

## **Framing, Context, and the Misperception of Black-White Wealth Inequality**

Michael W. Kraus<sup>1,2</sup>, Sa-kiera T. J. Hudson<sup>2</sup>, and Jennifer A. Richeson<sup>2,3</sup>

<sup>1</sup>Yale University, School of Management

<sup>2</sup>Yale University, Department of Psychology

<sup>3</sup>Yale University, Institution for Social and Policy Studies

### **Author Note:**

Correspondence regarding this article should be addressed to: Michael W. Kraus, 165 Whitney Ave., New Haven, CT, 06511, [michael.kraus@yale.edu](mailto:michael.kraus@yale.edu). This research was supported in part by a grant from the Russell Sage Foundation (RSF #G-1905-16246) awarded to MWK and JAR, and the Yale, School of Management and Department of Psychology.

### **Author Contributions:**

MWK and JAR developed the study concept and contributed to the study design. M. Kraus 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.

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### **Abstract**

In one large-scale experiment using US respondents on MTurk ( $N = 2,899$ ), we studied how subtle differences in framing and context impact 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 misperception, the tendency to overestimate racial wealth equality is extremely robust.

**Keywords:** economic inequality, racism, intergroup relations, social psychology, socioeconomic status

**Statement of Relevance**

People tend to underestimate the extent of wealth inequality between Black compared with White families in the United States. This tendency to underestimate the current state of racial economic inequality has primarily been demonstrated using a single paradigm, making it difficult to assess whether these results are a robust phenomenon, sensitive to the contexts in which they are solicited, or perhaps even entirely an artifact of question wording. In this experiment we used 10 different framings to examine people's lay understandings of the Black-White wealth gap. That underestimates of Black-White wealth inequality were largely robust to a number of subtle framing and context variations and that the largest underestimations 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.

### **Framing, Context, and the Perception of Black-White Wealth Inequality**

As social scientists interested in both awareness of, and willingness to acknowledge, societal gaps in racial economic outcomes, it is important for us to understand how perceptions of racial inequality are affected by the contexts in which people report them. If the tools used to measure these perceptions are unreliable, then we are likely to have a distorted or unreliable sense of the magnitude with which people (mis)perceive racial inequality in society. Critically, evidence of systematic malleability in reports of racial economic equality as a function of relevant contextual factors may reveal the role of important socio-cognitive processes in shaping individuals' perceptions.

In prior research, issues regarding the validity of estimates of inequality have garnered attention. Research by judgment and decision-making scholars has found, for instance, that estimates of the level of economic inequality in society shift based on how the question is asked and answered. Critically, these subtle changes have occasionally yielded substantively different conclusions in how we might interpret what people actually believe about, and desire for, societal economic inequality. The most recent example of this is the debate between two groups of researchers who found that people either overestimate (Davidai & Gilovich, 2015; Kraus, 2015; Kraus & Tan, 2015) or underestimate (Chambers, Swan, & Heesacker, 2015) economic mobility in society. After several experimental studies and comments, this measurement work found that question framings as well as the benchmarks utilized for estimating actual societal mobility accounted for these differing conclusions (Davidai, 2018; Davidai & Gilovich, 2018; Nero, Swan, Chambers, & Heesacker, 2018; Swan, Chambers, Heesacker, & Nero, 2017).

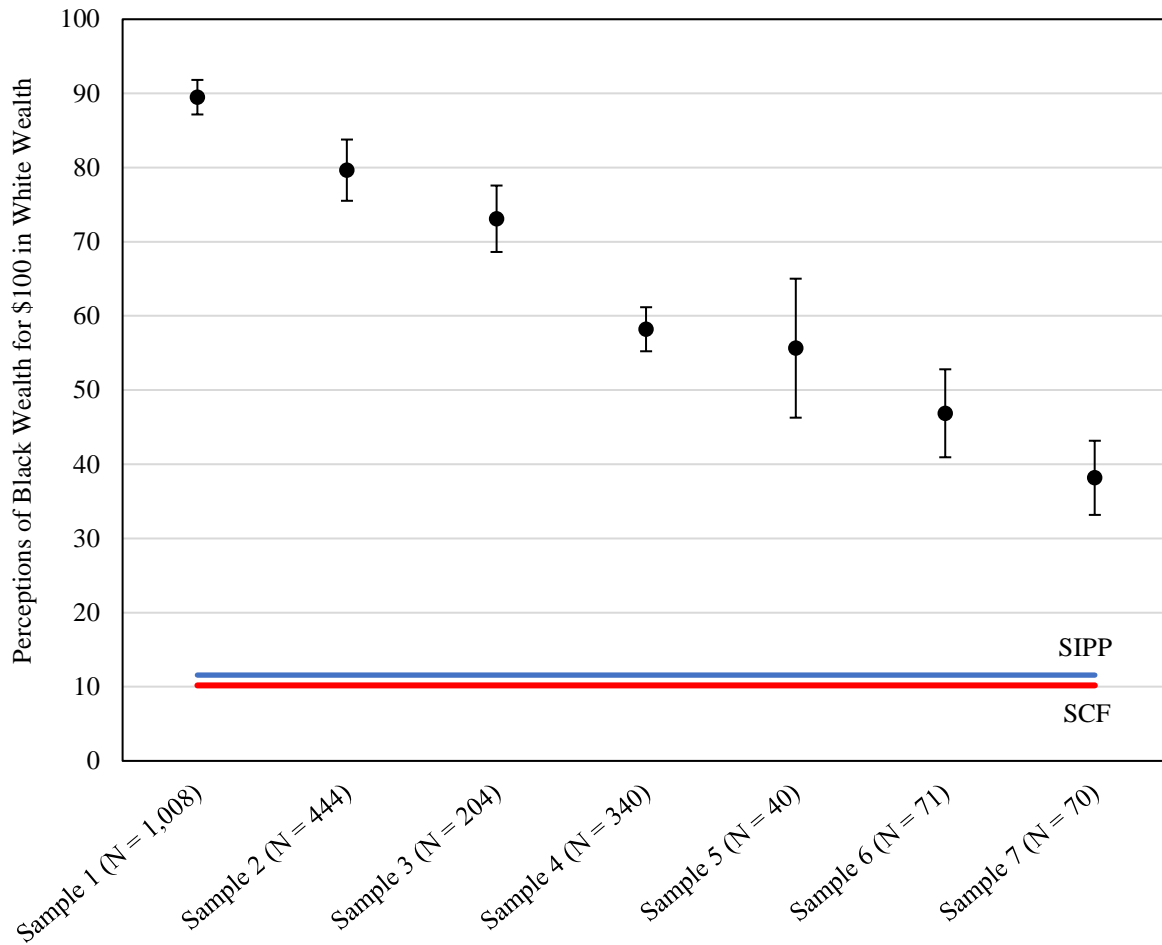
One outcome of these efforts was a set of recommendations regarding “best practices” for asking lay audiences about the economic structure of society, including 1) limiting the number of

group comparisons, 2) avoiding reliance on math and in particular, percentages, and 3) basing accuracy judgements only on high quality benchmark economic data (Davidai, 2018; Eriksson & Simpson, 2012, 2013; Swan et al., 2017). Drawing on these recommendations, our prior work (Kraus, Onyeador, Daumeyer, Rucker, & Richeson, 2019; Kraus, Rucker, & Richeson, 2017; Kuo, Kraus, & Richeson, 2020) solicited estimates of racial economic equality with variations on the basic question, “If the average White family has \$100 of some resource (e.g., wealth, income, wages), how much does the average Black family have?” Using a 0-200 rating scale, this question method relies on a single comparison between two groups, limited mathematical calculation, and represents the resource values as whole numbers rather than percentages. Moreover, for benchmark data on wealth inequality we have used the survey of consumer finances (SCF) or the survey of income and program participation (SIPP), because these data sources provide the largest samples for estimating wealth and are both maintained by US federal agencies (Darity et al., 2018).

As depicted in Figure 1, our past research (both published and unpublished data) has reliably found that when compared to the actual amount of Black-White wealth equality estimated based on the SCF or SIPP, respondents significantly overestimate Black-White wealth equality (Kraus et al., 2019, 2017). Nevertheless, there is also evidence in our past work suggesting that the context in which we solicit estimates of Black-White economic equality may contribute to the degree that people overestimate it. For instance, as depicted in Figure 1, the three largest estimates (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

twelve 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).

This pattern of results is suggestive, albeit inconclusive, evidence that considering several decades in time increases overestimates of Black-White wealth equality. Specifically, this pattern is consistent with the possibility that being asked to consider inequality in the past and in the present heightens the salience of narratives of societal racial progress; namely, that racial equality is linearly increasing over the passage of time (Hur & Ruttan, 2019; Kraus et al., 2019; Richeson, 2020)—a belief not activated when only considering the present state of society. That narratives of racial progress inform perceptions of racial inequality is something that we and others have theorized (Bell, 1987; DeBell, 2017; Eibach & Ehrlinger, 2006; Kraus et al., 2019; Seamster & Ray, 2018). The present investigation also furthers the aims of related research that considers how highlighting the salience of racial inequality and racism across time can activate beliefs in societal progress (see Onyeador et al., 2020).



**Figure 1.** Estimates of current Black wealth when White wealth is \$100 across seven studies. 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 MTurk (Sample 3), our lab at Yale’s School of Management (Sample 4), or collected in three different classrooms of professional students (Samples 5 through 7). Error bars show 95% confidence intervals surrounding the mean. Median Black wealth in 2016 estimated from the Survey of Consumer Finances (SCF) is plotted with the solid red line at \$10.18 for every \$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 \$11.57 for every \$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.

Based on the above analysis, we predicted that participants would perceive greater Black-White wealth equality when generating estimates at past and present time points relative to at one current time point. We exposed participants to a total of 10 variations of perceptions of

Black-White wealth equality to assess how malleable these perceptions are to other subtle changes in framing and context. Variation in all these manipulations – away from our standard form of probing these perceptions at a single current time point (the present) using a 0-200 scale – will inform any research on this topic going forward.

Notably there were a few variations that were likely to engender significant differentiation from the standard question format. First, because we and others theorize that overestimates of wealth equality are motivated, we expected that monetary incentives provided for accurate responding will produce greater accuracy (Hess, Blaison, & Dandeneau, 2016). Second, we expected that representing wealth pictorially will help reduce some of the calculation challenges in scale estimates (Hyde & Ansari, 2018), potentially increasing accuracy. Finally, 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 (Onyeador et al., 2020). We tested these competing predictions in the present study.

### **The Current Research**

Our primary goal was to examine how various question frames and contexts shape estimates of Black-White family wealth equality. We created 10 unique versions of a question that asked participants to estimate Black-White wealth equality in the contemporary US, and we assigned a minimum of 200 people to randomly receive one of these question varieties. These variations, we expected, would all yield overestimates of Black-White wealth equality, providing evidence that the pattern of overestimation is a robust one. We also expected that asking about



Black-White wealth equality at past and present time points that span several decades would elicit the largest overestimates of equality, relative to the other variations that only asked for an estimate of current equality. We then explore the effects of subtle differences in question framing and context that emerged in participant estimates.

## Method

### Sample

We collected a sample of 2,899 respondents from Amazon's online crowdsourcing research platform Mechanical Turk (Paolacci & Chandler, 2014) for a survey that took respondents less than 5 minutes to complete. Respondents were compensated \$0.50 US for their participation. Study participation was limited to people currently residing in the United States. Our respondents were 72.0% White, 53.8% men<sup>1</sup>, 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/>). 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

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<sup>1</sup> To allow for self-categorization of gender identity we asked for gender in an open-ended text format. This procedure resulted in missing data for about half of participants; thus the gender breakdown reported was based on the participants who answered the question.

between estimates of Black-White wealth equality and individual difference measures within each of the conditions (Schönbrodt & Perugini, 2013).

## Measures

Below we detail the 10 experimental variations in how we 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 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 in that it 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<sup>2</sup>.

**Current-only standard ( $n = 291$ ).** In our prior research, we used a 0-200 scale where we anchored participants on the average White family holding \$100 in wealth. We then ask respondents what the average Black family holds in wealth in the US currently. The question uses a sliding scale and the response is always anchored at zero.

**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., 2017; 2019).

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<sup>2</sup> Although the measurement of wealth is both challenging because of its complexity (Pfeffer, Schoeni, Kennickell, & Andreski, 2016) and multiply determined (Barsky, Bound, Charles, & Lupton, 2002), we recognize that these benchmarks are also subject to their own measurement error and variation. Though this is an important topic that will be central to work in this area of research, it is not the focus of the present study.

**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 \$100 and asks respondents to estimate what a White family has. Second, because scaling might shape estimates of White wealth using this framing, we also asked participants to estimate Black family wealth using an open-ended response capped at \$5,000 US. Respondents only became aware of the cap if they entered a response with a larger value. For our analysis, we transformed these responses to the original units where White families had \$100 in wealth and Black families had a value that varied between \$0 and \$200. We deviated from our pre-registration 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 as White families. Removing these responses made our central hypothesis test more conservative.

**Person framing ( $n = 292$ ).** Race shapes family structure in America (Pattillo, 2013), 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. To test this, we asked participants a version of the question that was identical to the standard method but replaced “family” with “person.”<sup>3</sup>

**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, Fiske, & Glick, 2008; Fiske, Cuddy, Glick, & Xu, 2002; Rosch, 1988). As such, we asked participants a version of the question that was identical to the standard method but replaced “average” with “typical.”

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<sup>3</sup> Based on androcentric biases in cognitive representations (Hamilton, 1991), it is likely that respondents assumed that a “person” meant a man rather than a woman.

**Past anchor ( $n = 292$ ).** In this variation we told participants the wealth gap in 1963, in which Black families earned about \$5.17 for every \$100 in wealth held by White families. Following participant exposure to this information about past wealth inequality, participants respond to the same standard question variety.

**Open ended ( $n = 290$ ).** If our 0-200 scale anchors shape 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 unprompted beliefs about wealth equality. This version had the same question structure as the current-only standard method where participants were asked for every \$100 in wealth held by a White family, how much would a Black family have using an open-ended answer capped at \$5,000 US. Respondents were only made aware of this cap if they entered larger values that exceeded the cap. We deviated from our pre-registration plan with this question in that we removed three responses that placed Black families as having 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. Again, removing these responses made our central hypothesis test more conservative.

**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, Brown, & Cox, 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.

**Incentivizing correct responses ( $n = 290$ ).** Given prior theorizing that overestimates of Black-White wealth equality are motivated (e.g., Kraus et al., 2019), in this variation we provided a monetary incentive to reduce overestimates, and therefore, increase accuracy (Hess et al., 2016). Participants in this condition were told that one respondent who answers with the correct answer in the shortest amount of time would receive a \$100 US bonus for participation in the experiment<sup>4</sup>.

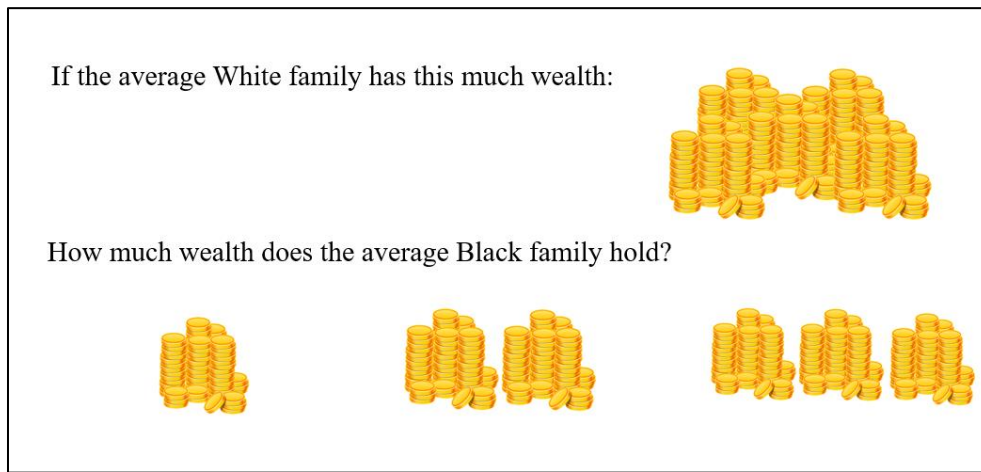
**Pictograph ( $n = 287$ ).** In line with current recommendations to reduce math requirements on the part of respondents when estimating inequality (Eriksson & Simpson, 2012, 2013; Norton & Ariely, 2011), we devised a pictograph of wealth inequality (Figure 2) between Black and White Americans that 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 \$0-\$180).

**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 US between the five quintiles of Americans—with our interest being in perceptions of the amount of wealth in the top quintile ( $M = \$50.40$ ,  $SD = \$27.81$ ). We also asked participants the extent that they are

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<sup>4</sup> Our winner answered the question correctly (i.e., within \$1.00 US) in six seconds

economically and politically conservative, averaging across these two 7-point Likert items ( $M = 3.78$ ,  $SD = 1.94$ ). We asked participants to report their educational attainment ( $M = 1.94$   $SD = 0.67$ ) on a three-point scale where 1 = *high school graduation or less*, 2 = *college graduation*, and 3 = *postgraduate degree*, and income on a seven-point scale ranging from < \$15,000 US to greater than >\$150,000 US ( $M = 3.48$ ,  $SD = 1.67$ ), as in the prior studies (Kraus et al., 2017). We do not present analyses with these data in the manuscript.



**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).

## Results

We hypothesized 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 Black-White wealth equality benchmark data from the SCF (i.e. \$10.18). Consistent with predictions and replicating our prior research (Kraus et al., 2017; 2019), respondents

overestimated Black-White wealth equality in each condition to a substantial degree ( $ps < .001$ ;  $ds = 1.03$  to  $1.68$ ; see Figure 3).

The secondary goal 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 a one-way ANOVA comparing the ten conditions, and then probed any differences against the standard method estimate at the current time point as the reference category. We first found that the overall ANOVA was significant, suggesting there was meaningful 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, as predicted, 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,  $t(2886) = 5.20, p < .001, d = 0.43$ . This result is suggestive evidence that the act of thinking about changes in Black-White wealth equality over decades elicits perceptions of greater equality. 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,  $t(2886) = -4.34, p < .001, d = -0.36$ . The average estimate in this condition, then, was also the most accurate. These data provide initial evidence that methods which reduce computation can increase accuracy, although

future research is necessary to more precisely determine if this method induces more accuracy, or simply lowers estimates more generally.

*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.*

| <b>Comparison to Current Standard</b> | <b>LS Mean Diff</b> | <b>SE</b> | <b>DF</b> | <b>t-value</b> | <b>p value</b> | <b>d</b> |
|---------------------------------------|---------------------|-----------|-----------|----------------|----------------|----------|
| Pictograph                            | -12.61              | 2.91      | 2886      | -4.34*         | <0.001         | -0.36    |
| Incentive                             | -8.00               | 2.90      | 2886      | -2.76          | 0.0058         | -0.23    |
| Range Restriction                     | -5.75               | 2.89      | 2886      | -1.99          | 0.0471         | -0.16    |
| Open-Ended                            | -2.75               | 2.91      | 2886      | -0.95          | 0.3421         | -0.08    |
| Past Anchor                           | 1.16                | 2.89      | 2886      | 0.40           | 0.6892         | 0.03     |
| Typical Framing                       | 4.29                | 2.89      | 2886      | 1.48           | 0.1389         | 0.12     |
| Person Framing                        | 5.40                | 2.89      | 2886      | 1.87           | 0.0616         | 0.15     |
| Black Family                          | 6.36                | 2.92      | 2886      | 2.18           | 0.0293         | 0.18     |
| Past and Present                      | 15.05               | 2.89      | 2886      | 5.20*          | <0.001         | 0.43     |

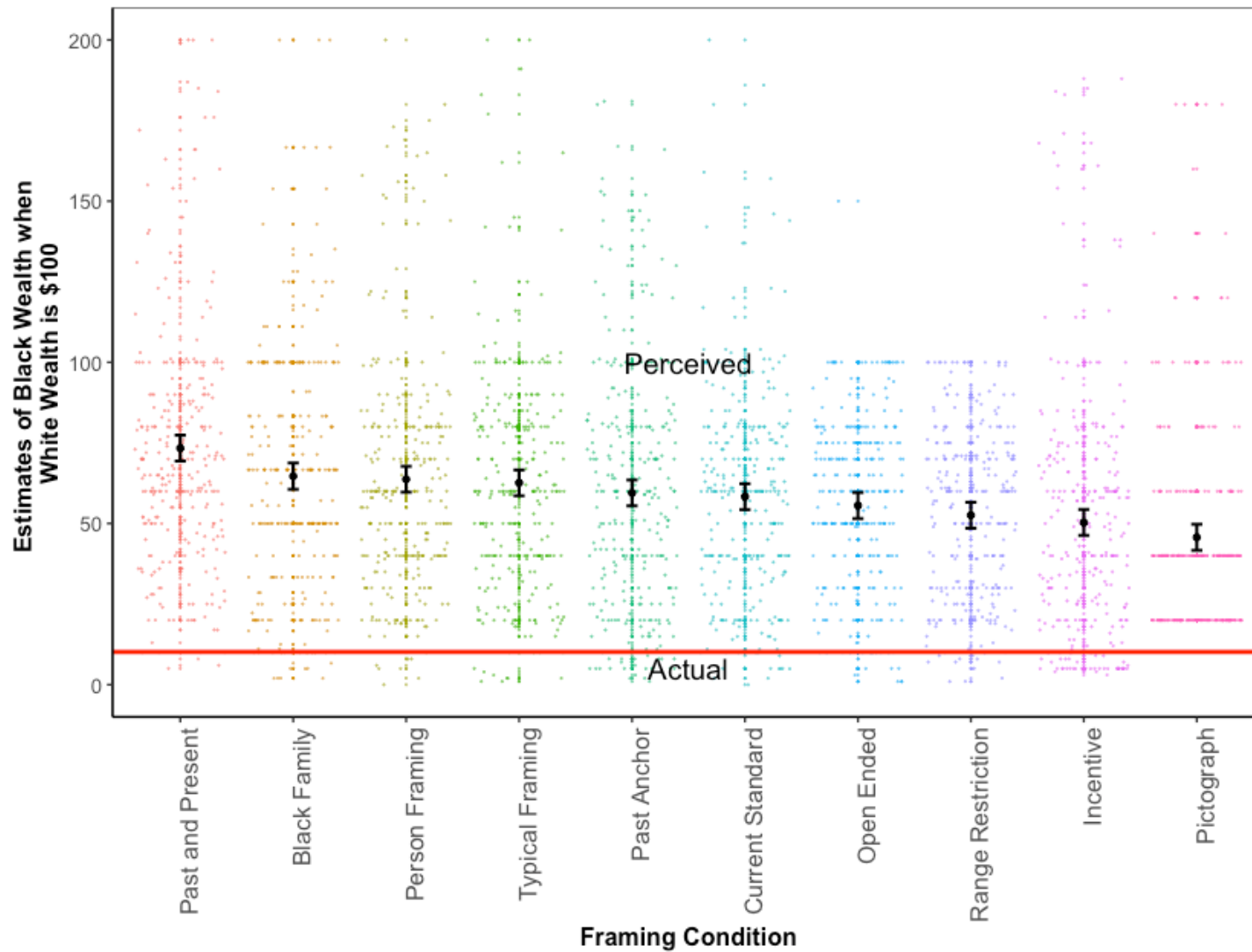
Note: \* indicates significance after Bonferroni corrections

For our final set of exploratory analyses, we relaxed our adjustment for multiple comparisons to examine additional patterns in mean estimates. Interestingly, relaxing multiple comparison adjustments reveals that the incentives condition showed a significantly reduced estimate of Black-White wealth equality when compared to the current only standard condition  $t(2886) = -2.76, p = .006, d = -0.23$ . This finding, though less conclusive, is suggestive evidence that providing monetary incentives can increase accuracy concerns and, perhaps, increase participant motivations to respond with greater seriousness and accuracy. Although not central to our present investigation, when we relax criteria for statistical significance range restriction also



reduced estimates of Black-White wealth equality, whereas framing the question in terms of a Black (v. White) family increased overestimates.

Another suggestive exploratory analysis concerns the past anchor condition where participants were told explicitly about the magnitude of the Black-White wealth gap in 1963 of \$5.17 US. This condition did not significantly differ from the current only standard (see Table 1) after corrections. However, if we calculate perceptions of progress in this condition and compare them to the past and present condition we find that participants estimated significantly more progress in the past anchor condition ( $M = 54.32$ ) than they did in the past and present condition ( $M = 29.75$ ) where participants provided their own past estimates of Black-White wealth inequality,  $t(583) = 8.773, p < .001, d = 0.86$ . 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, is an exciting direction for future inquiry (c.f., Onyeador et al., 2020).



**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.

### Discussion

How Americans perceive racial inequality in society has important implications for efforts to engender greater societal equity. Consequently, understanding the factors that shape such perceptions—be they relevant psychological processes or artifacts of measurement—is vital to research on this topic. If, for instance, perceptions of racial economic equality are highly susceptible to subtle variations in question framing and/or context, then researchers need to pay extra attention to how these perceptions are elicited. Indeed, some potential context effects may offer 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 ten variations of the standard method used in much of our past work: “If the average White family has \$100 in wealth, how much does the average Black family have?”. Across these ten 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. Further, after accounting for multiple comparisons, only two of the methods of soliciting estimates of the Black-White wealth gap produced average estimates that were reliably different from the standard method. These results instill some confidence that the standard method of asking respondents about this wealth gap is indeed a reasonable approach that is fairly robust to potentially important yet still subtle differences in question wording and framing (Eriksson & Simpson, 2013).

There were two conditions that were significantly different from the standard method. First, the condition producing the largest estimates of current Black-White wealth equality

involved answering the question in both the past and present. That these estimates were largest suggests that there is an association in the minds of respondents between time and progress toward racial equality (Richeson, 2020; Seamster & Ray, 2018). The sizeable progress perceptions generated in the past anchor condition, where participants learned about the wide Black-White wealth gap in 1963, are also consistent with this interpretation. 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 (Kraus et al., 2019; Hur & Ruttan, 2020). Future studies should explore this effect of providing accurate information about past inequality further, perhaps also assessing perceptions of societal progress toward racial equality.

Interestingly, a pictograph representation of Black-White wealth in gold coins produced the most accurate estimates of racial wealth inequality. Perhaps because it requires numeracy the least, the pictograph allowed respondents to report their intuitive understanding of the current state of racial economic equality. Future research will need to test this assumption in other domains, where accuracy is reflected in higher vs. lower estimates. Would a pictograph representation elicit greater accuracy of all types of statistical data or just for estimates of the racial wealth gap (or, perhaps, other economic gaps)? 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, Khanum, & Spelke, 2014; Hyde & Spelke, 2009). Moreover, that incentives improved accuracy, albeit after relaxing our corrections for multiple

comparisons, provides additional evidence that these estimates of racial economic inequality are, at least in part, motivated.

Overall, 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 this paper was primarily concerned with examining whether and the extent to which perception of Black-White wealth inequality is susceptible to different framing and context effects, 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 societal equity and justice. That estimates of Black-White wealth equality were largely, with few exceptions, 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, suggests that the belief that American society has largely achieved racial equality in any number of important domains 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., 2020). 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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