Racial Essentialism is Associated with Prejudice Towards Blacks in 5- and 6-Year-Old White Children

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Abstract

Psychological essentialism is a cognitive bias that leads people to view members of a category as sharing a deep, underlying, inherent nature that causes them to be fundamentally similar to one another in non-obvious ways. Although essentialist beliefs can be beneficial, allowing people to view the social world as stable and predictable, essentialist beliefs about social categories such as race or ethnicity are also thought to underlie the development of stereotyping and prejudice. Whereas recent studies in adults have found that racial essentialism is associated with increased prejudice, the development of this relationship has rarely been examined. The present research examined the implications of essentialism for prejudice in a population of white five- and six-year old children in the United States, and revealed that essentialist beliefs about race are associated with increased implicit and explicit prejudice towards members of a minority racial group.

Keywords: essentialism; social; race; prejudice; cognitive development

Introduction

Humans form categories based on a wide range of features (e.g., color, size, shape), yet in some conceptual domains—particularly for biological and social thought—certain categories take on particularly central roles in cognition and behavior because they are embedded in essentialist beliefs about the structure of the world (Gelman, 2003). Psychological essentialism is a pervasive cognitive bias that leads people to view members of a category as sharing a deep, underlying, inherent nature (a category "essence"), which causes them to be fundamentally similar to one another in non-obvious ways (Medin & Ortony, 1989). In humans, essentialist beliefs about social categories allow people to view the social world as stable and predictable, yet these beliefs might also carry with them deleterious consequences. By emphasizing the distinctiveness of group boundaries, leading people to see social group membership as discrete and immutable, and reifying the idea that social groups are objectively constructed and naturally occurring, essentialist beliefs about social categories have been theorized as a basic cognitive bias that underlies the development of stereotyping and prejudice (e.g., Haslam, Rothschild, & Ernst, 2002; Yzerbyt, Corneille, & Estrada, 2001; Allport, 1954).

Indeed, Mandalaywala, Amodio, and Rhodes (in prep) found that essentialist beliefs about race were associated with increased implicit and explicit prejudice in a sample of white American adults, suggesting that essentialist beliefs provide the cognitive basis for prejudicial attitudes. These findings were consistent with studies that documented a link between the belief that race has a biological basis and increased prejudice towards black individuals (Williams & Eberhardt, 2008; Jayaratne et al., 2006). However, the association between essentialism and prejudice has not been found across the board (e.g., Bastian, Loughnan & Koval, 2011; Bastian & Haslam, 2006; Haslam, Rothschild & Ernst, 2002). These inconsistencies in previous work with adult populations suggest the need for a more precise framework and better understanding of how and why essentialist beliefs relate to prejudiced attitudes. One of the primary points of clarification necessary is whether essentialist beliefs underlie the development of prejudice, or whether essentialist beliefs are invoked as justification for prejudiced attitudes that people might already hold.

There are several mechanisms by which essentialist beliefs could foster the development of prejudice. As essentialism leads individuals to believe that group differences arise from stable and inherent factors, essentialism could lead individuals to view all members of an out-group as more different from themselves than all members of the in-group (No et al., 2008). Similarly, essentialism could lead individuals to believe that social groups demarcate fundamentally distinct *kinds* of entities, perhaps even leading them to dehumanize members of essentialized out-groups. Both of the above processes have been shown to contribute to prejudice in adults (Haslam, Bastian, Bain, & Kashima, 2006; Brewer, 1999). Additionally, essentialism could lead to prejudice by influencing how people respond to negative information about individual group members. For example, because essentialism promotes category-wide generalizations and emphasizes within group similarity, essentialism could make people more likely to draw conclusions about the nature of an entire group based on the negative actions of single individuals (Andreychik & Gill, 2014; Prentice & Miller, 2007).

In light of the mixed patterns of data found in adult populations, however, some theorists have proposed that essentialist beliefs do not lead to the development of prejudice. Instead, these theorists have suggested that essentialism and prejudice are sometimes related to one

another because essentialist beliefs are purposefully adopted in order to justify already held social attitudes or practices. For example, Morton, Hornsey, and Postmes (2009) found that endorsement of certain social essentialist beliefs depended on whether essentialism was being used as a justification for excluding an in-group member or an out-group member, and Mahalingam (2003) found that higher caste Indians were more likely to endorse essentialist interpretations of caste than were lower caste Indians. These findings suggest that people might use essentialism in a post-hoc manner to justify their already held beliefs and, in certain circumstances, to justify their advantaged position in the social hierarchy.

One way to clarify the way in which essentialism is related to prejudice is to consider how this relationship unfolds in early development. Children begin to show race-based social preferences and in-group biases in the preschool years (e.g., Shutts, 2015; Baron & Banaji, 2006), but no prior work has tested whether such prejudiced beliefs and behaviors are related to essentialist beliefs in early childhood. If essentialism underlies the development of prejudice—by accentuating group boundaries, for example—then we might expect that essentialism and racial prejudice will be related to one another as soon as both of these phenomena begin to emerge. Alternately, if essentialist beliefs are adopted strategically to justify already held prejudices and practices, then we might expect essentialist beliefs and racial attitudes to remain distinct in early childhood, and only begin to relate to each other after children gain more experience with the structure of their social world. Thus, examining the relation of essentialism to prejudice in early childhood can provide an initial way to begin to distinguish how these critical cognitive and social phenomena relate to one another.

Like adults, children are prolific essentializers, holding essentialist beliefs about biological and social categories (Taylor, Rhodes, & Gelman, 2009; Waxman, Medin, & Ross, 2007; Gelman, 2003). Social essentialist beliefs emerge in early childhood (by at least age four), but with substantial individual and cultural variation in both the ages at which social essentialist beliefs are acquired (Pauker, Xu, Williams, & Biddle, in press; Kinzler & Dautel, 2012; Rhodes & Gelman, 2009) and in the precise social categories that are essentialized (Diesendruck et al., 2013; Waxman, 2012; Deeb et al., 2011). In the United States, where race is a salient category, children between four- and nine- years of age develop essentialist beliefs about race—coming to view racial categories as stable and determined by birth (Hirschfeld, 1995), as marking similarities within members and differences between groups (Waxman, 2010), and as an objectively accurate way of classifying people (Rhodes & Gelman, 2009), with these beliefs typically emerging at the higher end of this age range in white children (Rhodes & Gelman, 2009).

The implications of essentialist beliefs for other aspects of children's cognitive and social development have rarely been examined. In a notable exception (Pauker, Ambady, & Apfelbaum, 2010), children who believed that skin color is constant over time (e.g., "when you grow up, will you be a white man/woman or a black man/woman?") were also more likely to endorse stereotypes about out-group members (e.g., when asked which of two children would be good at playing basketball, these children were more likely to select the picture of the black child than the picture of the white child). Similarly, at older ages, children who believed that traits are stable over time were more likely to form stereotypes about novel groups (Levy & Dweck, 1999).

The present research goes beyond these previous studies by: (1) directly measuring category essentialism (instead of beliefs about the stability and constancy of individual traits), and (2) examining the relation of essentialism to implicit and explicit prejudicial *attitudes* (i.e. social partner preferences and feelings of warmth towards majority and minority race individuals). Although stereotypes and prejudicial attitudes often co-occur, they are distinct in that prejudicial attitudes are evaluative and rely less strongly on cognitive constructs and explicit knowledge than stereotypes do. Thus, the current study examines the relationship between essentialist beliefs and implicit and explicit prejudice towards blacks in a sample of five- and six-year-old white children who are in the process of developing essentialist beliefs about race.

Examination of the ontological timeline of the emergence of essentialist beliefs and prejudice will shed light onto whether essentialism underlies the development of prejudice, or whether it is invoked as a justification for prejudice after these attitudes are already formed. If essentialism is necessary for the formation of prejudice, then we should find evidence of a relationship in children who have recently acquired both essentialist beliefs and prejudice towards out-group members. However, if essentialism is applied as a justification or rationalization of prejudice, then we might not see a relationship early in development, with a relationship only emerging once more sophisticated knowledge and experience about the structure of the social world is acquired.

Methods

Participants

Participants were 72 five- and six-year-old white children (30 male, M_{age} = 5.88 years, range = 5.00-6.92 years). Child ethnicity was determined by parental report. Participants were recruited from and tested at the Children's Museum of Manhattan. Written parental consent was obtained for all participants and children provided oral assent. All study procedures were approved by the Institutional Review Board of New York University.

Procedure

Participants completed multiple tasks to assess the extent of their essentialist beliefs about race, as well as both their implicit and explicit racial prejudice towards blacks during a single 20 minute testing session. All participants completed the tasks in the same order.

Participant's levels of essentialist beliefs about race were assessed with the visitor task, a commonly used measure of

category essentialism (e.g., Rhodes & Gelman, 2009). This measure of essentialism goes beyond racial constancy, tapping into the beliefs that there are objectively correct ways of classifying people, and that members of the same group are more similar to each other and more dissimilar to members of other groups. In the visitor task, participants were shown a pair of images, consisting of photographs of two children, and were asked to evaluate whether it could be acceptable for a "visitor from some place far away" to group that pair together as the "same kind". If participants view race as an *objective and natural* way to classify people, consistent with an essentialist view of race, they should reject the pairing of a white and black child together and accept only those pairings that follow their expected racial boundaries (i.e. white with white, or black with black). Each child saw four "mismatched" pairs and the total number of times they rejected these pairs was counted and divided by four to obtain an essentialism score in which a value closer to one indicates greater racial essentialism and a value closer to zero indicates less racial essentialism.

To measure participants implicit prejudice towards blacks, we used an evaluative version of the Implicit Association Test (IAT: Greenwald, McGhee & Schwartz, 1998) which is a dual categorization, reaction time test that measures the relative strength of association between compatible pairings (i.e. white faces with positive words and black faces with negative words) as compared to incompatible pairings (i.e. white faces with negative words and black faces with positive words). As not all participants were able to read at the time of testing, we utilized a child appropriate version of the IAT (chIAT) that replaces positive and negative words with smiley and frowny cartoon faces, respectively (Baron & Banaji, 2006).

The chIAT consisted of 5 blocks of trials, during which stimuli were presented in the middle of the computer screen in a randomized order. In Block 1 (10 trials), participants were shown a computer screen on which a cartoon smiley face was presented on the far left side of the screen in front of a yellow background, and a cartoon frowny face was presented on the far right side of the screen in front of a blue background. The participant was first oriented to the picture of the smiley face and told to "press the yellow button anytime you see a smiley face in the middle of the screen", and was then oriented to the picture of the frowny face and was told to "press the blue button anytime you see a frowny face in the middle of the screen". The participant was told to press the buttons as quickly as possible, but without making too many mistakes. After checking for comprehension, the child was randomly and sequentially shown the faces of 10 cartoon smiley or frowny faces (5 smiley and 5 frowny) while pressing the yellow or blue button. Across all Blocks, incorrect responses (e.g., pressing the incorrect button for the face being presented) were marked with a large red "X" and children had to press the correct button before the next face would be presented. In order to avoid excessive memory demands, the reference cartoon smiley and frowny faces in front of the yellow or blue background, respectively, remained on the screen at all times. Block 2 (10 trials) utilized the same training and testing as in Block 1, but with the faces of white and black children in place of smiley and frowny faces, respectively. Racial labels (i.e. black or white) were never used in the instructions, or at any point during the study. Block 3 (30 trials) was the first set of critical trials in which participants viewed the "compatible" pairing (white faces/smiley faces; black faces/frowny faces), Block 4 (20 trials) was used to train the participant on the black and white faces new, switched, locations, and Block 5 (30 trials) was the critical trial for the "incompatible" pairing (white faces/frowny faces; black faces/smiley faces). The block order in which the compatible and incompatible pairings were presented was counterbalanced across participants, with half receiving the compatible pairing first, and half the incompatible pairing first. An IAT D score was calculated following the scoring procedure in Greenwald, Nosek & Banaji (2003), excluding any participant who made incorrect responses on more than 20% of trials (excluded $n = 11$). A positive IAT D score indicates a stronger association for compatible pairings, and thus greater implicit prejudice towards blacks, whereas a negative score indicates greater implicit prejudice towards whites, and a score of zero indicates no implicit prejudice.

Finally, to assess explicit prejudice towards blacks, participants completed two tasks of their racial attitudes: a social preference task and a feelings thermometer task. In the social preference task, participants were shown three sets of pictures, each consisting of one white child and one black child, and for each set they were asked who they would prefer to associate with (e.g., "Here are two kids. Who would you like to invite to your birthday party/to the zoo/to the movies?"). The number of times each participant selected the white child was divided by three (the total number of questions), so that a higher percentage score indicates greater social preference for whites.

In the feelings thermometer task, adapted from the adult version (Amodio & Devine, 2006), each participant was shown six children (3 white and 3 black) one at a time, and asked about each child, "Do you like this kid, or do you not like this kid?" and "How much do you like/not like this kid? Do you sort of like/not like them, like/not like them, or really like/not like them?" Each participant then received an average score for the warmth of their feelings towards all three white children (white composite score) and all three black children (black composite score) separately, to determine the warmth of their feelings towards white and black individuals. As the feelings thermometer measure was incorporated after data collection for this study had already begun, there are fewer participants who completed this measure ($n = 22$).

Data were analyzed in SPSS 22.0. There was no effect of whether the participant received the compatible or incompatible pairing first on the chIAT, so Block order was not taken into account in subsequent analyses. We used Pearson's correlations to examine the relationships between essentialist beliefs and implicit and explicit prejudice.

Results

Overall, participants gave more essentialist responses than would be expected by chance (M = .84, CI = .77-.90; $t(72)$ = 9.92, p < .001), and there was no change in the magnitude of essentialist beliefs about race across development (r (72) = .06, p = .59).

Across all participants, there was an overall implicit bias towards whites (M = .21, CI = .07-.35; $t(61)$ = 3.09, p =.003), with participants demonstrating a stronger association between white/good and black/bad, than between white/bad and black/good. In line with the hypothesis that essentialism leads to the development of prejudice, essentialist beliefs about race were associated with increased implicit prejudice, as measured by the chIAT (r (61) = .31, p = .01: Fig. 1).

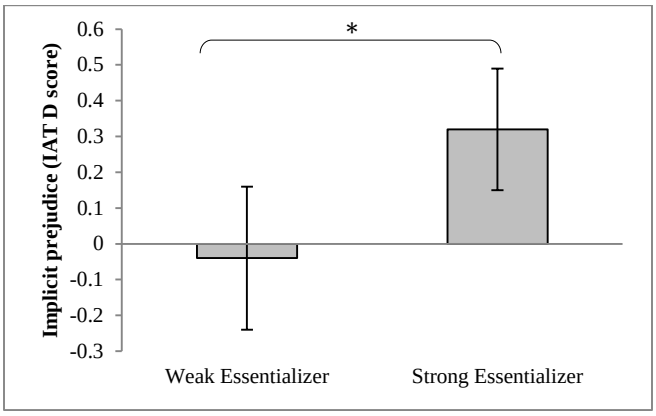

Figure 1: Relationship between essentialist beliefs about race and greater implicit prejudice as measured by the chIAT as shown for weak (M = -.04, CI = -.24-.17, n = 19) and strong (M = .32, CI = .15-.49, n = 42) essentializers. Strong essentializers were significantly more likely to exhibit implicit prejudice towards blacks than weak essentializers ($t(59)$ = -2.55, p =.013).

Essentialist beliefs about race were also marginally associated with greater feelings of warmth towards white individuals, as measured by the white composite score on the feelings thermometer (r (22) = .40, p = .06). We found no relationship between essentialist beliefs about race and feelings of warmth towards blacks (r (22) = -.13, p = .56). There was also no relation between essentialism and responses on the social preference task (r (63) = .08, p = .56).

Discussion

We found that essentialist beliefs about race were related to white children's implicit prejudice towards members of a socially disadvantaged, racial minority out-group, and explicit feelings of warmth towards members of their own socially advantaged, racial majority in-group. Echoing the results of studies done in adults, we found that by the age of five, white children show a clear relationship between essentialism and increased implicit prejudice towards blacks, an out-group, and are beginning to show a relationship between essentialism and greater liking of whites, their in-group. Co-occurrence of essentialist beliefs and prejudice early in development and during the pre-/early-school years when exposure and knowledge of social structure and hierarchy is less fully developed supports the hypothesis that essentialism contributes to the early formation of prejudiced attitudes.

There are several remaining questions that will be important to address in future work. Although this study found that the link between essentialism and prejudice is not dependent upon extensive social experience and knowledge of stereotypes, the precise mechanism by which essentialism might affect the formation of prejudice is still an open question. There are multiple, non-mutually exclusive ways by which essentialism could lead to increased prejudice, and these mechanisms could vary depending on the social group being essentialized, the social group status of the individual who holds the essentialist beliefs, or developmental stage. For example, as members of a socially dominant group, essentialism in white individuals might be associated with greater prejudice towards socially disadvantaged racial groups by emphasizing the boundaries and distinctiveness between racial groups, or by leading them to view out-group members as a distinctly different *kind* of individual (e.g., No et al., 2008). In either manner, these views are likely to increase their in-group bias and positive feelings towards their own racial group, leading them to feel more warmly towards their own group members. White adults and children both demonstrate similar relationships between essentialism and greater in-group liking, in support of the idea that essentialism in white individuals is associated with prejudice towards out-groups by reinforcing group boundaries and increasing in-group preferences.

Without data on black children, it is difficult to determine whether essentialism contributes to the formation of prejudice in the same way across all social groups. As essentialism is related to increased prejudice towards in-group members in black adults (Mandalaywala, Amodio, & Rhodes, in prep), it is possible that essentialism in black children or adults might be associated with prejudice through more of a post-hoc justification of a socially disadvantaged position than was found in white children or adults. By utilizing a more diverse sample and studying these same relationships in black children, we can better understand whether the mechanistic link between essentialism and prejudice is similar across children (i.e. similar relationship regardless of child characteristics), varies based on specific characteristics of both the individual and the particular category being essentialized (i.e. different relationships depending on child characteristics), and/or is developmentally variant (i.e. relationship changes between childhood and adulthood as a consequence of social experience).

Children as young as four- to six-years-old show increased liking and prefer to affiliate with those higher in social status and wealth, and at these ages they also begin to equate race and social status (Shutts, 2015). Therefore, even

though the data we present here did not support the hypothesis that essentialist beliefs are applied to justify prejudice, it is possible that different results would be obtained in minority race children, opening up the possibility that some social groups might use essentialist reasoning in a post-hoc manner, while for others essentialism is a necessary component for the formation of prejudiced attitudes

However, as we did not manipulate children's essentialist beliefs, we are unable in this study to assess a causal relationship between essentialism and prejudicial attitudes. Future research should experimentally manipulate essentialist beliefs about race and assess the consequences for racial attitudes and prejudice to determine whether essentialism is simply related to prejudice or actually leads to it. Findings from recent experimental research in adults suggest that there is a causal relationship in which essentialism directly influences the degree of prejudice reported towards blacks (Mandalaywala, Amodio, & Rhodes, in prep; Williams & Eberhardt, 2008), but the present study does now allow us to support that claim in children.

This study supports the proposal that certain key features of intergroup cognition are continuous across development (e.g., Dunham, Baron, & Banaji, 2008), and that essentialist beliefs about race are more likely to contribute to the formation of prejudiced attitudes than to be a consequence of prejudiced attitudes, at least in socially advantaged white children. Whereas additional research incorporating a more diverse sample of children will continue to clarify the underlying relationship between essentialism and prejudice and the direction of this relationship, this research lays the basis for future studies to investigate new ways to shape early developmental processes to reduce intergroup biases and prejudice towards vulnerable groups in society.

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