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Does this Recession Make Me Look Black? The Effect of Resource Scarcity on the

Categorization of Biracial Faces.

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### Abstract

Realistic group conflict theory posits that resource competition can promote hostility toward one's outgroups. We extend this work by testing the hypothesis that perceived resource availability will decrease the inclusiveness of one's racial ingroup. Across two experiments, we found that participants primed with resource scarcity were more likely to categorize biracial faces as belonging to a racial outgroup than were participants in a control condition. Our findings extend the existing literature on ingroup biases and outgroup prejudice, and contribute to the growing body of literature on the effects of resource scarcity on human psychology. Effects of Resource Scarcity on the Categorization of Biracial Faces "Prosperity makes friends; adversity tries them."

---Publilius Syrus

Ingroup biases are a ubiquitous feature of human social life (e.g., Brewer, 1979; Halevy, Bornstein, & Sagiv, 2008; Mullen, Dovidio, Johnson, & Copper, 1992; Tajfel, 1982). One explanation that has been offered for these biases is that they arise from processes facilitating resource competition between groups (e.g., Kurzban & Neuberg, 2005; Schaller, Park, & Faulkner, 2003; Sherif, 1966). On this view, outgroup hostility is predicted to occur when resource access is constrained (Pettigrew & Meertens, 1995; Takemura & Yuki, 2007; Wildschut et al., 2003) or when one seeks to justify an existing resource advantage (Sidanius & Pratto, 1993). Here, we extend this logic to test novel predictions about ingroup boundary formation. Specifically, we tested whether resource scarcity decreases the inclusiveness of one's racial ingroup.

The cost of having unrestricted ingroup boundaries may be relatively low during times when there are sufficient resources available to all who need them. During times of scarcity, however, it is reasoned that individuals may narrow their definition of belongingness to include only those whose group membership is unambiguous (Miller & Maner, 2012). We conducted two experiments where people were primed with cues to scarcity and then asked to categorize biracial faces as being Black or White. We predicted that willingness to include racially ambiguous others as part of one's racial ingroup may decrease with scarcity cues.

### Study 1

Seventy-one White undergraduates (53 female) underwent a priming procedure similar to that used by Hill, Rodeheffer, Griskevicius, Durante, and White (in press), where they viewed a

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slideshow depicting captioned pictures of economic hardship or abundance (e.g., scarcity: empty office with a caption about lack of good jobs vs. abundance: thriving office with caption about there being plenty of good jobs). They then viewed photographs of twenty biracial faces (10 male, 10 female). For each face, participants were asked: *If you had to choose, would it be more accurate to describe this biracial individual as Black or White?* The faces were created by averaging one White and one Black face using face averaging software available at www.faceresearch.org (see Bensen & Parrett, 1993). The original Black and White faces used to make the composite faces were taken from the Radboud Faces Database (RaFD) at www.rafd.nl (Langner, et al., 2010). All were forward facing neutral profiles.

The number of faces participants categorized as Black were summed and entered into an independent-samples t-test with resource availability as the grouping variable. As predicted, participants in the scarcity condition categorized more faces as Black (M = 9.71, SD = 2.87) than did those in the abundance condition (M = 7.75, SD = 3.33), t(57) = 4.23, p = .019,  $d = .63^{1}$ .

#### Study 2

In Study 2, we sought to conceptually replicate the results from Study 1 using a different priming procedure. We also included a control group that saw neither a scarcity nor an abundance prime to determine whether the results from Study 1 were driven by changes in perceptions of resource scarcity, resource abundance, or both. Eighty-one white undergraduate students (32 Male, 49 female) were randomly assigned to one of three priming conditions: resource scarcity, resource abundance, or a no priming control. To prime resource scarcity and abundance, participants completed five analogy problems, three of which contained words representative of each condition's resource availability. In the scarcity condition, for example, participants were asked to solve *sweat : summer :: debt : recession*, and participants in the

abundance condition were asked to solve *payday : money :: harvest : <u>crops</u>*. Participants in the control group completed neutral analogy problems. Next, participants completed the same racial categorization task used in Study 1.

The number of faces participants categorized as Black was analyzed using a one-way analyses of variance, with resource availability as the independent variable. Results revealed a significant effect of resource availability, F(2, 78) = 5.11, p = .008,  $\eta_p^2 = .12$ . Probing this effect (Tukey's HSD, p < .05) revealed that cues to scarcity again led participants to categorize more biracial faces as Black (M = 9.78, SD = 2.60), compared to the control group (M = 7.39, SD = 3.02) or those primed with abundance (M = 7.62, SD = 3.43) (Figure 1). The control and abundance conditions did not significantly differ from each other.

### Conclusions

Outgroup prejudice continues to be a ubiquitous feature of human social life (see e.g., Shapiro & Neuberg, 2008). It is therefore imperative to deepen our understanding of the processes by which people form their ingroups (e.g., Kurzban & Neuberg, 2005). Across two experiments, we found that times of economic hardship may limit the inclusiveness of people's racial ingroups. Cues to scarcity led people to categorize fewer biracial others as belonging to their own racial ingroup whereas abundance had no such effects. Future studies should examine the effects of resource availability cues on racial categorization in other race (e.g., Black) samples to ensure that our results are generalizable across racial groups, as would be predicted by our hypothesis. Nonetheless, the current research contributes to the literature on ingroup biases (e.g., Brewer, 1979; Halevy et al., 2008; Mullen et al., 1992; Tajfel, 1982), outgroup prejudice (e.g., Cottrell & Neuberg, 2005; Ackerman et al., 2006; Navarrete et al., 2009; Navarrete & Fessler, 2006) and the growing body of research demonstrating how adverse environmental conditions incite a number of functionally specific cognitive and behavioral shifts that alter how we perceive and interact with our environment (e.g., Hill et al., in press; Griskevicius, Tybur, Delton, & Robertson, 2011).

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# Footnotes

<sup>1</sup> Participant and target sex did not interact with our primes in Study 1 or 2, and were therefore not included in the reported analyses.