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Are humans born to hate? Three myths and three developmental lessons about the origins of social categorization and inter-group bias

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Abstract

Are humans born to hate? The present chapter considers three common claims about the nature of social categorization—that humans are predisposed to racism, to dislike out-groups, and to think of differences between people in the same way as they think about differences between animal species—and addresses the developmental evidence on which these claims are based. Consideration of the processes underlying the emergence of these phenomena across childhood provides new insight into how to prevent the development of prejudice and improve inter-group relations.

Racism and other forms of prejudice and discrimination have impeded the safety and survival, educational and economic opportunities, and physical and mental health, of countless people throughout the course of human history. The pervasiveness of racism around the world and throughout history, along with evidence that racism and racial biases emerge early in human development, have given rise to the view that racism and prejudice are the inevitable consequence of basic and inalterable features of human psychology. This view is problematic for two reasons. First, this view misrepresents what developmental science has revealed about the origins and ontogeny of racism and prejudice. Second, this view directs attention away from what we might learn from developmental science about how to prevent these negative phenomena in the next generation of children. In the present chapter, I describe three common myths about the developmental origins of racism and prejudice and three lessons from developmental science about how these phenomena emerge and might be prevented.

Myth 1: Babies are racist

The idea that humans are born racist, or with racial biases, originates in studies of infant looking behavior. For example, by three months, babies often look longer at faces of their own race (Bar-Haim et al., 2006; Kelly et al., 2005; Liu et al., 2015). By 6-months, infants begin to categorize faces into groups that correspond to conventional race categories (Anzures, Quinn, Pascalis, Slater, & Lee, 2010). To illustrate this categorization behavior, after babies see a series of White faces on a screen, for example, they notice (as evidenced by increased attentive looking to the screen) if they are then shown a face of someone of a different race. This behavior suggests that the participating babies had grouped all of the White faces together as one type, and then noticed a "change in type" that corresponds to race. Further, by the end of their first year, infants are often better at recognizing and remembering individual faces of people of their own race than people of other racial backgrounds (Anzures, Quinn, Pascalis, Slater, & Lee, 2013; Kelly et al., 2007). Thus, in several aspects of their visual behavior, babies appear to discriminate between members of their own race and others.

These findings are often described or interpreted as evidence that babies have racial biases, or even that humans are born racist (Kluger, 2014; Parry, 2012; Ryan,

2019). But this interpretation is wrong for two reasons. First, babies are not *born* with these behaviors. Newborn babies look equally long at people from different racial backgrounds (Kelly et al., 2005); babies develop the tendency to look longer at faces of their own race only after the first few months of life. Further, this development is entirely dependent on infants' environments. For instance, White babies growing up in Israel (who see mostly White faces) look longer at White faces; Black babies growing up in Ethiopia (who see mostly Black faces) look longer at Black faces; but Black babies growing up in Israel (who see both) look equally long at White and Black faces (Bar-Haim et al., 2006). Also, whereas babies often lose the ability to remember and recognize other-race faces by the end of the first year, babies who regularly see people of different racial backgrounds, or even who are intentionally shown diverse faces in books and media, do not (Anzures et al., 2013; Liu et al., 2015).

Babies process faces that seem familiar to them differently than faces that appear more different (Ellis, Xiao, Lee, & Oakes, 2016). Therefore, when infants grow up in environments that are racially homogeneous, they experience certain race faces as more familiar, and begin to process them differently. But when babies grow up in diverse environments, they do not show these biases in their early looking behavior. All of this suggests that infant behaviors that might appear as early forms of racial biases do not reflect innate tendencies, but instead are the result of early learning that takes place in particular environments.

The second reason why babies' looking behavior does not reflect early racial biases or innate racism, however, is that even when babies grow up in homogeneous environments and *do* start to look longer at own-race faces, this longer looking does not necessarily reflect or have any implications for the development of biased attitudes, beliefs, or behaviors. It feels intuitive to assume that babies look longer at things they *like*; if this were the case, then infants' tendency to look longer at own-race faces might mean that they already prefer people with those faces. But, although babies sometimes look longer at things they like (Kinzler, Doupoux, & Spelke, 2007), this is not always the case. Sometimes babies look longer at things because they are afraid of them or find them potentially threatening (LoBue & DeLoache, 2009; Rakison & Derringer, 2008). Sometimes, babies look longer at things that are familiar, surprising, or easier or harder

to process (Powell & Spelke, 2018). What determines whether babies look longer at something depends on a wide-variety of factors. Because there are so many reasons why babies might look longer at a particular stimulus, it is a mistake to assume that when babies look longer at faces of a particular race, this pattern necessarily means they like them better.

In fact, there is considerable evidence against the idea that there is a straight developmental path from longer looking to biased attitudes. For instance, infants' tendency to look longer at faces of their own race does not even persist across the first year of life—by 12 months, babies often look longer at faces from *less* familiar racial groups (Liu et al., 2015; Singarajah et al., 2017). Also, in a direct test of infants' preferences, Kinzler and Spelke (2011) found that 10-month-old babies are just as likely to accept a toy from someone of the same or different race (even though this is a sensitive test of babies' preferences more generally).

In sum, babies are not racist, and humans are not born with racial biases. How babies begin to attend to race depends on the diversity of the environment that they grow up in. Growing up in a diverse environment, or even exposure to diverse faces via books or the media, can help infants maintain their abilities to recognize and remember individual faces (Lee, Quinn, & Pascalis, 2017). As noted above, whereas there is not a straight line from infants' visual behavior to later bias in attitudes or social behavior, there is evidence that helping infants and young children retain these abilities to recognize and remember individuals from diverse racial groups can have positive consequences for inter-group relations (Lee et al., 2017). For example, providing children with targeted experiences with faces from diverse backgrounds reduces implicit race biases both in the moment and across time (Xiao et al., 2015; Qian et al., 2019). Therefore, the first lesson from developmental science on how to prevent the early emergence of racial biases is to expose infants and young children to people from diverse backgrounds.

Myth 2: People are predisposed to hate out-groups

Another common myth about human psychology is that people are predisposed to hate out-groups. From this perspective, people cannot help but categorize into groups of "us" and "them" and to dislike people who are in the other group. If this were

the case—if hating out-groups was the inevitable consequence of categorizing as "us" and "them"—then the particular stereotypes, experiences, or ideologies that people hold about certain groups are almost incidental (Dunham, 2018). From a strong version of this perspective, the simple act of categorizing is at the root of prejudice, discrimination, and inter-group conflict; the rest (e.g., group-specific stereotypes, biased ideologies and so on) is just justification.

The idea that people are predisposed to hate out-groups is often thought of as supported by the findings of social psychological studies that have tested what happens when people are placed into made-up groups for the first time during an experiment (Tajfel & Turner, 2004). This approach is useful because people do not bring any stereotypes or particular experiences with group members into the study. Researchers then vary features of the environment—whether the groups are in competition, differ in size, and so on, to see precisely what causes inter-group bias to emerge (for review, see Dunham, 2018). The striking finding from these studies is that inter-group bias emerges even in the "control" conditions—even when there is no competition, the groups are of equal size, neither group has more social power, and so on, people are still biased in favor of their own group.

As further evidence of the fundamental nature of inter-group bias, such "minimal group" effects emerge very early in childhood, long before children have extensive experience in formal social groups or teams (Dunham, Baron, & Carey, 2011). Even infants respond preferentially to people who are similar to them on arbitrary dimensions that are made salient in experimental contexts (Buttelmann, Zmvi, & Carpenter, 2012; Mahajan & Wynn, 2012).

Yet, none of this indicates that out-group hate is a psychological primitive or inevitability. This is because there is a fundamental distinction between in-group love and out-group hate (Brewer, 1991). Minimal group paradigms reveal evidence of the former, but usually not of the latter. When someone in a minimal group paradigm chooses to do something nice (e.g., sharing a resource) for an in-group member rather than an out-group member, they usually do because they feel increased positive feelings for the in-group member, not because they feel more negatively toward the out-group member. Of course, this is still a form of inter-group bias and discrimination. But,

the most pernicious forms of inter-group bias—including prejudice, punitive treatment, dehumanization, and inter-group violence—seem uniquely motivated by out-group hate (Brewer, 1991).

In human childhood, in-group love develops before out-group hate, further reinforcing that these are not two sides of the same coin—it is possible to love one's own group and not hate the out-group at all (Nesdale, 2004). As an experimental demonstration of these effects, Buttelmann and Boehm (2014) found that already by age six, children allocated more positive resources (e.g., stickers) to their in-group members than to out-group members. But, although children of this age also chose *not* to give negative resources (e.g., moldy toast) to their in-group, they did not systematically choose to give these negative things to the out-group either. They often discarded them into a neutral box. Thus, simply being placed into a minimal group did not lead 6-year-old children to behave punitively towards the out-group. In this study, a tendency to behave badly to the out-group developed later in childhood. Studies on the development of racial attitudes also confirms this differentiation and age-related time-lag between the emergence of in-group love and out-group hate (Nesdale, 2004).

Although feeling positively towards one's own group may indeed be a psychological inevitably (Dunham, 2018) and can itself have problematic consequences, thinking of in-group love and out-group hate as two sides of the same coin ignores the uniquely problematic nature of out-group hate and the particular circumstances that encourage it to develop. Considering the circumstances under which out-group hate develops reveals that—far from reflecting psychological primitives—the processes that give rise to out-group hate are clearly under societal control. For instance, children develop more out-group hate when they are exposed to specific derogatory stereotypes and ideologies designed to perpetuate oppressive status hierarchies (Bigler & Liben, 2007). Because of the pervasiveness of such stereotypes and ideologies, a second developmental lesson is the importance of actively preparing children to recognize and confront such stereotypes and problematic belief-systems, so that they will not be passive recipients of problematic messages. Whereas more research is needed on how to do this most effectively, recognizing the role of these experiential factors—instead of

viewing out-group hate as the inevitable consequence of human psychology—is a step in the direction to motivate such endeavors.

Myth 3: People inevitably think of differences between people as difference between animal species

The final common myth that I will address in this chapter is the idea that people inevitably think of human social categories as marking fundamentally distinct kinds of people—in the same manner as they think of tigers and sheep, for example, as fundamentally different kinds of animals (Rothbart & Taylor, 1992). This idea is pervasive in theoretical approaches to the origins of prejudice and discrimination from fields ranging from social and developmental psychology (Haslam, Rothschild, & Ernst, 2002; Hirschfeld, 1996) to philosophy (Leslie, 2008) and anthropology (Gil-White, 2001). From this perspective, racism, and other forms of social prejudice, are the inevitable byproduct of one of the most central functions of the human cognitive system—the simple but fundamental tendency to classify individuals into categories that capture similarities across members and differences between groups.

These ideas originate in the literature on psychological essentialism. Psychological essentialism describes a set of intuitions that people hold about the structure and function of some everyday categories (Gelman, 2003). For instance, these intuitions include the beliefs that a baby animal born to tiger parents will be a tiger; that this baby tiger will inevitably grow up to have stripes, sharp teeth, and ferocious behavior, even if it is raised by a community of sheep; that this tiger will naturally have many features in common with other tigers and many differences from other animals (including those not yet observed or discovered); and that the difference between tigers and other animals is absolute, discrete, and reflects the objective and natural structure in the world (e.g., that the distinction between tigers and sheep is determined by nature and discovered by people, not the product of social construction). These ideas are referred to as psychological essentialism because they all reflect a core intuition that category identities are determined by an intrinsic category "essence" (e.g., that the baby tiger inherited a tiger essence from its parents), which determines category membership and category-related features.

In the case of a category like *tigers*, it might appear that the essentialist view of the category is roughly accurate, and even might arise from formal science education (e.g., learning about DNA in school). But neither of these things is quite right. By focusing on category identity as determined by an intrinsic entity located inside each individual animal, for example, essentialist views are inconsistent with modern understandings of species categories that emphasize population genetics (Gelman, 2003; Leslie, 2013). Also, by emphasizing stability across category members and time, essentialism leads people to neglect within-category variation, making it challenging for them to understand core scientific concepts like natural selection and speciation (Gelman & Rhodes, 2012; Shtulman & Schulz, 2008). Thus, rather than being the product of science education, essentialist intuitions impede the development of scientific understanding. Further, essentialist intuitions emerge prior to the onset of formal schooling—by age 3, children demonstrate each of the intuitions about animal categories described above (Gelman & Wellman, 1991; Waxman, Medin, & Ross, 2007). Thus, essentialist intuitions seem to reflect a flawed yet fundamental way of understanding the structure and meaning of some important everyday categories.

The myth of interest in this section is the idea that children are predisposed to think of differences between people through the same essentialist lens through which they understand animal species—that they inevitably think of differences between boys and girls, or White people and Black people, for example, in the same way as they think about the difference between tigers and sheep. Researchers from various disciplines have proposed that some social differences appear to the human mind to pattern like differences in animal species, either because they appear to be inherited from parents or to correlate with physical feature differences in a similar manner as species categories do (Davoodi, Soley, Harris, & Blake, 2019; Gil-White, 2001), or because they are labeled with the same type of noun labels that are frequently used to refer to basic-level animal species (e.g., referring to "girls" and "boys", in the same way as one might refer to "tigers" and "sheep"; Hirschfeld, 1996; Waxman, 1990). From this perspective, when people confront such differences, they cannot help but think of them as reflecting the same types of essential differences that they believe structure the biological world.

It is easy to see why such a view of the social world would be problematic and contribute to prejudice and other forms of inter-group bias. For example, an essentialist view of gender implies that it is impossible for one's gender to change over time and is associated with decreased acceptance of transgender identities and policies that support transgender rights and freedoms (Roberts, Ho, Rhodes, & Gelman, 2017). Further, essentialist views contribute to social stereotyping—leading people to assume that all members of a category should share the same features (e.g., that *all* girls should prefer pink to blue, for example; Bastian & Haslam, 2006; Taylor, Rhodes, & Gelman, 2009). Essentialist beliefs also promote problematic and inaccurate explanations for group differences—for instance, that the reason more men than women succeed in advanced mathematics is because of differences in inherent potential (Leslie, Cimpian, Meyer, & Freedman, 2015) or that the reason Black people in the United States have less wealth and social power is because they have less inherent value (Mandalaywala, Amodio, & Rhodes, 2017). Finally, because essentialism leads people to think of differences between people as if they are members of different species, essentialism can lead people to dehumanize members of social outgroups (Haslam, 2006).

Children do indeed sometimes represent some social differences as similar to species differences. For example, by age four, children often hold essentialist beliefs about gender. Children expect a baby that is born a girl will remain a girl and develop the stereotypical properties of girls (e.g., having long hair, liking tea sets, and so on), even if she grows up in an unusual environment where she is surrounded only by boys (analogous to their beliefs about a baby tiger who grows up surrounded by sheep; Taylor, 1996; Taylor et al., 2009). By age four, children also expect girls to share many features with one another even if they have very dissimilar appearances or personalities (Berndt & Heller, 1986; Gelman, Collman, & Maccoby, 1986), and they see the difference between boys and girls as reflecting the objective structure of the world instead of as socially constructed (Rhodes & Gelman, 2009).

Yet, it is a myth that thinking of social differences in this way is an inevitable or inalterable consequence of human psychology. Children do not automatically think of differences between people in the same way as they think of the differences between animals. It is true they sometimes learn to think of social differences in essentialist

terms, but when they do, these beliefs are the product of a protracted period of culturally-embedded learning.

We know this is the case for two reasons. First, essentialism is not the product of an "on-or-off" switch in the mind that is automatically flipped "on" to understand species differences and differences between people. Essentialism includes a set of inter-related beliefs (e.g., that whether one is a tiger or not is determined by birth and stable, that being a tiger inevitably means developing certain features, and that the distinction between tigers and other animals reflects the real structure of the biological world). These beliefs all seem to stem from a core commitment to the idea that categories are determined by an intrinsic category "essence." Yet, these various aspects of people's essentialist beliefs are separable from one another, and they are often more highly dissociated for beliefs about social categories than for animal species (Gelman, Heyman, & Legare, 2007). For instance, in thinking about the social world, children might come to think that some category identities are informative about what a person is like (e.g., groups based on age or team memberships), but still not view these categories as stable over time. As another example, for race, children appear to think that a person's racial identity is determined by birth (e.g., at least to the extent that think a person's skin color will match their birth parents; Hirschfeld, 1995), but they do not think that race is an objective way to classify people (Rhodes & Gelman, 2009), or that people of the same race share behaviors or psychological properties (Mandalaywala et al., 2019). As these examples illustrate, essentialism is not the product of an "on-or-off" switch in the mind that is locked in the "on" position for social differences—instead, essentialism reflects a series of inter-related beliefs that can be endorsed for various degrees for different types of social categories.

Second, if the human mind could not help but think of social differences like animal species differences, then we would expect children to think of all social differences in this way, from as soon as they begin to recognize them. But instead, children develop essentialist beliefs about social categories slowly, and in a manner that varies across cultural contexts. This pattern suggests that thinking of social differences like animal species (in essentialist terms) is the product of cultural learning, rather than an inevitable feature of the human mind.

To illustrate, consider the development of representations of race. Although children view skin color as inherited by age 4 (Hirschfeld, 1995), and sometimes classify by race when prompted in experimental contexts by age 5 (Rhodes & Gelman, 2009), they do not think of race in strongly essentialist terms. For instance, White 5-year-old children in the United States seem unsure of whether race is stable across an individual's life span, especially once that person experiences other types of changes (Kinzler & Dautel, 2012; Roberts & Gelman, 2016, 2017). Children at these ages also do not expect people of the same race to share any physical, psychological, or behavioral features (aside from skin color; Mandalaywala et al., 2019) and view the decision to classify by skin color as subjective and flexible (as reflecting a social construction rather than the objective structure of the world; Rhodes & Gelman, 2009; Diesendruck, Goldfein-Elbaz, Rhodes, Gelman, & Neumark, 2013). Across childhood, particularly between ages 7-10, children sometimes develop more strongly essentialist views of race, but whether they do, and the extent to which they endorse these beliefs, depends on their own racial identity, the diversity of their neighborhood, and the social and political ideology of their parents (Kinzler & Dautel, 2012; Mandalaywala et al., 2017; Rhodes & Gelman, 2009). Similar patterns of context-dependent developmental change have been found for other categories as well (e.g., those based on ethnicity, religion, and status; Birnbaum, Deeb, Segall, Ben-Eliyahu, & Diesendruck, 2010; Deeb, Segall, Birnbaum, Ben-Eliyahu, & Diesendruck, 2011; Smyth, Feeney, Eidson, & Coley, 2017).

Thus, children *learn* to think of certain social differences in essentialist terms—like animal species differences—if those differences are made salient in their environment. Cultural learning plays a fundamental role of in shaping how children think about social differences, including whether they develop problematic representations that tie differences to natural "essences" and feed into prejudice, or more positive representations that allow them to appreciate social diversity without viewing all the differences between people as reflecting the essential structure of the world.

Both of these features of essentialist thought—that it is comprised of a set of inter-related but separable beliefs and that these beliefs emerge slowly across childhood for particular social dimensions—can be understood by thinking about the processes underlying conceptual development. Consideration of these processes also provides

guidance about how to prevent the development of essentialist beliefs about particular social differences (and the resulting negative consequences).

For instance, children are particularly likely to develop essentialist beliefs about categories that they hear adults in their community describe them with *generic claims* (Gelman, Taylor, & Nguyen, 2004; Gelman, Ware, & Kleinberg, 2010; Rhodes, Leslie, & Tworek, 2012; Segall et al., 2014). Generic descriptions include statements such as, "Jews celebrate Passover," "Girls have long hair," or "A boy doesn't cry." Children recognize that generics describe abstract information about what kinds of people are like, and thus assume that adults use generics to describe categories that are important, coherent, and meaningful (Foster-Hanson, Leslie, & Rhodes, 2019). Indeed, adults are more likely to produce generics in conversation with children (e.g., about gender, ethnicity, or another particular dimension of social difference) when they themselves hold essentialist beliefs about the category (Rhodes et al., 2012; Segall et al., 2014). Hearing generics can then lead children to identify a particular way of classifying people as reflecting an essential "species-like" difference when they would not otherwise view a group in this manner (Gelman et al., 2010; Rhodes et al., 2012; Rhodes, Leslie, Bianchi, & Chalik, 2018). Generics do not *create* essentialist beliefs—they guide children to map essentialist intuitions onto particular culturally relevant distinctions.

Careful analysis of the processes by which essentialist beliefs arise can provide insight into how to prevent the development of racism and prejudice. Thus, the third lesson from developmental science is to talk to children about social differences in ways that promote appreciation of diversity but do not promote the development of essentialist beliefs. The lesson from this is *not* to avoid talking about differences, but instead to keep in mind that children often draw certain assumptions from language that might be different from what speakers intend. Thus, to avoid promoting essentialism, it can be helpful to talk about specific examples, to explicitly discuss within-group variation, and to provide direct information that group differences do not reflect differences in inherent potential or value. Thus, this research can provide direction on how to have productive conversations with children about differences, that can help them appreciate the importance of diversity, without viewing it as indicating that people from different groups are fundamentally distinct kinds of people.

Conclusion

This chapter addressed three common views about the psychological origins of racism and other forms of prejudice, and argued that these views miss the mark—babies are not born racist, people are not pre-disposed to hate out-groups, and children do not inevitably think of differences between people in the same way as they understand differences between animal species. Yet, each of these phenomena can—and often does—develop. That is, people become racist, begin to hate certain out-groups, and adopt views that particular differences between people are as fundamental and natural as animal species. When these beliefs develop, they have pernicious consequences for inter-group relations and the members of stigmatized groups. Therefore, it is critical to take a developmental approach to understanding the origins of these beliefs and attitudes. If we do not ask how these beliefs develop—and instead erroneously believe they are inevitable or there from the start—then we miss the opportunity to consider how they might be preempted or changed. By carefully analyzing the processes that give rise to racism and prejudice, we are better prepared to tackle the question of how these negative phenomena might be prevented in the next generation of children.

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