# PRO-BLACK, PRO-WHITE, OR PROACTIVE:

# EXAMINING PREDICTORS OF IMPLICIT RACIAL BIAS IN BLACK PARTICIPANTS

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## ABSTRACT

The majority of research examining implicit racial bias has focused on the biases held by White participants (Jost, Banaji, & Nosek, 2004). By contrast, the implicit racial bias of minority group members has been largely overlooked, despite the potential for these associations to provide new insight into the nature of implicit social cognition. In the current research, I extended previous findings by examining predictors of implicit racial bias for Black participants. Specifically, across three studies conducted in two cultural contexts, I examined whether implicit racial bias was related to Black participants' racial ideologies, defined as an individual's philosophy about how racial group members should "live and interact with other groups in the larger society" (Sellers, et al., 1997, pp.806). Consistent with my expectations, implicit racial bias, as measured by the Implicit Association Test (IAT; Greenwald et al., 1998; 2003; Studies 1 & 2) and the Affective Misattribution Procedure (AMP; Payne et al., 2005; Study 3) was significantly correlated with racial ideologies. However, the specific relationship depended on the cultural context as well as the implicit measure. In Study 1, within the predominantly White Canadian context, Nationalist ideology was negatively correlated with implicit pro-White bias. By contrast, in Study 2, within the predominantly Black Jamaican context, Humanist ideology positively predicted pro-White bias (Study 2). In Study 3, again conducted in the predominantly White Canadian context but with a different measure of implicit racial bias (AMP), Nationalist ideology negatively predicted implicit pro-White bias, while both Assimilation and Humanist ideologies were positive predictors of implicit pro-White bias. In Study 3, explicit racial attitudes, system justification and individual versus collective success orientation were also significantly correlated with implicit racial bias as measured by the Affective Misattribution Procedure (AMP; Payne et al., 2005). As expected, however, ideologies accounted for unique

variance in implicit racial bias. The implications of these findings for understanding implicit racial bias in Blacks, in predominantly White and Black contexts, are discussed.

# DEDICATION

I would like to dedicate this work to the Black Canadian community and the global Black communities that continue to inspire, energize, and renew me. Although this research makes important contributions to our understanding of implicit bias in minority groups and even implicit bias more generally, for me this project was a labour of love. I hope I have contributed in some small way to enriching the knowledge base that we draw upon to strengthen our understanding of ourselves.

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In 2007, a segment of the television program *Dateline* introduced viewers to what had become a popular measure of implicit attitudes among social psychologists – the Implicit Association Test (IAT; Greenwald, McGee, & Schwartz, 1998). The IAT is designed to measure implicit attitudes, which are believed to be "unintentional, resource-independent, unconscious, or uncontrollable evaluations that are automatically activated by the presence of an attitude object" (Gawronski & DeHouwer, 2011, p. 284). Since being developed, the IAT has been used to measure a variety of attitudes, particularly those that test takers may be either unable or unwilling to express, including attitudes toward the elderly, the disabled, and the obese (Axt, Ebersole, & Nosek, 2014; Dovidio, Pagotto, & Hebl, 2011; Schwartz, Vartanian, Nosek, & Brownell, 2014). In this Dateline special the IAT presented was one of the most commonly used IATs in the social psychological literature (Greenwald et al., 1998), the Black-White race IAT. In this test, participants are required to quickly categorize Black faces, White faces, pleasant words, and unpleasant words by pressing response keys on a computer keyboard. In one set of critical trials, Black faces and pleasant words share one response key and White faces and unpleasant words share another response key. In the other set of critical trials, the opposite pairings (Black faces + unpleasant words and White faces + pleasant words) share a response key. The difference in the speed of association between the Black positive/White negative and the White positive/Black negative pairings is thought to represent an index of relative implicit preference for one racial group over the other.

The Black-White race IAT has been most frequently used with White participants and over numerous administrations researchers have found that about 78% of Whites show a pro-

White (versus Black) bias on this measure (Jost, Banaji, & Nosek, 2004). The extent of this pro-White bias is thought to reflect participants' relative racial preference or implicit attitudinal discrimination between racial groups (Greenwald et al., 1998). In line with this interpretation of the results, on the Dateline NBC special, White test takers who received feedback that their IAT results showed a preference for Whites over Blacks, expressed discomfort, shame, and some doubt over the validity of the results.

The Black-White race IAT has not been used extensively with Black participants and there is some ambiguity with interpreting the meaning of a relative preference for Blacks over Whites or Whites over Blacks among Black participants (Trawalter & Shapiro, 2010). A large-scale web-based database of implicit racial bias has reported that about 40% of Black participants show a pro-Black bias and 40% show a pro-White bias on the IAT (Jost et al., 2004). The sentiment expressed by Black participants showing a pro-Black bias on the Dateline NBC special was quite different from the White participants showing a pro-White bias. Black test takers whose IAT results showed a preference for Blacks over Whites did not express shame, but rather something more akin to pride. For Black test takers, shame was expressed when a pro-White bias was found.

This difference in personal response to IAT feedback between members of each racial group suggests that the meaning of these automatic racial biases is interpreted differently for each racial group – although in both cases the main focus seems to be on the associations with Black (as opposed to White) targets. Specifically, the White participants in this NBC special seemed to believe that the test was a measure of out-group attitudes, with pro-White attitudes reflecting hidden biases that were anti-Black in nature and with pro-Black biases reflecting healthy liberal attitudes toward out-groups. By contrast, the Black participants seemed to believe

that the test was a measure of in-group attitudes, with pro-Black biases indicating positive in-group regard and pro-White biases reflecting an internalization of the anti-Black stigma that is prevalent in the larger society. These differential interpretations are consistent with larger societal beliefs about out-group attitudes towards Blacks, and Blacks' ideal attitudes toward themselves, but are these lay perspectives really accurate? Are explicit in-group positivity and perceptions of out-group negativity reliably related to implicit racial bias in Blacks? Or do implicit attitudes reflect the strategies that Blacks use to navigate their social worlds? The primary goal of the present research was to examine predictors of implicit racial bias for Black participants across two cultures and test the novel hypothesis that implicit racial bias in Blacks is related to explicit racial ideologies.

**Brief History of Whites' Implicit Racial Bias**

The result of over fifteen years of research using the IAT with White participants suggests that for Whites, the IAT is, at least in part, measuring racial attitudes that can manifest as racism (Jost et al., 2009). Early research on racial bias has shown that when explicit measures were used to measure prejudice among Whites, positive attitudes were reported toward both Black and White racial groups, but when implicit measures (e.g., physiological responses) were used, more negative attitudes towards Blacks were revealed (Amodio & Mendoza, 2010; Crosby, Bromley, & Saxe, 1980; Rankin & Campbell, 1955). Researchers began to speculate as to the cause of this divergence in implicit and explicit attitudes. Some researchers suggested that socio-cultural norms discouraging prejudice motivated participants to hide their negative attitudes explicitly. They suggested that implicit measures, which were outside of the participants' control, were able to reveal a more accurate picture of participants' attitudes toward the out-group (Crosby et el., 1980, Sigall & Page, 1971). Other researchers suggested that the negative

attitudes might not be held consciously (Devine, 1989), so that respondents were not hiding their biases, but rather were unaware of them. There is some support for the idea that implicit attitudes are unconscious and/or uncontrollable. This is seen in the fact that for socially sensitive topics in particular, implicit attitudes tend to diverge from explicit attitudes such that explicit attitudes reflect more conformity to acceptable social norms (Greenwald et el., 1998; Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005; Nosek & Banaji, 2002). Interestingly a recent article by Hahn and colleagues (2014) contradicts this assertion by demonstrating that participants were surprisingly accurate in predicting the level of bias they would later reveal on an upcoming test of implicit racial bias (Hahn, Judd, Hirsch, & Blair, 2014).

**What Does an Implicit In-Group Preference Represent?**

Several hypotheses have been put forth to explain the consistent pro-White bias shown by White participants on implicit measures of racial attitudes. The Black-White race IAT was designed to measure implicit differences in attitude between two target categories, that the subject might be otherwise unable or unwilling to reveal (Greenwald et al., 1998) and as a result it is most frequently used as a measure of implicit bias when comparing two social groups (Lane, Banaji, Nosek, & Greenwald, 2007). It has, however, also been hypothesized that the negative racial attitudes that Whites hold toward Blacks (versus Whites) on the IAT or on other measures of implicit racial bias, could represent anxiety resulting from threat or the fear of appearing racist (Frantz, Cuddy, Burnett, Ray, & Hart, 2004), or sympathy resulting from the salience of past mistreatment of the out-group (Uhlmann, Brescoll, & Paluck, 2006). Another interpretation of a pro-White bias among Whites is that this bias could simply reflect in-group positivity rather than perceived out-group negativity (Brewer, 1999), and that in-group positivity is a "natural and unavoidable consequence" of belonging to a group (Mullen, Brown, & Smith, 1992; cf. Jost et

al., 2004; Scherer & Lambert, 2012). Interestingly, an article by Gonsalkorale and colleagues (2010) which compared the extent to which implicit pro-White and anti-Black associations are activated in Whites and Blacks calls this assertion into question. Their findings suggest that White participants show higher levels of both pro-White *and* anti-Black attitude activation than Black participants (Gonsalkorale, Allen, Sherman, & Klauer, 2010).

In addition, it has been suggested that the attitudes revealed by implicit measures, and specifically by the IAT, may not reflect the participants' personal beliefs, but rather pre-existing associations learned from the larger culture that are automatically elicited by the presentation of the targeted out-group (Olson, Fazio, & Han, 2009). The majority of research supporting this position was inspired by a desire to explain why some minority group members are not showing the automatic in-group preference consistently found with Whites. For example, some researchers have suggested that implicit racial bias may reflect the knowledge of existing status differences between racial groups (Axt et al., 2014; Jost, Pelham, & Carvallo, 2002; Newheiser & Olsen, 2012; Rudman, Feinberg, & Fairchild, 2002). Those researchers that have a status interpretation of implicit racial bias suggest that status differences between groups are learned from the larger society and that humans have an automatic tendency to show preference for groups of higher status (Axt et al., 2014; Newheiser & Olsen, 2012; Rudman et al., 2002).

In partial support of this possibility, a recent large-scale investigation of implicit racial bias used a multi-category race IAT to measure the relationship between status and implicit racial bias. Participants from four racial groups (Asian, Black, Hispanic and White) completed 6 IATs, each consisting of one of the possible six pairings between the groups. The results demonstrated that, irrespective of group status, each group showed a pro-in-group bias. The

ranking of status among the other groups however was consistent between groups: Whites at the top, followed by Asian, Black, and then Hispanic (Axt et al., 2014).

Other researchers have suggested that implicit racial bias may serve system-justifying needs (Jost et al., 2002; 2004; Nosek, Banaji, & Jost, 2009; March & Graham, 2015). System justification researchers suggest that individuals are aware of inequalities between groups in the social system and are motivated to defend these inequalities and to protect the status quo. They assert that this is a strong innate motivation for both advantaged and disadvantaged group members, and is evidenced by implicit in-group bias among advantaged group members and out-group bias among disadvantaged group members (Jost et al., 2004; March & Graham, 2015).

Irrespective of which of these interpretations is endorsed, research has demonstrated that there are negative behavioural consequences of implicit pro-White bias that adversely affect the outcomes of Blacks, and link implicit racial biases with racial discrimination (Amodio & Mendoza, 2010; Jost et al., 2009). Physiological evidence of the connection between pro-White bias on the Black-White race IAT and negative racial attitudes towards Blacks can be seen in research by Phelps and colleagues (2000). They found a positive correlation between increased amygdala activation, which is known to be associated with fear or threat responses, and exposure to Black versus White faces among White participants. The magnitude of this effect was positively correlated with a pro-White bias on the IAT (Phelps et al., 2000). Implicit pro-White bias among Whites has also been linked to negative inter-group behaviour such as colder non-verbal behaviour towards the out-group (Amodio & Devine, 2006; Dovidio, Kawakami, Johnson, Johnson, & Howard, 1997; Fazio & Olson, 2003), negative judgments of ambiguous actions of out-group members (Rudman & Lee, 2002), less aggressive medical treatment for a serious health condition suffered by an out-group member (Green, Carney, Pallin, Long, &

Raymont, 2007), discrimination in hiring practices (Bertrand, Chugh, & Mullainathan, 2005), self-reported racial discrimination practices and the use of racial slurs, ostracism of minority group members, engagement in threat or intimidation toward minority group members and even physical harm to minority group members and their property (Rudman & Ashmore, 2007). Negative consequences have also been shown for those Whites who hold pro-White attitudes, such as self-control depletion following interracial interactions (Monteith, Voils, & Ashburn Nardo, 2001; Shelton, Richeson, Salvatore, & Trawalter, 2005).

These findings suggest that, at least for Whites, implicit racial bias is predictive of socially significant negative behaviours toward out-group members in society. In line with initial theorizing on the meaning of the race IAT, “a recent refutation of critiques of the IAT” concluded that most Americans show a pro-White bias on the IAT and that there is strong evidence that these implicit attitudes exist and emerge in the form of racist behaviours (Jost et al., 2009).

**Whites’ Implicit Racial Bias and Ideology**

More recently, researchers have begun to examine the relationship between implicit racial bias and political ideology (Cunningham, Nezlek, & Banaji, 2004; Nosek et al., 2009). Political ideology has been defined as an "interrelated set of moral and political attitudes that possesses cognitive (egalitarian style/ individualistic style), affective (care and concern/ self-reliance and discipline), and motivational (equality, tolerance and social change/ stability and industry) components" (Jost, 2006 pp. 653; Kerlinger, 1984). Nosek and colleagues (2009) examined the relationship between implicit racial bias and political conservatism. They found that the explicit endorsement of conservatism versus liberalism was associated with higher levels of implicit pro-White bias among White Americans. They concluded that this finding represents a tendency

among conservatives to prefer high-status over low status groups. While liberals also showed this bias toward high-status groups, the effect was weaker. The researchers concluded that both ideology and social identity are factors in the prediction of implicit in-group attitudes.

Somewhat similarly, Cunningham and colleagues (2004) examined the relationship between implicit racial bias, explicit racial bias, and various markers of right wing ideological perspectives including right wing authoritarianism, protestant work ethic, and rigid cognitive styles of thinking including the need for closure and need for structure. They found that pro-White bias on the IAT was related to stronger endorsement of right wing ideology and the construct of rigid thinking. This study provides further evidence that ideologies, or interpersonal strategies and beliefs, can be related to implicit racial bias among Whites and that the degree of an individual's implicit racial bias may be related to his/her strategy for dealing with issues in the larger society.

**Brief History of Blacks' Implicit Racial Bias**

It is important to consider implicit racial bias among Blacks beyond the interpretation that has been presented for Whites, because Blacks and Whites can have very different orientations toward issues of race. While research has suggested that Whites are focused on avoiding appearing prejudiced or revealing prejudice (Devine & Vasquez, 1998; Richeson, & Shelton, 2003, 2007), research suggests that Blacks are focused on avoiding being the targets of prejudice (Inzlicht, McKay, & Aronson, 2006; Monteith & Spicer, 2000; Richeson, Trawalter, & Shelton, 2005; Shelton, Richeson, & Salvatore, 2005; Shelton et al., 2005). Further, while Whites' explicit racial attitudes have become more positive toward out-groups in the recent past, minority group members' explicit attitudes towards Whites have retained their negativity (Trawalter & Shapiro, 2010). The motivation to avoid prejudice and a related negativity toward

Whites is intensified when minority group members perceive their outcomes to be dependent on Whites (Shapiro & Neuberg, 2008). These different motivational perspectives likely influence and are influenced by both implicit and explicit racial attitudes, and in very different ways for each racial group.

By examining implicit racial bias in Blacks, we can gain insight into implicit social cognition from the non-dominant perspective, which can broaden our understanding of these processes. We can also better understand the problems that might occur when Blacks and Whites interact, outside of the assumption that all negativity is coming from Whites (Shelton, 2000). Furthermore, examining these implicit associations from another perspective provides us with more information about what these associations are predicting in other racial groups (Shelton, 2000). Although some researchers have hypothesized specific relationships between implicit and explicit racial attitudes in Black participants, the studies to date have produced mixed results (Ashburn-Nardo, Knowles, & Monteith, 2003; Livingston, 2002; Olson, Crawford, and Devlin, 2009).

For example, researchers have hypothesized that implicit racial bias among Blacks might reflect in-group positivity, such that individuals with a greater explicit orientation towards their group would also show more implicit in-group bias (Brewer, 1999; Ashburn-Nardo et al., 2003; Livingston, 2002; Olson et al., 2009). The results from some studies provide evidence in support of this hypothesis, but the findings are inconsistent across studies. Specifically, Livingston (2002) found no relationship between explicit measures of in-group positivity, as measured with feeling thermometers, and implicit racial bias as measured by the Black-White race IAT. By contrast, Ashburn-Nardo and colleagues (2003) found that explicit attitudes, as measured by the Racial Centrality and Private Regard subscales of the Multidimensional Inventory of Black

Identity (MIBI: Sellers, Rowley, Chavous, Shelton, & Smith, 1997), *were* correlated with implicit racial bias measured with the Black-White race IAT. Specifically, more pro-White implicit racial bias was associated with lower levels of private regard for African-Americans and lower levels of racial centrality. In a different study, Olson and colleagues (2009) found similar, although non-statistically reliable, relationships between the standard Black-White race IAT and racial centrality as well as feeling thermometers. When a personalized IAT, an implicit measure designed to exclude extra-personal influences learned from the larger society, was used, a larger, statistically reliable relationship emerged. Implicit pro-White attitudes were negatively correlated with explicit positive racial regard as measured by feeling thermometers, as well as higher levels of racial centrality.

Another related hypothesis, that has been examined in past research in this area, is that implicit racial bias among Blacks may reflect responses to perceived out-group negativity (Ashburn-Nardo et al., 2003; Jost & Banaji, 1994; Livingston, 2002; Richeson et al., 2005; Sidanius & Pratto, 1999), such that individuals who perceive the in-group as being viewed negatively by the out-group may be more likely to either direct this negativity toward the self (intro-punitive hypothesis) or direct the negativity back toward the out-group (extro-punitive hypothesis; Allport, 1954). Based on this theorizing, if implicit racial bias is related to perceptions of out-group negativity, then Blacks who perceive more negativity toward the in-group in society should show either an anti-Black (pro-White) bias or an anti-White (pro-Black) bias on the IAT depending on where the perceived negativity is subsequently directed.

There is some research to support this hypothesis, but again the findings are not consistent. Livingston (2002) hypothesized that perceived out-group negativity (as measured by participants' estimates of the percentage of Whites with low, moderate, or high levels of

prejudice) would predict both explicit and implicit racial bias but in opposing directions, with perceived negativity reducing explicit pro-White bias, but increasing implicit pro-White bias. Consistent with this possibility, Livingston (2002) found that Blacks who perceived higher levels of out-group negativity had less explicit pro-White bias (in line with Allport's extro-punitive hypothesis), but more implicit pro-White bias (in line with Allport's intro-punitive hypothesis), than those Blacks who perceived less out-group negativity.

Ashburn-Nardo and colleagues (2003) also examined the relationship between implicit racial bias among Blacks as measured by the IAT and perceived negativity. In contrast to Livingston's findings (2002), they found no relationship between implicit racial bias and either of their two measures of perceived out-group negativity (public regard subscale of the Multidimensional Inventory of Black Identity (MIBI): Sellers et al., 1997; and the Johnson Leci Attitudes towards Whites Scale: Johnson & Leci, 2003). They concluded that the failure to replicate this effect may have resulted from the use of different measures of perceived out-group negativity in the two studies. Olson and colleagues (2009) also collected measures of Blacks' implicit racial bias as measured by both a standard and a personalized IAT, and one measure of perceived out-group negativity: the public regard subscale of the Multidimensional Inventory of Black Identity (Sellers et al., 1997). No significant relationship emerged between perceived negativity and implicit racial bias for the standard IAT or the personalized IAT.

The inconsistency in past research regarding the relationships between explicit attitudes (both in-group positivity and perceived out-group negativity) and implicit racial bias may have resulted from the fact that explicit attitudes, along with other related racial attitudes and beliefs (some of which are examined in the current research project) act indirectly to predict implicit

racial bias. These explicit racial attitudes and beliefs may manifest in predictable combinations out of which the construct of racial ideologies have been developed.

**Blacks' Implicit Racial Bias and Racial Ideologies**

In the present research, I propose that implicit racial attitudes might be related to the *racial* ideologies that Black individuals use to navigate their social world. Racial ideologies are defined as beliefs held by group members about how to deal with issues of race in their environment (Sellers et al., 1997). They are thought to influence, and be influenced by the larger society, and to be a lens through which an individual perceives and responds to their social environment (Dawson, 2001). Racial ideologies as conceptualized in the Multidimensional Inventory of Black identity (MIBI: Sellers et al., 1997) are a complex and nuanced construct, involving a wide variety of racial attitudes in such realms as "political and economic development, cultural/social activities, intergroup relations, and perceptions of the dominant group" (Sellers, Smith, Shelton, Rowley and Chavous, 1998). Racial ideologies help to organize the varied explicit racial attitudes and beliefs measured in past research on Black identity into a meaningful framework through which variation in individual racial attitudes and beliefs can be understood and predicted. The Multidimensional Inventory of Black Identity (MIBI: Sellers et al., 1997) which was developed to assess African-American racial identity identifies 4 ideology subscales: Nationalist, Humanist, Assimilation, and Oppressed Minority Orientation ideologies. A Nationalist ideology focuses on the unique needs and well-being of Blacks, as well as working with other Blacks to protect and support Black interests. A Humanist ideology involves deemphasizing the importance of race overall and focusing on cooperation and harmony between all groups. With Assimilation ideology, the focus is on conforming to the larger "White" social context to the greatest extent possible to maximize integration. Finally, An Oppressed Minority

Orientation ideology involves allying oneself with members of other stigmatized groups to create a united front against oppression (Sellers et al., 1997).

For stigmatized minority groups in North America, and Blacks in particular, the stigma associated with race is pervasive and has far reaching consequences for mental health and social success (Branscombe, Schmitt, & Harvey, 1999; Hall & Carter, 2006; Neblett, Shelton, & Sellers, 2004; Seaton, Caldwell, Sellers, & Jackson, 2010; Shelton et al. 2005; Trawalter & Shapiro, 2010). Blacks' racial ideologies are related to these outcomes as well. According to Neblett and colleagues (2004), when considering how racial identity relates to coping with stigma and racism, researchers should include more than just the importance of race to one's identity (racial centrality), but should also consider racial regard and racial ideologies as these factors can also have an important impact on success in coping with stigma.

Support for this perspective was demonstrated in research examining the relationship between perceptions of discrimination, racial regard and racial ideology within both inter-group and intra-group contexts (Outten, Giguere, Schmitt, & Lalonde, 2010). Outten and colleagues (2010) hypothesized that because racial identity beliefs and ideologies are often inter-group in nature, they should be particularly relevant to the interpretation of inter-group attitudes. They found that in inter-group contexts, racial ideology, specifically Nationalist ideology, positively predicted perceived racism, while Assimilation and Humanist ideologies negatively predicted perceived racism (Outten et al., 2010). These findings suggest that the beliefs that Blacks hold about dealing with race (racial ideologies) may influence - or be influenced by - the experience of being Black within the social context. If this is so, then it is also likely that these same ideologies may influence (or be influenced by) both explicit *and implicit* perceptions of and

attitudes toward the dominant group in the social context. In the current research, I examined the relationship between implicit racial bias and both explicit attitudes and racial ideologies.

Although it has been found that minority group members have concerns that their outcomes are controlled by Whites (Shapiro & Neuberg, 2008) and that these concerns shape their explicit attitudes toward Whites, the possibility that *implicit racial bias* toward Whites might be related to the racial ideology that a minority individual endorses has been largely uninvestigated. One strategy that minority group members can use to avoid experiencing prejudice, and to reduce concerns about the lack of autonomy regarding their own outcomes, is to avoid interracial contact. This option is particularly viable for those with a high motivation to avoid prejudice, who hold less positive attitudes towards Whites, and who live in a more diverse context wherein avoidance is possible (Trawalter & Shapiro, 2010). This strategy and its associated features bear a resemblance to the Nationalist racial ideology[1] (Sellers et al., 1997), which involves focusing on the unique needs and well-being of Blacks and working with other Blacks to protect and support Black interests

If avoidance is not perceived to be possible due to population homogeneity or because Whites are perceived to control essential resources and outcomes, another strategy is to attempt to create positive relationships with Whites by building intimacy, conforming to White norms, and engaging in other compensatory behaviours (Trawalter & Shapiro, 2010). This strategy and its associated features bear some resemblance to both the Humanist ideology, which involves deemphasizing the importance of race overall and focusing on cooperation and harmony between all groups and an Assimilation racial ideology, which focuses on conforming to the larger "White" social context to the greatest extent possible to maximize integration (Sellers et al., 1997). According to Sellers and colleagues (1997), people may hold one predominant ideology

or they may hold various ideologies simultaneously and these may be dependent on the social context.

In order to be successfully implemented, these ideologies likely require very different behaviours and cognitive strategies to be applied on a daily basis. One theory of implicit racial bias development is that implicit racial bias requires strong associations to have been developed over time, through repeated exposure between the target (racial group) and the positive or negative evaluation (Fazio, Sanbonmatsu, Powell, & Kardes, 1986; Smith & DeCoster, 2000; Wilson, Lindsay, & Schooler, 2000; cf. Bargh, Chaiken, Govender, & Pratto, 1992; Dunham, Baron, & Banaji, 2008; Ranganath & Nosek, 2008). It is conceivable that the implementation of the strategies associated with each of these ideologies could provide just such repeated exposure between racial groups and evaluative responses.

An alternative theory of implicit racial bias development suggests that an individual can manifest implicit racial bias instantly in response to the pursuit of a goal. Once the goal is set, target objects related to that goal are immediately evaluated more positively (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Troetschel, 2001; Ferguson & Cone, 2013). There are goals associated with particular racial ideologies (e.g., Nationalist ideology: in-group autonomy, Assimilation ideology: out-group acceptance), and based on these goals different racial groups might be identified as a target object (Nationalist ideology: in-group as a target object, Assimilation ideology: out-group as a target object) and thereby be associated with different implicit racial biases.

A few studies have provided preliminary evidence of a relationship between ideology and implicit racial bias among Black participants in a North American context (Nosek et al., 2009; Olson et al., 2009). Nosek and colleagues examined the relationship between implicit racial bias

and political conservatism among Black participants. Although the Black sample on the whole showed a pro-Black bias, in line with White conservatives, Black conservatives showed more pro-White bias than Black liberals. This effect, however, was weaker among Blacks than Whites. The researchers concluded that this finding represents the tendency among conservatives (Black or White) to prefer high-status over low status groups. More recent research, however, suggests that the relationship between implicit racial bias and ideology may be more complex.

Specifically, Olson and colleagues (2009) examined the relationship between a standard IAT, a personalized IAT (designed to limit the effects of the extra-personal associations learned from the larger society), and implicit and explicit racial attitudes among Blacks. To measure explicit racial attitudes, the four ideology subscales of the Multidimensional Inventory of Black Identity (MIBI: Sellers et al., 1997) along with the three other subscales from the MIBI, were used. Olson et al. found that pro-White attitudes on both implicit measures negatively correlated with Nationalist ideology (although only marginally for the traditional IAT) and implicit pro-White bias as measured by the personalized IAT positively correlated with Humanist ideology. Although not a main focus of their study, this finding provides initial evidence that implicit racial bias may be related to explicit racial ideologies – at least among African-Americans living in the Southern United States. The ideology that celebrates the uniqueness of the in-group and encourages individuals to promote and protect the in-group's interests (Nationalist ideology) was negatively correlated with a more positive implicit orientation toward the racial out-group, while that which requires the individual to minimize the importance of race (Humanist ideology) was positively correlated with a more positive implicit orientation toward Whites.

## Overview

The goal of this research was to increase our understanding of implicit racial biases among Black participants. The primary goal in each of the three studies (Goal 1) was to examine whether a significant relationship would emerge between racial ideologies and implicit racial bias in Black participants. Building on previous findings, I hypothesized that endorsement of a Nationalist ideology would be negatively correlated with implicit pro-White attitudes while Humanist and Assimilation ideologies would be positively correlated with implicit pro-White attitudes. This was tested in both Canada (Studies 1 and 3) and Jamaica (Study 2) using both the Implicit Association Test (IAT; Greenwald et al., 1998; 2003) in Studies 1 through 3, and the Affective Misattribution Procedure (AMP; Payne, Cheng, Govorun, & Stewart, 2005) in Study 3, as measures of implicit racial bias.

A second goal in each of these studies (Goal 2) was to examine the relationships between implicit racial bias and explicit racial attitudes, including in-group positivity (Studies 1, 2 and 3: Goal 2a) and perceptions of out-group negativity (Studies 1, 2 and 3: Goal 2b), which has been examined in the literature but with mixed results.

A third goal of this research was to test another hypothesized predictor of implicit racial bias: System Justification. According to System Justification Theory, implicit out-group preference among disadvantaged group members should be related to the system justification motive, defined as a motivation among both advantaged and disadvantaged group members to believe the system in which they live (social, political and economic) is fair and legitimate, even when confronted with systemic inequality (Jost et al., 2004). In Studies 2 and 3, I empirically tested this possibility by examining the relationship between self-reported system justifying beliefs and implicit racial bias (Goal 3). In line with Jost and colleagues' (2004) theorizing, I

predicted that higher levels of system justifying beliefs would positively predict pro-White implicit racial bias.

In addition to these three main goals, in Study 3 I aimed to replicate and extend the findings of Study 1 by measuring implicit racial bias using both a category based (IAT) and exemplar based (AMP; Payne et al., 2005) measure among Black participants in Canada. In addition, I examined one final potential relationship with implicit racial bias among Black participants: collective success orientation, defined as valuing the success and empowerment of both one's racial group and oneself as an individual within the larger social context, versus individual success orientation defined as valuing one's individual success and empowerment irrespective of the outcomes of the group as a whole (Goal 4).

Finally, I was also interested in examining whether the broad and nuanced construct of racial ideology would account for greater variability in implicit racial bias above and beyond variance accounted for by other predictors including, explicit racial attitudes (Studies 1-3), system justification (Studies 2 and 3) and individual versus collective success orientation (Studies 3; Goal 5). Racial ideologies are a complex and nuanced construct, involving a wide variety of racial attitudes in such realms as "political and economic development, cultural/social activities, intergroup relations, and perceptions of the dominant group" (Sellers et al., 1998, p. 27). It is theorized that racial ideologies help to organize the explicit racial attitudes and beliefs measured in past research into a meaningful framework through which variation in individual racial attitudes and beliefs can be understood and predicted. Demonstrating the proposed relationships between ideology, implicit racial bias, and the other racial attitudes measured in the current project, would also provide evidence that although other beliefs might be related to

Black's implicit racial bias, racial ideologies can account for variance in implicit racial bias over and above that explained by the other racial attitude measures.

## Study 1

The primary goal of Study 1 was to examine the relationship between racial ideologies and implicit racial bias in Black Canadian participants. I hypothesized that the racial ideology that promotes the importance of racial group membership (Nationalist ideology) would correlate negatively with pro-White (versus Black) bias on an implicit measure of racial attitudes and the measures that downplay the significance of race in the social context (Humanist ideology), or promote conformity into the larger society (Assimilation ideology) would correlate positively with implicit pro-White (versus Black) bias. A second goal (Goal 2) was to examine the relationships between implicit racial bias and in-group positivity (Goal 2a) and perceptions of out-group negativity (Goal 2b), which have been examined in the literature with mixed results in studies with African-Americans. As such I had no a priory prediction as to whether in-group positivity and perceptions of out-group negativity would be related to implicit racial bias in this study.

## Method

### Participants and Design

One hundred and four Black students (80 female and 24 male) were recruited from a large urban university campus in Toronto, Canada, to participate in a study that was purportedly designed to validate a number of measures of Black racial identity with a Black-Canadian population[2]. Data were excluded for 1 participant for whom the computer malfunctioned and 2 participants for whom experimenter error resulted in unusable data. This left a total of 101 Black students, $M_{age}$ = 21.34, $SD$ = 4.41. Participants were offered either $20 or course credit in exchange for their participation.

**Measures**

**Implicit racial bias**. The Black-White race Implicit Association Test (IAT) measures automatic associations thought to reflect implicit racial bias (Greenwald et al., 1998; Greenwald, Nosek & Banaji, 2003). For this task, participants were required to categorize Black faces, White faces, pleasant words, and unpleasant words as quickly as possible by pressing response keys on a computer keyboard. In one set of critical trials, Black faces and pleasant words shared a response key and White faces and unpleasant words shared another response key. In the other critical block, the opposite pairings (Black faces + unpleasant words and White faces + pleasant words) shared a response key. Within each block, stimuli were randomly presented. The difference in speed of association between the Black positive/White negative and the White positive/Black negative pairings represents an index of relative preference for Whites over Blacks. Reliability analyses revealed good internal consistency, $\alpha = .77$ (see Table 1).

**Racial ideologies**. Racial ideologies were measured using three of the seven subscales from the MIBI, a measure of Black racial identity. Responses for all subscales were given on a Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). The Racial Ideology Subscales measure attitudes and beliefs held by an individual, about how Blacks should deal with the issues of race in their environment (Sellers et al., 1997). There are a total of four ideology subscales, which include the three of interest: Nationalist, Humanist, and Assimilation ideologies. ***The Nationalist ideology Subscale*** is a measure of how strongly an individual endorses the unique needs of Blacks as a racial group and promotes the idea of Blacks establishing independence from the social hierarchy. It is a nine-item scale featuring items such as "Black students are better off going to schools that are controlled and organized by Blacks" and "Black people must organize themselves into a separate Black political force". Reliability

for this subscale was good, $\alpha$ = .79 (see Table 1). ***The Humanist ideology Subscale*** measures the importance of the commonalities between all races and being a member of the human race and endorses minimizing the significance of race in the social hierarchy. It is a nine-item scale featuring items such as "Blacks would be better off if they were more concerned with the problems facing all people than just focusing on Black issues" and "Being an individual is more important than identifying oneself as Black". Reliability for this scale was adequate, but lower than that reported in the initial investigation of reliability with an African American population (Sellers et al., 1997), $\alpha$ = .61 (see Table 1). ***The Assimilation ideology Subscale*** is a measure of how strongly an individual endorses the similarities between Blacks and the larger society and promotes working within and assimilating to, the established social hierarchy. It is a nine-item scale featuring items such as "Blacks should try to work within the system to achieve their political and economic goals" and "Because America is predominantly White, it is important that Blacks go to White schools so that they can gain experience interacting with Whites". Reliability for this scale was again adequate, but lower than that reported in the initial validation study for the MIBI (Sellers et al., 1997), $\alpha$ = .59 (see Table 1). All measures used are provided in Appendix A.

**In-group positivity.** As in the study by Ashburn-Nardo and colleagues (2003), in-group positivity was measured using ***the Private Regard Subscale*** of the MIBI which measures how positively or negatively an individual feels about being Black. Responses for this subscale were given on a Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). It is a six-item scale featuring items such as "I feel good about Black people" and "I am happy that I am Black". Reliability for this scale was comparable to that reported in the initial investigation of construct

reliability in an African American population, and not outside of the norm for subscales of this length (Briggs & Check, 1986; Sellers et al., 1997), $\alpha$ = .59 (see Table 1).

**Perceived out-group negativity.** The present study included three measures of perceived out-group negativity. The first, used previously by Ashburn-Nardo et al. (2003) was the Public Regard Subscale of the MIBI (Sellers et al., 1997) which measures individuals' perceptions of how positively or negatively *other* racial groups feel about Blacks. . Responses for this subscale were given on a Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). The subscale has six items including statements such as "In general, others respect Black people" and "In general, other groups view Blacks in a positive manner". Reliability for this scale was good (Sellers et al., 1997), $\alpha$ = .77 (see Table 1). The second was the Academic Subscale of The Perceived Racism Scale (PRS; McNeilly et al., 1996). This scale was designed to measure Black students' perceptions of racism in an academic setting. It includes items such as "My academic achievement has suffered because of my race" and "When I excel academically, I am looked upon as an exception to my race", and asks respondents to indicate how often this has happened in the past year, as well as over the course of their academic life from 0 (never) to 5 (several times a day). These scales had good reliability: $\alpha$ = .88 and .93 respectively. The final measure of perceived out-group negativity was the Race-Based Sensitivity to Rejection Scale (RSQ-Race; Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002; see Appendix A), which measures an individual's anxiety and expectations regarding rejection based on his/her racial group membership (Mendoza-Denton, et. al., 2002). Participants were asked to evaluate their own predicted level of anxiety associated with race based rejection as well as their expectation of race based rejection for 12 scenarios. Responses were given on a six-point scale ranging from 1 (very unconcerned) to 6 (very concerned) for the anxiety measure and from 1 (very unlikely) to 6 (very

likely) for the expectation measure. These two scores are then multiplied to create a final score. Reliability for this scale was also good $\alpha = .91$.

**Procedure**

Upon arrival each participant was greeted by a Black experimenter who asked them to complete a series of randomly ordered questionnaires followed by a computer task. The measures of interest: The Multidimensional Inventory of Black Identity (MIBI: Sellers et al., 1997), the Perceived Racism Scale (McNeilly et al., 1997) and the Race-Based Rejection Sensitivity Scale (Mendoza-Denton, et al., 2002) (see Appendix A), were embedded within other measures that were being collected as part of a larger research project[3]. After completing the questionnaires, participants started into the computer task, which was a Black-White race IAT (Greenwald et al., 1998). This procedure took approximately 40 minutes. When the study was completed, participants were debriefed and thanked for their participation.

## Results

**Descriptive Statistics**

Descriptive Statistics for Study 1 are reported in Table 1.

**Scoring the IAT**

The IAT was scored according to Greenwald and colleagues (2003). Response latencies lower than 300 milliseconds and higher than 10,000 milliseconds were recoded as 300 and 10000 milliseconds respectively. Each participant's mean response latencies within each block of critical trials were then computed. A difference score was calculated by subtracting average response latencies for the Black positive/White negative trials from the average response latencies for the White positive/Black negative trials and then dividing this score by the pooled standard deviation. Higher numbers indicate greater pro-White bias (Greenwald et al., 2003).

One participant, whose *D* score was greater than 3 standard deviations above the mean, was excluded as an outlier. A test of the implicit racial bias of the Canadian Black sample revealed no bias overall, one-sample $t(100) = -1.37$, $p = .17$, $D = -0.04$, $SD = .27$, see Table 1.

**Implicit Racial Bias and Racial Ideologies (Goal 1)**

To test my first hypothesis, that implicit racial bias and specific ideologies would be related, bi-variate correlations were examined between the IAT score and each of the three ideology subscales of interest from the MIBI (Sellers et al., 1997). As expected, a significant correlation emerged between Nationalist ideology and implicit racial bias, $r(101) = -.24$, $p = .02$, such that, those participants who more strongly endorsed Nationalist ideology as a strategy for dealing with race in their environment also had less implicit pro-White (versus Black) bias (see Table 2). While in the anticipated direction, the predicted positive relationships between implicit pro-White bias and both Humanist, $r(101) = .15$, $p = .14$, and Assimilation ideologies, $r(101) = .12$, $p = .23$, were not significant.

**Implicit Racial Bias and In-Group Positivity (Goal 2a)**

To test whether implicit racial bias was correlated with Black participants' explicit in-group positivity (Goal 2), bi-variate correlations were examined between IAT scores and private regard scores. Unlike the previous findings of Ashburn-Nardo and colleagues (2003) with African-Americans, no significant correlation emerged between implicit racial bias and private regard, $r(101) = -.16$, $p = .11$, see Table 2. However, there was a non-significant trend in the anticipated direction such that those higher in implicit pro-White attitudes had lower levels of private regard.

**Implicit Racial Bias and Perceived Out-Group Negativity (Goal 2b)**

To test whether implicit racial bias reflected Black participants' awareness and possible internalization of perceived out-group negativity (Goal 2b), bi-variate correlations were examined between implicit racial bias and the three measures of perceived out-group negativity. No significant relationship emerged between implicit racial bias and either public regard, $r$ (101) = .11, $p$ = .27, or the Race-based Rejection Sensitivity Scale, $r$ (101) = -.07, $p$ = .47. For The Perceived Racism Scale, only a non-significant trend in the anticipated direction emerged for racism perceived over the past academic year, $r$(101) = -.17, $p$ = .09, such that those participants who had less pro-White bias also perceived more racism over the course of the academic year. This relationship did not hold true for perceived racism over the course of the participants' academic life, $r$(101) = -.12, $p$ = .23, see Table 2.

**Regression Analyses**

To examine the hypothesis that racial ideologies would account for more of the variability in implicit racial bias than predictors used in past research, a hierarchical regression analysis with implicit racial bias (IAT) as the dependent variable was conducted. In step 1, explicit in-group positivity measured by the Private regard subscale, and explicit perceived out-group negativity measured by the perceived racism scale were entered. Model 1 was significant, $F$ (2, 98) = 3.16, $R^2$ =.06, p = .047, with both private regard, $\beta$ = -.18, $t$ = -1.83, $p$ = .07, and perceived racism, $\beta$ = -.18, $t$ = -1.92, $p$ = .06, jointly contributing to implicit racial bias. In three separate analyses, each ideology (Nationalist, Humanist, and Assimilation ideology) was added in step 2. When Nationalist ideology was included no significant improvement in the prediction of implicit racial bias emerged, $\Delta F$(3, 98) = 2.45, $\Delta R^2$ =.02, p = .12. The effect of private regard, $\beta$ = -.16, $t$ = -1.60, $p$ = .11, and perceived racism, $\beta$ = -.10, $t$ = -.94, $p$ = .35, were slightly reduced

and although the effect of Nationalist ideology was marginal and in the hypothesized direction, $\beta$ = -.17, $t$ = 1.57, $p$ = .12, it was not statistically significant (see Table 3). When Humanist ideology was entered in Step 2, no significant improvement in the prediction of implicit racial bias emerged, $\Delta F(3, 98) = .41$, $\Delta R^2 = .004$, p = .52. Betas for private regard, $\beta$ = -.18, $t$ = -1.77, $p$ = .08, and perceived racism, $\beta$ = -.15, $t$ = -1.38, $p$ = .17, were largely unchanged and Humanist ideology did not contribute to the prediction of implicit racial bias, $\beta$ = -.07, $t$ =.64, $p$ = .52, see Table 3. Finally, when Assimilation ideology was included in Step 2, there was no improvement in the prediction of implicit racial bias, $\Delta F$ (3, 98) = .28, $\Delta R^2 = .003$, p = .59. Betas for private regard, $\beta$ = -.18, $t$ = -1.77, $p$ = .08, and perceived racism, $\beta$ = -.17, $t$ = -1.61, $p$ = .11, were largely unchanged and Assimilation ideology did not contribute to the prediction of implicit racial bias, $\beta$ = .06, $t$ =.53, $p$ = .60 (see Table 3).

## Discussion

The primary aim of Study 1 was to examine the relationship between implicit racial bias and racial ideologies (Goal 1). I predicted that the measure of Black racial ideology that promotes the importance of racial group membership (Nationalist ideology) would correlate negatively with pro-White bias on the IAT, and that measures of Black racial ideology that downplay the significance of race in the larger society (Humanist ideology) or promote conformity to and integration within the larger society (Assimilation ideology) would correlate positively with pro-White bias on the IAT. These hypotheses were partially supported. Black-Canadian participants who more strongly endorsed Nationalist ideology as an ideology also showed less implicit pro-White bias. Neither Humanist nor Assimilation ideology, however, were reliably related to implicit racial bias in the Black-Canadian sample. This finding provides preliminary support for the possibility that implicit racial bias in Blacks may influence and/or be

influenced by the racial ideologies that they employ in particular racial contexts. It is possible that the relatively low reliability estimates for both the Assimilation and Humanist ideology subscales in this sample may have weakened the hypothesized relationships with these variables (Sellers et al., 1997).

The second goal of Study 1 was to examine the relationship between implicit racial bias and both explicit in-group positivity (Goal 2a) and perceived out-group negativity (Goal 2b). Somewhat consistent with the findings of Ashburn Nardo and colleagues (2003), as well as Olson and colleagues (2009), I found a marginally significant relationship between implicit pro-White attitudes and private regard. As participants' personal evaluation of Blacks increased, their implicit pro-White attitudes decreased (Goal 2a). This relationship was, however, not statistically significant, suggesting that explicit racial attitudes may not be the most reliable predictors of implicit racial biases. Further, due to the low reliability of the private regard measure in this sample, firm conclusions regarding this relationship cannot be drawn. Although a relationship between explicit in-group positivity and implicit racial bias has been found in past research (Ashburn-Nardo et al, 2003), it has not been found consistently (Livingston, 2002) even when the same measures were employed (Olson et al., 2009).

In addition, of the three measures of perceived out-group negativity, I found only a marginally significant relationship between perceived racism in an academic context over the course of the year and implicit pro-White bias (Goal 2b) wherein higher levels of perceived racism were related to less implicit pro-White bias. This finding is consistent with past research examining the relationship between explicit racial attitudes and perceived out-group negativity (Monteith & Spicer, 2000), and Allport's (1954) extropunitive hypothesis which asserts that for stigmatized group members, perceiving negativity from the out-group toward the in-group could

lead to an anti-White (pro-Black) bias (Richeson et al., 2005; Sidanius & Pratto, 1999). This finding is in contrast to Livingston's assertion that perceived out-group negativity is internalized and then directed toward the in-group resulting in implicit out-group preference (2002).

Finally, I tested whether racial ideologies would account for more of the variance in implicit racial bias, than explicit attitudes. Although the correlations between in-group positivity (private regard) and perceived out-group negativity (perceived racism) were not statistically reliable, when entered in model 1of a hierarchical regression, they jointly accounted for a small but statistically significant portion of the variance in implicit racial bias. In step 2 of each of the regressions, however, the ideologies failed to account for increased variance in implicit racial bias, as was predicted. Although Nationalist ideology accounted for a marginally significant increased percentage of variance, this was not the case for Assimilation or Humanist ideologies. Again, it is possible that this null finding may have resulted from the relatively low reliabilities of the Assimilation ideology, Humanist ideology and Private regard subscales of the MIBI in this Canadian sample (Sellers et al., 1997). Taken together these results suggest that for Black Canadians, Nationalist ideology is related to implicit racial biases as measured by the Implicit Association Test, however it does not account for significantly more of the variance in these biases than explicit attitudes.

## Study 2

The primary goal of Study 2 was to extend the finding of Study 1 by examining whether racial ideologies are related to implicit racial bias, in the predominantly Black social context of Jamaica (Goal 1). As in Study 1, I predicted that racial ideologies would be related to implicit racial bias. However, because Blacks' strategies for success should differ in a predominantly Black versus a predominantly White context I predicted that different racial ideologies might

predict implicit racial bias in Study 2. Specifically, I tested the possibility that the Humanist ideology would be positively correlated with implicit pro-White bias in this predominantly Black community. In addition in line with Study 1, I again examined the relationships between in-group positivity (Goal 2a) as well as perceived out-group negativity (Goal 2b) and implicit racial bias. Given the mixed findings of the past, and the novelty of this population, these analyses were exploratory.

A third goal of Study 2 (Goal 3) was to examine whether system justification was related to implicit racial bias. System justification is defined as the need among both advantaged and disadvantaged group members to view the social system in which they live as fair and legitimate. According to system justification theory, this need causes individuals to express support for the status quo, even in circumstances where such behaviour is not personally advantageous. More recently it has been proposed that for the disadvantaged, the system justification motive should be more likely to emerge under specific circumstances including when the system has been threatened, the system is difficult or impossible to change, or the individual perceives him/herself to be dependent on or controlled by the system (Kay, Gaucher, Napier, Calan, & Laurin, 2008). This line of theorizing is consistent with research examining acculturation strategies among immigrants (Lalonde & Cameron, 1993) that suggests that the choice to adopt an Assimilation ideology over a heritage culture maintenance strategy (similar to Nationalist ideology) is dependent on perceptions of the permeability of the dominant group.

Building on this theorizing, in Study 2 I examined whether stronger endorsement of system-justifying beliefs would be related to higher levels of implicit pro-White bias in Jamaica (Goal 3). System justification has been used to explain the presence of implicit out-group preference among some minority group members (Axt et al., 2014; Jost et al., 2004). Although

implicit out-group favouritism has been interpreted as evidence of system justification (Jost et al., 2002; Nosek et el., 2002; Rudman et el., 2002), the relationship between individual differences in implicit racial bias and self-reported endorsement of system justifying beliefs had not yet been examined in the literature. As such, I examined this directly in Study 2. In line with Jost and colleagues, (2004), I predicted that the endorsement of system-justifying beliefs would be positively related to higher levels of implicit pro-White bias. I also tested whether racial ideologies and system justification would account for unique variance in implicit racial bias over and above in-group positivity and perceived out-group negativity (Goal 3b).

**Racial Ideologies and System Justification in Jamaica**

Most of the research examining Black racial identity has been conducted in contexts where Blacks are a stigmatized minority group dealing with a dominant non-stigmatized group (Phinney, 1996). As a result, much of the theorizing regarding Black racial identity has been connected with the experience of racism and coping strategies among Blacks operating as a minority. This is true in the predominantly White context of the United States, as well as in Canada where Study 1 was conducted. In the United States, Shockley and colleagues (2014) hypothesized a relationship between system justification and racial ideology among Black American participants, such that Nationalist and Minority orientation ideologies would be negatively related to system justification while Assimilation and Humanist ideologies would be positively related to system justification. This hypothesis was partially supported. Nationalist ideology negatively, and Assimilation ideology positively, predicted system justification (Shockley, Wynn & Ashburn-Nardo, 2014).

In Study 2, I extended this line of research by examining implicit racial bias, system justification and racial ideologies in a different cultural context: Kingston, Jamaica. Jamaica is a

tropical island located in the Caribbean Sea. As of the 2009 census it had a population of close to 3 million people of which 91% were of African descent, approximately 7% were of mixed race, and the remaining 2% were of East Indian, Asian and European descent. In spite of this rather homogeneous racial composition, Jamaica's national motto is "Out of many, one people".

Due to the racial composition and the history of this predominantly Black environment, it seemed likely that both Assimilation and Nationalist ideologies might be understood differently than in a predominantly White context. Assimilation ideology, an ideology that encourages integration into a White majority, may be less relevant if there is no White majority physically present in the environment. Similarly, Nationalist ideology, an ideology that encourages Black unity and promotes the interests of Blacks, may also seem less relevant, if Black interests are already perceived to be protected in the predominantly Black context. This suggestion is supported by research on the generalizability of the MIBI in a Caribbean context (Bernard, 1999). A factor analysis on the MIBI ideology items from a sample of Black Trinidadians and Jamaicans revealed that the Assimilation ideology subscale of the MIBI did not hold up as an independent factor and four of the nine items from the Nationalist subscale had to be dropped resulting in the scale taking on a somewhat different meaning (Bernard, 1999). Bernard concluded that these two subscales may be less universally understood than the Humanist ideology subscale which showed adequate internal consistency. For this reason, I predicted that only Humanist ideology, which focuses on minimizing the significance of race in the social hierarchy, would emerge as a significant predictor of implicit racial bias in this context and, specifically predicted that it would correlate positively with implicit pro-White bias (Goal 1).

There are three main justifications for this prediction. First, one important difference between Blacks in a predominantly Black environment and Whites in a predominantly White

environment, is that although both might be the majority within their respective environments, Black racial identity is globally stigmatized, while White racial identity is not. Therefore Blacks can be a numerical majority while concurrently holding a stigmatized status. This is the case in Jamaica, wherein political and economic status established during slavery and persisting to the present day, has been based on a racial hierarchy with "…a poor-Black man, a middle-class and privileged brown man (Blacks of mixed race), and a rich or wealthy White man (Bernard, 1999). The "out-group" perpetuating the systemic inequality in Jamaica is not clearly defined, because most of the current political and economic power is currently in the hands of mixed Blacks (Nettleford, 1963, pp.66; see also Bernard, 1999; Cramer & Anderson, 2003) and the White presence is largely invisible. There may be differing perceptions as to whether these privileged mixed Blacks represent an in-group in power, or an out-group in power. For this reason, in contrast to predominantly White contexts, attitudes towards the legitimacy of the devalued status of Blacks may be somewhat ambivalent for some Jamaicans. This ambivalence might facilitate the adoption of a system justifying ideology, like Humanist ideology.

In further contrast to White majority contexts, there is little advantage conferred upon Blacks in Jamaica as a result of their majority status, yet a good deal of tension associated with their stigmatized status (Nettleford, 1963). Mixed Blacks and Whites in Jamaica are an idealized group (Bernard, 1999, Cramer & Anderson, 2003; Nettleford, 1998) and this idealization is becoming "a source of great irritation" to the Black majority (Nettleford, 1963, pp. 64). This quote suggests that for many Jamaicans, an awareness of this social injustice exists. There are still some Jamaicans, however, who promote the philosophy that they are neither Black nor White but Jamaican, purportedly being "a mixture of races living in perfect harmony" and "providing a useful lesson to a world torn apart by race prejudice" (p.62). This philosophy, along

with the Jamaican national motto “Out of many, one people”, also suggests that Humanist ideology is likely a component of some Jamaican’s identities, in spite of its contradiction with objective reality.

A final means to determine which racial ideology might predict implicit racial bias among Blacks in a predominantly Black context is to look at the ideologies of other majority group members in a majority context. Whites in the majority context of the United States commonly endorse a colour-blind ideology (Bonilla-Silva, 2003; Neville, Awad, Brooks, Flores, & Bluemel, 2013) wherein all human beings are judged as the same and any racial differences are de-emphasized. Recent research has shown that a colour-blind ideology is also commonly used in Canada (Kawakami et al., under review). It has been proposed that this ideology allows advantaged majority group members in North America, to dismiss systemic advantages resulting from racial stratification, to promote the status quo, and to maintain in-group dominance (Bonilla-Silva, 2003, Brown et al., 2003, Frankenburg, 1993; Neville et al., 2013) consistent with system justification theory (Jost et al., 2004; Neville et al., 2013). This assertion is also consistent with a finding by Richeson and Nussbaum (2003) that manipulating the salience of colour-blind versus multicultural ideology among Whites increases implicit pro-White biases, which can serve to perpetuate racial inequality.

The colour-blind ideology can also be endorsed by stigmatized minority groups. The endorsement of the Colour-Blind ideology among *Blacks* has been linked to the endorsement of anti-Black stereotypes, social dominance orientation and victim-blame ideology (internalized oppression), all of which are thought to be manifestations of system justification (Barr & Neville, 2014; Neville, Coleman, Falconer, & Holmes, 2005). A colour-blind ideology is similar in many ways to the Humanist ideology found in Sellers’ Multidimensional Model of Black Identity

(Sellers et al., 1997). Like a colour-blind ideology, the Humanist ideology promotes the idea that people are all members of the human race and de-emphasizes the importance of race or racial differences in society. If Black-Jamaicans are motivated to see their social system as fair and just, then the endorsement of the Humanist ideology, which dismisses systemic *disadvantages* resulting from racial stratification in Jamaica and downplays the significance of race in the larger social context, could serve the purpose of reducing this tension. This would be in line with a system justification interpretation, this time among disadvantaged group members (Jost et al., 2004; Neville et al., 2013).

Based on this theorizing, I hypothesized that in the predominantly Black context of Jamaica, Humanist ideology might be a strategy to reduce the tension associated with acknowledging the devalued status of Blacks in Jamaica. In line with system justification theory, as well as my theorizing regarding the relationships between ideology and implicit racial bias in Blacks, I hypothesized that stronger endorsement of Humanist ideology would be related to higher levels of implicit pro-White bias. The other ideologies, specifically Nationalist and Assimilation ideologies were not expected to be related to implicit racial bias (Goal 1). Second, consistent with the findings in Study 1 and the mixed findings from past research, I tested whether explicit attitudes would be significantly correlated with implicit racial bias in this new context (Goal 2). Finally, I predicted that in line with System Justification Theory (Jost et al., 2004), endorsement of system justification would be positively associated with implicit pro-White bias (Goal 3).

## Method

### Participants and Design

Ninety eight Black students (55 female and 43 male) were recruited from two large urban university campuses in Kingston Jamaica. Participants were told that the study was designed to

validate a number of measures of Black Racial Identity in a Caribbean population. Data were excluded for 3 participants for whom the computer malfunctioned and 1 participant who did not self-identify as a member of the target racial group. This left a total of 94 Black students, $M_{age}$ = 20.86, *SD* = 2.97. Participants were offered $10 in exchange for their participation.

**Measures**

The measures were identical to the ones administered in Study 1 with the following exceptions. First, the entire Perceived Racism Scale, along with two items from the Race-Based Rejection Sensitivity Scale and one item from the Assimilation ideology subscale of the MIBI were omitted due to their inapplicability in the Jamaican context. Second, two measures of system justifying beliefs were included (see Appendix A).

**System justification.** System justifying beliefs were measured using two scales. The first was the System Justification Scale (SJS: Kay & Jost, 2003; see Appendix A), which is an eight-item measure that includes items such as "In general, I find society to be fair" and "Everyone has a fair shot at wealth and happiness" on a 9 point Likert-type scale. The wording of the scale was modified to fit the Jamaican context. This scale had poor reliability in the current sample: $\alpha$ = .41, see Table 1. The second measure of system justifying beliefs was the Personal Belief in a Just World Scale (PBJW: $\alpha$ = .87, see Table 1: Dalbert, 1999). This scale is a thirteen-item measure with a six point Likert-type scale that includes items such as: "I believe that, by and large, I deserve what happens to me (PBJW)."

**Procedure**

As in Study 1, upon arrival at the laboratory each participant was greeted by a Black experimenter who asked them to complete a series of randomly ordered questionnaires followed by a computer task (the Black-White race IAT). In some cases, two participants completed the

experiment at the same time in the presence of the experimenter, but were instructed not to communicate in any way with the other participant in the room. As in Study 1, The Multidimensional Inventory of Black Identity (MIBI: Sellers et al., 1997) and The Race-Based Rejection Sensitivity Scale (Mendoza-Denton, et al., 2002), were embedded within other measures that were being collected as part of a larger research project. After completing these measures, participants were debriefed. Two weeks later, participants were invited back to the lab to participate in an unrelated study that was part of a larger research project. Seventy-seven of the original participants returned to participate in this study, which involved viewing a video recording of another participant speaking on either a race-related or neutral topic[4] and then answering a set of questionnaires within which the system justification measures were embedded. Upon completion of these measures, participants were again thanked and debriefed.

## Results

### Descriptive Statistics

Descriptive Statistics for Study 2 are reported in Table 1.

### Scoring the IAT

The same procedure as in Study 1 was used for scoring the IAT. Data for 1 participant for whom more than 10% of responses were below 300 milliseconds were deleted (Greenwald et al., 1998). Although the test of the implicit racial bias for the Black-Jamaican sample revealed no significant bias, one-sample $t(93) = 1.90$, $p=.06$, $D = 0.05$, $SD = .28$, there was a marginal trend toward a pro-White bias, see Table 1.

### Implicit Racial Bias and Racial Ideologies (Goal 1)

My main hypothesis was that a significant negative relationship would emerge between Humanist ideology and implicit pro-White bias. Bivariate correlations revealed that, in line with

this prediction, Humanist ideology and implicit pro-White bias were positively correlated, $r$ (93) = .23, $p$ = .03. No other correlations with racial ideologies were statistically significant, all $r$s < .10, all $p$s >.33, see Table 4.

**Implicit Racial Bias and In-Group Positivity (Goal 2a)**

To examine whether implicit racial bias was correlated with explicit attitudes in this Jamaican sample (Goal 2a), I examined bi-variate correlations between IAT scores and in-group positivity as measured by private regard. In contrast to Study 1, a non-significant trend between higher levels of private regard and *higher* levels of pro-White bias emerged, $r$ (93) = .16, $p$ = .13, see Table 4.

**Implicit Racial Bias and Perceived Out-Group Negativity (Goal 2b)**

Consistent with Study 1, no significant relationship emerged between public regard and implicit racial bias, $r$(93) = -.003, $p$ = .97. For Race-Based Rejection Sensitivity, however, a marginally significant relationship emerged in the hypothesized direction, such that participants with lower race-based sensitivity to rejection also had greater implicit pro-White bias, $r$(93) = -.17, $p$ = .09, see Table 4.

**Implicit Racial Bias and System Justification (Goal 3)**

To test my third prediction that system justification would be positively related to implicit pro-White bias, I examined the bivariate correlations between the measures of System Justification and participants' implicit racial biases (Goal 3). Providing some support for my hypothesis, a significant relationship emerged between implicit racial bias and the Personal Belief in a Just World subscale, $r$(77) = .29, $p$ = .01, such that those participants with higher levels of implicit pro-White bias also believed more strongly that the world was a just place. However, no significant relationship emerged between IAT scores and the System Justification

Scale, all *rs*(77) > .13, all *ps* > .27. This finding may be due to the low reliability of the System Justification Scale in this context, see Table 1.

**Regression Analyses**

To test whether racial ideology accounts for unique variance in implicit racial bias over and above past predictors a hierarchical regression with IAT scores as the dependent variable was conducted. In step 1, explicit in-group positivity measured by the Private regard subscale, explicit perceived out-group negativity measured by the race-based rejection sensitivity scale, and system justification measured by the Personal Belief in a Just World scale were entered. Model 1 was significant, $F$ (3, 73) = 3.02, $R^2$ =.07, $p$ = .03, with only Personal Belief in a Just World, $\beta$ = .28, $t$ = 2.60, $p$ = .01, significantly contributing to implicit racial bias (see Table 5). Unlike the results of Study 1, the inclusion of Humanist ideology in model 2 at Step 2, *did* result in a significant improvement in the prediction of implicit racial bias, $\Delta F$ (4, 72) = 4.45, $\Delta R^2$ =.05, $p$ = .04. Although Personal Belief in A Just World remained a significant predictor of implicit racial bias, $\beta$ = .25, $t$ = 2.31, $p$ = .02, Humanist ideology also emerged as a significant predictor, $\beta$ = .24, $t$ = 2.11, $p$ = .04, (see Table 5). As expected, when Nationalist ideology was included instead at Step 2, there was no significant change in the prediction of implicit racial bias, $\Delta F$ (4, 72) = .09, $\Delta R^2$ <.001, p = .76. Personal Belief in a Just World remained the only significant contributor to implicit racial bias, $\beta$ = .29, $t$ = 2.58, $p$ = .01, (see Table 5). Similarly, when Assimilation ideology was instead included in Step 2, again no significant improvement in the prediction of implicit racial bias emerged, $\Delta F$ (4, 72) = .11, $\Delta R^2$ =.001, p = .73, and Personal Belief in a Just World again remained the only significant contributor to implicit racial bias, $\beta$ = .28, $t$ = 2.51, $p$ = .01 (see Table 5).

## Discussion

The primary aim of Study 2 was to examine the relationship between implicit racial bias and racial ideologies in a predominantly Black context (Goal 1). First, it is worth noting that very few studies have examined the implicit racial bias of Blacks in a cultural context where they are the majority racial group. One interesting finding to emerge was that this Black-Jamaican sample showed no bias overall on the Black-White race IAT, with a non-significant trend toward a pro-White bias emerging. This finding is in line with past research examining racial attitudes among Black children in predominantly Black contexts (Cramer & Anderson, 2003; Dunham et al., 2014). Importantly, consistent with my prediction, among Black-Jamaicans, the only racial ideology that was significantly related to implicit racial bias was Humanist ideology, with stronger endorsement of Humanist ideology being associated with more implicit pro-White bias. Taken together with the finding of Study 1, this provides additional support for the possibility that specific racial ideologies can predict implicit racial bias, and that these may reveal beliefs and strategies that Blacks employ in particular racial contexts that could influence and/or be influenced by, their implicit racial biases.

As in Study 1, an additional goal of Study 2 was to examine the relationship between implicit racial bias and explicit racial attitudes, this time in a predominantly Black context (Goals 2a and 2b). As in Study 1, no statistically significant relationships emerged between in-group positivity and implicit racial bias; although unlike the findings of Study 1, there was a marginal trend toward a *positive* relationship between private regard and implicit pro-White bias.

In addition, as in Study 1, I examined the relationship between implicit racial bias and perceived out-group negativity (Goal 2b) and again found no relationship between implicit racial bias and perceived out-group negativity as measured by the MIBI subscale measuring public

regard. However, I did find a marginally significant relationship between implicit racial bias and Race-Based Rejection Sensitivity. Those participants who reported more sensitivity to issues of race in their environment also had less implicit pro-White bias, suggesting that those Black-Jamaicans who view greater systemic inequality in Jamaica based on race also show less pro-White orientation, similar to the pattern seen with Black-Canadians. In line with Study 1, Study 2 provides some additional support that believing one's Black racial in-group is perceived negatively by out-groups is related to less pro-White bias.

A third aim of Study 2 was to examine the relationship between implicit racial bias and system justifying beliefs (Goal 3). As expected, participants' system justifying Personal Belief in a Just World was related to higher levels of implicit pro-White bias. This finding is consistent with Jost and colleagues' (2004) assertion that for minority group members, out-group bias is a manifestation of system justification. Barr and Neville (2014) assert that among Black-Americans, conformity to mainstream messages and ideologies surrounding race in the larger society (e.g., Colour-blind ideology) serves to reinforce negative racial stereotypes about Blacks, as well as beliefs that the in-group is to blame for experienced discrimination, and other system justifying beliefs. This finding is consistent with that assertion.

I also found that system justification and Humanist ideology were not correlated, but that each predicted unique variance in implicit racial bias. This finding is surprising in that Humanist ideology has system justifying elements, including the denial of race-based inequality in the system, and therefore was expected to be related to system justification. Although it is not possible to draw conclusive inferences based on these relationships, one potential explanation for the lack of correlation between these two variables is that one kind of system justifying belief (the perception that the stigmatized status of the in-group is legitimate and therefore the

individual is personally responsible for any negative outcomes in life) may be one source of implicit pro-White bias in some Jamaican participants, while another system justifying belief (Humanist ideology: an ideology that denies the stigmatization of the in-group) may be a different source of implicit pro-White bias in other Jamaican participants. Although both are system-justifying beliefs, it may be difficult to justify a purportedly legitimate racial hierarchy, while denying the existence of a racial hierarchy simultaneously.

As previously discussed, an Assimilation ideology may not be viable in the Jamaican context. This assertion is supported in part by the low reliability of the Assimilation ideology subscale of the MIBI (Sellers et al., 1997) in the Jamaican sample. It might be that the form of system justification described above, wherein the individual perceives the in-group's devalued status as legitimate, might be related to the endorsement of Assimilation ideology in predominantly White contexts. It is possible to legitimize ones' devalued status while endorsing the belief that Blacks should assume the values, behaviours and goals of the White majority (Assimilation ideology). Because Assimilation ideology may have been less relevant in this Jamaican context, this form of system justification might not have found an outlet in ideology and therefore Assimilation ideology failed to predict implicit racial bias over and above system justification. The finding that system justification and Humanist ideology are separate predictors of implicit racial bias may be specific to this predominantly Black context wherein the perpetrator of systemic injustice is ambiguous. In predominantly White contexts, system justification in the form of perceived legitimacy of group status could find an outlet for expression in an Assimilation ideology.

Taken together these results suggest that in the predominantly Black Jamaican context, both Humanist ideology and system justification are correlated with implicit racial biases as

measured by the Implicit Association Test, and in combination they account for significantly more of the variance in these implicit racial biases than in-group positivity and perceived out-group negativity.

## Study 3

The first main goal of Study 3 was to replicate and extend the relationship found between implicit racial bias and ideology in Study 1 (Goal 1) by again recruiting Black participants in a multicultural Canadian context. As in Study 1 it was predicted that Nationalist ideology would be negatively related to implicit pro-White bias. I also again examined the possibility that Humanist and Assimilation ideologies would be positively related to implicit pro-White bias. To test these possibilities I measured implicit racial bias using a Black-White race IAT (Goal 1a) as well as a different measure of implicit racial bias, the Affective Misattribution Procedure (AMP; Payne et al., 2005; Goal 1b).

Although the Black-White race IAT is the most widely used measure of implicit racial bias, it has faced a number of criticisms (see Fazio & Olson, 2003; Gawronski & DeHouwer, 2011; Teige-Mocigemba, Klauer, & Sherman, 2010), including that it provides a relative, comparative measure of implicit racial bias. An alternative measure of implicit racial bias, the AMP (Payne et al., 2005), addresses this issue. In the AMP participants are shown multiple trials; in each trial, a prime image, believed to evoke an affective response (e.g. Black person's face or White person's face), is presented briefly (75 ms), followed by a blank screen (125 ms), followed by a neutral image to be evaluated by the participant (inkblot for 100 ms). A mask stays on the screen until the participant rates the neutral image as pleasant or unpleasant (forced choice). The premise underlying the AMP is that affect elicited by the prime (face) will be

misattributed to the neutral target (inkblot); as such the responses can be used to estimate people's spontaneous affective response to the primes.

Because the AMP estimates implicit racial bias using *exemplars* of a social category in the absence of racial categorization, and because there is no reference to another social group for comparison during the evaluation, the AMP may provide a more nuanced estimate of implicit racial bias towards racial exemplars, as opposed to racial categories (Degner & Wentura, 2010; Livingston & Brewer, 2002; Fazio & Olson, 2003; Williams, Steele, & Lipman, in press). In addition, AMP data can be used to estimate both relative attitudes towards groups and attitudes toward each racial group separately (Gawronski & De Houwer, 2011; Nosek et al., 2005). This makes it particularly well suited to my research question regarding ideologies, which are defined as beliefs about how Blacks should live and interact with the dominant group in the larger society.

A second goal of Study 3 was to again examine the relationships between explicit in-group positivity (Goal 2a) and perceived out-group negativity (Goal 2b) with both a category based (IAT) and, in Study 3, an exemplar based (AMP) implicit measure. In a review of the efficacy of implicit measures, the AMP was found to correlate more strongly with explicit measures of racial attitudes than other implicit measurement tools (Bar-Anan & Nosek, 2014). Further, it was found to better discriminate between evaluations of the racial groups than a traditional IAT (Bar-Anan & Nosek, 2014). I predicted, therefore, that a more robust relationship would emerge between implicit racial bias measured with the AMP versus the IAT, and both explicit attitudes and racial ideologies. However, because I hypothesized that racial ideologies are broader and more nuanced predictors of implicit racial bias, I anticipated that

racial ideologies would account for additional variance in implicit racial bias over and above that accounted for by explicit attitudes (Goal 5).

As in Study 2, the third goal of Study 3 was to see whether a relationship between system justifying beliefs and implicit racial bias would emerge, this time with a Canadian Black sample (Goal 3). In line with the results of Study 2, research by Ashburn-Nardo and colleagues (2003), as well as theorizing by Jost and colleagues (2004), I anticipated that stronger endorsement of system justifying beliefs would be associated with more pro-White (versus Black) implicit racial bias measured with both the IAT and the AMP. I also again examined whether racial ideologies would account for variance in implicit racial bias over and above that accounted for by the other predictors in Study 3 (Goal 5).

One final goal of Study 3 was to better understand the relationship between a specific goal pursuit, individual vs. collective success orientation, and implicit racial bias (Goal 4). In line with the theory of conscious and unconscious goal pursuit reviewed earlier, I predicted that Black participants who have a stronger collective success orientation, defined as a stronger orientation toward valuing the success and empowerment of *both* one's racial group and oneself as an individual within the larger social context, would be motivated to positively evaluate the in-group. Participants with a stronger individual success orientation, defined as a stronger orientation to valuing one's individual success and empowerment irrespective of the outcomes of the group as a whole, would be motivated to positively evaluate the out-group. As such, I anticipated a relationship between individual versus collective success orientation and implicit racial biases (Goal 4). I also examined whether racial ideologies would predict unique variance in implicit racial bias, over and above that predicted by explicit attitudes, system justification and individual versus collective success orientation (Goal 5).

## Method

### Participants and Design

Two hundred and fifty-six Black students (197 female, 57 male and 2 participants with no gender information) were recruited to participate in a study on Black racial identity. Participants were primarily recruited through an undergraduate research participant pool (84%), but some were also recruited from flyers distributed around campus at a large urban university in Toronto, Canada. Participants were told that the study was designed to validate a number of measures of Black Racial Identity in a Canadian population. They were also advised that following completion of the identity study, they would be asked to participate in another separate and unrelated study on race and employment, to make up the one hour block of time to which they had committed. Participants were offered either course credit or $20.00 in exchange for their participation.

### Measures

**Implicit racial bias.** Two measures of implicit racial bias were administered. Participants completed the Black-White race-IAT used in Studies 1 and 2, as well as the Affective Misattribution Procedure (or AMP). ***The Affective Misattribution Procedure*** (AMP: Payne et al., 2005) is a newer implicit measure of attitudes that has been used to measure racial bias. The AMP consisted of 120 randomly ordered trials. Each trial consisted of a prime image presented on the screen for 75ms, followed by a blank screen that appeared for 125ms and then an inkblot (affectively ambiguous stimulus) presented for 100 ms. Finally a mask appeared and remained on screen until the participant responded with a pleasant or unpleasant rating of the inkblot. The randomly ordered primes included 12 Black male faces, 12 White male faces, 12 unpleasant stimuli (insects), 12 pleasant stimuli (flowers) and 12 neutral stimuli (grey square),

each presented twice in total in random order. There were two breaks during that task, during which a screen appeared reminding participants of the instructions and providing an opportunity to take a quick break if needed, before continuing. These break screens appeared after each 40 trials.

**Racial ideologies**. Three racial ideologies were again measured using the Nationalist ($\alpha$ = .74), Assimilation ($\alpha$ = .69), and Humanist ($\alpha$ = .67) ideology subscales from the MIBI (Sellers et al., 1997). Reliability scores for the ideology subscales in this sample were adequate (see Table 1).

**In-group positivity**. In addition to the private regard subscale ($\alpha$ = .75) of the MIBI, ***feeling thermometers*** were also used as a measure of explicit positivity. Participants were asked to rate their feelings toward Blacks and Whites on a feeling thermometer (Payne et al., 2005) ranging from 0 (cold and unfavourable) to 10 (warm and favourable), which were embedded within ratings of other racial groups (e.g. Asian and South Asian). This measure of explicit racial attitudes allowed for the creation of a relative preference score as well as explicit measures of positivity toward the in-group and out-group

**Perceived out-group negativity.** Perceived out-group negativity was measured as in Study 1, with the public regard subscale of the MIBI (Sellers et al., 1997, $\alpha$ = .69) and the academic subscale of the Perceived Racism Scale over the year ($\alpha$ =.87) and over the life time ($\alpha$ =.92) (McNeilly et al., 1996, see Appendix A).

**System justification.** System justifying beliefs were measured using the two scales described in Study 2 (PBJW ($\alpha_{PBJW}$ = .84): Dalbert, 1999; SJS: ($\alpha$ = .76) Kay & Jost, 2003).

**Individual versus Collective Success Orientation.** This was a six-item measure, created by the researchers that directly asked participants about their beliefs regarding individual

versus collective success ($\alpha$ = .80). It presented opposing statements about success at each end of a 9-point scale. A sample item is "The most meaningful measure of success is individual advancement" (at point 1 on the scale) and "The most meaningful measure of success is the advancement of Blacks as a group" (at point 9 on the scale), with 5 being the mid-point. Participants were asked to select a number on the nine-point scale that most closely reflected their belief with regard to the two statements. Higher scores on this scale indicate stronger endorsement of a collective success orientation (see Appendix A).

**Procedure**

Upon arrival at the laboratory, participants were greeted by a Black experimenter and told that they would be participating in two separate and unrelated studies. The first would be the Black Racial Identity study for which they had been recruited. The second study was a separate and unrelated study examining employment aptitude that was being administered to fill the one hour block of time for which the participants had signed up.

For the Black Racial Identity Study, the experimenter asked participants to complete a computer task (the AMP), followed by a series of randomly ordered questionnaires, and then a final computer task (the Black-White race IAT). These questionnaires included all of our measures, except for measures of system justification and individual versus collective success orientation which were administered in a "second study" (see below). Once these were completed, participants were informed that the "first study" was over and participants were thanked and partially debriefed.

Participants were then asked to complete the one-hour timeslot by participating in a second study called "Race, Employment Aptitude and Success" for which the researchers were purportedly "testing a widely used employment aptitude test for potential cultural bias against

Blacks, and validating its accuracy for individuals of any race". This cover story was used to reduce suspicions regarding the collective success measure. In line with this cover story, participants completed various measures of "employment aptitude" including the collective success questionnaire. Next they completed what were described as "personality questionnaires" which included the System Justification (SJS: Kay & Jost, 2003) and Belief in a Just World Scales (BJW: Dalbert, 1999). Upon completion of the study participants were fully debriefed.

## Results

### Descriptive Statistics

Descriptive Statistics for Study 3 are reported in Table 1.

### Scoring the IAT

For all IAT analyses, data were excluded for 8 participants whose IAT scores were lost due to experimenter error, 2 participants who had recently completed a study involving the IAT, and 2 participants with IAT scores more than 3 standard deviations outside the mean, leaving a total of 244 participants, $M_{age}$ = 22.3, $SD$ = 5.87. The IAT was scored according to Greenwald and colleagues (2003). A test of the implicit racial bias of the Canadian Black sample revealed a significant pro-Black bias overall, one-sample $t(244) = -2.45$, $p = .01$, $D = -0.05$, $SD = .30$. The magnitude of bias was similar to that found in Study 1.

### Scoring the AMP

For all analyses involving the AMP, data had to be excluded for 19 participants who completed a different version of the AMP[5], 6 participants whose data was lost due to experimenter error, and 19 participants whose scores indicated controlled responding (these participants evaluated every face prime trial positively), leaving a total of 212 participants. The AMP was scored according to Payne and colleagues (2005). First, the proportion of inkblots

judged to be pleasant following each type of prime (Black face, White face, grey square, positive stimulus and negative stimulus) was calculated, resulting in 5 separate scores. In addition, mean positive responses following Black primes were subtracted from mean positive responses following White primes to create a difference score with higher scores indicating greater positivity following White *relative* to Black primes ($AMP_{rel}$).

A within subjects analysis of variance was conducted on participants' positivity ratings following the 3 prime types of interest (Black, White and Neutral) as factors[6]. The priming effect was significant, $F$ (2, 422) = 41.81, $p < .001$. The Canadian Black sample revealed a significant pro-Black bias; paired sample t-tests, revealed that mean positivity ratings following Black primes, ($M$ = 14.95, $SD$ = 5.81, 62%), were significantly higher than those following White primes ($M$ = 13.12, $SD$ = 5.84, 55 %), $t$(211) = 4.84, $p$ <.001, and Neutral primes, ($M$ = 10.57, $SD$ = 5.34, 44%), $t$(211) = 8.33, $p$ <.001. Mean positivity ratings following White primes were also significantly higher than those following Neutral primes, $t$(211) = 4.66, $p < .001$, suggesting greater positivity towards social as opposed to non-social primes. Similarly, mean positivity ratings following Black primes, $t$(211) = 7.38, $p$ <.001, and White primes, $t$(211) = 2.81, $p$ =.005, were significantly higher than chance levels of responding (50%), while positivity ratings following neutral primes, $t$(211) = -3.91, $p < .001$, were significantly lower than chance levels of responding. The overall pro-Black bias of the sample, therefore, appears to be driven by positivity towards Blacks rather than negativity toward Whites.

A bivariate correlation between the IAT $D$ scores and the $AMP_{rel}$ revealed a significant positive correlation between the two measures, $r$(205) = .18, $p$ = .009. Partial correlations between IAT $D$ scores and implicit racial bias toward each racial group separately controlling for opposite race and neutral trials were also examined (Payne et al., 2005). As would be expected,

IAT *D* scores and implicit positivity towards Blacks (controlling for responses following White and neutral primes: $AMP_b$) were negatively correlated, $r(202) = -.18$, $p = .01$, while implicit positivity towards Whites (controlling for responses following Black and neutral primes: $AMP_w$) was positively correlated with IAT scores, $r(202) = .15$, $p = .03$, see Table 6.

**Implicit Racial Bias and Racial Ideologies (IAT: Goal 1)**

To test my hypothesis that racial ideologies would predict implicit racial bias as measured by the IAT (Goal 1), bi-variate correlations were examined between IAT *D* scores and each of the ideology subscales of the MIBI (Sellers et al., 1997). None of the predicted relationships between racial ideology and implicit racial bias as measured by the IAT were significant, all $|rs|(244) < .10$, all $|ps| > .10$, see Table 6. Although in the anticipated direction, unlike the findings of Study 1 which was also conducted in Canada, no significant relationship emerged between Nationalist ideology and implicit pro-White bias as measured by the IAT, $r = -.10$, $p = .10$.

To test my hypothesis that racial ideologies would predict implicit racial bias using the non-categorical, exemplar-based AMP (Goal 1), bi-variate correlations between $AMP_{rel}$ and the three ideology subscales of the MIBI (Sellers et al., 1997) were examined. Unlike the results with the IAT, each of the predicted relationships between ideology and implicit racial bias emerged. Nationalist ideology was negatively associated with relative implicit pro-White bias, $r(212) = -.26$, $p < .001$, while both Assimilation, $r(212) = .19$, $p = .006$, and Humanist ideologies, $r(212) = .24$, $p = .001$, were positively associated with relative implicit pro-White bias, see Table 6.

Partial correlations using implicit racial bias toward each racial group, controlling for both neutral and opposite race trials (Payne et al., 2005), were also conducted. When examining

attitudes towards Whites ($AMP_w$), Nationalist ideology was negatively associated with implicit positivity toward Whites, while both Assimilation and Humanist ideologies were positively associated with implicit positivity towards Whites, all $|rs|(209) > .19$, all $|ps| < .002$, see Table 6. When examining attitudes towards Blacks ($AMP_b$), as expected, the opposite pattern emerged. Nationalist ideology was positively associated with implicit positivity toward Blacks, while both Assimilation and Humanist ideologies were negatively associated with implicit positivity towards Blacks, all $|rs|(209) > .17$, all $|ps| < .01$, see Table 6.

**Implicit Racial Bias and In-Group Positivity (Goal 2a)**

As in Studies 1 and 2, the relationships between implicit and explicit racial attitudes were examined. Consistent with the findings of Study 1, no significant correlation emerged between implicit racial bias, as measured by the IAT, and the two measures of explicit in-group positivity including Private Regard, $r(244) = -.04$, $p = .53$, and explicit positivity towards Blacks ($EXP_b$) as measured by feeling thermometers, $r(244) = -.08$, $p = .24$, Goal 2a, see Table 7.

By contrast, when implicit racial bias was measured using the exemplar-based AMP ($AMP_{rel}$), the relationships between implicit racial bias and both private regard, $r(212) = -.14$, $p = .04$, and explicit positivity towards Blacks ($EXP_b$), $r(212) = -.20$, $p = .003$, were significant, see Table 7. For both of these measures, implicit pro-White bias was related to less positive attitudes toward Blacks (Goal 2a).

To examine the relationship between explicit in-group positivity and implicit racial bias towards each group ($AMP_b$ and $AMP_w$) partial correlations with explicit in-group positivity were conducted. No correlation emerged between $AMP_b$ and private regard, $r(209) = .11$, $p = .12$, however, a significant positive correlation emerged between $AMP_b$ and $EXP_b$ , $r(209) = .20$, $p = .004$. As implicit positivity towards Blacks increased so too did explicit warmth toward Blacks

on the feeling thermometers. For $AMP_w$, a marginal negative correlation emerged with private regard, $r(209) = -.13$, $p = .06$, and the negative relationship with $EXP_b$ was significant , $r(209) = -.16$, $p = .03$ (see Table 7). For these measures, those higher in implicit positivity towards Whites also had less explicit positive regard toward Blacks and colder feelings toward Blacks on the feeling thermometers.

**Implicit Racial Bias and Perceived Out-Group Negativity (Goal 2b)**

To test whether implicit racial bias as measured by the IAT reflects Black participants' awareness and possible internalization of perceived out-group negativity, bi-variate correlations were examined between IAT scores, the Public Regard Subscale of the MIBI (Sellers et al., 1997), and the Perceived Racism Scale, both over the current year, and over the lifetime. No significant relationships emerged: Public Regard, $r(244) = .09$, $p = .16$, Perceived Racism $_{year,}$ $r(244) = -.05$, $p = .45$, or Perceived Racism $_{lifetime,}$ $r(244) = .03$, $p = .60$, (Goal 2b), see Table 8. Similarly, no significant relationship emerged between $AMP_{rel}$ and public regard, $r(212) = -.03$, $p = .69$. In line with Study 1, however, a significant relationship emerged for perceived racism over the current year, $r(212) = -.14$, $p = .048$, and perceived racism over the lifetime, $r(212) = -.18$, $p = .009$, such that higher levels of implicit pro-White bias were associated with perceiving less racism (Goal 2b), see Table 8. When absolute scores were examined, no significant relationship emerged between $AMP_b$ and public regard, $r(209) = .04$, $p = .63$. For perceived racism over the year, $r(209) = .14$, $p = .04$, and perceived racism over the lifetime, $r(209) = .16$, $p = .02$, significant relationships with implicit positivity towards Blacks emerged, see Table 8. $AMP_w$ was not significantly correlated with public regard, $r(209) = .04$, $p = .60$, or perceived racism over the year, $r(209) = -.10$, $p = .14$. Higher levels of perceived racism over the lifetime,

however, were significantly related to less implicit positivity towards Whites ($AMP_w$), $r(209) = -.17$, $p = .01$, see Table 8.

**Implicit Racial Bias and System Justification (Goal 3)**

For analyses involving measures from "part 2" of the study (System Justification Measures and Individual Versus Collective Success Orientation Measure), sample sizes vary due to missing data. Data were excluded for 8 participants who did not complete the system justification or individual versus collective success orientation measures, some of whom were already excluded through AMP or IAT exclusions. For implicit racial bias as measured with the IAT, significant relationships emerged with the System Justification Scale, ($r(239) = .17$, $p = .009$), and the Personal Belief in a Just World Scale, $r(239) = .18$, $p = .005$, Goal 3, such that stronger endorsement of system justifying beliefs were associated with higher levels of implicit pro-White bias, see Table 9.

For implicit racial bias as measured with $AMP_{rel}$, stronger endorsement of system justifying beliefs measured by the System Justification Scale, $r(206) = .15$, $p = .03$, and Personal Belief in a Just World scale, $r(206) = .18$, $p = .008$, were associated with higher levels of implicit pro-White bias (Goal 3), see Table 9. To test whether higher levels of system justification were associated with attitudes toward a particular racial group individually, partial correlations were conducted between system justification, $AMP_b$ and $AMP_w$. Higher endorsement of system justifying beliefs as measured by the System Justification Scale, $r(203) = .21$, $p = .002$, and the Personal Belief in a Just World Scale , $r(203) = .20$, $p = .003$, were also associated with greater implicit positivity towards Whites, see Table 9. In contrast, implicit positivity towards Blacks was not reliably related to either of the System Justification Measures:

System Justification Scale, $r(203) = -.07$, $p = .27$, Personal Belief in a Just World Scale, $r(203) = -.12$, $p = .07$, see Table 9.

**Implicit Racial Bias and Individual versus Collective Success Orientation (Goal 4)**

To test the hypothesis that an individual's orientation towards success would predict implicit racial bias as measured with the IAT (Goal 4), bi-variate correlations were examined between scores on the Individual Versus Collective Success Orientation Questionnaire and the IAT difference scores. No relationship emerged between individual versus collective success orientation and implicit racial bias as measured with the IAT, $r(240) = -.03$, $p = .67$, see Table 9. For implicit racial bias as measured with the $AMP_{rel}$, as predicted, greater endorsement of collective success orientation was associated with lower levels of implicit pro-White bias, $r(207) = -.19$, $p = .006$ (Goal 4), see Table 9. To examine this same relationship with $AMP_b$ and $AMP_w$, partial correlations between individual versus collective success orientation and implicit racial bias were conducted. Implicit positivity towards Whites was unrelated to individual versus collective success orientation, $r(204) = -.11$, $p = .11$. By contrast, stronger endorsement of collective success orientation was associated with more implicit positivity towards Blacks, $r(204) = .21$, $p = .002$, see Table 9.

**Regression Analyses**

To examine the final hypothesis, that racial ideologies would account for unique variance in implicit racial bias, above and beyond predictors used in past research (Goal 5), hierarchical regression analyses with implicit racial bias (measured by the $AMP_{rel}$) as the dependent variable, were conducted[7]. For each regression analysis, the predictors used in previous research, including in-group positivity (private regard), perceived out-group negativity (perceived racism over the lifetime) and system justification (PBJW), along with the new predictor from Study 3,

individual versus collective success orientation, were entered at Step 1[8]. For each analysis, one of the ideologies was then entered at Step 2.

Step 1 of the model was significant, $F(4, 200) = 4.33$, $R^2 = .08$, p = .002, with PBJW emerging as the only significant predictor of implicit racial bias, $\beta = .16$, $t = 2.34$, $p = .02$; see Table 11. At Step 2, when Nationalist ideology was included, PBJW was no longer a significant predictor of implicit racial bias, and instead Nationalist ideology emerged as the only significant predictor of implicit racial bias, $\beta = -.18$, $t = 2.39$, $p = .02$. Importantly the addition of Nationalist ideology as a predictor in step 2 resulted in a significant increase in variance accounted for, $F(5, 199) = 5.74$, $\Delta R^2 = .03$, p = .02, see Table 11. Similarly, when Humanist ideology was instead entered at Step 2, it emerged as the only significant predictor of implicit racial bias, $\beta = .17$, $t = 2.40$, $p = .02$, resulting in a significant increase in variance accounted for, $F(5, 199) = 5.77$, $\Delta R^2 = .03$, p = .01, see Table 11. Finally, when Assimilation ideology was included at Step 2, it too emerged as the only significant predictor of implicit racial bias, $\beta = .18$, $t = 2.54$, $p = .01$, and again resulted in a significant increase in variance accounted for, $R^2$, $F(5, 199) = 6.46$, $\Delta R^2 = .03$, $p < .01$, see Table 11[9].

## Discussion

In Study 3, I examined the relationships between implicit racial bias and racial ideologies (Goal 1), explicit racial attitudes (Goal 2), system justifying beliefs (Goal 3), and individual versus collective success orientation (Goal 4) among Black-Canadian participants using two different measures of implicit racial bias. Participants in this study showed a significant pro-Black bias on the Black-White race IAT that was of a magnitude similar to that found in Study 1. Pro-Black bias also emerged when an exemplar-based implicit measure, the AMP, was used to assess implicit racial bias. Additional analyses suggest that, at least on the AMP, this pro-Black

bias reflects positivity towards Blacks, as opposed to negativity towards Whites, as the favourability ratings for both racial group primes were above chance levels of responding and above ratings following neutral primes.

My main hypothesis in Study 3 was that racial ideologies would emerge as significant predictors of implicit racial bias (Goal 1). Specifically, I examined whether Nationalist ideology was negatively related to implicit pro-White bias, and Assimilation and Humanist ideologies were positively related to implicit pro-White bias. This hypothesis was fully supported when the AMP was used as the implicit measure. Implicit pro-White bias on the AMP was negatively correlated with Nationalist ideology and positively correlated with Assimilation and Humanist ideologies. Comparable relationships emerged when participants' biases towards just the White racial out-group were assessed, and the opposite relationships were found when biases toward just the Black racial in-group were assessed. This finding provides additional evidence, with a second measure of implicit racial bias, that specific racial ideologies can be reliably related to implicit racial biases in Black participants.

This finding is important because it has the potential to advance our understanding of implicit racial bias. Unlike past research examining relationships between a single predictor that assesses one narrow construct (in-group positivity or perceived out-group negativity) and implicit racial bias, or a hypothesized predictor whose relationship with implicit racial bias had not been empirically assessed (system justification), racial ideologies assess a constellation of constructs that reflect beliefs about race and strategies for dealing with stigmatization, thereby offering potential insight into how particular combinations of those unitary constructs might combine and be manifested in implicit racial bias. The ideology constructs assessed by the MIBI (Sellers et al., 1997) were developed specifically for a Black American population. As such,

they take into account some of the meaning that may be associated with narrower constructs, such as in-group positivity and system justification for example, but clothe them in the larger context of Black racial identity and strategy in American culture. Establishing these relationships provides an important first step in understanding the nature of implicit racial biases for Blacks.

It is important to note, however, that these ideologies did not emerge as predictors when the IAT was used to estimate implicit racial bias in Study 3. Although in Study 1, Assimilation and Humanist ideologies were similarly unrelated to implicit racial bias on the IAT, a negative relationship between implicit pro-White bias and Nationalist ideology did emerge in Study 1 that was not apparent in Study 3. It is unclear why this relationship did not emerge again in the current study.

**Implicit Racial Bias, Explicit In-Group Positivity/Perceived Out-Group Negativity and Racial Ideologies (Goal 2)**

It has been hypothesized that explicit in-group attitudes "determine" implicit racial bias (Livingston, 2002, p. 406; Olson et al., 2009). Study 3 is at least partially consistent with this possibility. Although no significant relationships were found between explicit in-group positivity and the IAT, lower levels of relative implicit pro-White bias measured with the $AMP_{rel}$ and higher levels of implicit racial bias towards just the Black racial in-group ($AMP_b$) were related to higher levels of both of the measures of explicit in-group positivity. This finding is also consistent with past research comparing the strengths of seven different implicit measures using a racially diverse sample (70% White), which found that the AMP has more robust relationships with explicit racial attitudes than the other seven implicit measures assessed, including the IAT (Bar-Anan & Nosek, 2014).

The relationship, however, might not be entirely explained by in-group attitudes. Implicit pro-*White* bias ($AMP_{rel}$) was positively related to explicit attitudes towards just the White racial out-group ($EXP_w$), as well as explicit preference for Whites over Blacks ($EXP_{rel}$). Taken together, these findings suggest that both increased liking for the out-group and decreased liking for the in-group are related to implicit pro-White bias. It may in fact be particular combinations of explicit like and/or dislike toward each group that predict implicit racial bias.

This finding contradicts the lay beliefs expressed in the *Dateline* special wherein both Whites and Blacks believed that implicit racial bias was a reflection primarily of attitudes toward Blacks. The finding is in line, however, with theory surrounding the role of goal pursuit in implicit social cognition (Ferguson & Cone, 2013). If one is living as a stigmatized racial minority in a context wherein one perceive one's outcomes to be controlled by a dominant racial out-group (Shapiro & Neuberg, 2008), it would make sense that explicit attitudes toward the out-group would also be related to implicit racial bias (Ferguson & Cone, 2013).

Explicit perceived out-group negativity was not related to implicit racial bias measured with the IAT, in line with Studies 1 and 2. Higher levels of perceived racism over the year and the life time, however, were associated with less implicit pro-White bias measured with the $AMP_{rel}$. This finding makes theoretical sense, and is in line with Allport's extro-punitive hypothesis (1954; Richeson & Trawalter, 2005, Sidanius & Pratto, 1999), which asserts that stigmatized group members who perceive the in-group as being viewed negatively by the out-group direct the negativity back toward the out-group. Further, the relationships between perceived racism over the lifetime, and implicit racial bias toward each group separately ($AMP_b$ and $AMP_w$) suggest the possibility that Blacks who perceive racism in their environment, in line

with what one would intuitively predict, may over time develop more positive implicit racial attitudes toward Blacks and less positive implicit racial attitudes towards Whites.

The suggestion that implicit pro-White bias reflects internalization of anti-Black stigma from the larger society (Allport, 1954, Livingston, 2002) was not supported by my findings. In contrast, the results seem to suggest that implicit pro-White bias is related to perceiving less racism (see Table 8). Rather than internalizing negativity from the out-group and changing the perception of the *in-group* as has been hypothesized, it seems that those with an implicit pro-White bias may change their perception of the *out-group* and out-group behaviour. The disinclination to perceive racism could in part be related to racial ideology, in that stronger endorsement of both Assimilation and Humanist ideologies were also associated with lower levels of perceived racism (see Table 8) and higher levels of implicit pro-White bias. From the perspective of ideology as conscious goal pursuit, the ideological goals of Assimilation ideology (assimilating to a dominant out-group), and Humanist ideology (minimizing the significance of race, Sellers et al., 1998) are not particularly compatible with acknowledging racism.

**Implicit Racial Bias, System Justification and Racial Ideologies (Goal 3)**

A relationship was found between system justifying beliefs and implicit racial bias for Black participants. This relationship emerged for two measures of system justification and two unique measures of implicit bias in a North American context. This is a novel finding that is interesting in its own right as this provides direct empirical support for current theorizing among system justification theorists who assert that implicit out-group bias among disadvantaged groups *is* system justification (Ashburn-Nardo et al., 2003; Jost & Banaji, 1994; Jost et al., 2002; Nosek et al., 2002; Rudman et al., 2002).

The assertion that implicit out-group favouritism is system justification is an essential component of system justification theory (SJT), distinguishing it from social identity (SIT) and social dominance theories (SDT) by providing an explanation for the phenomenon of out-group favouritism among the disadvantaged (Jost, 2011; Jost et al., 2004). While SJT has asserted that the disadvantaged are more likely to justify the system, both SIT and SDT posit that stigmatized group members are more likely to challenge than justify the system (Jost, 2011; Sidanius & Pratto, 1999, Tajfel & Turner, 1986). The findings from Study 3 lend support to and expand upon system justification theory, as well as social identity and social dominance theories, by demonstrating that disadvantaged group members can be both *more* and *less* likely to justify the system.

The current project revealed that Nationalist ideology was related to both lower levels of system justification and lower levels of implicit pro-White bias, and Assimilation and Humanist ideologies were related to both higher levels of system justification and higher levels of implicit pro-White bias. This finding suggests that Assimilation and Humanist ideologies might be system justifying ideologies and Nationalist ideology a system challenging ideology. Further, ideology as a predictor of implicit racial bias takes us beyond system justification in a number of ways. Unlike implicit racial bias in Whites, pro-White and pro-Black biases have been shown to occur in almost equal proportion among Blacks (Jost et al., 2004). System justification provides information about implicit out-group bias, but racial ideology allows for the prediction of both in-group and out-group bias, provides information on the possible reasons for or effects associated with holding that bias (beliefs about how Blacks should live in and interact with the larger society), and allows us to better understand how other predictors of implicit racial bias may combine to create those beliefs.

This is also the first study to test this theory with a new measure of implicit racial bias, the AMP. In Study 3, through the use of the AMP, I found that implicit positivity towards Blacks ($AMP_b$) was *not* related to any of the measures of system justification, but that both the System Justification Scale and the Personal Belief in a Just World Scale were reliably related to implicit pro-White bias ($AMP_{w,}$). Interestingly, these results don't support the suggestion that implicit racial bias against the in-group is the source of system justifying beliefs in contrast to past theories regarding internalization of inferiority (Jost & Banaji, 1994). It appears that a Black individual can hold a somewhat positive attitude toward the in-group while still justifying the system. These findings again support the idea that attitudes toward not only the in-group but also the out-group are an important component of implicit racial bias in Blacks.

**Implicit Racial Bias, Individual versus Collective Success Orientation and Ideologies**

The final predictor of implicit racial bias that was examined in Study 3 was individual versus collective success orientation. Although no relationship emerged between individual versus collective success orientation and implicit racial bias as measured with the IAT, a more collective success orientation was associated with less implicit pro-White bias as measured by with the AMP. This is an important finding in that, to my knowledge, it is the first to link beliefs about success to implicit racial bias. Interestingly, implicit racial bias toward just the racial in-group was also related to a more collective success orientation, but implicit racial bias toward just the racial out-group was unrelated to individual versus collective success orientation. This finding suggests the possibility that the desire among Blacks to achieve success for the group as a whole, as opposed to just their individual success, may be due to in-group love and not hostility toward the out-group. This is an important connection because much of the research examining implicit racial biases in Blacks reviewed in the introduction has focused on affective responses to

in-groups and out-groups. The current project introduces some preliminary evidence that goals and social motivations are potential predictors of implicit racial bias for Blacks, and that a Black individual's beliefs about how to succeed in the larger society, irrespective of affective responses to the out-group, relate to implicit racial bias.

Finally, in Study 3 I tested the predictive ability of all of the hypothesized predictors of implicit racial bias using two different measures of implicit racial bias. While only the measure of system justification reliably predicted implicit racial bias on the IAT, when measured with the AMP, ideology emerged in each model as the only significant predictor of implicit racial bias. This latter finding again supports the importance of ideology in research examining implicit racial bias in Blacks. Ideology accounted for more of the variance in implicit racial bias than all of the existing and proposed predictors used in the current study.

These findings again highlight the value of using racial ideology to predict the direction of implicit racial bias in that racial ideologies are related to explicit and implicit racial bias in predictable patterns. These patterns show that particular combinations of these predictors are associated with the endorsement of particular ideologies, and are reliably accounting for variability in implicit racial bias. Interestingly, the effects of the bias may be manifesting outside of explicit consciousness or intent. For example, the endorsement of Humanist ideology, while possibly born out of a conscious desire to be fair and unbiased toward any group, may have an implicit counterpart: unconscious out-group preference. In support of this possibility, Neville and colleagues (2005) found evidence that the endorsement of colour-blind ideology (similar to Humanist ideology), in Black participants was associated with blaming the in-group for the disadvantage they face, an internalization of negative stereotypes against the in-group, and support for system hierarchies that disadvantage the in-group.

# General Discussion

## Ideologies as Predictors of Implicit Racial Bias in Black Participants

Research examining implicit racial bias has been dominated by studies examining the racial attitudes of Whites (Jost et al., 2004). The operationalization of an implicit attitude as a spontaneous positive or negative judgment toward an out-group (or in-group) that is thought to represent a hidden love or hatred of the evaluated group (Scroggins, Mackie, Allen, & Sherman, 2015) may have limited empirical support from non-dominant, minority, and/or stigmatized populations. As noted earlier, there has been little research examining implicit racial bias in Blacks, and other minority groups, and therefore theories regarding the meaning of implicit racial bias in Blacks and other non-dominant groups have been developed largely from a dominant group perspective (Ashburn-Nardo et al., 2003; Livingston, 2002; Olson et al., 2009). Because Blacks often need to consider how their interaction with the dominant out-group impacts their access to resources, their racial attitudes, both explicit and implicit, are likely situated within and shaped by goals relating to that access. Therefore spontaneous affective responses to racial in and out-group faces among Blacks, might reflect more than hidden love or hatred of a racial in or out-group, but rather an orientation toward particular goals in a context where race impacts one's chances of success. To test this possibility, I examined both goal related (e.g., racial ideologies and individual versus collective success orientation), and non-goal related (e.g., in-group love and perceived negativity from the out-group) predictors of implicit racial bias in Blacks.

The primary goal (Goal 1) was to examine whether a relationship would emerge between racial ideologies and implicit racial bias. In Studies 1 and 2, this goal was partially supported, with Nationalist ideology (Study 1, in Canada) and Humanist ideology (Study 2, in Jamaica)

being reliably related to implicit racial bias in the hypothesized direction. In Study 3, although none of the predicted relationships emerged with the IAT, when the AMP was used as the implicit measure all three of the predicted relationships between racial ideologies and implicit racial bias emerged in the hypothesized directions.

Building on these findings, an additional goal was to examine whether racial ideology accounted for variance in implicit racial bias, above and beyond that accounted for by past predictors (Goal 5). In Study 1 (IAT) this possibility was not supported. Although the finding for Nationalist ideology was marginally significant, none of the ideologies significantly increased the variance in implicit racial bias accounted for by in-group positivity and perceived out-group negativity. In Jamaica (Study 2: IAT), this possibility was partially supported. Humanist ideology accounted for variance in implicit racial bias above and beyond that accounted for by explicit in-group love, perceived negativity, and system justification. In Study 3, ideologies did not account for unique variance when the IAT was used to estimate bias. However, when the AMP was used as the implicit measure, each racial ideology accounted for variance in implicit racial bias, above and beyond all of the other predictors measured. This latter finding fully supports the assertion that racial ideologies are an important predictor of implicit racial bias for Black participants, and that their predictive ability may vary depending on the social context and the implicit measure used. Importantly, this finding also suggests the possibility that conceptualizing implicit racial bias in Blacks as a manifestation of goal pursuit and predicting it with a goal related construct may add nuance to our understanding of implicit racial bias in stigmatized minority groups.

In this research I also examined whether implicit racial bias was related to explicit racial attitudes, as has been done in previous research (Goal 2). As in previous research, the findings

were not consistent. Explicit in-group positivity was not directly related to implicit pro-White bias measured with the IAT in Canada (Studies 1 and 3). In Jamaica it was found to have a marginally positive relationship (inconsistent with past predictions) to implicit pro-White bias (Study 2). When implicit racial bias was measured with the AMP in Study 3, however, two different measures of in-group positivity (private regard and feeling thermometers) were negatively related to implicit pro-White bias (Study 3; Goal 2a). Similar inconsistent results emerged when the relationship between implicit racial bias and perceptions of how the Black racial in-group is viewed by the larger society (perceived out-group negativity) were examined (Goal 2b). No relationships between implicit racial bias (IAT) and any of the three measures of perceived out-group negativity emerged in Study 1, one of the two measures used in Study 2 predicted implicit racial bias on the IAT, and one of the two measures in Study 3 predicted implicit racial bias on the AMP. Although there were variations across measures and social contexts, when perceived out-group negativity emerged as a predictor, it was negatively related to implicit pro-White bias, refuting the hypothesis that perceiving negativity from the out-group results in internalization of inferiority (Allport 1954, Livingston, 2002).

These inconsistent findings provide additional support for the possibility that there may be more complexity than was previously hypothesized, to the relationship between implicit racial bias in Blacks and both in-group positivity and perceived out-group negativity.

The third proposed predictor of implicit racial bias examined in the current project was system justification (Goal 3). This predictor is broader than explicit attitudes towards the in-group or out-group, in that it takes into account the significance of the larger society, and perceptions of injustice. The current project is the first to my knowledge to empirically examine the relationship between system justifying beliefs and implicit racial bias. Importantly, the

previously theorized relationship between these constructs was supported in this research in two different social contexts and with two different measures of implicit racial bias (Study 2 and 3).

The current project, however, advances our understanding of implicit racial bias and system justification, through the introduction of racial ideologies. Although a measure of system justification emerged as a reliable predictor of implicit racial bias measured with the IAT in both Jamaica and Canada (Studies 2 and 3), a racial ideology also emerged as a reliable predictor of implicit bias measured with the IAT in Jamaica. System justification was the only variable to account for variance in implicit racial bias in the regression analyses including all predictors when the IAT was the dependent variable (Study 3), however, when the AMP was used to measure implicit racial bias, each racial ideology accounted for variance in implicit racial bias over and above all the other predictors, and the relationship with system justification was no longer reliable. This finding suggests that ideology has predictive value over and above system justification and may therefore allow for more nuanced theorizing as to the patterns of racial beliefs associated with both pro-Black and pro-White implicit racial bias.

As discussed earlier, racial ideologies are sufficiently broad and nuanced to assess attitudes relating to political and economic interests, cultural and social interests, intergroup interests, and perceptions of the dominant group" (Sellers et al., 1998) which facilitates the organization of varied explicit racial attitudes and beliefs into a meaningful framework through which these individual attitudes and beliefs can be understood and predicted. For example, Ashburn-Nardo and colleagues (2003) ask why system justification varies between and within social groups. Racial ideologies provide an answer as well as insight into how an apparently counterproductive phenomenon could be rationally enacted, passed down within groups and perpetuated by the larger society. Neither Assimilation nor Humanist ideology appear on the

surface to be irrational approaches to dealing with the larger society, yet both of these ideologies support system justification and allow the status quo to flourish unimpeded, a combination which is associated with higher levels of implicit pro-White bias. Nationalist ideology on the other hand outlines beliefs associated with not justifying the system and presents a potentially productive and empowering alternative for disadvantaged group members, a combination which is associated with lower levels of implicit pro-White bias and higher levels of implicit pro-Black bias.

Assimilation and Humanist ideologies are reminiscent of the old adages "If you can't beat them join them" or "When in Rome do as the Romans do" (James, 2010). It is possible that individuals who feel more dependent on or controlled by the system, or who perceive that the system is difficult or impossible to change (Kay et al., 2009; Kay & Friesen, 2011; Laurin, Shepherd & Kay, 2010), are more likely to adopt either an Assimilation or Humanist racial ideology. Importantly however, the converse may also be true: those who adopt Assimilation and Humanist ideologies may become more likely to perceive the system to be difficult or impossible to change and may feel more dependent upon the system. Nationalist ideology suggests that change can and should occur at least within the in-group (suggesting some independence from the system), and encourages beliefs that can bring about change. This raises the question of whether perceptions of the system accompany the system justification motive and out-group bias as proposed by Kay and colleagues (2009), or endorsement of particular ideologies accompany the system justification motive and out-group bias. This distinction has important implications and should be examined in future research. Importantly, for Blacks, racial ideologies can be used as a framework for organizing many of Kay and colleagues (2009) boundary conditions into meaningful worldviews.

Collective success was a fourth predictor (Goal 4) examined in the current project. In Study 3 I found that individual versus collective success orientation was unrelated to implicit racial bias measured with the IAT, but that a more individual success orientation was related to implicit pro-White bias, as well as less implicit positivity towards just the Black in-group when measured with the AMP. When all of the predictors, including ideology were entered into regression analyses, individual versus collective success orientation no longer emerged as a significant predictor of implicit racial bias, suggesting that racial ideology is accounting for variance over and above individual versus collective success orientation.

In the literature on goal pursuit and implicit cognition (Ferguson & Porter, 2010), goals are defined as mental representations of desirable outcomes that affect one's feelings, behaviours and judgments. The introduction of individual versus collective success orientation, and racial ideologies, to research on implicit racial bias in the current project has established a connection between implicit racial bias in Blacks and two goal related constructs (racial ideology and individual versus collective success orientation) that directly reflect Black racial identity. Individual versus collective success orientation is unique, in that it connects a social goal and/or strategy to beliefs about success. Both individual versus collective success orientation and racial ideology are constructs that may indirectly assess an individual's like or dislike of the in-group and out-group, perceptions of out-group negativity in the environment, and a need to believe the social, economic and political system is fair and just. Beyond this, these two constructs provide some information about what an individual may want to do as a result of those beliefs and perceptions, and what their eventual aim might be.

Taken together, these findings begin to provide a direction for research in implicit racial bias that moves away from affective responses to in-groups and out-groups and into the realm of

goals or strategies. The finding that at least one racial ideology reliably predicted implicit racial bias in all three of the studies, even when a measure of implicit racial bias less sensitive to explicit attitudes (IAT: Olsen et al., 2009; Bar-Anan & Nosek, 2014) was used (Studies 1 and 2) suggests that there may be a link between implicit racial bias in Blacks and goals relating to the management of racial issues in the larger social context. These goals may be manifested through the endorsement of racial ideologies. The correlations between at least one racial ideology and each hypothesized predictor: in-group positivity (Studies 1, 2 and 3), perceived out-group negativity (Studies 1, 2 and 3), system justification (Study 3) and individual versus collective success orientation (Study 3) support the possibility that the ideology construct may be accounting for some of the variance in the other predictors that are related to implicit racial bias. Ideology, however, organizes these predictors allowing one to create a profile of the beliefs associated with implicit pro-Black vs -White bias.

**Racial Ideologies in the Context of Two Theories of Implicit Racial Bias Development**

It has been well established that there are differences in the pattern of implicit racial bias displayed by Blacks and Whites (Ashburn-Nardo et al., 2003; Jost et al., 2002; Nosek et al., 2002; Olsen et al., 2009; Richeson et al., 2005). Are these cultural differences the result of differences in exposure to biased associations, ability to control the expression of bias, or the ability to resist being influenced by bias irrespective of exposure (Amodio & Mendoza, 2010)? The inclusion of ideology into the examination of implicit racial bias in Blacks presents some potential avenues to address these questions in future research.

One of the original theories of implicit racial bias development suggests that implicit racial bias develops in response to associations that individuals are repeatedly exposed to in the course of their daily lives (Devine, 1989; Fazio et al., 1986; Wilson et al., 2000: cf. Bargh et al.,

1992; Dunham et al., 2008; Ranganath & Nosek, 2008). If this is true then the endorsement and behavioural implementation of different racial ideologies may influence the level of exposure to these associations, one's emotional response to them, as well as the extent to which this exposure is internalized. For example, Nationalist ideology encourages Black individuals to consider the needs of the Black collective, interact and collaborate with other in-group members, and acknowledge and challenge both individual and systemic discrimination (Sellers, Morgan, & Brown, 2001). These thoughts and behaviours may encourage the formation of positive explicit and implicit associations with the in-group, and/or the rejection of existing negative associations with the in-group that are promoted within the larger system (Devine, 1989; Karpinski & Hilton, 2001; Shelton, 2000). They could also encourage the formation of negative implicit and explicit associations with the potentially hostile dominant out-group, and/or the rejection of existing positive associations with the dominant group that are promoted within the larger society (Devine, 1989; Karpinski & Hilton, 2001; Shelton, 2000). This, in turn, could influence the more spontaneous affective implicit racial biases. Assimilation and Humanist ideologies would encourage the formation of the opposite associations. This process is thought to occur slowly over time (Devine, 1989; Fazio et al., 1986; Wilson et al., 2000: cf. Dunham et al., 2008; Ranganath & Nosek, 2008). Consistent with the theorizing of Amodio and Mendoza (2010), if the process just described is occurring, differences in the expression of implicit racial bias within the group would result from both differences in exposure to biased associations, as well as potential differences in the ability to resist being influenced by bias (depending on the strength of endorsement of particular ideologies).

When examining repeated associations over time, rather than looking at a single predictor individually, the inclusion of ideology provides a framework within which to organize the

previously hypothesized predictors into meaningful patterns. For example, I found that in North American contexts (Studies 1 & 3), stronger endorsement of Nationalist ideology among Blacks was associated with feeling higher levels of explicit positivity towards Blacks (Studies 1 & 3), lower levels of explicit positivity towards Whites (Study 3), perceiving more racism (Studies 1 & 3), choosing not to justify systemic inequality that disadvantages Blacks (Study 3), believing that success should be associated with both oneself as an individual, and the Black collective as a whole (Study 3), and importantly an unconscious preference for Blacks over Whites (Studies 1 & 3). Stronger endorsement of Humanist ideology was associated with feeling higher levels of explicit positivity towards Whites (Study 3), lower levels of explicit positivity towards Blacks (Study 3), perceiving less racism (Studies 1 & 3), more justification of systemic inequality that disadvantages Blacks (Study 3), a stronger belief that success should be associated with oneself as an individual (and possibly also the out-group: Study 3), and importantly a greater unconscious preference for Whites over Blacks (Study 3). Assimilation ideology was associated with feeling higher levels of explicit positivity towards Whites (Study 3), perceiving less racism (Study 1), more justification of systemic inequality that disadvantages Blacks (Study 3), and importantly a greater unconscious preference for Whites over Blacks (Study 3). The constellation of characteristics associated with each ideology could provide a basis for the prediction of racial attitudes and behaviours based on the knowledge of the direction of an individual's implicit racial bias (or vice versa) and speculation on the relative merit of these ideological orientations based on these associated beliefs. Further, these findings suggests that if a particular ideology is strongly endorsed in a particular population it may be possible to predict the direction of various other relevant racial and social attitudes associated with the ideology that individuals in the population may hold.

Another theory of implicit racial bias development suggests that the conscious or non-conscious pursuit of race-related goals in the social environment can influence an individual's implicit attitude toward goal related objects. In a series of studies, positivity toward goal related objects was found to be activated immediately upon adoption of the goal (Bargh et al., 2001; Ferguson & Porter, 2010; Ferguson & Cone, 2013). Based on this reasoning, if the goal of assimilating (a race-related goal) is strongly endorsed, the out-group could be seen as a goal related object toward which implicit positivity is immediately activated. If Nationalist ideology were strongly endorsed, the goal-related object to which positivity is activated would be the in-group. When examining race related goals and implicit racial bias in Blacks, the inclusion of ideology makes this goal pursuit hypothesis becomes quite viable and easy to test. In response to Amodio and Mendoza (2010) in this scenario, because implicit racial bias is thought to be immediately activated, differences in implicit racial bias within the group would occur based goals held by different individuals within the group that might elicit differing emotional responses to differing target objects (Ferguson & Cone, 2013).

The findings from the current project cannot be taken as proof of the theories of implicit racial bias development discussed above, due to the correlational nature of the data and study design as well as the fact that there are a number of alternative explanations wherein the direction of effects may differ, or an unknown third variable may be responsible for the relationships (Pek & Hoyle, 2016). Hence, it is impossible from these data to determine the temporal sequence within which these variables emerge (Pek & Hoyle, 2016). The work of Richeson and Nussbaum (2003) on the relationship between ideology and implicit racial bias in Whites, however, provides some support for the possibility that ideology influences implicit racial bias. They primed White participants with either colour-blind or multicultural ideology,

and then measured implicit racial bias using the IAT in an experimental design. They found that those White participants that had been primed with a colour-blind ideology had stronger pro-White bias on the IAT than those primed with multicultural ideology, providing empirical support that ideologies can influence and may therefore precede implicit racial bias.

There is other support in the literature suggesting that ideological perspectives can influence implicit racial bias even in the short term in non-Black populations (Lai et al., 2014). In a series of interventions designed to reduce implicit pro-White bias in non-Black participants, Lai and colleagues (2014) found across a series of three trials that promoting Humanist and Egalitarian ideologies failed to reduce implicit pro-White bias. The promotion of multicultural ideology, on the other hand, succeeded in reducing pro-White bias in this non-Black population. Taken together, these findings suggest that, at least in the short-term, ideologies can have a direct impact on implicit racial bias.

It has been suggested that racial ideology "reflects the method by which individuals encode and interpret racial information" and is a "superordinate category capturing a number of concepts" (Neville et al., 2005). Although the significance of racial identity in the manifestation of implicit racial bias has been considered, the racial ideology component of racial identity has been under-examined (Neville et al., 2005). The value of ideologies is highlighted in the current research. The individual constructs that have been examined in past research may not fully take into account the varied combinations of internal and external socio-cultural factors that likely contribute to implicit racial bias and may lead to oversimplified conclusions regarding the meaning of these biases.

**Value of the AMP as an Implicit Measure**

All three studies in the current project used the IAT as an implicit measure. It should be noted, however, that the IAT has consistently failed to demonstrate in-group bias in disadvantaged groups, despite the fact that in-group bias *has* been found with other direct and indirect measures (Olsen et al., 2009). This suggests that for the purposes of the current project, the IAT may not be the best instrument to measure implicit racial bias. The AMP was introduced as an implicit measure in Study 3 of the current project and has provided considerable information about implicit racial bias in Blacks that might not have been revealed with the IAT alone. Most importantly, when the AMP was used as the implicit measure in Study 3, implicit racial bias was related to a variety of explicit measures including in-group positivity, perceived out-group negativity, system justification, individual versus collective success orientation, and most importantly racial ideology in the hypothesized directions.

One additional important contribution of the AMP in the current research is the demonstration that implicit racial bias toward just the racial in-group ($AMP_b$) and out-group ($AMP_w$) seem to have different relationships with the predictors. The ability to decompose these components in the current research has provided some novel and interesting results and advanced our understanding of the relationships between the predictors tested, by providing more nuanced information upon which to base future testable hypotheses. For example, system justification was not directly related to implicit negativity toward the in-group but rather to implicit positivity towards Whites. Based on this finding, it seems possible that system justification may be the unconscious companion of behaviours associated with ideological goal aspiration (Humanist & Assimilation goals), irrespective of attitudes toward the in-group: the unconscious component

being the effect of these conscious thoughts and behaviours on implicit racial bias (Ferguson & Cone, 2013).

Another interesting finding was that individual versus collective success orientation was only related to implicit positivity towards Blacks and unrelated to implicit positivity towards Whites, suggesting that valuing the well-being and advancement of the Blacks as a collective could reflect in-group "love" rather than out-group "hate" (Brewer, 1999). This construct may represent the in-group positivity that is thought to be an inevitable component of group membership (Axt et al., 2014; Mullen et al., 1992: cf. Scherer & Lambert, 2012). This finding may have been obscured when implicit racial bias was estimated by the IAT, as the IAT is less sensitive to detecting attitudes towards distinct racial groups (Bar-Anan & Nosek, 2014).

The use of the AMP as an implicit measure also provides more nuanced insight into how perceived out-group negativity is accounting for variability in implicit racial bias toward each group separately. It appears that perceiving racism in the environment, in line with what one would intuitively predict, is associated with more positive implicit racial attitudes toward the in-group and less positive implicit racial attitudes towards the out-group, supporting the assertion that it may not be anti-White racism that precipitates lower levels of implicit positivity towards Whites, but rather perceptions that Blacks are being mistreated by Whites (Wright, 2001).

With the AMP, I found convergence between implicit pro-Black bias and all of the measures of explicit in-group positivity, suggesting that the AMP is incorporating attitudes towards the in-group (Livingston, 2002; Olson et al., 2009). This convergence between implicit and explicit pro-Black bias supports the claim that the AMP may at least in part be evaluating race-related affective responses to the primed racial exemplars themselves, not in relation to another racial group (Bar-Anan & Nosek, 2012; Payne et al., 2005). The inconsistencies in the

relationship with explicit in-group positivity and implicit racial bias in Studies 1 and 2 and in other previous research (Nosek et al., 2002; 2005), may have arisen in part because of the nature of the IAT, that captures relative attitudes and affect towards two broad racial categories and not the more group-specific affective responses that racial exemplars might evoke (Nosek et al., 2005, Gawronski & DeHouwer, 2011).

Based on the advances offered by the current project in understanding implicit racial bias in Blacks it would be advisable for research examining implicit racial bias, particularly among disadvantaged groups, to include a measure that estimates implicit racial bias toward each group separately. Relative measures may not be able to appropriately assess the varied combinations of in-group and out-group bias, and could lead to oversimplified conclusions regarding the meaning of these biases.

In Study 3, the IAT and AMP were both used as implicit measures and on each measure a significant pro-Black bias emerged. In addition, the two measures were significantly correlated suggesting that they are measuring similar constructs. However, implicit racial bias as measured by the AMP was often a better predictor of our explicit measures. Although it is possible that this was because the AMP provides a more accurate or nuanced measure of implicit racial bias, it is also possible that for at least some participants the AMP is itself, an explicit measure (Bar Anan & Nosek, 2012; *cf* Cameron et al., 2012; Payne et al., 2013). For example, some have suggested that a subsection of participants control their responses on the AMP, which might compromise the implicit nature of this measure and the conclusions that can subsequently be drawn (Bar-Anan & Nosek, 2012). In future studies it will be important to include measures that allow for better detection of participants for who may be controlling their responses on the AMP (Gawronski & Ye, 2015).

**Conclusions and Future Directions**

This research project provides some exciting initial insights into the constructs associated with implicit racial bias in Blacks. The relationships that emerged in the current project provide an impetus to re-examine the meaning and implications of ideology and implicit racial bias. Future research should be conducted to investigate the value of a pro-Black bias among Blacks, a willingness to challenge (rather than to tolerate or justify) injustice in the larger social system and the promotion of Nationalist racial ideology as a benefit to the well-being and enrichment of Blacks as a group.

The impetus to re-examine the implications of ideology and implicit racial bias is supported by past research examining the negative effect of implicit pro-White bias (Ashburn-Nardo et al., 2003; Chae, Nuru-Jeter & Adler, 2012) and system justification (Kay et al., 2008; Kay & Zanna, 2009; Laurin & Kay 2008; Rankin, Jost & Wakslak, 2009) for Blacks. For example, Ashburn-Nardo and colleagues (2003) found that Blacks with higher levels of implicit pro-White bias were more likely to choose a White over a Black person to be their partner in an activity involving an academic domain in which Blacks are negatively stereotyped. Chae and colleagues (2012) examined the relationship between perceptions of discrimination and hypertension in middle aged Black men. They found that as perceptions of discrimination increased hypertension also increased, however this effect was only true for those with higher levels of implicit pro-White bias, suggesting that an implicit pro-White (versus pro-Black) bias may be having a deleterious health effect. These findings suggest that implicit pro-White bias among Blacks can predict behavioural and physiological outcomes that disadvantage Blacks. System justification among the disadvantaged has similarly been empirically linked to lower self-esteem and well-being (Jost & Hunyady, 2005), higher levels of neuroticism (Jost &

Thompson, 2000) increased depression and anxiety, and reduced performance self-esteem, sense of mastery, and financial optimism (Rankin et al., 2009), greater support for the status quo (Jost & Burgess, 2000), increased derogation of the in-group (Jost & Burgess, 2000), and resistance to social change (Kay & Zanna, 2009) in disadvantaged groups.

In contrast, there is evidence demonstrating that the implementation of a Nationalist ideology among Blacks might be an adaptive coping response to systemic injustice. White (2009) examined the relationship between social responsibility attitudes and various measures of racial identity in African American college students. She found that Nationalist ideology was positively associated with social responsibility attitudes, and that higher levels of social responsibility predicted better psychological outcomes (White, 2009). Many researchers examining methods to reduce social inequality have asserted that collective action is the most effective means to achieve more equitable resource distribution (Kawakami & Dion, 1995; Wright & Lubensky, 2009; Major, 1994). Similarly, Wright (2001) has defined collective action as the process by which members of a group come together and identify as a group in order to address issues affecting the social status and conditions experienced by the in-group. This definition quite accurately encapsulates the Nationalist items from the MIBI.

There is a growing body of research demonstrating that endorsement of Nationalist ideology, and/or racial identity profiles wherein Nationalist ideology is more strongly endorsed, are associated with positive outcomes among Blacks facing discrimination. Higher levels of Nationalist ideology have been associated with better mental health among Blacks in the form of lower levels of depression and psychological distress when faced with discrimination (Hudson Banks, Kohn-Wood, & Spencer, 2007; Sellers, Copeland-Linder, Martin, & Lewis 2006; Sellers & Shelton, 2003), and better physical health among Blacks in the form of reduced diastolic blood

pressure when faced with discrimination (Neblett, & Carter, 2012). Stronger endorsement of Nationalist ideology has also been found to be associated with better academic performance among Black university students (Allwood, 2012; cf. Sellers, Chavous & Cooke, 1998; Nasim, Roberts, Harrell, & Young, 2005)

Those higher in their endorsement of Assimilation or Humanist ideology were found to have higher levels of depression and psychological distress in the face of discrimination (Hudson-Banks & Kohn-Wood, 2007). Adolescents endorsing Assimilation ideology were found to have lower levels of academic engagement when faced with discrimination relative to other groups (Smalls, White, Chavous, & Sellers, 2007). In two studies with Black university samples stronger endorsement of Humanist ideology was associated with lower levels of academic performance (Allwood, 2012; Nasim, Roberts, Harrell & Young, 2005). Consistent with these data, Sellers and colleagues have suggested that the constellation of beliefs associated with a Nationalist ideology may prepare Black individuals for the experience of discrimination, help them make sense of the mistreatment they face in the larger society, and promote the adoption of more adaptive problem focused coping strategies to deal with the larger society (Sellers & Shelton, 2003; Seller et al., 1998). Taken together with the findings of the present research, it seems that future research would benefit from having greater focus on the many ways that racial ideologies can shape the affect, cognition, and behaviour of Blacks and of other minority group members.

In the current correlational studies, it is important not to draw causal conclusions. We do not know whether particular explicit racial attitudes, motives regarding the system, or individual versus collective success orientation *cause* an individual to develop a racial ideology that eventually results in implicit racial bias. Whether the constructs measured in this research project

are origins or outcomes of implicit racial bias in Blacks, or the result of a third factor, the nature of how these constructs relate to each other in the context of a racial ideology framework, with all of the attendant breadth of meaning to Black identity and functioning, is an invaluable contribution of this project. As noted by Gawronski and colleagues (2006), an individual can be unaware of the source, content, or impact of a particular implicit racial bias (Gawronski, Hofmann & Wilbur, 2006). Whether these constructs represent sources, contents or impacts, the introduction of racial ideologies into the analysis provides a framework to bring the "implications" of these implicit racial biases to light. What remains incontrovertible is that these "implications" are tremendously consequential to Blacks, both as individuals and as a collective.

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## Footnotes

[1]In the current project I propose that racial ideologies could be conceptualized as race-related goals or strategies. This is supported by Jost (2006) who describes political ideology as a broadly endorsed strategy enacted at the level of the individual. This conceptualization differs from Sellers and colleagues definition of racial ideologies as an individual's philosophy about how racial group members should "live and interact with other groups in the larger society" (Sellers, et al., 1997, pp.806). In support of my conceptualization, goals have been defined as states (manifested in behaviors or outcomes) that an individual strives to attain (Gollwitzer & Moskowitz, 1996). Gollwitzer (1999) further asserts that a goal must be planned by selecting behaviours consistent with achieving the goal and considering the situations best suited to performing these behaviours, so that as situations arise, situational factors do not hamper the enactment of prioritized goals. Many of the items of the racial ideology subscales of the MIBI seem to match this definition of a planned goal (see Appendix).

In further support of this conceptualization of ideologies as goals, Sellers and colleagues (1997) evaluated the predictive validity of the ideology subscales by associating particular ideologies with behavioural outcomes. For example, they predicted that Nationalist ideology would be positively associated with having an African American best friend and enrolling in Black studies courses. The opposite relationships were predicted for Assimilation ideology. Further, for those high in Nationalist ideology, another behavioural outcome: having less contact with Whites relative to those high in Assimilation ideology, was predicted. These predictions were confirmed (Sellers et al., 1997).

These behavioural indicators of predictive validity support the suggestion that the ideologies go beyond the realm of beliefs and into the realm goals. If one endorses an

Assimilation ideology, for example, and then engages in assimilative behaviours (having more White friends, fewer intimate Black friends, and less interest in engaging in studies associated with the in-group), then it follows that one may have a goal of assimilating.

[2]For Study 1, I recruited only Black Canadians who were born in Canada or had immigrated to Canada by 6 years of age (see Clément, Singh, & Gaudet, 2006 for a similar school-age cutoff). For Study 3, to increase access to participants, any participant who self-identified as Black was invited to participate. When the Study 3 sample was broken down into Canadian and non-Canadian participants based on the cut-off point described for Study 1, there were a total of 137 Canadian participants and 67 Non-Canadians.

[3] In Studies 1 and 2, the additional scales within which the measures of interest were embedded included the Rosenberg Self Esteem Scale (Rosenberg, 1979), the Castenell Achievement Motivation Scale (Castenell & Levitow, 1996), the Self-Efficacy for Self-Regulated Learning Scale (Zimmerman, Bandura, & Martinez-Pons, 1992) and the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). In Study 2, the Collective Self Esteem Scale (Luhtanen & Crocker, 1992) was also completed. When participants returned to complete the system justification measure in Study 2, they also completed the Stroop Task (Stroop, 1935), the PANAS scale (Watson, Clark, & Tellegen, 1988), and the State Self-Esteem Scale (Heatherton & Polivy, 1991). In Study 3, the additional, measures included in the "first study" were the Collective Self Esteem Scale (Luhtanen & Crocker, 1992), the Rosenberg Self Esteem Scale (Rosenberg, 1965), and the Global Black Identity Scale (Bair & Steele, unpublished). The additional measure included in the "second study" was the Horizontal & Vertical Individualism & Collectivism Scale (Singelis, Triandis, Bhawuk, & Gelfand, 1995).

[4]Because the "second study" involved viewing a video recording of another participant speaking on either a race-related or neutral topic and then answering a set of questionnaires within which the system justification measures were embedded, I tested whether this manipulation had any effect on system justification scores. A one-way MANOVA (Condition: Race-related or Neutral) on Personal Belief in a Just World, General Belief in a Just World, and System Justification Scale scores, showed no significant difference between conditions, $F_{PBJW}(3, 73) = .10$, $p = .75$, $F_{GBJW}(3, 73) = 2.01$, $p = .16$, and $F_{SYSJUS}(3, 73) = .16$, $p = .68$.

[5]A different version of the AMP was piloted in the early stages of Study 3. This version involved alterations to the target stimulus presentation time that would be consistent with preconscious processing. The findings from this pilot failed to show a priming effect even for the objectively positive (flowers) and negative (insects) stimuli, so the decision was made to use a standard AMP.

[6]To confirm that the AMP was working correctly, positive, negative and neutral primes were included in the test, along with the Black and White primes of interest. To validate that the AMP was producing the anticipated responses, a within subjects analysis of variance was conducted on participants' positivity ratings following positive (flowers), neutral (gray squares) and negative (insects) prime types. The priming effect was significant, $F(2, 210) = 277.83$, $p < .001$. Paired sample t-tests using AMP scores by prime type, revealed that mean positivity ratings following Negative primes ($M = 6.53$, $SD = 4.97$, 27%) were significantly lower than those following Neutral primes ($M = 10.57$, $SD = 5.34$, 44%), $t(211) = -12.08$, $p < .001$), as well as Positive primes, ($M = 17.13$, $SD = 4.67$, 71%), $t(211) = -19.86$, $p < .001$. Mean positivity ratings following Positive primes were also significantly higher than those following Neutral primes, $t(211) = 13.94$, $p < .001$. This finding shows that participants were more likely to rate

inkblots following positive primes positively, inkblots following negative primes negatively, and the neutral trials were somewhere in between as would be expected.

[7] For the regression analyses, 2 multivariate outliers were identified by Malhalanobis distance when Assimilation ideology was included as a predictor and 1 multivariate outlier was identified when Humanist ideology was included as a predictor. These scores were found not to be the result of error, but rather were a more extreme but otherwise correct and important part of a normal sample. For this reason, the outliers were retained. The results with the outliers excluded are footnoted. To reduce the effect of these outliers on the normality, linearity and homoscedasticity of the sample, the scores on the AMP, the Assimilation ideology subscale and the Humanist ideology subscale for these 2 participants were recoded to the next lowest non-outlying score on the affected scales (Tabachnick & Fidell, 2007).

Identical regression analyses were conducted with implicit bias scores measured with the IAT as the dependent variable and the results are presented in Table 10.

[8] For all regression analyses in Study 3, the measure of in-group positivity was chosen to maintain consistency between Study 1 and Study 3. Explicit positivity towards Blacks measured with feeling thermometers was also significantly related to the AMP ($r$ = -.20) and when substituted as the measure of in-group positivity in the regression analyses, although there was a significant increase in $R^2$ in Step 2 with each ideology included, this measure of in-group positivity remained a significant predictor of implicit racial bias, along with each of the ideologies. PBJW was chosen as the measure of system justification to maintain consistency between Study 2 and Study 3. The System Justification Scale was also significantly related to the AMP ($r$ = -.17) and when substituted into the regression analyses the effects were comparable to those found with PBJW.

[9]Regression analyses were conducted with the multivariate outliers noted in footnote 6 excluded for the Assimilation ideology subscale and Humanist ideology subscale. For the model excluding one multivariate outlier for Humanist ideology, step 1 of Model 1 including in-group positivity, perceived out-group negativity, PBJW and collective success was significant, ($F$(4, 199) = 3.74, $R^2$ =.05, p = .006), with PBJW emerging as the only significant predictor of implicit racial bias, $\beta$ = .17, $t$ = 2.42, $p$ = .02. When Humanist ideology was entered in Step 2, it emerged as a marginally significant predictor of implicit racial bias, ($\beta$ = .13, $t$ = 1.80, $p$ = .07), PBJW remained a marginally significant predictor ($\beta$ = .13, $t$ = 1.75, $p$ = .08), and there was a marginally significant increase in variance accounted for $F$(5, 198) = 3.67, $\Delta R^2$ =.01, p = .07. For the model excluding two outliers for the Assimilation ideology subscale, step 1 of Model 1 including in-group positivity, perceived out-group negativity, PBJW and collective success was significant, ($F$(4, 198) = 3.81, $R^2$ =.05, p = .005), with PBJW emerging as the only significant predictor of implicit racial bias, $\beta$ = .16, $t$ = 2.30, $p$ = .02. When Assimilation ideology was included in Step 2 it did not emerge as a significant predictor of implicit racial bias, ($\beta$ = .11, $t$ = 1.52, $p$ = .13). PBJW remained a marginally significant predictor ($\beta$ = .14, $t$ = 1.89, $p$ = .06), and there was no significant increase in variance accounted for, $F$(5, 197) = 3.53, $\Delta R^2$ =.01, p = .13. Nationalist ideology remained a significant predictor of implicit bias as there were no multivariate outliers for regression analyses including Nationalist ideology.

As noted in footnote 1, the Study 3 sample included some participants who could not be considered strictly Canadian due to their recent immigration. To examine whether "non-Canadians" might be influencing the predicted effects, regression analyses were run separately examining Canadian ($n$ = 137) and non-Canadian ($n$ = 67) samples separately in Study 3. The outliers identified in the larger sample were a part of the "Canadian" sample and were addressed

in the manner outlined in footnote 6. For the Canadian sample, the results were virtually identical to those with the entire sample except that individual versus collective success orientation rather than PBJW emerged as the only significant predictor of implicit racial bias in Step1, $\beta$ = -.17, $t$ = -1.98, $p$ = .049. At Step 2, when Nationalist ideology was included, Individual versus collective success orientation was no longer a significant predictor of implicit racial bias ($\beta$ = -.13, $t$ = -1.53, $p$ = .13) and Nationalist ideology emerged as the only significant predictor of implicit bias, $\beta$ = -.23, $t$ = -2.51, $p$ = .01. Importantly, the addition of Nationalist ideology as a predictor in Step 2 resulted in a significant increase in variance accounted for, $F(5, 131) = 6.31$, $\Delta R^2 = .04$. Similarly when Humanist ideology was instead entered at Step 2, it emerged as the only significant predictor of implicit racial bias ($\beta$ = .20, $t$ = 2.23, $p$ = .03) resulting in a significant increase in variance accounted for, $F(5, 131) = 4.95$, $\Delta R^2 = .03$, p = .03. Finally, when Assimilation ideology was instead included at Step 2, it too emerged as a marginally significant predictor of implicit racial bias ($\beta$ = .15, $t$ = 1.70, $p$ = .09), with a marginally significant increase in variance accounted for $F(5, 131) = 2.89$, $\Delta R^2 = .02$, p = .09. These results support the conclusion that the effects found with the full sample (including the modified outliers) are equally reflective of a sample of only Black Canadian participants.

No significant effects emerged for any predictors at any step in the non-Canadian sample for either Nationalist or Humanist ideology. For Assimilation ideology, Step 1 was not significant, but when Assimilation ideology was added in Step 2, the change in $R^2$ was marginally significant, ($F(5, 61) = 3.70$, $\Delta R^2 = .05$, p = .06) and Assimilation ideology emerged as a marginally significant predictor of implicit racial bias in Step 2, $\beta$ = .24, $t$ = 1.92, $p$ = .06. Caution must be taken in interpreting findings relating to the non-Canadians. As a result of the small sample size, the effects for non-Canadians may not be reliable.