Article

Framing, Context, and the Misperception of Black–White Wealth Inequality

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Abstract

In one large-scale experiment using U.S. respondents on Mechanical Turk ($N = 2{,}899$), we studied how subtle differences in framing and context impacted estimates of the Black–White wealth gap. Across our 10 different experimental manipulations of framing and context, respondents consistently overestimated Black family wealth relative to White wealth. There was also substantial variation in the magnitude of these wealth estimates, which ranged from a low of 35 to a high of over 60 percentage points across the conditions. Overestimates were largest when respondents were asked about the Black–White wealth gap at both past and present time points and closest to accuracy when respondents used images as pictorial comparisons for White and Black wealth. Overall, while framing and context certainly affect the magnitude of this misperception, the tendency to overestimate racial wealth equality is extremely robust.

Keywords

economic inequality, racism, intergroup relations, social psychology, socioeconomic status

Social scientists, policymakers, and the public all benefit from knowing whether people make accurate assessments of inequality. Several lines of prior research examine this inaccuracy and find that people tend to overestimate equality between groups of people (e.g., rich and poor, CEO and worker, Black and White families; Kiatpongsan & Norton, 2014; Kraus et al., 2017; Norton & Ariely, 2011). Knowing that people's perceptions of economic circumstances tend to overestimate equality between groups of people is an important insight for social scientists and policymakers because such a pattern highlights one potential perceptual barrier to equity-enhancing economic policy. In essence, policies that reduce racial wealth inequality cannot gain support, and policies that increase it are unlikely to be contested, if people are not aware of the magnitude of the inequality. Building on this prior work, understanding the stability of these overestimates and their underlying psychological mechanisms is an important line of future inquiry. Here, we used a paradigm exposing more than 2,000 American adults to 10 variations in framing and context for soliciting respondent perceptions of Black–White wealth equality in order to shed light on these psychological mechanisms.

Based on prior research (Bell, 1987; DeBell, 2017; Eibach & Ehrlinger, 2006; Kraus et al., 2019; Seamster & Ray, 2018), we expected respondents to overestimate the current state of wealth equality between White and Black families relative to federal benchmark data collected by the Survey of Consumer Finances (SCF; Darity et al., 2018). Aside from this general pattern, we explored how these perceptions shift as a function of framing and context: In particular, we expected respondents to provide larger overestimates of Black–White racial equality when exposed to reminders of the passage of time, given that such reminders highlight societal progress, relative to when only considering racial equality at a single time point. In contrast, we expected that monetary accuracy incentives would counteract motivations to see society as just and fair and would thus increase accuracy in perceptions of Black–White racial equality. Aside from these latter expectations, we expected other subtle variations in framing and context to have little impact on the general tendency for respondents to overestimate Black–White wealth equality.

The Narrative of Racial Progress and Motivated Cognition

Motivated reasoning is foundational to our understanding of misperceptions of racial equality (Jost et al., 2003; Kunda, 1990; Richeson, 2020). Despite acknowledging the racial

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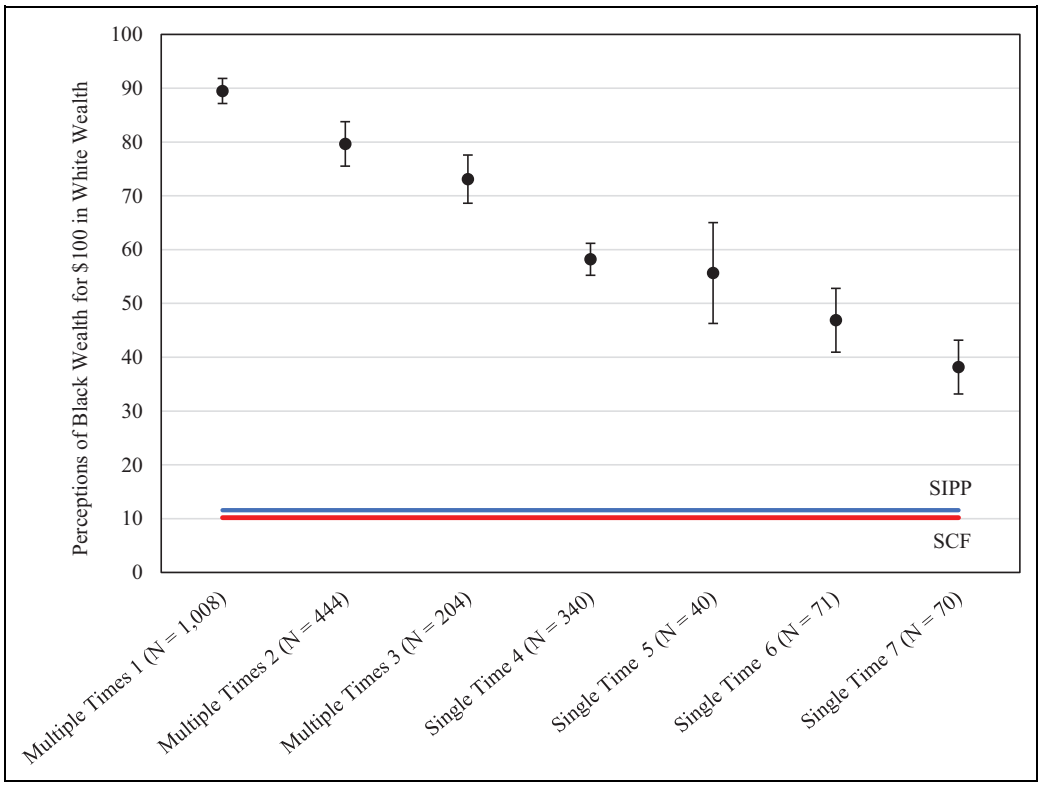

Figure 1. Estimates of current Black wealth when White wealth is US$100 across seven studies organized by asking about wealth equality at multiple times or a single time. Samples 1 (Kraus et al., 2019) and 2 (Kraus et al., 2017) are published elsewhere whereas the remaining samples represent currently unpublished data from prior studies. The remaining estimates are from unpublished work from Mechanical Turk (Sample 3), our lab at Yale's School of Management (Sample 4), or three different classrooms of professional students (Samples 5–7). Error bars show 95% confidence intervals surrounding the mean. Median Black wealth in 2016 estimated from the Survey of Consumer Finances is plotted with the solid red line at US$10.18 for every US$100 in wealth held by White Americans. As a second comparison, median Black wealth estimated from the Survey of Income and Program Participation is plotted with the solid blue line at US$11.57 for every US$100 in wealth held by White Americans. Participants in Sample 2 estimated Black–White wealth equality for 2013 whereas all other samples provided estimates for 2016.

inequalities of the past, Americans have a tendency to adhere to a set of beliefs about society asserting that racial equality is a predestined, natural, and perhaps even automatic societal outcome (Kraus et al., 2017, 2019). For instance, as early as 1977, the majority of respondents to the General Social Survey report that racial differences on many outcomes are no longer due to racial discrimination and, further, job earnings and promotions are determined fairly (General Social Survey, 2016). We propose that this perceptual pattern is indicative of a widespread belief that racial inequality is rapidly, linearly, and perhaps even automatically disappearing (Bonilla-Silva, 2006; Eibach & Keegan, 2006; see also Pinkney, 1986).

In essence, adherence to this narrative of racial progress is motivated by a more general desire to see society as just, fair, and merit-based (e.g., Phillips et al., 2020). That is, to constantly and chronically attend to societal inequality is an uncomfortable mental and affective state that can be avoided by simply imagining a society that is more in line with ideals of equity and progress (Mueller, 2020; Seamster & Ray, 2018). Thus, when given the opportunity to report on Black–White wealth equality, a statistic easily searched on the internet for which there is publicly available federal data (Darity et al., 2018), respondents tend to overestimate it by a wide margin[1] (Kraus et al., 2017, 2019; see also, Kuo et al., 2020).

An aim of the present research was to put this motivational account of misperceptions of racial economic inequality to the test with two experimental manipulations. First, we sought to heighten overestimates of Black–White wealth equality by asking respondents to explicitly consider society across time (i.e., in the past and present) and then compared these responses to estimates at a single present time point. We expected that estimating current Black–White wealth equality while being reminded of time passage versus not would give respondents the chance to explicitly consider racial progress narratives and, thus, would increase overestimates of Black–White wealth equality. The most direct evidence in support of this prediction comes from our past work suggesting that asking about Black–White wealth equality at more than one time point elicits heightened overestimates. As depicted in Figure 1, the three largest estimates of Black–White wealth equality (ranging from 73.1 to 89.5 percentage points) were generated in studies in which participants were asked to

estimate Black–White wealth equality both in the present and for at least one time point in the past—with the largest overestimates generated for our study of 12 time points. In contrast, the smallest overestimates occurred in studies wherein respondents only estimate at the current time point (ranging from 38.2 to 58.2 percentage points).

Second, we sought to provide motivation to counter the inclination to adhere to narratives of racial progress, namely, by using monetary incentives to be accurate (Bonner & Sprinkle, 2002; Hess, Blaison, & Dandeneau, 2017; Terborg & Miller, 1978). By providing the possibility of a cash transfer for accurate reporting of the Black–White wealth gap, monetary incentives counteract motivations to see society as fair, just, and equitable. In short, default responses to overestimate racial equality should be tempered by monetary reward seeking (e.g., Bonner & Sprinkle, 2002; Yan et al., 2018). In prior research, providing monetary incentives increased accuracy in emotion recognition testing, presumably because it provides a concrete monetary incentive for attending to others emotional states (Hess et al., 2016). In this context of racial wealth inequality, we expected monetary incentives for accuracy to produce a similar increase in accurate responding—that is, to reduce overestimates of racial wealth equality.

Misperception Versus Mismeasurement: Subtle Variation in Framing and Context

Along with these motivational predictions, we sought to understand how subtle variations in framing and context might shape perceptions of Black–White wealth equality across seven additional experimental conditions. A complement to the motivated account we have put forth above regarding misperceptions of Black–White wealth equality is that subtle shifts in framing and context shape the kinds of Black and White comparison sets people bring to mind when making estimates of racial wealth inequality (Phillips et al., 2020; Sinclair & Kunda, 1999). For instance, using words like "average" or "typical" or "person" or "family" when describing Black and White wealth in society might shift the kinds of reference groups respondents bring to mind, which then could possibly be a source of variation in estimates of racial wealth equality (Current Population Survey, 2016; Patillo, 2013). Likewise, asking respondents to calculate wealth in numbers or using open-ended versus specified ranges for respondent estimates could create anchoring effects that also meaningfully shift these estimates, perhaps leading to systematic reporting differences based on these subtle experimental choices (Epley & Gilovich, 2001; Tversky & Kahneman, 1974). To the extent that these subtle variations do not shift estimates of racial equality, the present results would provide clearer evidence that tendencies to overestimate racial economic equality are robust to design and methodology choices, thereby providing confidence that the estimates are evidence of misperception and not mismeasurement.

Method

Sample

We collected a sample of 2,899 respondents from Amazon's online crowdsourcing research platform Mechanical Turk (MTurk; Paolacci & Chandler, 2014) for a survey that took respondents less than 5 min to complete. Respondents were compensated US$0.50 for their participation. Study participation was limited to people currently residing in the United States. Our respondents were 72.0% White, 53.8% men,[2] and had a mean age of 37.6 ($SD = 12.2$). We chose MTurk as our online crowdsourced platform primarily because MTurk offers a large pool of survey respondents that could be realistically assigned at numbers of at least 200 per condition across our 10 experimental varieties.

Our study measures and hypotheses were preregistered at the open science framework (see https://osf.io/f9254) along with study materials and data (see https://osf.io/d7nky/). Throughout, we explicitly state when we report exploratory analyses or analyses that deviate from our preregistration, we chose to collect a sample of at least 200 per framing condition based on prior research indicating that the size of the effect of overestimates of Black–White wealth equality is large ($d > 1.00$), and thus, 200 people per condition gives us greater than 99% power to detect a significant difference between perceptions of Black–White wealth equality estimates and benchmark data. As well, prior research indicates that correlations stabilize at $N = 200$, allowing us to examine associations between estimates of Black–White wealth equality and individual difference measures within each of the conditions (Schönbrodt & Perugini, 2013).

Measures

Below, we detail how the 10 experimental variations asked respondents about Black–White family wealth equality. For clarity of presentation, we describe the standard method of estimating Black–White wealth equality and then explain deviations from that standard method. We first present the two experimental conditions testing motivation, the past and present and monetary incentives conditions, and then present the seven experimental conditions testing context and framing. We focus participant perceptions on wealth inequality between Black and White Americans, versus income, health benefits, or wage inequality, because wealth is the most consequential indicator of economic well-being. Wealth in particular provides a safety net when facing the unexpected financial shocks that families face due to unemployment or unanticipated costs (Darity, Hamilton, & Stewart, 2015; Hamilton et al., 2015). Because levels of actual inequality differ considerably between wealth, income, and wages, the accuracy findings here will vary when examining other domains.[3]

Current-only standard (control condition; n = 291). We used a 0−200 scale where we anchored participants on the average White family holding US$100 in wealth. We then asked

respondents what the average Black family holds in wealth in the United States currently. The question used a sliding scale, identical to those used in our prior work, and the response was always anchored at zero. For the purpose of our statistical analysis, this condition is our experimental control condition to which all other conditions are compared.

Past and present (n = 292). The past and present method is identical to the standard method except that participants estimate both past (1963) and current equality on the same screen in a randomized order (Kraus et al., 2019; Kraus et al., 2017). Recall that our prediction is that considering societal racial equity across time increases the salience of racial progress narratives and, thus, results in greater overestimates of "current" racial wealth equality.

Incentivizing correct responses (n = 290). In this variation, we provided a monetary incentive to reduce overestimates and, therefore, increase accuracy (Bonner & Sprinkle, 2002; Terborg & Miller, 1978). Participants in this condition were told that one respondent who answers with the correct answer in the shortest amount of time will receive a US$100 bonus for participation in the experiment.[4] Recall that our prediction here is that monetary incentives for accuracy will reduce overestimates of racial wealth equality.

Open ended (n = 290). If the 0–200 scale we have been using anchors these estimates, it is possible that asking about Black–White wealth equality with an open-ended survey rather than a slider scale might allow people to better enter estimates that reflect their beliefs. This version had the same question structure as the current-only standard method where participants were asked for every US$100 in wealth held by a White family, how much does a Black family have, using an open-ended answer (capped at US$5,000). Respondents were only made aware of this cap if they entered a value that exceeded it. This method allows us to test the possibility that our use of the 0–200 scale contributes to reports of unrealistically high values of Black family wealth relative to the wealth of White families, thereby inflating overestimates of Black–White wealth equality.

We deviated from our preregistration plan with this question in that we removed three outlier responses as identified using the Tukey interquartile range approach. These outlier responses went beyond the standard method's scale in which participants indicated that Black families had more than twice the wealth of White families. An additional outlier was identified based on the Tukey method, but because it fell within the 0–200 scale, we left the response in the data. Removing these responses made the test of statistical significance for this condition more conservative.

Black family framing (n = 288). This method has two notable differences from the standard method: First, the question anchored on an average *Black* family with US$100 and asks respondents to estimate what a White family has. Second, we also asked participants to estimate Black family wealth using the same format as in the open-ended condition. This condition tests the possibility that the reference group that respondents think about initially will reduce people's estimates of Black–White wealth equality because that reference group activates lower status Black exemplars (Kuo et al., 2020; Sinclair & Kunda, 1999).

For our analysis, we transformed these responses to the original units where White families had US$100 in wealth and Black families had a value that varied between US$0 and US$200. We deviated from our preregistration plan with this question, in that we removed seven outlier responses as identified using the Tukey interquartile range approach because these outlier responses went beyond the standard method's scale in which participants indicated that Black families had more than twice the wealth of White families. Again, removing these responses made our test of statistical significance more conservative.

Person framing (n = 292). Race shapes family structure in America, and it might be the case that asking about "families" adds some noise to people's estimates of racial wealth equality, such that respondents think about different family structures when making their estimates—given real differences in family structure between White and Black families (Current Population Survey, 2016). To test this possibility that thinking of people versus families would reduce overestimates, we asked participants a version of the question that was identical to the standard method but replaced "family" with "person.[5]"

Typical framing (n = 293). Whereas average Black and White families have certain demographic characteristics, stereotypes might further differentiate what we think of as typical members of these racial groups (Cuddy et al., 2008; Ghavami & Peplau, 2013; Rosch, 1988; see also Kuo et al., 2020). As such, we asked participants a version of the question that was identical to the standard method but replaced "average" with "typical." With this condition, we test the possibility that typical exemplars would bring to mind lower status Black families and thereby reduce estimates of Black–White wealth equality.

Past anchor (n = 292). In this variation, we told participants what the Black−White wealth gap was in 1963,[6] in which Black families earned about US$5.17 for every US$100 in wealth held by White families. Following participant exposure to this information about past wealth inequality, participants respond to the standard format of the question. We expected that giving participants information about the Black–White wealth gap in the past might provide a useful anchor (Epley & Gilovich, 2001; Tversky & Kahneman, 1974) that can lead current estimates to be lower and closer to accuracy. Alternatively, that information could simply be funneled into individuals' societal racial progress narratives and, thus, yield larger overestimates of Black–White wealth equality in the present compared to the standard format (Kraus et al., 2017).

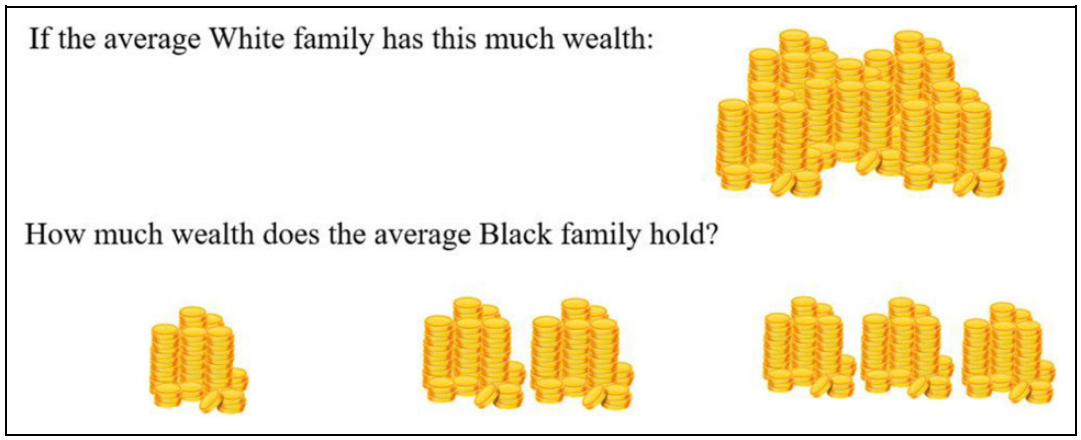

Figure 2. An example of the pictograph question variety where respondents were asked to imagine average White wealth in gold coins and then to select a corresponding pile of coins held by the average Black family. Response options ranged from 0 (*zero Black family wealth*) to 10 (*Black families have nearly double the wealth of White families*).

*Range restriction (*n = *291).* In our original methodology, around 14% of respondents said that Black families have more wealth than White families. Although this is roughly equivalent to the percentage of respondents that say Whites are disadvantaged in society in other research (Horowitz et al., 2019), there is a chance that these responses could be an error among some subset of this population. To account for this possibility, we ask participants to estimate racial wealth equality between Black and White families on a 0–100 scale instead of the 0–200 scale used in the standard method. This scale allows respondents to say that Black−White wealth is equal but not that Black family wealth is higher than White family wealth. Here, we are again testing whether the use of a 0–200 range inflates estimates of racial wealth equality.

*Pictograph (*n = *287).* In line with current recommendations to reduce math requirements on the part of respondents when estimating inequality (Eriksson & Simpson, 2012, 2013; Garcia-Castro et al., 2020; Norton & Ariely, 2011, 2013), we devised a pictograph of wealth inequality (Figure 2) between Black and White Americans that asked respondents to compare a mountain of gold coins held by Whites to the amount held by Black families that would approximate contemporary levels of wealth equality. Participants responded on a 0 (*no Black family wealth in coins*) to 10 (*nearly double the wealth of Whites in gold coins*) scale of ascending pictographs. For our analysis, these scores were translated into estimates of Black–White family wealth equality based on a conversion of the pictograph amounts to actual dollars (ranging from US$0 to US$180). Here, we tested the possibility that representing wealth pictorially will help reduce some of the calculation challenges in scale estimates (Hyde & Ansari, 2018), potentially increasing accuracy.

Additional measures. After completing one of these 10 varieties of the question of Black–White wealth equality, participants were asked a series of questions for a larger research project. Participants were asked about general wealth inequality in the United States between the five quintiles of Americans—with our interest being in perceptions of the amount of wealth in the top quintile (M = US$50.40, SD = US$27.81). We also asked participants the extent that they are economically and politically conservative, averaging across these two 7-point Likert-type items (M = 3.78, SD = 1.94). We asked participants to report their educational attainment (M = 1.94 SD = 0.67) on a 3-point scale where *1 = high school graduation or less*, *2 = college graduation*, and *3 = postgraduate degree*, and income on a 7-point scale ranging from <US$20,000 to greater than >US$150,000 (median income range = US$40,000–US$60,000; M = 3.48, SD = 1.67), as in the prior studies (Kraus et al., 2017). We do not present analyses with these data in this article.

Results

We predicted that respondents would overestimate wealth equality between Black and White American families across the different question varieties. We tested this with one-sample t tests, while applying a Bonferroni correction for multiple comparisons, that compared perceptions of Black–White wealth equality in each of the 10 experimental framing conditions to the median Black–White wealth equality benchmark data from the SCF (i.e., US$10.18). Consistent with predictions and replicating our prior research (Kraus et al., 2017, 2019), respondents significantly overestimated Black–White wealth equality in each condition (ps < .001; ds = 1.03–1.68; see Figure 3).

The secondary aim of this experiment was to examine variation in the magnitude of respondents' overestimates of Black–White wealth equality as a function of the different framing conditions. To that end, we ran an exploratory one-way analysis of variance (ANOVA) comparing the 10 conditions and then probed any differences using the current time point as the reference category. We first found that the overall ANOVA was significant, suggesting there was meaningful

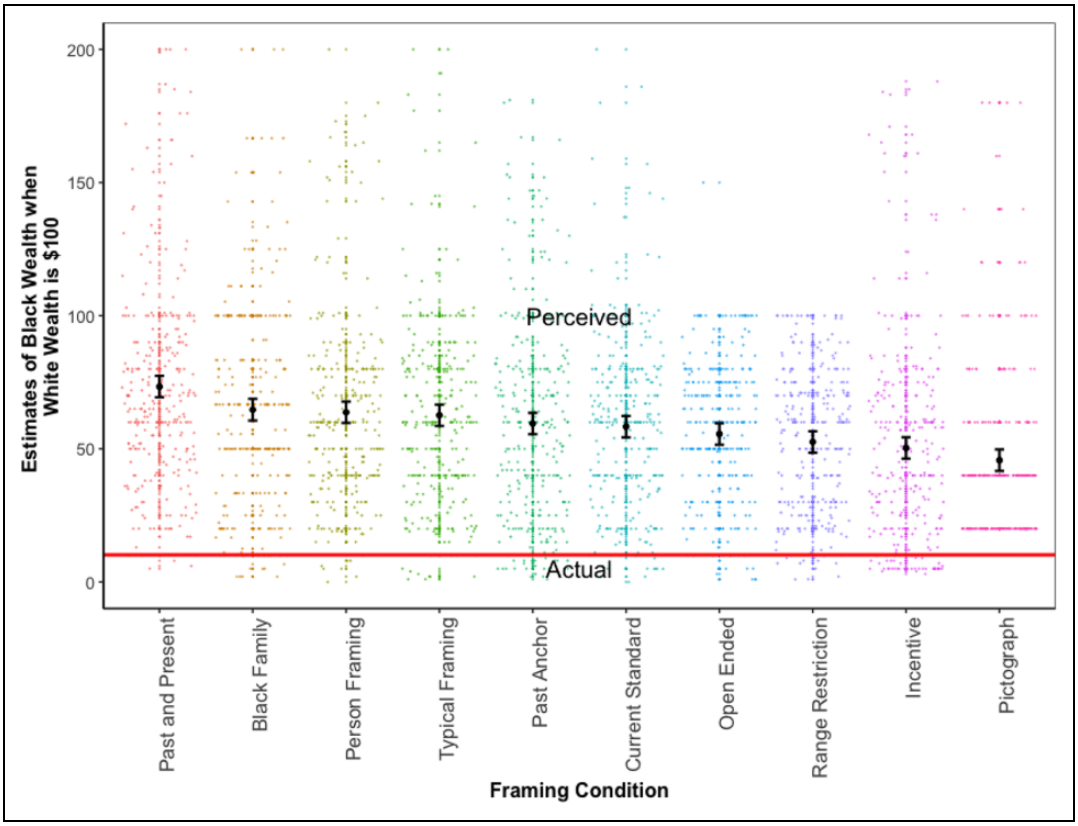

Figure 3. Mean perceptions of Black–White wealth equality as a function of the 10 experiment conditions with variations in the framing and context surrounding the survey question. Error bars indicate 95% confidence intervals, and the horizontal red line indicates actual Black–White wealth equality according to estimates based on the Survey of Consumer Finances.

variation in the estimates generated as a function of the framing condition, $F(9, 2886) = 15.26$, $p < .001$. To understand which conditions meaningfully differed, we ran a series of post hoc t tests through the *emmeans* package in *R* comparing the current standard method with the other nine experimental conditions, again using a Bonferroni correction for multiple comparisons.

When adjusting for multiple comparisons, results indicate that only two conditions were significantly different from the current standard time point estimate (see Table 1): the past and present method and the pictograph method. In the former case, participants who were asked to estimate both past and present levels of Black–White wealth equality generated estimates of current equality that were significantly larger than the standard method, $t(2,886) = 5.20$, $p < .001$, $d = 0.43$. This result is suggestive evidence consistent with one of our expectations outlined in the introduction of this article that the act of thinking about changes in Black–White wealth equality over decades elicits perceptions of greater equality in the present.

Interestingly, in the latter case, the pictograph methodology elicited estimates of Black–White wealth equality that, on average, were smaller than those associated with the standard method, $t(2,886) = -4.34$, $p < .001$, $d = -0.36$. The average estimate in this condition, then, was also the most accurate. These data provide initial evidence that methods that reduce computation can increase accuracy, although future research is necessary to determine whether this method induces more accuracy or simply lowers estimates more generally.

For our final set of exploratory analyses, we relaxed our adjustment for multiple comparisons to examine additional patterns in mean estimates. With these relaxed corrections, the incentives condition showed a significantly reduced estimate of Black–White wealth equality when compared to the current only standard condition $t(2,886) = -2.76$, $p = .006$, $d = -0.23$. This finding, though less conclusive, is suggestive evidence consistent with our motivational account: Providing monetary incentives for accurate responding can counteract tendencies to see society as fair and just. Although not central to our present investigation, under these relaxed criteria for statistical significance, the range restriction method also led to lower estimates of Black–White wealth equality, compared with the standard method, whereas framing the question in terms of Black (vs. White) family wealth resulted in even larger (over)estimates.[7]

A final exploratory analysis concerns the past anchor condition. Recall that participants in this condition were informed that the magnitude of the Black–White wealth gap in 1963 was US$5.17 (for White family wealth set at US$100). This condition did not significantly differ from the current only standard (see Table 1) after corrections. However, if we calculate participants' perceptions of racial wealth *progress* in this condition

Table 1. Pairwise Comparisons Between Estimates of Black–White Wealth Equality Using the Standard Method at the Current Time Point and the Nine Other Experimental Conditions.

Comparison to Current Standard (Control)	Mean Difference	*SE*	*df*	*t* Value	*p* Value	*d*
Pictograph	−12.61	2.91	2,886	−4.34*	<.001	−.36
Incentive	−8.00	2.90	2,886	−2.76	.0058	−.23
Range restriction	−5.75	2.89	2,886	−1.99	.0471	−.16
Open ended	−2.75	2.91	2,886	−0.95	.3421	−.08
Past anchor	1.16	2.89	2,886	0.40	.6892	.03
Typical framing	4.29	2.89	2,886	1.48	.1389	.12
Person framing	5.40	2.89	2,886	1.87	.0616	.15
Black family	6.36	2.92	2,886	2.18	.0293	.18
Past and present	15.05	2.89	2,886	5.20*	<.001	.43

*Significance after Bonferroni corrections.

by subtracting the past wealth gap from participants' current wealth gap estimates and compare them to the racial wealth progress estimates generated by participants in the past and present condition, we find that participants in the past anchor condition thought that there had been significantly more progress ($M = 54.32$) toward racial wealth equality, compared with participants in the past and present condition ($M = 29.75$), $t(583) = 8.773$, $p < .001$, $d = 0.86$. That being presented with accurate information about the quite stark Black–White wealth inequality of the past engenders steeper trajectories of perceived societal progress, compared with being asked to estimate both pieces of information, hints at the operation of, if not a commitment to, the idea that society has made considerable progress toward racial economic equality that is observable in the present. Future research is necessary, however, to examine how belief in progress narratives shapes perceptions of current, compared with past, economic equality (see Onyeador et al., 2021).

Discussion

How Americans perceive the racial inequality that exists in society has important implications for efforts to engender greater societal equity. Consequently, understanding the factors that shape such perceptions is vital to research on this topic. Here, we also explored whether perceptions of racial economic equality are highly susceptible to subtle variations in question framing and/or context. Indeed, the extent to which specific context and framing decisions affect these estimates of racial economic equality offers important insight into the psychological processes that govern how people think about racial inequality, if not societal justice more generally.

The present research explored these possibilities. Specifically, we asked a large sample of online survey participants one of the 10 variations of the standard method used in much of our past work: "If the average White family has US$100 in wealth, how much does the average Black family have?" Across these 10 experimental conditions, we found that respondents provided large and consistent overestimates of Black–White wealth equality that ranged in magnitude between 35 and 60 percentage points. We also found some initial evidence in support of our motivational account of misperceptions of the Black–White wealth gap. First, the condition producing the largest estimates of current Black–White wealth equality involved answering the question at both a period in the past and for the present day. That the estimates in this condition were larger than those of the standard format suggests that there is an association in the minds of respondents between time and progress toward racial equality (e.g., Richeson, 2020; Seamster & Ray, 2018). Second, after relaxing our multiple comparisons correction criteria, monetary incentives also increased the accuracy with which respondents estimate the current Black–White wealth gap. That monetary incentives may improve accuracy offers additional evidence that respondents' estimates of racial economic equality are, at least in part, shaped by their motivations.

Although not predicted, the sizable progress perceptions generated in the past anchor condition, where participants learned about the wide Black–White wealth gap in 1963, are also consistent with our theorizing regarding narratives of racial progress. In this latter condition, estimates of current Black–White wealth equality were equivalent to estimates made at the current only time point. But that participants provided large overestimates in this condition despite having the anchor of accurate information is again indicative of this insistence that America has made considerable progress toward racial economic equality that is readily observable in the present (Kraus et al., 2019). In other words, respondents were committed to perceiving the current state of racial wealth equality as especially fair and just, irrespective of what they are told or led to believe about the past (e.g., Onyeador et al., 2021). Future studies should explore the effects of providing accurate information about inequality at different periods in the past, perhaps also assessing whether perceptions of societal progress toward racial equality are affected at all. Importantly, this result also underscores the possibility that providing accurate information about racial wealth inequality in the past or present will do little to affect these misperceptions.

One insight from this experiment is that triggering relevant motivational processes moderated the estimates of Black–White wealth equality more than relatively more subtle framings and contexts. It is likely that similar motivational framings

may also shape estimates of general societal wealth equality; indeed, the tendency to overestimate societal wealth equality is motivated by some of the same psychological processes (Phillips et al., 2020). In general, understanding how people think and reason about racial wealth equality is instructive for gaining a better understanding of how people think and reason about general societal inequality, given that in the United States, economic inequality is built on a system of economics that has been explicitly racialized since its founding (Ray, 2019; Richeson, 2020).

Last, although the majority of our manipulations did not shift respondent estimates, a pictograph representation of Black–White wealth in gold coins produced the most accurate estimates of racial wealth inequality. It is possible that visual inequality represented in the pictograph either made the concept of wealth more concrete and thus created an aversion to high rates of inequality represented in the higher scale values or allowed respondents to report their intuitive understanding of the current state of racial economic equality. Future research will need to test this methodology in other domains, where accuracy is reflected in higher versus lower numbers (e.g., poverty rates). Such studies would provide greater methodological clarity to this area of research as well as contribute to the growing literature on the intuitive sense of numbers (Hyde et al., 2014; Hyde & Spelke, 2009).

The present results provide compelling evidence for our primary claim here and in our past work: Americans overestimate the current state of Black–White wealth equality to a substantial degree. Although we were also concerned with underlying psychology, it is important to remember the primary point of investigating perceptions of the racial wealth gap: Significant underestimates of racial wealth inequality are likely to act as a barrier to fostering societal equity and justice. That estimates of Black–White wealth equality were robust to a number of subtle framing and context variations and that the largest overestimates occurred in the condition most likely to activate narratives of societal racial progress suggest that the belief that American society has largely achieved racial equality is alive and well. Unfortunately, beliefs about the automatic unfolding of racial progress across time may be challenging to disrupt and, thus, increasing the accuracy with which Americans perceive racial economic equality may also be difficult (Onyeador et al., 2021). Future research that attempts to intervene on these misperceptions, perhaps by challenging these narratives of racial progress with data and counternarratives, remains essential.

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Author Contributions

MWK and JAR developed the study design. MWK collected the data and MWK and STJH analyzed the data. All authors interpreted the data. MWK drafted the initial manuscript and all authors provided critical revisions. All authors approved the final version of the manuscript for submission.

Declaration of Conflicting Interests

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Notes

1. Motivated cognition is not the only mechanism that explains overestimates of the Black–White wealth gap (e.g., Kraus et al., 2017; Kuo et al., 2020).
2. To allow for self-categorization of gender identity, we asked for gender in an open-ended text format which resulted in missing data for half of participants.
3. Although the measurement of wealth is both challenging because of its complexity (Barsky et al., 2002; Pfeffer et al., 2016), we recognize that these benchmarks are also subject to their own measurement error and variation that is an important topic for future research.
4. Our winner answered the question correctly (i.e., within US$1.00) in 6 s.
5. It is likely that respondents assumed that a "person" meant a man rather than a woman (Bailey et al., 2019; Hamilton, 1991).
6. The 1963 estimates of Black wealth from the Survey of Consumer Finances use all communities of color in their estimates.
7. The same four conditions were significantly different from our control condition when conducting an uncorrected analysis of covariance while controlling for general wealth inequality estimates, political ideology, and race where respondents were coded as White or people of color.

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