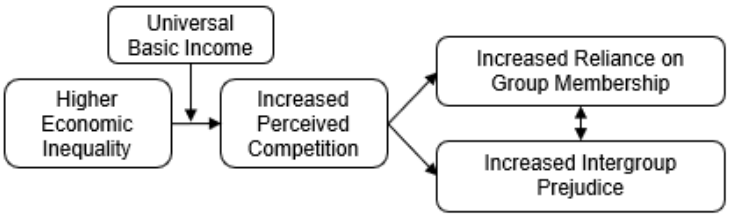
Racial Inequality at the Brink: How Economic Inequality Exacerbates Racial Prejudice and the Potential Alleviating Role of a Universal Basic Income

In the U.S., both economic inequality and racial economic inequality – or the unequal distribution of financial resources across racial groups – is large and growing. From 1983 to 2016, the median White family went from approximately 8 times to 13 times more wealth than the median Black family (Pew, 2016). More recently, the pandemic has left Black families more vulnerable to death by COVID-19 and its economic shocks (Hardy & Logan, 2020; Wrigley-Field, 2020). Making matters worse, data suggest that income inequality precedes rises in White-on-Black racial prejudice (Connor et al., 2019; see also Hovland & Sears, 1940). **Unfortunately, little empirical data investigates *how* inequality impacts individuals' psychological processing and, in turn, increases prejudice. And, almost no work investigates the impact of inequality on racial minorities (Bianchi, 2020). Critically, inequality could also exacerbate prejudice between low-social power groups, stifling coalition building across these groups. The global pandemic's widening of economic inequality makes now a crucial moment for understanding how inequality may exacerbate prejudice and for developing effective strategies to mitigate this process's dire outcomes.**

The current application (1) puts forth a new hypothesis: *inequality group-competition hypothesis,* and (2) examines whether a policy, such as universal basic income, could mitigate the impact of inequality on prejudice (see Figure 1). We hypothesize that higher inequality triggers beliefs that people are in competition for limited resources because people tend to think the economy is zero-sum, meaning that one person's higher earnings implies others' lower earnings (Friedman & Friedman, 1990; related work see Buttrick & Oishi, 2017; Sommet et al., 2017). Perceiving others as competitors for scarce resources increases individuals' concerns about their individual position and their groups' position within society (Elliot, 2006; Esses et al., 2001). Status concerns activate both the desire to gain more resources for the self and group, as well as fear of losing relative position in the socioeconomic hierarchy (e.g., Davidai & Ongis, 2019; Sommet et al., 2017). Further, because inequality fosters the mindset of living in an intensely competitive environment, residents may be particularly attuned to group membership cues, such as race, as a way to determine whether someone has the potential to be economically beneficial (because they are ingroup member) or harmful (because they are an outgroup member).

Figure 1. Inequality group-competition theoretical model.



Providing for basic needs via a universal basic income may mitigate the impact of higher inequality on increasing prejudice by assuaging people's zero-sum biases and their fears that others are competing for limited resources. However, to whom basic income is provided must be carefully considered to mitigate resentment toward a specific income and racial group.

Overall, we have four research questions investigating the predictive and explanatory potential of the inequality group-competition hypothesis for racial prejudice. Findings will inform both basic understanding of the (causal) relationship between inequality and prejudice, and the psychological consequences of specific policies in mitigating racial prejudice.

1. Does economic inequality increase perceived competition?
2. Does inequality exacerbate prejudice via perceived intergroup competition?
3. Does inequality increase reliance on social group membership to determine trustworthiness of others?
4. Does providing basic income mitigate prejudice under conditions of higher inequality?

Research Approach. These questions will be investigated through a series of social-psychological experiments and archival studies. For all experimental studies, sample sizes are determined based on having adequate power ($1\text{-}\beta > .80$) to detect a small-to-medium effect ($d = .30$). Studies will be pre-

registered and data/analysis code will be posted on Open Science Framework. Subsequent studies replicate and extend upon aspects of previous studies. For internally valid studies (see below), we will use a combination of undergraduate student samples, local community samples, and online samples. For externally valid studies (see below), we will recruit representative samples (using TurkPanels and Lucid) to investigate how these processes impacts both higher- (e.g., Asian and White Americans) and lower- (e.g., Black and Latinx Americans) social power groups. For all studies, we will investigate relative moderators: political ideology, social dominance orientation, system justifying beliefs, internal and external motivation to control prejudice, race centrality, and gender.

Research Plan

Question 1: **Does economic inequality increase perceived competition?** We anticipate that higher inequality increases beliefs that people are in competition for limited resources.

Pilot Data. Participants (N = 273) were randomly assigned to imagine that in the U.S. in the year 3000, economic resources were distributed relatively equally or unequally across society. Then, participants were asked about perceived competition and zero-sum beliefs between social groups. In the high- (vs. low-) inequality condition, participants thought social groups would be more competitive (t = 11.90, p < .001, d = 1.42), and that zero-sum between groups was more plausible (t = 7.83, p < .001, d = 0.95). One limitation of these data was that the manipulation was about imagining a hypothetical future. Therefore, we will test perceived competition using an internally and externally valid manipulation of inequality.

Study 1: Internally valid manipulation of inequality. Participants (N = 400) will be asked to play an economic game in which they invest tokens to earn more tokens. Participants are asked to play this game with ostensibly five other players (in reality, the game is pre-programmed and there are no other players). To create groups, we will use a minimal groups approach where the participant and two other players will be randomly assigned to a color team (e.g., blue), and the remaining three players will be assigned to a different color team (e.g., green). To manipulate inequality, participants are told a lottery will determine the number of tokens they start the game with. In a between-subjects manipulation, the lottery will distribute tokens across the players in a relatively equal or unequal manner. To control for position within the distribution of resources, the participant will always be given a moderate amount of resources. Before participants are given any more details about how to play the game, the participant will be asked how competitive they think the game will be between the color teams and the extent to which they endorse a zero-sum belief between teams. We anticipate that when resources are distributed more unequally, participants will perceive more competition and hold a stronger zero-sum belief between groups.

Study 2: Externally valid manipulation of inequality. Because many Americans are unaware of the extent of economic inequality in the U.S. (Norton & Ariely, 2011), giving this information can serve as an inequality manipulation. A representative sample of participants (N = 800) will be randomly assigned to learn economic inequality in their state is relatively high or low (see manipulation from Côté et al., 2015). Then, participants will report their individual and group-based zero-sum beliefs. We anticipate that when the distribution of resources is relatively unequal (vs. equal), participants will report more zero-sum bias.

Question 2: **Does inequality exacerbate intergroup prejudice via perceived competition?** We will replicate and extend the previous studies by measuring implicit (automatic) and explicit (self-reported) prejudice. We anticipate that higher inequality exacerbates prejudice via perceived competition.

Pilot Data. In a pilot study (N = 378), participants were randomly assigned to imagine that in the U.S. in the year 3000, economic resources were distributed relatively equally or unequally across society. Participants in the high (vs. low) inequality condition anticipated greater intergroup competition (t = 19.88, p < .001, d = 2.02) and prejudice (t = 8.66, p < .001, d = .90). Further, intergroup competition mediated the relationship between inequality condition and prejudice.

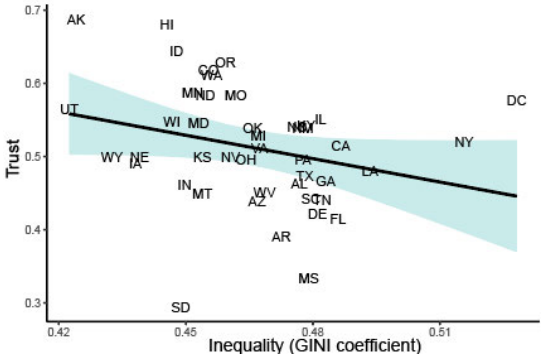
Study 3 (internally valid approach). In the context of the economic game with ostensibly 5 other players, participants (N = 400) will be assigned to one of two color teams and to the high vs. low inequality condition. They will be asked to play a variant of the public goods game – where teams can discuss how many tokens they want to place into a public pot which then gets multiplied by a factor and evenly split across all players, regardless of team membership. Through this game, we can assess the extent of competitive *behavior* between groups for a monetary reward. Then, participants will complete the following measures of prejudice toward the minimal outgroup: feeling thermometer, perceived trust, and the Implicit Association Test (IAT; Greenwald et al., 1998).

Study 4 (externally valid approach). A representative sample of participants (N = 800) will be randomly assigned to learn economic inequality in their state is relatively high or low. We will measure prejudice toward racial groups using warmth/competence measures (Fiske et al., 2002), perceived intergroup competition and trust, and the IAT toward racial groups.

Question 3: **Does inequality increase reliance on social group membership to determine the trustworthiness of others?** We anticipate that higher inequality decreases intergroup trust and increases beliefs that ingroup members may be more economically beneficial to the self.

Archival Pilot Data. Using survey data from Project Implicit and US Census data on inequality, we investigated the relationship between trust and inequality. The findings of our multilevel model suggest that residents of more unequal states report less intergroup trust (see Figure 2). We build upon this archival finding using experimental approaches.

Figure 2. The relationship between inequality and trust.



Study 5 (internally valid approach). Using the context of an economic game that has either high or low inequality and two three-person minimal groups, participants (N = 800) will be presented with a new ostensible player. This player will either be part of their color team, or not (i.e., ingroup or outgroup). Then, participants will be asked how trustworthy they think this new player is. We will measure both automatic and self-reported perceptions of trust. Finally, we will measure the extent to which they think this new player will be economically beneficial to the self.

Study 6 (externally valid approach). A representative sample of participants (N = 800) will be randomly assigned to learn economic inequality in their state is relatively high or low. We will measure prejudice toward racial groups using warmth/competence measures (Fiske et al., 2002), perceived intergroup trust, and the extent to which people believe ingroup members are more likely be economically beneficial to the self as compared to outgroup members.

Question 4: **Does providing basic needs mitigate prejudice under conditions of higher inequality?** Universal basic income (UBI) policies seek to provide money to community members on an individual basis, without means test or work requirement. We anticipate that providing a UBI to *all* residents will mitigate perceived intergroup competition and zero-sum beliefs, and that in turn will reduce prejudice. We will also test whether a UBI to residents *below* a specified income may exacerbate the relationship between higher inequality and prejudice, particularly when outgroup members benefit.

Study 7 (internally valid approach). Using the context of an economic investment game and minimal groups, participants will again be given starting tokens based on a lottery. However, all participants will be in the high inequality condition. Then, participants will be randomly assigned to one of four UBI conditions. In the control condition, there will be no mention or provision of a UBI. In the subset-outgroup UBI condition, participants will be told that players who received below a specified amount of tokens in the lottery will be given a certain number of tokens to mitigate the difference between their

standing and the other players. In this situation, the player who receives the extra tokens is an outgroup member. In the subset-ingroup UBI condition, participants are given the same explanation as the previous condition, but the player who receives the extra tokens is an ingroup member. In the population UBI condition, all players will be given a certain number of tokens. Then, we will measure perceived competition, perceived fairness of the policy, and intergroup prejudice.

Study 8 (externally valid approach). We will collect a demographically representative sample of online participants (N = 800) and objectively as well as subjectively measure the level of inequality in their state. Then, we will measure stereotypes that those in poverty are a specific race (e.g., stereotypes that poor people are Black). Participants will be told that 500 residents in their state have randomly been selected to receive a monetary benefit that would subsidize basic needs on a monthly basis. In a between-subjects manipulation, participants are told residents were selected regardless of their income, or that only residents whose annual income was at or below a specified number could be selected. Then, we will measure perceived fairness of the policy, the extent to which people believe certain races of residents will benefit from the policy, racial resentment, and intergroup prejudice.

Additionally, we are in talks with the Economic Security Project, which has helped implement UBI trials across the US, to collect data on perceived intergroup competitiveness, trust and prejudice in an upcoming UBI trial in Jackson, MS with Magnolia Mother's Trust.

Addressing the Foundation's Goals

The current proposal addresses the Foundation's "Social, Political and Economic inequality" program by providing a psychological framework linking the impact of inequality to intergroup attitudes and policy attitudes. In addition, the current proposal addresses the goals of the "Race, Ethnicity, and Immigration" program by investigating the psychological mechanism through which the context of economic inequality may exacerbate racism. Together, this work has important implications for intergroup attitudes and policy attitudes more generally.

Qualifications

Jazmin Brown-Iannuzzi (PI) is an assistant professor at the University of Virginia who investigates how the context of inequality influences individuals' psychology and, in turn, perpetuates inequality. She has published in journals such as *Psychological Science*, the *Proceedings of the National Academy of Sciences*, and recently received the "Rising Star" award from the American Psychological Association.

Shigehiro Oishi (Co-PI) is a professor of psychology at the University of Virginia. He has published over 160 articles on culture, social ecology, and well-being, including several papers on income inequality and redistribution policies. He is the 2017 winner of the Society of Experimental Social Psychology's Career Trajectory Award as well as the 2018 winner of the Society for Personality and Social Psychology's Mid-Career Award in social psychology.

Budget and Justification

Salary Support. PIs will oversee participants recruitment, study design and implementation, data analysis, and manuscript preparation. For each PI: 0.5 Summer month (Year 1); 0.5 Summer month (Year 2); *Subtotal*: [redacted]. Graduate Student will assist the PIs with participant recruitment, study design, data analysis, and manuscript preparation. Year 1: 9 Months; Year 2: 9 Months; *Subtotal*: [redacted].
Participant Payment. We are requesting participant payment to collect representative online and community samples. Year 1: [redacted]; Year 2: [redacted]; *Subtotal*: [redacted]. **Indirect Costs.** An indirect rate of 15% has been applied to proposed total direct costs. Subtotal: [redacted].
Total Requested Funds: [redacted].

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