

Judgements of identity claims vary for monoracial and biracial people

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Abstract

Despite increasing racial diversity in the United States, and the particular growth of multiracial populations, questions about how children perceive others' (bi)racial identities remain poorly understood. In two preregistered studies, we asked White and racially minoritized American children ($N = 157$; 4-to 11-years old) and White and multiracial adults ($N = 226$) how acceptable it was for monoracial people (Black or White; Study 1) and/or biracial people (Black-White; Studies 1 & 2) to claim either a monoracial or biracial identity. Consistent with past research with adults (e.g., Small & Major, 2018), children said that monoracial people should claim (only) the monoracial identity which matched their ancestry. Judgements about biracial identity were more variable. White and multiracial adults (Study 2) reported that biracial targets could claim a racial identity that matched either or both of their parents, with biracial claims being evaluated most positively. Exploratory analyses on children's judgements about biracial people's identity claims (Study 1) revealed different patterns of development for White children and children from minoritized backgrounds. Whereas White children became more likely with age to report that all identity claims were acceptable, children from racially minoritized groups became more likely with age to endorse biracial targets who claimed a biracial identity. These findings suggest that children's own racial background **and age** may have larger impact on their perceptions of biracial people's identities, compared to their perceptions of monoracial people's identities.

Keywords: biracial, racial identity, identity flexibility, contextual presentation

Judgements of identity claims vary for monoracial and biracial people

The number of individuals who identify as biracial is increasing at three times the rate of the general population (Pew Research Center, 2015), with the number of Black/White biracial Americans increasing from approximately 800,000 in 2000 to 3.1 million by 2020 (Pew Research Center, 2015; U.S. Jones et al., 2021). Therefore, understanding biracial identity development is a timely and critical question. Interestingly, not all biracial people choose to identify with both of their racial identities, and biracial people change how they self-identify over time and across contexts (Jones & Bullock, 2012; Lou et al., 2011; Sanchez & Garcia, 2009; Sanchez et al., 2009; Wilton et al., 2013). Biracial people, both children and adults, vary in how they identify, with some people choosing to identify as monoracial, others as biracial, and others as monoracial or biracial depending on the context (Herman, 2004; Porter & Washington, 1993; Rockquemore & Brunσμα, 2001). Indeed, biracial people sometimes claim different parts of their racial identity to align with the expectations of perceivers (Khanna & Johnson, 2010). For example, perceivers may see Black-White biracial people as solely Black, and correspondingly many people with this biracial identity choose to identify as only Black (Khanna, 2010; Khanna & Johnson, 2010). We are interested in how perceivers' judgments of a biracial person are impacted by the identity that the biracial person chooses to claim. Therefore, we ask how children and adults judge people (from both monoracial and biracial backgrounds) based on how they choose to identify: as a member of one race, or of two races.

Adult's Perceptions of Identity Claims

Recently, cases in which monoracial adults claim identities that do not match their ancestry have made headlines. For example, Jessica Krug, a professor at George Washington University, revealed that she had claimed a Black identity despite having no Black ancestors

(Krug, 2020). Prior to that, Rachel Dolezal, former head of Spokane's NAACP chapter and civil rights activist, was outed as claiming a Black identity despite having two White parents (Samuels, 2015). Even more recently, Elizabeth Hoover, an associate professor of environmental science at the University of California Berkley, admitted to claiming a Native American identity despite having two White parents (Jaschik, 2023). These women were met with harsh criticism when their White ancestry was revealed, with some calling their claims "racial fraudulence" (St. Felix, 2018).

Empirical research supports the idea that adults dislike monoracial people who claim racial identities that do not match their ancestry: monoracial targets who claimed discordant racial identities (e.g., a target with two White parents who claimed a Black identity) were rated as less likable and perceived as having a less legitimate claim to that identity compared to a target whose identity claim matched their parents' ancestry (Small & Major, 2018). Adults may dislike when monoracial individuals claim a race inconsistent with their ancestry because societal norms—historical and current—dictate that a person's racial identity is determined by genetics (Prentice & Miller, 2007) and that race remains stable over time (Bastian & Haslam, 2006). This is especially true for people who endorse essentialist beliefs that racial group membership is fixed, biologically-based, and reflects some underlying essence (Gelman, 2004). For example, adults high in racial essentialism are more likely to endorse the belief that White and Black people share very little genetic similarity (Christensen et al., 2010), to assume that people cannot have membership in two different racial groups or change their racial identity (Ho et al., 2015), and to negatively evaluate White people who claim a Black identity (Small & Major, 2018).

Interestingly, adults may also be opposed to *biracial* individuals who make identity claims that do not match their *complete* ancestry (e.g., by claiming only certain parts of their racial identity). That is, even when an identity claim is technically in line with a biracial individuals' ancestry, they may be perceived as engaging in unwarranted flexibility by identifying with only one of their identities. For example, *New York Times* writer Anatole Broyard was the target of criticism after his death when the public learned that he was biracial but had identified as White (Staples, 2003). Indeed, even former biracial president Barack Obama and current biracial vice-president Kamala Harris, found themselves under scrutiny about whether they should be allowed to claim a Black identity instead of a biracial identity (both have one parent who is Black; Cillizza, 2014; Nittle, 2020).

Research backs these ideas by showing that adults may penalize biracial people for claiming certain racial identities. For example, adults view a biracial person who changes from initially identifying as biracial identity to later identifying as monoracial to gain a benefit (e.g., by selecting only "Black" when asked for demographic background on a college application) as less trustworthy and less likeable (Albuja et al., 2018). It is possible the negative evaluations are due to disliking people who claim racial identities that are not in line with their ancestry (as is the case for judgments of monoracial people). But, because this previous research involved a biracial target who claimed a monoracial identity in order to specifically gain an advantage (i.e., a scholarship), it is possible that adults were instead negatively judging the *contextual* racial presentation. That is, adults may dislike biracial people who *change* their identity based on context, rather than disliking biracial people based on the identity claim itself. Adults may see contextual presentation as manipulative or as indicating a person is intentionally trying to misrepresent themselves (Kennedy, 2003; Sasson-Levy & Shoshana, 2013), which leads to their

negative judgements. Therefore, it is an open question whether adults negatively evaluate biracial people who claim monoracial identities in the absence of contextual racial presentation. We address this question in Study 2.

Development of Racial Categorization and Judgements of Identity Claims

Elucidating children's understanding of race and racial categories is important as it can offer valuable insight into the development of outgroup bias, intergroup attitudes, and prejudice (Bigler et al., 1997). We chose to focus on Black, White, and Black-White biracial targets for this initial study for a few reasons. First, the bulk of research on how children and adults think about and categorize biracial identities has used Black-White stimuli (i.e., Roberts & Gelman, 2015; Roberts & Gelman, 2017). Thus, focusing on Black-White biracial people's identity claims allows us to ask whether perceivers find a Black-White biracial person's identity claim most acceptable if it matches how perceivers would typically racially categorize that individual. Second, Black-White biracial people are afforded less flexibility in their racial identification and are often discouraged from identifying as White (Ho et al., 2017; Khanna, 2010). Further, laws prohibiting racial miscegenation in the U.S. were largely created to prevent Black-White interracial relationships (Kendi, 2016), and White people in the U.S. continue to show the strongest resistance to Black-White interracial pairings (versus other racial pairings; Golebiowska, 2007).

We are specifically interested in the *developmental origins* of judgments based on people's racial identity claims. We hypothesize that children will evaluate identity claims made by monoracial people (Black or White) similarly to adults: they will report that it is most acceptable to claim an identity in line with parent ancestry (Small & Major, 2018). However, we offer multiple plausible outcomes (all preregistered) for how people (both children and adults)

may evaluate racial identity claims made by Black-White biracial targets. Below, we list each plausible outcome, and then we explain the rationale for these different possible predictions. We hypothesized that participants might vary in how acceptable they find each claim, such that they either see a Black claim (Hypothesis 1) or a biracial claim (Hypothesis 2) as most acceptable. Alternatively, we hypothesized that it could be possible that participants would view all three claims as generally acceptable (Hypothesis 3).

Hypothesis 1: Black identity claims as most acceptable for Black-White biracial people. Research on categorization suggests that adults often racially categorize biracial people based on their minority identity status, a process known as hypodescent (Hollinger, 2003). Specifically, Black/White and Asian/White people are more likely to be categorized as Black and Asian, respectively by both White perceivers and racially minoritized perceivers (Hirschfield, 1995; Ho et al., 2011; Ho et al., 2017; Peery & Bodenhausen, 2008). Studies have shown that White children at least sometimes show a similar tendency to categorize racially ambiguous targets as Black: White children who were shown a Black-White target (without information about the target's parentage) were above chance at categorizing the target as Black rather than White (Roberts & Gelman, 2015; Albuja et al., 2023). Therefore, it is possible that both children and adults may find a Black identity claim as most acceptable since it is in line with their typical pattern of categorization.

Hypothesis 2: Biracial identity claims as most acceptable for Black-White biracial people. If people are judgmental of others who do not claim racial identities that match their (complete) ancestry, then it is possible that biracial people will be evaluated most positively when they identify as biracial (in line with Albuja et al., 2018). Indeed, although adults sometimes categorize biracial individuals as members of their minority race (as discussed

above), when given the option of saying that the person is biracial, White and racially minoritized adults do sometimes categorize the target as belonging to more than one racial group (Chen & Hamilton, 2012; Chen et al., 2014; Roberts & Gelman, 2015). Thus, it is possible that children and adults will also understand that biracial people can belong to more than one racial group, in which case they will rate the biracial claim by a biracial target as “OK.” Indeed, Hirschfield (1995) presented White and racially minoritized children with pictures of Black-White couples and then asked participants whether that couple’s child would be Black, White, or “something else”. Fifth-grade children reported that the child would be “something else”. More recent research also found that White and racially minoritized children, at least by age 10, categorize racially ambiguous targets as “not wholly Black or wholly White” (Roberts & Gelman, 2015). Related work has shown that even younger children may be biased towards seeing biracial people as neither Black nor White. That is, White and racially minoritized 4- to 9-year-olds prioritize salient physical features such as skin tone over other information when categorizing Black-White biracial people (e.g., Dunham et al., 2015, see also Bigler & Liben, 2007; Quintana, 1998). Indeed, Mandalaywala and colleagues (2019) argue that previous studies showing beliefs about race essentialism developing early in childhood may only be measuring the inheritability of race by asking about *skin tone*, not the meaningfulness of racial categories. Therefore, if Black-White individuals have a skin tone that is somewhere in between the skin tone expected for prototypically Black or White people, children may expect those people to claim a biracial identity rather than a Black or White identity.

Hypothesis 3: All claims as generally acceptable for Black-White biracial people. It is also possible children and adults will say *that all three* identity claims are acceptable for biracial people. We have a few main reasons for this prediction. First, most prior work looking at

the categorization of racially ambiguous targets has used force-choice paradigms in which White and racially minoritized people must choose between one of three choices (e.g., Black, White, Black and White; see Hirschfield, 1995; Roberts & Gelman, 2015; Roberts & Gelman, 2017, to name a few). Because children and adults in our study will not be forced to choose just one categorization, they may demonstrate more flexibility, and report multiple identity claims as “OK.” Second, if children and adults judge claims based on ancestry or genetics, then they may see all three claims as acceptable because a Black-White biracial person has at least one parent who matches each identity. Similarly, if children rely mostly on perceptual features, they may see biracial targets as sharing perceptual features with both monoracial parents, leading them to rate all three claims as acceptable.

Exploratory Hypotheses: Individual Differences Based on Child Race and Age. In addition to the above hypotheses (which were pre-registered), we also explore how participants’ own racial identity and age may impact judgements of identity claims. In terms of race, a recent meta-analysis found that whereas White people categorized ambiguous targets as Black, racial minority participants did not show this pattern (Young et al., 2021). Indeed, newer work found that adults and children may exhibit ingroup over-exclusion (rather than hypodescent) when categorizing ambiguous faces: White participants (children and their parents) reported that a racially ambiguous target looked more *Black* than White, but Black participants (children and their parents) reported that the same targets looked more *White* than Black (Albuja et al., 2023). In other work, White and Black 10- to 13-year-olds also varied in their categorization of a racially ambiguous face (presented without parents): whereas White children evidenced hypodescent (like White adults), Black children did not, and instead were equally likely to categorize the ambiguous face as White or Black (Roberts & Gelman, 2015). These findings

could be explained by the fact that White perceivers rely more on salient perceptual features than Black perceivers when categorizing ambiguous targets (Pauker et al., 2009). Because White children have less exposure to racial diversity, they subsequently dedicate more attention to less familiar, out-group features (e.g., a darker skin tone) than racially minoritized children (Anzures et al., 2013; Bar-haim et al., 2006). This could result in White children, but not racially minoritized children, putting more emphasis on these features and categorizing racially ambiguous people as Black. Thus, it is possible that White children and adults will be more likely than racially minoritized children and adults to say that a biracial target claiming a Black identity is “OK.”

It is also possible that White children will show a different developmental trajectory in terms of their judgments than racially minoritized children due to race stability beliefs. For example, research suggests that racially minoritized children view race as a stable feature earlier by age 5, whereas White children do not necessarily expect race to be stable until closer to age 10 (e.g., Kinzler & Dautel, 2012; Roberts & Gelman, 2016). Therefore, it is possible that racially minoritized children’s judgments will mirror those seen in adults earlier in development than White children’s judgements.

Study 1

Method

Participants

Participants were 157 English-speaking children from the U.S. between the ages of 4 and 11 years old ($Mean_{age} = 6.99$, $SD = 2.16$; $Median_{age} = 7.00$; 82 females, 75 males). In order to conduct a power-analysis, we estimated proportions of responses of OK/not OK for each identity claim and each target race. Then, we ran a simulation in RStudio to determine how many

participants would be needed to have 80% power to detect an interaction between target race and identity claim (both fixed factors) using a multilevel logistic regression. The simulation revealed that we should test 160 participants (see details posted on OSF). However, three participants were removed from the dataset for study noncompletion. According to parental report, participants racially identified as White (58%), Black (1%), Asian (14%), Hispanic (5%), multiracial (18%), or identity wasn't listed (4%).

Participants completed the study on Discoveries Online (discoveriesinaction.org; Rhodes et al., 2020), an online platform designed for presenting study stimuli, recording webcam video during participation (include parental consent), and securely uploading the video data to an external web database. The study was unmoderated, so participants could complete it at their leisure. Participants were recruited to the study from an internal participant database from [blinded], as well as on Children Helping Science (<https://lookit.mit.edu>). All participants were compensated with a \$5.00 Amazon gift card for their participation. This study was approved by the Institutional Review Board at [blinded]. Preregistration, stimuli, data, and analysis script can be found on OSF: [https://osf.io/78whp/?view_only=1863a815f6324bd3bc20f71345bb3d6d].

Materials

Target-parent pictures. The race(s) of the parents of the targets were manipulated by using images taken from the Chicago Face Database (Ma et al., 2015; see OSF page). These images are already pre-rated on various dimensions, so we were able to select images that were matched. We made sure that all images chosen were matched on age and attractiveness and were rated as highly prototypical for their race (at least a 5 on scale from 1 = “Not at all” to 7 = “Extremely”). We selected a total of 40 images (10 Black men, 10 Black women, 10 White men, 10 White women) and randomized the images so participants never saw the same two adults.

Target child pictures. Pictures were taken from the Child Affective Facial Expressions (CAFE) database (LoBue & Thrasher, 2015; see OSF page). We were interested in choosing children who would be perceived as prototypically White, Black, or biracial (Black and White). Because these ratings were not available, we collected an independent sample of adults ($N = 75$) recruited via Prolific (www.prolific.co) who were asked to categorize each potential stimulus face by race. We pre-tested a total of 30 images from the CAFÉ database (6 phenotypically White girls, 4 phenotypically White boys, 6 phenotypically Black girls, 4 phenotypically Black boys, 6 phenotypically Black-White biracial girls, and 4 phenotypically Black-White biracial boys). For each racial category, we selected the three girl images and two boy images that had the most agreement (over 60%) that they were Black, White, or Black-White biracial. All images were forward-facing, and the children were smiling. All images and pre-test ratings are available on OSF.

Procedure

Participants first completed two practice trials to learn how to play the game. On each trial, children heard a target make a claim, and they were asked to select whether the claim was OK (indicated by clicking on a green check mark) or not OK (indicated by clicking on a red X). Previous developmental studies have also used OK/Not OK to measure the acceptability of a target's actions (e.g., Mulvey, 2016; Rhodes & Chalik, 2006; 2013; Smetana, 2006, to name a few). Thus, if participants chose "OK" we took that to mean that they found the target's claim acceptable and if they select "Not OK" we took that to mean that they found the target's claim unacceptable. In the practice trials, participants were presented with a cartoon girl who made a claim about the color of her dress (e.g., "This child says her dress is blue."). In the first trial, the claim was accurate (the character's dress color matched her claim), and in the second trial it was

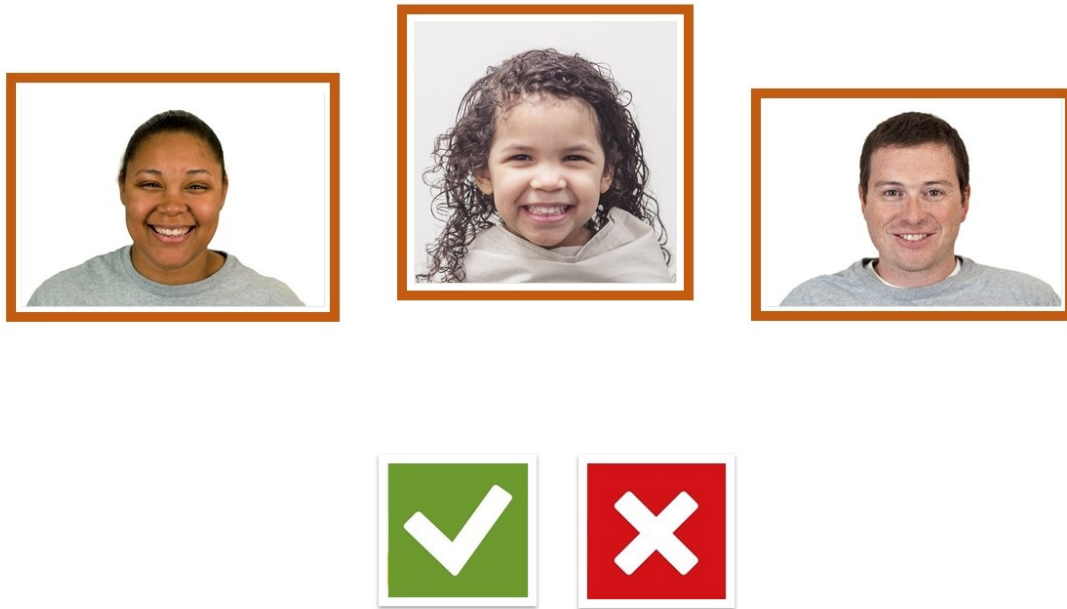
inaccurate (the character's dress color did not match her claim). If the child answered either trial incorrectly (e.g., saying it was "OK" to claim an inaccurate dress color), they were asked to try again before proceeding to the test trials. All participants passed both practice trials by the second try, suggesting they understood how to respond to the claim questions.

Then, participants moved on to the main study. The study utilized a 3 (target race: Black, White, biracial) by 3 (identity claim: Black, White, biracial) within-subjects factorial design. On each trial participants saw a target child appear, along with images of the target child's parents (the parents were always matched to the target child's prototypical race). Then, the target child made a claim about their identity, and participants could choose whether the claim was OK (green checkmark) or not OK (red X). See Figure 1. For example, a child might be presented with a biracial girl target and hear the following:

"Here is a kid. Here is her Mom, and here is her Dad. Her mom is Black, and her dad is White. The kid says she is Black. Is this OK? Or not OK?"

Figure 1

Example stimuli for biracial female target condition.

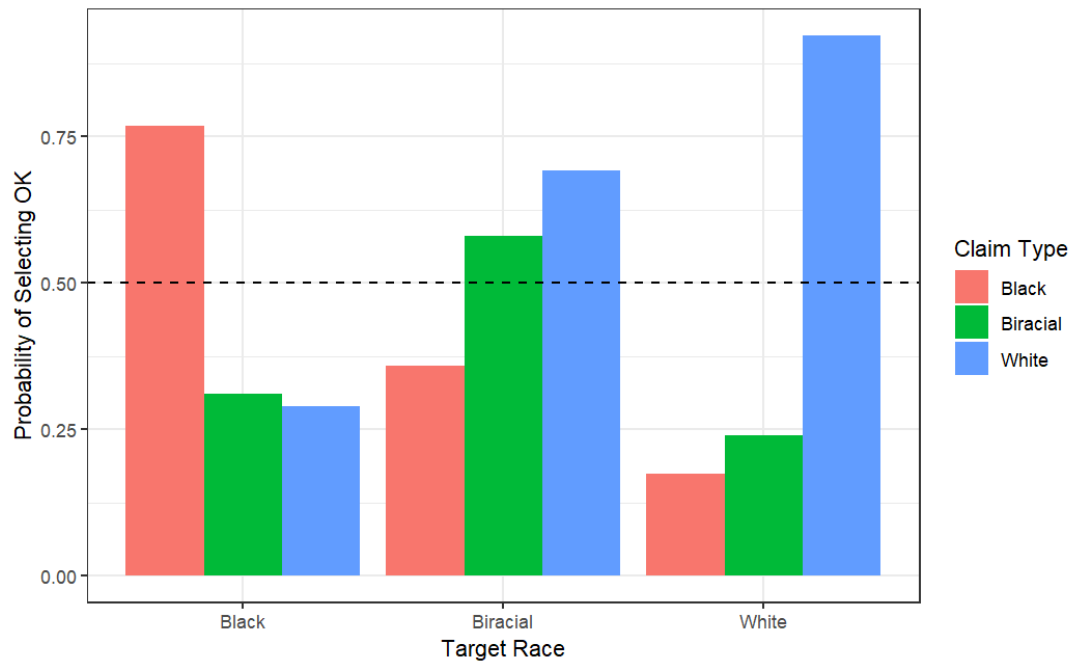


Participants viewed a total of nine test trials, in which each level of the two independent variables were fully crossed, meaning participants saw three different monoracial Black targets, (each making a different identity claim), three different monoracial White targets (each making a different identity claim), and three different Black-White targets (each making a different identity claim; order randomized). The gender of the targets was randomized so that each participant saw either 5 girls and 4 boys, or 4 girls and 5 boys. After the last trial, participants were asked to explain their response. For example, they were told “You said that it was OK for this child to say she was Black. Why was that OK?.” Responses to this free-response measure can be found in the supplemental material.

Results

Pre-Registered Analyses

Our main question was whether judgments about identity claims varied based on a targets' racial background. That is, were children more likely to rate claims that matched the target's ancestry as "OK"? We conducted a repeated-measures logistic regression with children's choices of "OK" as the outcome variable and target race (Black, White, biracial), identity claim (Black, White, biracial), and their interaction as fixed factors. We included a random effect of participant to control for individual differences in the repeated measures design. The model revealed significant main effects of claim, $X^2(2) = 82.77, p < .001$, and target race, $X^2(2) = 101.57, p < .001$, which were qualified by a significant interaction between claim and target race, $X^2(4) = 218.08, p < .001$ (see Figure 2), suggesting children's responses about which claims were "OK" varied based on the target race.

Figure 2*Children's Judgements of Monoracial & Biracial Target's Identity Claims*

Note. Figure 2 shows children's responses about whether targets' identity claims were OK (1) or not OK (0). Children were above chance at saying that it was OK for monoracial targets to claim the identity that matched their ancestry, regardless of whether the targets were Black (left) or White (right). For Black-White biracial targets (middle), children were above chance at endorsing a White identity claim.

To further understand the interaction, we evaluated children's response for each target race separately using logistic regressions. For Black targets, we set the Black identity claim (*probability* = .77) as the comparison case. A significant effect of identity claim ($X^2(2) = 80.69$, $p < .001$) was due to participants rating both a biracial claim (*probability* = .31, $\beta = -1.99$, $SE = 0.26$, $z = -7.71$, $p < .001$) and a White claim (*probability* = .29, $\beta = -2.09$, $SE = 0.26$, $z = -8.04$, $p < .001$) as less acceptable than a Black claim. We were also interested in children's general

evaluations of whether each claim was acceptable. To ask this, we conducted follow-up binominal probability tests comparing rates of saying the claim was “OK” to chance (0.5). Children were significantly above chance at indicating that a Black target making a Black identity claim was “OK”, $p < .001$, 95% CI [.69, .83], but were significantly below chance when asked if it was “OK” for a Black target to claim a White, $p < .001$, 95% CI [.22, .37], or biracial identity, $p < .001$, 95% CI [.24, .39].

A similar pattern was seen for the White targets (in which we set the White identity claim (*probability* = .92) as the comparison case). A significant effect of identity claim ($X^2(2) = 78.62$, $p < .001$) was due to participants rating both a biracial claim (*probability* = .24, $\beta = -4.06$, $SE = 0.49$, $z = -8.27$, $p < .001$) and a Black claim (*probability* = .17, $\beta = -4.50$, $SE = 0.52$, $z = -8.64$, $p < .001$) as less acceptable than a White claim. Follow-up binominal probability tests comparing rates of saying the claim was “OK” to chance (0.5) revealed that children were significantly above chance at indicating that a White target making a White identity claim was “OK”, $p < .001$, 95% CI [.87, .96], but were significantly below chance when asked if it was “OK” for a White target to claim a Black, $p < .001$, 95% CI [.12, .24] or biracial identity, $p < .001$, 95% CI [.18, .32].

For biracial targets, we set a biracial claim (*probability* = .58) as the comparison group. The model revealed a significant effect of identity claim, $X^2(2) = 33.35$, $p < .001$, which was due to participants reporting that a White claim was more acceptable than a biracial claim (*probability* = .69, $\beta = 0.51$, $SE = 0.24$, $z = 2.08$, $p = .037$), but a Black claim was less acceptable than a biracial claim (*probability* = .35, $\beta = -0.95$, $SE = 0.25$, $z = -3.90$, $p < .001$). Follow-up binominal probability tests showed that participants were significantly above chance at saying that it was “OK” for a biracial target to claim a White identity, $p < .001$, 95% CI [.61, .76], and

significantly below chance at saying that it was “OK” for a biracial target to claim a Black identity, $p < .001$, 95% CI [.28, .44]. However, their responses did not differ significantly from chance when asked whether it was “OK” for a biracial target to claim a biracial identity, $p = .053$, 95% CI [.50, .66]. This overall pattern of results was not in line with any of our predicted patterns of response (Hypotheses 1-3).

Exploratory Analyses

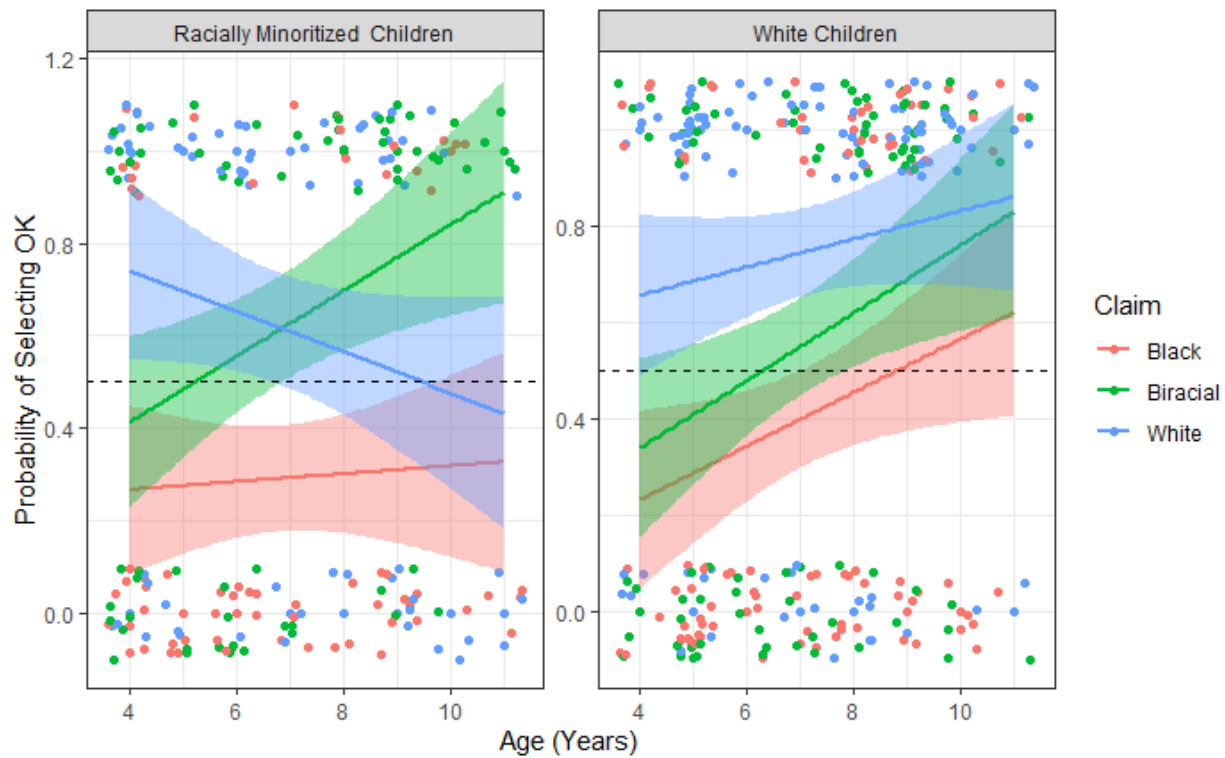
Participant Age & Race Differences

Although we did not find support for any of our hypotheses about the biracial targets when investigating the entire sample of participants, we were interested in whether this was potentially due to effects of participants’ age and/or race. Thus, we next present exploratory analyses examining these factors. Since we did not have a large enough sample of any specific racially minoritized group, we separated the sample into White ($N = 92$) and racially minoritized participants ($N = 65$; see Participants section for racial identity breakdown). Also, given that children almost universally responded that monoracial targets should make claims in line with their ancestry, we focus here on results of race and age for the biracial targets (but see supplemental material for similar analyses for White and Black targets). Given that we likely did not have sufficient power to test participant race as a factor, we looked at each sample separately.

White participants. We conducted a repeated measures logistic regression with White children’s choice of “OK” as the outcome variable, participant age (continuous), identity claim (White, Black, biracial) and the interaction between participant age and identity claim as fixed factors. We also included a random effect of participant. There was only a significant main effect of age, $X^2(1) = 12.21$, $p < .001$. Consistent with Hypothesis 3, as White children got older, they were more likely to select “OK” for all three racial identity claims (see Figure 3, right).

Figure 3

Impact of Age & Racial Background on Children's Judgements of Biracial Target's Identity Claims



Note. Figure 3 shows that children from racially minoritized backgrounds (left) and White children (right) show different developmental trends when it comes to endorsing biracial targets' identity claims. Children from racially minoritized backgrounds became most likely to endorse a biracial identity claim, whereas White children became more likely with age to endorse all three identity claims.

Racially minoritized participants. A repeated measures logistic regression with on racially minoritized children's choices (with the same variables as above) revealed a significant two-way interaction between participant age and identity claim, $X^2(2) = 10.55, p = .005$. To

probe this interaction further, we looked at whether age predicted racially minoritized children's choice of "OK" for each identity claim separately. With age, children from minoritized backgrounds became more likely to say that a biracial identity claim was "OK" ($\beta = 0.33$, $SE = 0.13$, $z = 2.60$, $p = .009$). Children's age did not significantly predict their likelihood of selecting "OK" for Black ($\beta = 0.04$, $SE = 0.12$, $z = 0.35$, $p = .728$) or White ($\beta = -0.19$, $SE = 0.11$, $z = -1.63$, $p = .103$) identity claims. In line with Hypothesis 2, as racial minority children got older, they were more likely to see the biracial identity claim as most acceptable (see Figure 3, left).

Discussion

As hypothesized, children (regardless of race) rated the monoracial targets' claims as most acceptable when it matched their ancestry. Indeed, children were below chance at selecting claims that did not match their ancestry. Preregistered analyses revealed that children were only above chance at finding a White identity claim acceptable for biracial targets. However, exploratory analyses showed differential judgements for White and racially minoritized children. In particular, with age, White children's responses were most in line with Hypothesis 3 (that a biracial person could claim a racial identity that matched either or both of their parents), but non-White children's responses were most in line with Hypothesis 2 (that a biracial person should claim a biracial identity).

Previous research has found that children from minoritized racial backgrounds showed more adult-like reasoning about race (e.g., expecting race to be stable earlier in development: Kinzler & Dautel, 2012). Therefore, we were next interested in investigating adults' judgments about biracial people's identity claims to test whether adults' judgements mirrored those of older White children (in which all claims were judged as generally acceptable: Hypothesis 3) or

mirrored those of older children from minoritized racial background (in which biracial claims were seen as most acceptable: Hypothesis 2).

We were also interested in whether adults' judgements varied based on their own racial background (as was the case in the child sample). **We did not have specific hypotheses that there would be differences, but instead collected an adult sample that would allow us to explore potential variability.** We decided collect data from both White adults and multiracial adults. We recruited multiracial adults specifically (rather than adults of any racially minoritized background, which would better match Study 1) because we reasoned that they may be more accepting of flexibility in biracial people's identification. In addition to the fact that their personal experiences could lead them to understand biracial identity claims differently (Wilton et al., 2013), past research has shown that multiracial people are more likely to believe that race is socially constructed (versus essentialist views of race; Bonam & Shih, 2009; Markus, 2008; Shih et al., 2007; Smedley & Smedley, 2005; Zack, 1995) and are more cognitively flexible in their conceptualizations of race (Gaither, 2015; Gaither et al., 2014). Therefore, we expected that *if* any participants were going to be more accepting of flexibility in a biracial person's identity claims, it may be multiracial adults. In this way, comparing a sample of White adults to one of multiracial adults may provide the best evidence of whether racial background impacts adults' judgments about biracial identity claims.

Although this research is not a direct replication of Study 1 (as it uses an adult sample), the patterns will allow us to better understand the patterns seen for biracial identity claims, which when taken across the entire child sample did not match any of our specific hypotheses. For instance, conceptually replicating any of the patterns seen in Study 1 strengthens the possibility

that those patterns exist, despite the exploratory nature of the separate analyses based on racial background in the child data.

Study 2

Method

Participants

An a priori power analysis in R using the `pwr.chisq.test` function showed that we should recruiting 107 participants would provide 80% power with an alpha of .05 to detect a medium effect size (0.3). We rounded this up to 120 to account for possible exclusions. Because we were interested in whether there were any differences based on adult racial background (as seen in children), we aimed to recruit a sample (120 people) of White adults as well as a sample (120 people) of multiracial adults. Therefore, we aimed to recruit a total of 240 adults via Prolific (prolific.com). On the actual survey 139 participants identified as White and 87 identified as multiracial. When asked to self-identify their race, the top four identities selected by those in the multiracial group were: Multiracial ($n = 20$), White and Asian/Asian American and Multiracial ($n = 13$), White and Black/African American ($n = 12$), and White and Asian/Asian American ($n = 11$). See supplemental material for full sample breakdown. This left a total sample of 227 ($Mean_{age} = 36.82$, $SD = 12.74$; 117 female, 102 male, 7 non-binary). Participants were compensated \$0.30 for their participation. This study was approved by the Institutional Review Board at [blinded], protocol number [blinded]. Preregistration, data, and analysis script can be found on OSF: [https://osf.io/afe2y/?view_only=979ecc01cecc41d28b3bdca615717f3f].

Procedure

The study utilized a 3 condition (biracial identity claim: Black, White, Black and White) within-subjects factorial design. We chose not to ask about monoracial people's identity claims

for two main reasons. First, in Study 1, children had robust expectations that monoracial people should (only) make claims that were in line with their ancestry. That is, regardless of their age and their own racial background, children said that it was not OK for a monoracial to claim an identity that did not match their parents. Second, previous research has already established that adults (both White adults and adults from racially minoritized backgrounds) view monoracial peoples' identity claims as less legitimate when their claims do not match their ancestry (Small & Major, 2018). Therefore, we expected that judgments about monoracial target's identity claims would not vary based on participant age or background, so we decided to focus on only biracial targets' identity claims.

On each trial, participants read about a Black-White biracial target who made a claim about their identity, and then chose whether the target's claim was OK or not OK. For example, the participant might read the following: "Michael's¹ mom is White and his dad is Black. When he is asked about his race, Michael says that he is Black and White. Is it OK or not OK for this Michael to say he is Black and White?"

The gender of the targets was randomized so that each participant read about either 2 girls and 1 boy, or 1 girl and 2 boys. After the last trial, participants were asked to explain their response. That is, in the above example they would be told, "You said that it was [OK/Not OK] for him to say that he was Black and White. Why do you think that?" Responses to this free-response measure were coded for themes and can be found in the supplemental material.

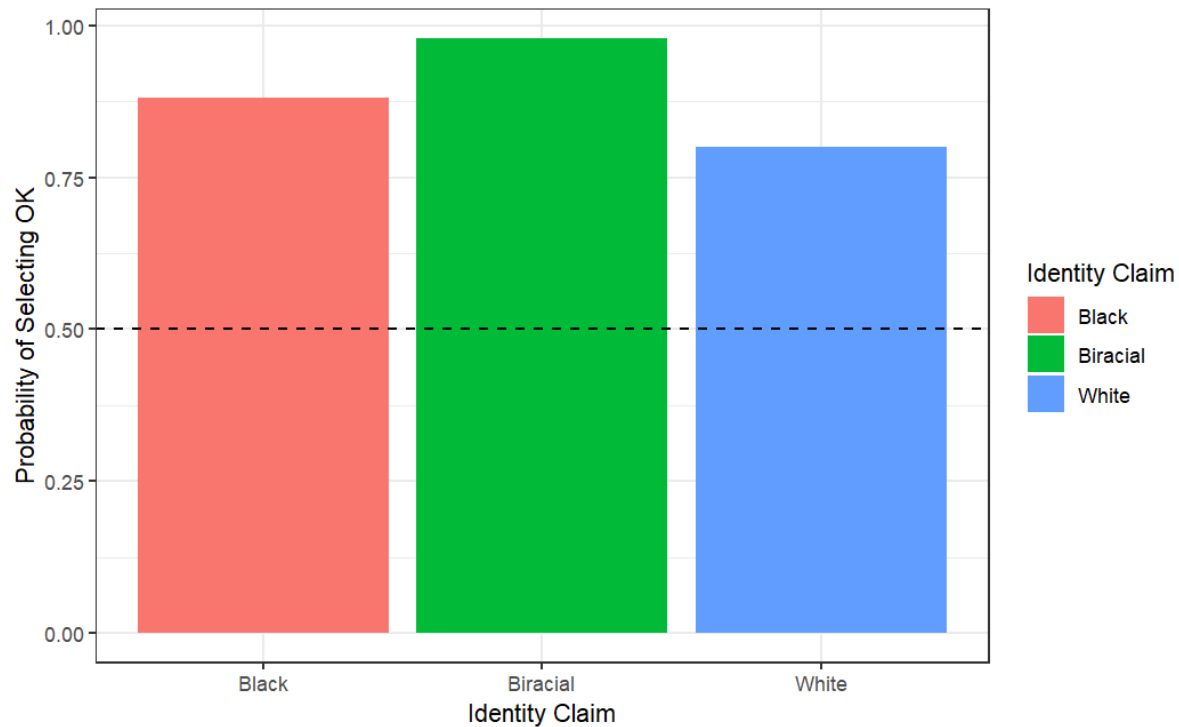
Results

¹ The names of the targets were randomized. Male targets were Micheal, John, and Jack. Female targets were Michelle, Julie, and Jessica.

Pre-Registered Analyses

We were first interested in whether adults were more likely to accept some racial identity claims than others. To test this, we conducted a logistic regression with adult's choices of "OK" as the outcome variable and identity claim (Black, White, biracial) as a fixed factor. We also included a random effect of participant to control for individual differences in the repeated measures design. There was a significant effect of claim type, $X^2(2) = 63.41, p < .001$, suggesting that participants' ratings varied based on the type of claim made (see Figure 4). We ran follow-up tests to further understand the effect of claim type. Setting the Black identity claim as the comparison case revealed that all claims were significantly different from each other: adults rated a biracial claim (*probability* = .98) as more acceptable than a Black claim (*probability* = .88, $\beta = 7.90, SE = 1.05, z = 7.52, p < .001$). But rated the Black claim as more acceptable than a White claim (*probability* = .80, $\beta = -6.70, SE = 1.35, z = -4.98, p < .001$). Interestingly, despite these differences, follow-up binomial probability tests indicated that adults found each type of claim generally acceptable. That is, participants were above chance at saying each claim type was "OK" (biracial: $p < .001$, 95% CI [.95, .99]; Black: $p < .001$, 95% CI [.83, .92]; White: $p < .001$, 95% CI [.74, .85]). Therefore, these results were somewhat in line with both Hypothesis 2 (biracial claim is seen as the best) and Hypothesis 3 (all claims are seen as generally acceptable).

Figure 4.*Adults' Judgements of Biracial Target's Identity Claims*



Note. Figure 4 shows adults' responses to whether Black-White biracial targets' identity claims were OK (1) or not OK (0). Adults were above chance as endorsing all three identity claims.

Exploratory Analyses of effects of participant race

To examine if there were differences based on participant race, we conducted another repeated-measures logistic regression with adults' choice of "OK" as the outcome variable, this time including identity claim (White, Black, Black and White), participant race (White vs. Multiracial), and their interaction as fixed factors. However, analyses revealed only a significant main effect of claim type, $X^2(2) = 15.83, p < .001$, replicating the main findings reported above. Therefore, White and multiracial adults viewed a biracial target's identity claim similarly (see Supplemental Materials for further analyses of each group).

Discussion

Pre-registered analyses showed that adults were above chance at selecting all three identity claims but rated the biracial identity claim as the most acceptable. This was consistent with both Hypothesis 2 and Hypothesis 3. Interestingly, exploratory analyses based on participant race did not show significant differences between White and multiracial participants.

General Discussion

Here, we assessed judgments about monoracial people (Study 1) and biracial people (Studies 1 & 2) who claimed monoracial and biracial identities. As predicted, like adults (Small & Major, 2018), children found it most acceptable for monoracial people to claim the racial identity consistent with their parents' race (a Black target claiming a Black identity, a White target claiming a White identity). Indeed, children were significantly above chance at saying that it was "OK" for monoracial targets to claim the racial identity consistent with their parents' race, and below chance at saying that it was "OK" for monoracial people to claim *other* racial identities. These findings are in line with past research suggesting that essentialist beliefs about race and/or salient perceptual features may impact how children categorize racially monoracial targets. Young children are also highly sensitive to norms (Kalish, 1998; Kalish & Cornelius, 2007) and enforce social norms on others (Rakoczy et al., 2008; 2009). Therefore, it is possible that children negatively judge monoracial targets who claim identities not in line with their ancestry because they are aware of norms condemning identity flexibility among monoracial individuals.

The very clear pattern for children's judgements about monoracial targets' claims was not mirrored in their judgments about biracial targets' claims. Instead, in the overall (racially diverse) sample of children, we did not find support for *any* of our pre-registered hypotheses about racial identity claims made by biracial targets. It is perhaps most interesting that children

(when collapsed across the sample of White and racially minoritized children) were least likely to select “OK” when a biracial target claimed a Black identity. This pattern was contradictory to *all three* of our posited preregistered hypotheses. Additional research is needed to understand why this is the case. One possibility is that the results were due to the visual stimuli. Because many of the children tested were too young to read, we chose to use pictures in Study 1 to help participants follow the story. Previous research highlights children’s sensitivity to phenotypic appearance in racial categorizations (Dunham et al., 2015; Roberts & Gelman, 2015; 2016). Therefore, adults (according to our pre-test) viewed these stimuli as racially ambiguous, children may have focused on some perceptual feature of the stimuli (such as the lighter skin tone) when evaluating each target’s claim. Indeed, children sometimes prioritize perceptual features when categorizing biracial targets (Dunham et al., 2014; Bigler & Liben, 2007; Mandalaywala et al., 2019). Therefore, future research could vary the perceptual features (lighter-skin tone vs. darker-skin tone) of biracial targets to see children are more accepting of a Black identity when a target has more prototypically Black features.

It is possible that children may find it harder to process biracial people’s identity information (e.g., integrating information about two parents, seeing contrasting phenotypic features), leading to less clear patterns in when children are evaluating identity claims made by biracial people compared to those made by monoracial people. Indeed, in addition to the surprising finding of not finding it acceptable for a biracial person to claim a Black identity (described above), children were also surprisingly *above* chance at endorsing biracial targets who made White claims. Children’s selection of “White” as the most acceptable identity claim for biracial targets may have been driven by younger children, who tend to show more explicit pro-White biases than older children (Williams & Steele, 2019). Indeed, consistent with past research

showing that children's judgements about biracial people may depend on both age and race (e.g., Pauker et al., 2009; Roberts & Gelman, 2015; 2016), our exploratory analyses suggest that our findings for biracial targets may be better understood as a function of participant race and age. Specifically, as White children got older, they became more likely to endorse all three identity claims (Hypothesis 3). Alternatively, as racially minoritized children got older, they became more likely to specifically endorse a biracial identity claim (Hypothesis 2). However, given these findings were exploratory, future research should seek to replicate these findings with a higher-powered design.

It could also be fruitful to explore whether White and racially minoritized children's responses to biracial targets are due to differences in racial socialization. For example, racial minority parents are more likely to discuss race with their children (Brown et al., 2007), whereas White parents may instead emphasize colorblind ideologies (Pahlke et al., 2012). Therefore, importance of racial identity (and identity claims) may be more salient to racially minoritized children (Priest et al., 2014), which could lead racially minoritized participants to be more likely than White participants to judge a biracial target for not claiming their full racial identity (Black and White).

Interestingly, adults (both White adults and multiracial adults) showed similar judgements to that of older White children. That is: adults rated all types of claims made by biracial targets as "OK" at above chance levels (Hypothesis 3). It is possible that participants (older White children; adults of all racial backgrounds) rated all identity claims as acceptable because they see biracial targets as members of all three racial categories due to flexibility in race conceptualizations, beliefs about genetic inheritance (biracial people have some shared genetics with both racial groups) or based on perceptual features (biracial people share features

with both racial groups). Alternatively, it is also possible that participants may have been driven (or partially driven) by social desirability. That is, as children get older, they become more aware of social norms that prohibit outward expressions of racial bias (Crandall et al., 2002). Therefore, participants may have said that all identity claims were acceptable because they think it is the most socially desirable response. Future research is needed to tease apart whether these groups responded similarly for different or similar reasons.

Limitations & Future Directions

We acknowledge several methodological limitations to our studies. First, future research could benefit from including more dependent variables. For example, although our measure of “OK/Not OK” likely provided information about whether or not children and adults found the target’s claim acceptable, it did not tell us *why* they found the claim acceptable or unacceptable (though, see supplemental material for possible explanations based on open-ended responses). Because past research has shown that adults like and trust targets who make more “acceptable” identity claims (Small & Major, 2018), it would be interesting to assess whether identity claims impact children’s liking and trust of targets. Also, it is possible that having participants complete a warmup task that had a correct and incorrect answer led participants to believe there was a right or wrong answer on the experimental task. Because children did not always pick only one identity claim per target type as OK (i.e., many children said that multiple claims made by biracial people were OK), we do not believe this was a large issue. Regardless, future research should consider alternative practice trials. In future studies, it would also be interesting to include monoracial comparisons, as it is possible that adult participants’ responses about biracial targets would look different when there is a direct comparison to a claim made by a monoracial target.

Further, we explored (in non-preregistered analyses) the effect of participant race in Study 1, but we did not have a large enough sample of any minoritized group to consider specific effects. It could be informative to examine if Black children's responses or biracial children's responses differ from other racial minority children. That is, a large enough sample of either Black children or biracial (Black-White) children will allow researchers to examine if responses differ as a function of ingroup membership. Additionally, from a young age, multiracial children may be more flexible in how they think about race. For example, biracial infants show reduced face scanning when habituating to faces during looking-time studies, while monoracial infants show increased face scanning (BarHaim et al., 2006; Gaither et al., 2012). While not concrete evidence of cognitive flexibility, it does suggest that multiracial infants are faster to perceive and encode faces than monoracial infants. Further, research shows that biracial children also engage in identity switching (Herman, 2004; Porter & Washington, 1993; Rockquemore & Brunson, 2001). Therefore, it is possible that biracial children may also differ from minoritized monoracial children in how they respond to monoracial and biracial people's identity claims due to a) increased cognitive flexibility and/or b) because they also engage in identity flexibility.

Future work should also examine how children (from various backgrounds) evaluate identity claims made by other biracial populations (beyond Black and White). Current research on biracial populations has focused almost exclusively on Black-White people, likely due to this a) being the most common biracial population in the U.S. and b) due to strained race relations between Black and White people in the U.S. (see Charmaraman et al., 2014). However, it would be informative to test how children judge identity claims made by biracial people with other combinations of racial ancestry, including those with a different minoritized identity (e.g., White-Asian) and those with two minoritized racial identities (e.g., Black-Asian). It is possible

that similar patterns would be seen such that older children and adults are most accepting of biracial identity claims. Or, because different groups vary in terms of their perceived status (Kuo et al., 2020; Zou & Cheryan, 2017), and likelihood of facing discrimination (O'Brien et al., 2023), it is possible that there would be times when it was viewed as relatively more acceptable for a biracial person to only claim an identity matching part of their ancestry. It is also possible that this question would intersect with the question of the participants' own background in that people may make these judgments differently in cases in which some (but not all) of the target's identity claims would place the target in the participant's racial ingroup.

In this research, the target's racial identity claims were made outside of any specific context. We felt that not including any specific context was important in order to get a baseline understanding of how children and adults judge biracial people's identity claims. However, we acknowledge that it is also important to examine how context may shape perceptions of *why* a biracial person changed their identity. For example, children, like adults, might be more likely to think that biracial people should maintain their biracial identity in cases when identity flexibility might be seen as seeking an advantage (e.g., Albuja et al., 2018). That is, it is important to more fully understand whether people (children and adults) make different judgements about identity claims (e.g., a biracial person always saying s/he is biracial vs. always saying s/he is Black) than about identity flexibility or contextual racial presentation (e.g., a biracial person who sometimes identifies as biracial and other times identifies as Black). It is possible that identity flexibility is judged more negatively, or whether expectations that people should maintain one identity are strongest when an identity shift signals that the contextual racial presentation is being used to provide a personal benefit. For example, future work could compare judgments of identity flexibility when there was no benefit, an academic benefit (e.g., a scholarship), or a social benefit

(e.g., making a new friend). Perceived motivation is important to consider as some reasons for claiming certain racial identities may be seen as less manipulative than others. Research on lying supports this conclusion: lying for self-gain purposes is viewed as less socially acceptable than lying to gain social acceptance (McLeod & Genereux, 2008). Further, the context in which a person changes their identity may also have implications on how perceivers categorize racially ambiguous people (e.g., whether the context evokes physical or social belonging threats, whether the perceiver is motivated to act without racial bias, and the degree to which racial stereotypes are made salient, to name a few; Chen & Hamilton, 2012; Chen et al., 2014; Freeman et al., 2011; Gaither et al., 2016; Ito et al., 2011; Miller et al., 2010).

Finally, future research should also examine if children and adults' ratings of identity claim acceptability change based on whether the label "biracial" is used instead of "Black and White." That is, past research shows that people vary in how they conceptualize what it means to be Black-White biracial (Roberts et al., 2022). For example, using the label "Black and White" may lead people to conceptualize a biracial identity as fragmented ("half Black and half White, but those halves are separate and nonoverlapping") while using the label "biracial" may lead people to conceptualize a biracial identity as mixed ("a mixture of Black and White, but not 100% Black or White").

Conclusion

Over the past few years there has been increased public attention to whether people should be allowed to claim racial identities that do not match their parentage, or only match part of their parentage. Given the impact that judgements about these claims have on intergroup relations, it is important to understand when and how these judgements develop. Our results indicate that children and adults show some similar patterns: they think that monoracial people

should claim monoracial identities in line with their heritage (Small & Major, 2018; Study 1).

Interestingly, children and adults' judgements about biracial people's identity claims vary based on both age and racial background, suggesting that White and racially minoritized people differential experiences may impact how they think about biracial identity.

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