but suddenly shifts direction and leans forward, reaching towards the middle of his car; this prompts Officer Parker to draw his weapon, pointing it at Smith and loudly telling him to put his hands in the air and step out of the car.

"I want to see your hands up! I want to see your hands up!" Parker is heard saying twice.



"What the hell is wrong with you?", Smith is heard declaring in the video.

Parker is then seen opening his door, dragging Smith out of the driver's seat, and throwing him to the ground, placing his knee on his back to restrain him.

Smith is briefly heard saying, "I was reaching for my damn cigarette," to which Parker does not reply, subsequently putting Smith in handcuffs.



#### Appendix B

Police Brutality Vignette (Black Cop, White Victim)

The local community is demanding answers after a dash cam video was released to the public regarding Officer Jalen Smith's arrest of 28 year-old Jerry Parker after a routine traffic stop last Thursday.

In the dash cam video, Smith's police car is seen pulling away from an earlier traffic stop, doing a U-turn and following Parker's car for about 30 seconds, stopping him after his car changes lanes to the right without signaling.

After telling Parker, a caucasian resident of the city, why he has been stopped, he asks some questions and then walks away, apparently to complete paperwork or make inquiries. Smith, an African-American officer in his 14th year on the force, then is shown returning to the vehicle.

"You seem very irritated," Smith says at one point after returning.

"I am, I really am," Parker replies, "because I feel like it's crap, what I'm getting a ticket for; I was getting out of your way, you were speeding up, tailing me, so I moved over and you stopped me so yeah, I am a little irritated but that doesn't stop you from giving me a ticket, so."

At this point in the video, Parker is seen beginning to open his door, as if he was going to step out, but suddenly shifts direction and leans forward, reaching towards the middle of his car; this prompts Officer Smith to draw his weapon, pointing it at Parker and loudly telling him to put his hands in the air and step out of the car.

"I want to see your hands up! I want to see your hands up!" Smith is heard saying twice.



"What the hell is wrong with you?", Parker is heard declaring in the video.

Smith is then seen opening the door, dragging Parker out of the driver's seat, and throwing him to the ground, placing his knee on his back to restrain him.

Parker is briefly heard saying, "I was reaching for my damn cigarette," to which Smith does not reply, subsequently putting Parker in handcuffs.

### Appendix C

### Symbolic Racism Scale (Sears, 2002)

- 1. It's really a matter of some people not trying hard enough; if blacks would only try harder, they could be just as well off as whites. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)
- 2. Irish, Italian, Jewish, and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)
- 3. Some say that black leaders have been trying to push too fast. Others feel that they haven't pushed fast enough. What do you think? (1, trying to push too fast; 2, going too slowly; 3, moving at about the right speed)
- 4. How much of the racial tension that exists in the United States today do you think blacks are

responsible for creating? (1, all of it; 2, most; 3, some; 4, not much at all)

- 5. How much discrimination against blacks do you feel there is in the United States today, limiting their chances to get ahead? (1, a lot; 2, some; 3, just a little; 4, none at all)
- 6. Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)
- 7. Over the past few years, blacks have gotten less than they deserve (1, strongly agree;
- 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)



8. Over the past few years, blacks have gotten more economically than they deserve. (1, strongly agree; 2, somewhat agree; 3, somewhat disagree; 4, strongly disagree)

## Appendix D

# Attribution and Policy Support Items

Situational Attribution

"Overall, to what extent was the officer responsible for what happened to the driver

1 (*Not at All*) to 7 (*Completely*)

Dispositional Attribution

"How responsible was the driver for the outcome of this situation"

1 (*Not at All*) to 7 (*Completely*)

Support for Use of Physical Force

"To what extent was the officer justified to use physical force in this scenario?"

1 (*Not at All*) to 7 (*Completely*)

Support for Use of a Weapon

"To what extent was the officer justified to draw their weapon in this scenario?"

1 (*Not at All*) to 7 (*Completely*)



### Appendix E

Social Dominance Orientation (Pratto, Sidanius, Stallworth, & Malle, 1994)

Instructions: Which of the following objects or statements do you have a positive or negative feeling towards? Beside each object or statement, place a number from '1' to '7' which represents the degree of your positive or negative feeling." The scale was labeled very positive (7), positive (6), slightly positive (5), neither positive nor negative (4), slightly negative (3), negative (2), and very negative (1).

1. Some groups of people are simply inferior to other groups
2. In getting what you want, it is sometimes necessary to use force against other
groups.
3. It's OK if some groups have more of a chance in life than others
4. To get ahead in life, it is sometimes necessary to step on other groups
5. If certain groups stayed in their place, we would have fewer problems
6. It's probably a good thing that certain groups are at the top and other groups
are at the bottom.
7. Inferior groups should stay in their place
8. Sometimes other groups must be kept in their place
9. It would be good if groups could be equal
10. Group equality should be our ideal
11. All groups should be given an equal chance in life



12. We should do what we can to equalize conditions for different groups.

13. Increased social equality
14. We would have fewer problems if we treated people more equally.
15. We should strive to make incomes as equal as possible
16. No one group should dominate in society

### Appendix F

Right-Wing Authoritarianism Scale (Rattazzi, Bobbio, & Canova, 2007)

Please indicate your reaction to each statement according to the following scale:

- -4 = You very strongly disagree with the statement.
- -3 = You strongly disagree with the statement.
- -2 = You moderately disagree with the statement.
- -1 = You slightly disagree with the statement.
- 0 = You feel exactly and precisely neutral about the statement.
- 1 = You slightly agree with the statement.
- 2 = You moderately agree with the statement.
- 3 = You strongly agree with the statement.
- 4 = You very strongly agree with the statement.
- 1. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.
- 2. There is absolutely nothing wrong with nudist camps.
- 3. The majority of those who criticize proper authorities in government and religion only create useless doubts in people's mind.
- 4. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.
- 5. The situation in our country is getting so serious, the strongest method would be justified if they eliminated the troublemakers and got us back to our true path.



- 6. Homosexuals and feminists should be praised for being brave enough to defy "traditional family values".
- 7. What our country really needs instead of more "civil rights" is a good stiff dose of law and order.
- 8. People should pay less attention to the Church and the Pope, and instead develop their own personal standards of what is moral and immoral.
- 9. Obedience and respect for authority are the most important values children should learn.
- 10. The fact on crime, sexual immorality and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers, if we are going to save our moral standards and preserve law and order.
- 11. It is good that nowadays young people have greater freedom "to make their own rules" and to protest against things they don't like.
- 12. What our country needs most is disciplined citizens, following national leaders in unity.
- 13. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.
- 14. A lot of our rules regarding sexual behavior are just customs which are not necessarily any better or holier than those which other people follow.



## Appendix G

Belief in a Just World Scale (Rubin & Peplau, 1975)

Below are a list of statements regarding some of your personal beliefs about the world. Please indicate how much you agree or disagree with the statement by selecting the option that best fits your sentiments on a scale from 1 (Strongly Disagree) to 6 (Strongly Agree).

13. Good deeds often go unnoticed and unrewarded. \_\_\_\_\_

14. Although evil men may hold political power for a while, in the general course of
history good wins out
15. In almost any business or profession, people who do their job well rise to the top.
16. American parents tend to overlook the things most to be admired in their children
17. It is often impossible for a person to receive a fair trial in the USA
18. People who meet with misfortune have often brought it on themselves
19. Crime doesn't pay
20. Many people suffer through absolutely no fault of their own