Conceptualizing Socioeconomic Status:

Children's Essentialist Thinking About Differentially Advantaged SES Categories

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Abstract

The present study (N=32) examined the ways in which children differentially psychologically essentialize advantaged and disadvantaged socioeconomic status categories, using a switched-at-birth reasoning task. Children did not exhibit a tendency to essentialize for social properties and preferences, and there were no differences across age or SES categories. However, they did essentialize for biological properties pertaining to internal body parts, and did so consistently across age and SES categories. Children exhibited overwhelming accuracy in inferences made about adult members of both the advantaged and disadvantaged SES categories regarding lifestyle outcomes. Accuracy increased with age, but did not differ between advantaged and disadvantaged SES categories. Children’s tendencies to biologically and socially essentialize advantaged and disadvantaged SES categories did not correlate with parent self-reports of their family’s own SES background, relative to either their immediate community or the United States as a whole. Conceptualization of SES category membership, as well as interpretations and implications of findings are discussed.
Introduction

Understanding Psychological Essentialism

At the core of how we navigate our social world lies the ways in which we perceive and categorize one another. Genetic and other biological theories previously used to explain differences in the ways in which we conceptualize and classify certain social categories of people no longer serve as the dominant reasoning with which we explain human diversity (Gelman & Hirschfeld, 1999). For many however, it is still intuitive to think about socially constructed categories as sharing some fundamental trait or quality that justifies their collective grouping. One cognitive tendency that has been suggested to underlie the existence and persistence of these kinds of beliefs is psychological essentialism. Although other definitions of this view exist, for the purpose of this paper I will be using the term psychological essentialism to mean endorsing a criteria of identification, an essence, that is hidden, intrinsic, and which remains salient throughout time, development, and reproduction (Gelman & Hirschfield, 1999). A defining feature of psychological essentialism is that social categories such as race, gender, and socioeconomic status are believed to be natural such that they were not the product of human intervention or construction. Psychological essentialism can also be used to describe a cognitive tendency to have consistent, yet abstract, intuitions about the underlying determinants for behavior, as well as psychological or phenotypical features that characterize particular social kinds (Cimpian & Salomon, 2014). This endorsement in immutable and embedded traits, as a feature of psychological essentialism, has been linked to stronger stereotype endorsement, and overall acceptance of the status quo of social inequalities (Haslam, Rothschild, & Ernst, 2002; Pauker, Ambady, & Apfelbaum, 2010; Cimpian & Salomon, 2014).
We still believe for example, that in considering gender, girls *naturally* like the color pink and enjoy playing with Barbies, while boys would prefer to play with red fire trucks (Taylor, Rhodes, and Gelman, 2009). Similarly, we also continue to endorse stereotypical claims about the nature of racialized groups, such that Asian people are particularly hardworking and intelligent, or that African-American people have aggressive personalities (Pauker et al., 2010). It is unclear (and quite unlikely) that these kinds of stereotypes are *entirely* driven by psychological essentialism, but research seems to suggest that essentialism may in fact play a large role in their emergence or reinforcement (Haslam, Rothschild, & Ernst, 2000). Despite efforts to disprove biological naturalist theories, and the inability to substantiate any other claims that appeal to genetic differences, these beliefs still persist in our society today. The fact that not everyone endorses these kinds of stereotypes, however, could be indicative that either not everyone is born an essentialist, or that even if we are, there is a possibility to “unlearn” or be re-socialized so as to overcome this cognitive tendency. Previous efforts to examine the emergence or development of this cognitive tendency have lead to studying the way children psychologically essentialize biological categories like animal species, as well as social categories such as gender and race (Gelman & Wellman, 1991; Hirschfeld, 1995; Taylor et al., 2009).

**Examining Essentialist Tendencies: Animal Species, Race & Gender**

One of the first investigations into psychological essentialism examined whether children psychologically essentialize animal species. Pitting nature against nurture, children were asked to think about the origins of specific target traits surrounding an animal’s phenotypic appearance, along with their preferences and physical capabilities (Gelman & Wellman, 1991). In these studies, children subsequently reported a stronger probability of the animals exhibiting traits of their birth parents, such that a kangaroo for example, would be better at jumping despite being
raised by goats. Building upon these findings, a switched-at-birth task was developed by anthropologist and psychologist Lawrence Hirschfeld to investigate whether children similarly employ psychological essentialism in the way they think about racial categories (1995). The task asks participants to consider a fictitious child born to parents of a specific racial category, but owing to hospital error, were raised by parents belonging to another racial category. The target questions included asking about the kinds of characteristics this individual would have “when they grow up”, and whether these traits would resemble those held by the birth parents or the adoptive parents (Hirschfeld, 1995). This study revealed that children were exhibiting a higher tendency to endorse the belief that the fictitious target children would inherit attributes from their birth parents, suggesting that children were heavily endorsing essentialism in the domain of race. Today, the switched-at-birth task is now one of the primary methodologies used to examine psychological essentialist thought in children.

Later studies used this methodology to assess the way in which children essentialize other social kinds (Taylor et al., 2009). Scientists have adopted the switched-at-birth task to investigate the ways in which children essentialize within the gender domain. In previous research, children (ages 4-10) were told stories and shown pictures of gender-matched infants raised by a relative living on an island inhabited solely by members of the opposite sex (Taylor et al., 2009). In this way, researchers emphasized that the fictitious child had never interacted with members of the same gender category which they themselves were assigned at birth. Children were asked to infer the fictitious child’s preferences, capabilities, and physical appearance. Findings suggest that in younger children, gender is treated as an inflexible category, much in the same way that animal species are understood. Finally, this study revealed that the gender categories of boy and girl (or man and woman) did not develop concurrently (Taylor et
In order to further advance our own understanding of psychological essentialism and its emergence, it is important to investigate the underlying mechanisms that might lead children to differentially essentialize members of certain social categories within the same domain.

**Differential Essentialism & Socioeconomic Status**

Previous research has examined the tendency for adults to differentially psychologically essentialize groups of people in a multitude of different domains (Haslam et al., 2000). Findings revealed that for sexual orientation, homosexual people were being essentialized more than heterosexual people; for race, black people were being essentialized more than white people; and for gender, women were being essentialized more than men (2000). These findings seem to suggest that the endorsement of essentialist beliefs could be associated with perceived social status or perceived social position of the group or group members (Rothbart & Taylor, 1992). This same sentiment is echoed in social categorization research in the domain of race, which points to the categorization bias of hypodescent to explain why biracial Black-White individuals are usually categorized as Black relative to White (Ho, Roberts, & Gelman, 2015). Hypodescent refers to the tendency for racially ambiguous individuals to be categorized as a member of the lower-status racial category, relative to the higher-status racial category. In the presence of an anti-Black bias, individuals exhibited a higher tendency to engage in hypodescent (2015). This suggests that individuals who exhibit a negative bias against a lower status group consistently categorize ambiguous cases or individuals as members of the lower status group, rather than the higher status group. This seems to suggest that lower-status groups have wider reaching essentialist influence or power. The connection between perceived social status and the degree to which a social category is essentialized, can be extended to thinking about the way socioeconomic status categories may be differentially psychologically essentialized as well.
Socioeconomic status (SES) in the present study is used to refer to the perceived or expected social standing of a particular group or group member, with regards to access to resources, privilege, and power (APA).

In the domain of SES, negative perceptions towards disadvantaged SES categories, and positive attitudes towards advantaged SES are often considered intuitive. In one study, results showed that 4- and 5-year-old children evaluated a puppet with more resources (richer) as “nicer” compared to the puppet with less resources (Li, Spitzer, & Olson, 2014). Other research similarly revealed children’s pro-wealth attitudes, with 4- and 6-year-olds exhibiting a higher desire to befriend and interact with children who have more resources at their disposal compared to children who have significantly less. Given similar patterns of negative evaluations towards members of lower-status racial groups and disadvantaged SES categories, it is likely that individuals would engage in differential essentialism within the SES domain in a predictable way (Brandt & Reyna, 2011). Much of the literature surrounding socioeconomic class or status explores the impact that membership in historically advantaged or disadvantaged SES categories can have on intergroup relations, mental and physical health, and power dynamics (Ahl & Dunham, 2017; Blacksher, 2002; Aries & Seider, 2005; Lareau, 2002; Gülgöz & Gelman, 2017). However, what appears to still be lacking from this field of research is a fruitful examination of the way in which we conceptualize different SES categories and their members.

**The Present Study**

The present study seeks to investigate the ways in which children psychologically essentialize social categories within the domain of SES. Drawing connections between the ways in which children essentialize within other social constructed identities like race and gender, I *predict that children will psychologically essentialize in the domain of SES as well.* (H1).
Considering that perceived social status seems to be associated with the tendency to essentialize certain categories over others within the same domain, I predict that when administered an adapted version of the switched-at-birth task, children should exhibit higher tendency to essentialize a historically disadvantaged SES category relative to a historically advantaged SES category (H2). Based on previous methodologies investigating essentialism, the current study will make use of both biological (Meyer, Gelman, Roberts, & Leslie, 2017), and social (Taylor et al., 2009) essentialism measures. In order to track the developmental trajectory of the emergence of essentialist beliefs about SES categories, participants in the present study will consist of a sample of 5 to 9-year-old children— the typical age range in which the emergence of essentialist beliefs has been studied in previous research (Taylor et al., 2009; Gelman, 2004; Rhodes et al., 2012). *A main effect of age with regards to psychological essentialism is anticipated in this study (H3), as prior research in other social domains has shown that younger children exhibit an overall higher tendency to endorse essentialism compared to older children (Taylor et al., 2009; Rhodes, Leslie, & Tworek, 2012).*

In order to circumvent any biases that children may have towards specific real-world SES categories, either because of their own membership or because of memorable first-hand experience with other members of a particular SES category, this study will use novel social categories (Rhodes, Leslie, & Tworek, 2012). In addition to the switched-at-birth-task, children will be asked to infer lifestyle outcomes for members of each novel group, given a limited SES-indicative narrative. Subsequent analyses will also be conducted on information provided in a parent questionnaire. Parents will be asked to report on basic demographic information for themselves and their children, which includes questions about SES category membership. With this information, we hope to determine if any connections exist between children’s differential
essentialization of specific SES categories and the self-reported SES category membership of their family. Previous research has shown that high-SES individuals tend to explain personal circumstances as determined by character traits, compared to low-SES individuals who allude to social or institutional structures at play in explaining their personal circumstances (Kraus, Piff, & Keltner, 2009). This line of research suggests that high-SES children should exhibit a higher tendency to endorse essentialist beliefs about other categories than low-SES children would ($H_4$).

**Methods**

**Participants**

Participants included thirty-two children (17 females) of two age groups (young and old) living in the greater area of Lancaster, Pennsylvania who were recruited the family database used by the developmental psychology laboratories at Franklin & Marshall College. The division in ages is consistent across the developmental essentialism literature (Taylor et al., 2009; Meyer, Gelman, Roberts, & Leslie, 2017).

Younger children ranged in age from 5;1 to 7;0 ($n = 16, M_{age} = 72;1$). Older children ranged in age from 7;7 to 9;10 ($n = 16, M_{age} = 8;11$). All participants were assigned to either a disadvantaged or advantaged condition (see below), and counterbalanced across age and for the order in which the tasks were presented. These participants were primarily European or White-American and from middle- to upper-middle-class backgrounds.

**Materials and Procedures**

*Introductory narrative*

All participants were read a short narrative corresponding to their condition *(see Appendix A)* and presented with images of the two novel groups, the Mozies and the Yarps *(see Appendix A)*.
The narrative was designed to introduce the two novel groups, and to list their occupation and fictional income/salary (either 2 or 20 gumballs an hour) to communicate either the group’s advantaged or disadvantaged socioeconomic status to the participant. In the disadvantaged condition, participants were told that the Mozies were the disadvantaged group and the Yarps were advantaged; in the advantaged condition, the Mozies were advantaged and the Yarps were disadvantaged. Children were asked an attention check question (“So who makes more gumballs? The Mozies or the Yarps?”) to ensure that they understood the story they were read. If participants answered incorrectly, the researcher would repeat the narrative and ask the attention check question again before proceeding. The order in which the tasks were administered were counterbalanced so that participants either completed the switched-at-birth task, following by the adult inference task, or the inverse.

Switched-at-birth task

Participants were presented with a color picture of a novel baby character that was physically indistinguishable as belonging to either the Mozy or the Yarp group (see Appendix B). The picture was gender-neutral and did not include any SES-specific indicators. Participants were told that owing to a hospital error, a nurse had sent a Mozy baby home with a Yarp mommy; the Mozy baby grew up with the Yarp family, and no one ever knew about the switch. The researcher pointed to the pictures of the baby, the birth group, and the adoptive group during the story to ensure participants were paying attention. The researcher followed-up with simple memory questions (“So who was this baby born to?”; “And who does this baby live with now?”) to ensure participants’ understanding before moving on.

Participants were asked a series of questions about the kinds of properties or preferences the Mozy/Yarp baby would have when they grew up (see appendix for Table 1). Participants
were randomly asked a total of 5 social essentialism questions, and 3 biological essentialism questions for the switched-at-birth task. Participants were only allowed to make binary decisions, such that the when the baby grew up it would have properties or preferences of the birth group (category-based prediction), or the properties or preferences held by the adoptive group (environment-based prediction). Participants were presented with the physical image of each option reflecting either a disadvantaged or advantaged outcome (see Appendix C). For example, during the social essentialism questions, the researcher asked “(When this baby grows up…) Do you think they would live in a house like this or like this?”, and participants would be presented with a picture of either a small shack, or a large mansion. For the biological essentialism questions, the researcher asked “(When this baby grows up…) Will this baby have a Mozy heart or a Yarp heart?”. For these questions, participants were presented with a picture of either a heart, vile of blood, or a brain, and the researcher would point to the Mozy and Yarp images as the child was asked (see Appendix D).

Adult outcome inferences

To examine whether participants really had a coherent understanding of socioeconomic status as implied by the introductory narrative, participants were asked to infer properties of Mozy/Yarp adults. After participants were reminded which group were the Mozies and which group were the Yarps, the researcher redirected participants’ focus to the next task by saying, for example, “Now I was wondering what you think grown-up Mozies are like!” . Participants were asked about the same preferences and properties included in the social essentialism component of the switched-at-birth task, but were asked to make inferences about the majority of the members of each group. For example, participants were asked “What kind of school do you
think most Yarps go to?”, and presented with an image of a run-down schoolhouse, and a large resource-rich school.

Participants were asked 8 open-ended questions (4 for each group) that required them to think about the capabilities or skills that members of each category could potentially possess or perform (see appendix for Table 2). For both the advantaged and disadvantaged categories, participants were asked to justify why they believed members of each group performed their corresponding job, and what other jobs they would be good at doing. Additional questions asked children to respond to whether or not they thought the advantaged and disadvantaged categories could ever possess properties of the opposite SES category.

**Parent Questionnaire**

Parents were asked to complete a voluntary parent questionnaire used to collect basic demographic information such as gender, race, ethnicity, language(s) spoken in the home, and most notably, self-reported SES. The parents questionnaire used the MacArthur Scale of Subjective Social Status to measure SES (Adler & Stewart, 2007; see Appendix D). The scale consists of two numbered stepladders, which asks participants to indicate where they think they stand in relation to other people in the United States, and in relation to their surrounding community.

**Results**

**Switched-at-birth task**

**Social essentialism**

For the social essentialism items on the switched-at-birth task, participants endorsed social essentialism only 22% (SD = 30%) of the time, collapsed across age and condition. An independent t-test determined this to be statistically significantly lower than chance $t(31) = -$
5.343, \( p < .001 \). A 2 (SES birth category: disadvantaged, advantaged) \times 2 \) (age: old, young) ANOVA was conducted to examine the effects of SES category and age on the endorsement of social essentialism (see Figure 1). The interaction effect between SES birth category and age was not statistically significant, \( F(1, 28) = 1.732, p = .199 \), partial \( \eta^2 = .058 \). Results showed that there were no statistically significant main effect of either SES birth category, \( F(1, 28) = .014, p = .906 \), partial \( \eta^2 = .001 \), or age, \( F(1, 28) = 1.732, p = .199 \), partial \( \eta^2 = .058 \).

![Figure 1. Mean endorsement of social essentialism (%) by age and SES birth category.](image-url)

**Biological essentialism**

For the 3 biological essentialism items in the switched-at-birth task, participants exhibited a tendency to endorse biological essentialism 68% (\( SD = 34.3 \% \)) of the time, collapsed across age and condition. A t-test determined this to be statistically higher than chance, \( t(31) = 2.914, p = .007 \). Another 2 (SES birth category: disadvantaged, advantaged) \times 2 \) (age: old, young) ANOVA was conducted to examine the effects of SES category and age on the endorsement of
biological essentialism in the switched-at-birth task (see Figure 2). The interaction effect between SES birth category and age was not statistically significant, $F(1, 28) = 1.4, p = .247$, partial $\eta^2 = .048$. Results showed that there were no statistically significant main effect of either SES birth category, $F(1, 28) = .029, p = .867$, partial $\eta^2 = .001$, or age, $F(1, 28) = .714, p = .405$, partial $\eta^2 = .025$, for biological essentialism.

![Figure 2. Mean endorsement of biological essentialism (%) by age and SES birth category.](image)

**Adult inferences**

Overall, children exhibited 94% accuracy in their inferences about the adults’ lifestyle outcomes (SD = 14.3%). A 2 (SES birth category: disadvantaged, advantaged) X 2 (age: old, young) ANOVA was conducted to examine the effects of SES category and age on the accuracy of predictions about the adults’ lifestyle outcomes (see Figure 3). The interaction effect between SES birth category and age was not statistically significant, $F(1, 28) = .868, p = .359$, partial $\eta^2 =$
Results showed that there was no statistically significant main effect of SES category, $F(1, 28) = .868, p = .359$, partial $\eta^2 = .03$. However, there was a statistically significant main effect of age, $F(1, 28) = 6.397, p = .017$, partial $\eta^2 = .186$, such that older children were accurate 100% of the time for both SES conditions, compared to younger children who were accurate 89% of the time.

![Figure 3. Mean accuracy of inferences for the adult categories (%) by age and SES category.](image)

**Essentialism endorsement and self-reported SES correlations**

A Spearman's rank-order correlation was run to assess the relationship between endorsement of social/biological essentialism, and SES background (see Table 3). Parents self-reported SES background on two different items of the MacArthur Scale of Subjective Social Status—SES relative to the United States, and SES relative to their surrounding community (see appendix D). Findings revealed that there were no correlations between endorsement of
biological essentialism for reports of either country-relative SES, \( r_s(31) = .054, p = .773 \); or community-relative SES, \( r_s(29) = .024, p = .901 \). Results also showed that there were no correlations between endorsement of social essentialism for reports of either country-relative SES, \( r_s(31) = .170, p = .361 \); or community-relative SES, \( r_s(29) = .058, p = .765 \).

**Justifications and Inferences**

These data are undergoing analyses. Mirroring the coding scheme used by Taylor, Rhodes and Gelman (2009), participants’ responses are being categorized into biological, environmental, preferential, and category-based explanations.

**Discussion**

**Social essentialism**

Findings revealed that participants were exhibiting a tendency to endorse social essentialism only 22% of the time. These results contradict my initial hypothesis (H1) that children would exhibit essentialism for both the social and biological attributes. These results can potentially be interpreted by considering whether the items used to measure endorsement of social essentialism for the switched-at-birth task were really getting at the underlying mechanisms of essentialism. The 5-items included in the switched-at-birth task, and the reasoning behind why those items would be SES-specific, might not have been understood or properly transmitted in the brief narrative that the participants were read. Some of the items such as “food”, “hobby”, and “clothes” that the children were asked about, could have been understood as reflecting aspects of the groups’ preferences, rather than lifestyle outcomes that result from a specific SES category membership.
Results from a two-by-two ANOVA indicated that there was no main effect of SES birth category on social essentialism, such that children were not differentially socially essentializing for the the advantaged or the disadvantaged SES groups. These results failed to support my hypothesis (H2) that children would exhibit a higher tendency to essentialize the disadvantaged category, over the advantaged category. One potential reason why children would exhibit similar endorsements of social essentialism for both the advantaged and disadvantaged SES categories is that children may not have been exhibiting negative biases or attitudes towards the disadvantaged category. Previous research which sought to integrate racial essentialism and negative bias evaluations to examine the ways in which people categorize bi-racial individuals, found that only in cases where people exhibited negative biases towards Black people, a group with lower perceived social status, did essentialism actually increase (Ho, Roberts, & Gelman, 2015). It is possible that children do not possess the same kind of intuitions for positive and negative evaluations or attitudes for advantaged and disadvantaged SES categories that adults exhibit, which would have lead to a similar kind of differential essentialism.

Younger children and older children did not display a tendency to socially essentialize in different ways. This finding stands in opposition to my third hypothesis (H3) which predicted a main effect of age for essentialism measures. Across the ages of 5-9, children seem to be pretty stable in the ways in which they conceptualize social aspects of SES categories. It is possible that in using other social essentialism measures in a follow-up study, age differences between the young and the older children might be revealed.

**Biological essentialism**

Analyses revealed that despite the decreased tendency to essentialize on social attributes, children were still showing strong tendencies to endorse biological essentialism, supporting
initial predictions (H1). The oversimplification of potential physical elements that could underlie group membership such as the brain, heart, or blood items is potentially reflective of children’s rudimentary understanding of biology (Taylor et al., 2009). These findings are well supported by research suggesting that some of children’s earliest essentialist thoughts often endorse the idea that a category’s essence can be found in places such as in the brain, heart, or blood of the category members (Meyer et al., 2017; Taylor et al., 2009). One interpretation of these findings is that children might be viewing biological essence as a wholly immutable property, regardless of the social properties or preferences held by the individual. Thus, it makes sense that in the present study, results did not yield any main effects of either age or SES-birth category (not supporting H2 or H3) such that children seemed to be consistently essentializing around 68% of the time across both age groups, and doing so similarly with regards to both the advantaged and disadvantaged SES categories.

**Adult inferences**

To understand why children were essentializing for biological but not social properties, we wanted to look at how accurate participants were at inferring attributes of the advantaged and disadvantaged adult categories. Participants were overwhelmingly accurate in their inferences about members of the adult SES categories, exhibiting 94% accuracy overall. These findings were primarily exploratory, such that no preemptive hypotheses or predictions were made. A two-by-two ANOVA revealed a main effect of age, such that older participants had 100% accuracy on the inference items, with younger children exhibiting 89% accuracy. These findings indicate that children do seem to possess a coherent understanding of the SES domain, and that conceptions of the SES domain continue to develop as children get older. However, in reflecting on participant’s endorsement of biological and social essentialism, a coherent understanding of
SES did not translate into a tendency to exhibit psychological essentialism for either biological or social properties. In other words, despite seeming to really have an understanding of what SES is and how advantaged and disadvantaged SES groups differ from one another, children still think that SES is environmentally determined rather than determined by some underlying essence. There was no significant main effect of SES category such that participants were extremely accurate in inferring social properties of both the advantaged and disadvantaged SES categories.

**Essentialism endorsement and parent’s self-reported SES background**

To assess the relationship between parent’s self-reports of SES background, and endorsement of both social and biological essentialism, a Spearman’s rank-order correlation was conducted. Inconsistent with my initial hypothesis, findings revealed that there were no significant correlations between endorsement of biological essentialism and reports of either country-relative SES, or community-relative SES. Results also showed that there were no correlations between endorsement of social essentialism, and reports of either country-relative SES, or community-relative SES. It is possible that these low correlations are a result of limited range of SES background participants in our sample, all identifying as middle-to upper-middle class backgrounds. In a more diverse sample, differential essentialism resulting from participants’ own SES identification could potentially still exist.

It is also possible that the MacArthur Scale of Subjective Social Status may not have been a sufficient measure of SES as was initially intended. In the future, using a more explicit measure of SES or taking the time to explain to parents what the scale is trying to tap into by conveying a more comprehensive understanding of SES to the family before they complete the MacArthur scale, might have produced different outcomes.
**Interpretations, implications, and limitations.**

Overall, children do seem to have a coherent understanding of the SES domain and can accurately infer properties of someone’s life based on limited SES-indicative knowledge, but they don’t seem to endorse the belief that different SES groups have unique essences rooted in their social practices and preferences. Results revealed that children exhibited really strong endorsement of biological essentialism for both SES categories, and although this hinted at children’s essentialist thinking about SES categories, children just really were not endorsing the kind of social essentialism that we often see endorsed in other domains like race and gender. Instead, they seem to believe that in determining social properties, it’s nurture (SES category you are raised in) that matters more than nature (SES category you are born into). Analyses of the qualitative responses might yield some insight into why children didn’t endorse social essentialism.

Although these findings did not reveal a lot of variability in SES or racial background, it is possible that variation in other aspects of a child or family’s background could explain these results. Given that socioeconomic status is a very unique, and causally as well as socially constructed concept, it is possible that children’s understanding of advantaged and disadvantaged SES groups may in fact come from other sources that were not asked about in the parent questionnaire, and that extend beyond gender and age demographics. Family’s religious background, public versus private education, and even parents’ political affiliation could all be sources of information for how children perceive and understand advantaged and disadvantaged socioeconomic categories, as well as how they view themselves in relation to others of different SES backgrounds.
Focusing on psychological essentialism as a cognitive tendency that likely resulted from an evolutionary mechanism to generalize about biological kinds–we can attempt to bring awareness to both adults and children, that there are times when this mechanism “gets things wrong”. Instead, we should stress the importance of cultivating the awareness that SES is a subjective and contextual construct; one which is just as vulnerable to structural forces as individual circumstance (Olson, Shutts, Kinsler, & Weisman, 2012; Srinivasan et al., 2016). Supporting these kinds of understandings about the socioeconomic landscape could allow for higher-SES individuals to advocate for the social and economic policies that allow for the upward mobility of those less fortunate. Similarly, there is just as much to gain by providing low-SES families and individuals the right encouragement that emphasizes that they are not, and should not feel, constrained by their current SES category identity or lifestyle.
References


Appendix A

Sample narrative for the disadvantaged birth-category condition.

These are some grown-up Mozies (introduce image), and these are some grown-up Yarps (introduce image). The Mozies are in charge of picking up all the trash on the playground, and the Yarps are in charge of making all the rules for the playground. The Mozies get 2 gumballs for every hour that they spend picking up trash on the playground, and the Yarps get 20 gumballs for every hour they spend making rules for the playground. The Mozies and the Yarps use their gumballs to buy things.

The Mozies don’t have a lot of gumballs, and so they use their gumballs to buy crayons. The Yarps have lots of gumballs and so they use their gumballs to buy bicycles.
Appendix B

Mozy and Yarp image illustrations
Appendix C

Images used in switched-at-birth task and adult lifestyle predictions

Clothing predictions

Home predictions

Meal predictions

Hobby predictions.
School predictions

Blood image

Heart image

Brain image
Table 1. Items used in the switched-at-birth task to measure social and biological essentialism.

<table>
<thead>
<tr>
<th>Essentialism Type</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Do you think they would dress like this or like this?</td>
</tr>
<tr>
<td></td>
<td>Do you think they would live in a house like this or like this?</td>
</tr>
<tr>
<td></td>
<td>Do you think they would eat foods like this or like this?</td>
</tr>
<tr>
<td></td>
<td>Do you think they would play with things like this or like this?</td>
</tr>
<tr>
<td></td>
<td>Do you think their school would look like this or like this?</td>
</tr>
<tr>
<td>Biological</td>
<td>Will this baby have a Mozy brain or a Yarp brain?</td>
</tr>
<tr>
<td></td>
<td>Will this baby have a Mozy heart or a Yarp heart?</td>
</tr>
<tr>
<td></td>
<td>Will this baby have Mozy blood or Yarp blood?</td>
</tr>
</tbody>
</table>
Table 2. Sample items of questions used in the adult lifestyle outcome predictions for the disadvantaged condition.

<table>
<thead>
<tr>
<th>Questions</th>
</tr>
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<tbody>
<tr>
<td>Why do you think Mozies pick up trash off the playground?</td>
</tr>
<tr>
<td>What other jobs do you think Mozies would be good at doing?</td>
</tr>
<tr>
<td>Could a Mozy ever make 20 gumballs an hour?</td>
</tr>
<tr>
<td>Could a Mozy ever make rules for the playground?</td>
</tr>
</tbody>
</table>
Table 3. Spearman’s rank-order correlations between endorsement of biological essentialism, social essentialism, country-relative SES, community-relative SES.

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
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<td>–</td>
<td>–</td>
<td>–</td>
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<td>2. Social Essentialism</td>
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<td>3. Country-relative SES</td>
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<td>.17</td>
<td>–</td>
<td>–</td>
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<tr>
<td>4. Community-relative SES</td>
<td>-.02</td>
<td>-.05</td>
<td>.112</td>
<td>–</td>
</tr>
</tbody>
</table>
Appendix D

Scales used in MacArthurs’ Scale of Subjective Social Status (Adler & Stewart, 2007).

Removed for Copyright Reasons