Psychological Science

A Choice Mind-Set Increases the Acceptance and Maintenance of Wealth Inequality

Krishna Savani and Aneeta Rattan
Psychological Science 2012 23: 796 originally published online 14 June 2012
DOI: 10.1177/0956797611434540

The online version of this article can be found at: http://pss.sagepub.com/content/23/7/796

Published by: SAGE

http://www.sagepublications.com

On behalf of:

ASSOCIATION FOR PSYCHOLOGICAL SCIENCE

Association for Psychological Science

Additional services and information for Psychological Science can be found at:

Email Alerts: http://pss.sagepub.com/cgi/alerts

Subscriptions: http://pss.sagepub.com/subscriptions

Reprints: http://www.sagepub.com/journalsReprints.nav

Permissions: http://www.sagepub.com/journalsPermissions.nav

>> Version of Record - Jul 18, 2012

OnlineFirst Version of Record - Jun 14, 2012

What is This?



A Choice Mind-Set Increases the Acceptance and Maintenance of Wealth Inequality

Psychological Science 23(7) 796–804
© The Author(s) 2012
Reprints and permission: sagepub.com/journalsPermissions.nav DOI: 10.1177/0956797611434540
http://pss.sagepub.com



Krishna Savani¹ and Aneeta Rattan²

¹Management Division, Columbia Business School, and ²Department of Psychology, Stanford University

Abstract

Wealth inequality has significant psychological, physiological, societal, and economic costs. In six experiments, we investigated how seemingly innocuous, culturally pervasive ideas can help maintain and further wealth inequality. Specifically, we tested whether the concept of choice, which is deeply valued in American society, leads Americans to act in ways that perpetuate wealth inequality. Thinking in terms of choice, we argue, activates the belief that life outcomes stem from personal agency, not societal factors, and thereby leads people to justify wealth inequality. The results showed that highlighting the concept of choice makes people less disturbed by facts about existing wealth inequality in the United States, more likely to underestimate the role of societal factors in individuals' successes, less likely to support the redistribution of educational resources, and less likely to support raising taxes on the rich—even if doing so would help resolve a budget deficit crisis. These findings indicate that the culturally valued concept of choice contributes to the maintenance of wealth inequality.

Keywords

policymaking, decision making, choice, wealth inequality, redistribution, taxation

Received 10/27/11; Revision accepted 12/6/11

Wealth inequality has substantial negative consequences for societies, including reduced levels of societal well-being (Napier & Jost, 2008; Oishi, Kesebir, & Diener, 2011; Oishi, Schimmack, & Diener, 2012), fewer public goods (Frank, 2011; Kluegel & Smith, 1986; Wilkinson & Pickett, 2009), and even lower economic growth (Alesina & Rodrik, 1994). Despite these negative consequences, high levels of wealth inequality persist in many nations. The United States has the highest degree of wealth inequality among all industrialized countries: On the Gini coefficient index of wealth equality, the United States ranks 93rd out of 134 countries (Central Intelligence Agency, 2009). Moreover, wealth inequality in the United States substantially worsened during the first decade of the 21st century, with median household income in 2010 equal to that in 1997 (U.S. Census Bureau, 2011) even though the per-capita gross domestic product (GDP) increased by 33% during the same period (Bureau of Economic Analysis, 2011). Together, these data indicate that *all* of the gain in wealth was concentrated at the top end of the wealth distribution.

A large majority of Americans disapprove of a high degree of wealth inequality (Norton & Ariely, 2011), such as when 1% of a nation's citizens possess 35% of the nation's wealth, which was the case in the United States in 2007 (Wolff, 2010). Instead, people in the United States prefer a more equal distribution of wealth with a strong middle class, such as when the

60% of people in the middle of the wealth distribution own approximately 60% of the nation's wealth, rather than the 15% that they owned in 2007 (Norton & Ariely, 2011). If people are unhappy with wealth inequality, then policies aimed at reducing it should be widely supported. However, Americans often oppose policies that would remedy wealth inequality (Bartels, 2005). For example, taxation and redistribution—taxing the rich and using the proceeds to provide public goods, public insurance, and a minimum standard of living for the poor—is probably the most effective means of reducing wealth inequality from an economic perspective (Frank, 2007, 2011; Korpi & Palme, 1998). However, most Americans, including workingclass and middle-class citizens, support tax cuts even for the very rich and oppose government spending on social services that would mitigate inequality (Bartels, 2005; Fong, 2001). What factors explain this inconsistency between a general

Corresponding Authors:

Krishna Savani, Management Division, Columbia Business School, 3022 Broadway, Uris Hall 7L, New York, NY 10027 E-mail: ks2884@columbia.edu

Aneeta Rattan, Department of Psychology, Stanford University, 450 Serra Mall, Building 420, Stanford, CA 94305 E-mail: arattan@stanford.edu

preference for greater wealth equality and an opposition to policies that would produce it?

In this research, we investigated whether people's attitudes toward wealth inequality and support for policies that reduce wealth inequality are influenced by the concept of choice. Choice is a core concept in American culture: As Thomas Jefferson said, "Freedom is the right to choose: the right to create for oneself the alternatives of choice" (as quoted in Iyengar & Lepper, 1999, p. 349). Both the practice of choice and the discourse of choice are widely prevalent in the United States. The degree of consumer choice available in the United States is probably the greatest in the world (Schwartz, 2004). Faced with the same set of options, Americans even perceive more choices than people from other countries do (Savani, Markus, Naidu, Kumar, & Berlia, 2010). In public discourse, the concept of choice is frequently invoked by both the political left (e.g., the movement in favor of women's reproductive rights is framed as promoting choice) and the political right (e.g., health-care reform is framed as taking away choice) to generate public support.

Recent research has suggested that the concept of choice decreases support for societally beneficial policies (e.g., a tax on highly polluting cars) but increases support for policies furthering individual rights (e.g., legalizing drugs; Savani, Stephens, & Markus, 2011). In addition, historical analyses have suggested that Americans often use the concept of choice to justify inequality—for example, by arguing that the poor are poor because they made bad choices (Hanson & Hanson, 2006; see also Porter, in press; Stephens & Levine, 2011). Building on this work, we theorized that the assumption that people make free choices, combined with the fact that some people are rich and others are poor, leads people to believe that inequality in life outcomes results from differences in individuals' life choices and is therefore justified and reasonable. We hypothesized that when people think in terms of choice, they should be less disturbed by wealth inequality and less supportive of policies aimed at reducing wealth inequality.

General Method

Participants

Participants in all experiments came from a demographically heterogeneous sample of adult U.S. residents recruited via Amazon's Mechanical Turk (www.mturk.com).¹

Control variables

In all experiments, after an experimental manipulation, participants completed a subset of items from Crowne and Marlowe's (1960) Social Desirability Scale and a demographics questionnaire, on which they reported their gender, age, and ethnicity and rated their political orientation, using a scale from 1 (*strongly conservative*) to 7 (*strongly liberal*). In Experiments 1, 2, and 5, participants also rated their perceived social class,

using a scale from 1 (*lower class*) to 5 (*upper class*). For complete lists of the dependent-measure items used in all studies, see the Supplemental Material available online. Results for non-significant covariates are not reported.

For all experiments, we defined the following set of potential covariates in advance and tested whether they explained variance in the dependent variable: tendency to make socially desirable responses, gender, age, ethnicity,² and political orientation. Perceived social class was also defined as a covariate in Experiments 1, 2, and 5. For each experiment, we entered all covariates in the initial regression analysis unless they were significantly influenced by our manipulation of choice. Significant covariates were retained in the final model, and nonsignificant covariates were removed. We followed this specific data-analysis strategy to avoid introducing experimenter biases.

Experiment I

In Experiment 1, we investigated whether activating the concept of choice influences people's acceptance of wealth inequality.

Method

Participants. Forty-eight participants (30 women, 18 men; mean age = 39.74 years; 41 European Americans, 7 minorities) were randomly assigned to one of two conditions (control or choice).

Procedure. Participants in the control condition were asked to list five things they did the previous morning (8:00 a.m. to 12:00 p.m.), afternoon (12:00 p.m. to 4:00 p.m.), evening (4:00 p.m. to 8:00 p.m.), and night (8:00 p.m. to 12:00 a.m.), whereas participants in the choice condition were asked to list five choices they made during the same four periods. Participants then rated how difficult it was for them to recall all of these actions, using a scale from 1 (*extremely difficult*) to 7 (*extremely easy*).

After this manipulation, participants were asked how disturbed they were by 10 factual statistics illustrating the existing wealth inequalities in the United States (e.g., "The richest 20% of people in the United States own 85% of all wealth in the country"; "Recent statistics show that between 1990 and 2010, the average worker's salary has risen by less than 5%, whereas the average CEO's salary has risen by 500%"). For each of these items, participants were asked, "How disturbed are you by this finding?"; responses were made on scales from 1 (not at all disturbed) to 7 (extremely disturbed).

Results

We averaged participants' responses to the 10 items about inequality ($\alpha = .97$). A multiple regression analysis revealed that liberals were more disturbed by facts about U.S. wealth

inequality than conservatives were, b = 0.62, t(42) = 6.78, p <.001; upper-class individuals were more disturbed than lowerclass individuals were, b = 0.47, t(42) = 2.30, p < .05; and women were more disturbed than men were, b = 1.06, t(42) =2.72, p < .01. Participants' level of difficulty completing the listing task that constituted the experimental manipulation did not influence their level of disturbance, b = -0.14, t(42) = 1.20, p > .23. Most important, controlling for political orientation, gender, perceived social class, and difficulty in completing the listing task, the regression revealed that participants in the choice condition were less disturbed by wealth inequality than participants in the control condition were, b = -0.97, SE =0.43, t(42) = 2.29, p < .03, Bayes factor = 12.76, $^3 d = 0.59^4$ (see Fig. 1). Thus, merely listing choices made participants more comfortable with profound inequalities in American society.

Experiment 2

Although our findings in Experiment 1 were suggestive, the effect of recalling choices on disturbance with wealth inequality could have been driven by a personal sense of power or control induced by the choice-listing task (relative to the action-listing task; Inesi, Botti, Dubois, Rucker, & Galinsky, 2011). Therefore, in Experiment 2, we attempted to replicate the results from Experiment 1 using a different manipulation of choice, in which we primed the concept of choice rather than instances of personal choice.

Method

Participants. Forty-six participants (30 women, 16 men; mean age = 33.65 years; 33 European Americans, 13 minorities) were randomly assigned to condition (control or choice).

Procedure. All participants watched a 6-min video used to prime choice in prior research (Savani et al., 2010, Savani et al.,

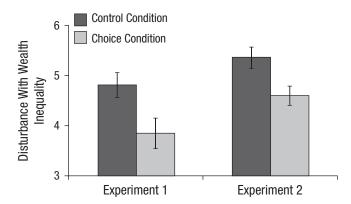


Fig. 1. Results from Experiments I and 2: mean rating of disturbance with statistics that illustrate wealth inequality as a function of condition. Disturbance was rated using scales from I to 7; higher values indicate greater disturbance. Error bars represent standard errors.

2011); the video showed a solitary actor engaging in mundane actions (e.g., opening mail, working on a computer, reading a magazine) in an apartment. Participants in the control condition were instructed to press a button whenever the actor touched an object, whereas participants in the choice condition were instructed to press a button whenever the actor made a choice. In both conditions, participants were focused on the actor's interactions with objects; the task in the choice condition, however, incidentally highlighted the concept of choice.

After the experimental manipulation, participants rated the degree to which they were disturbed by the same 10 statistics illustrating wealth inequality used in Experiment 1 ($\alpha = .92$).

Results

A multiple regression analysis revealed that liberals were more disturbed by information about the existing wealth inequality in the United States than conservatives were, b =0.42, t(40) = 4.26, p < .001; upper-class individuals were more disturbed than lower-class individuals were, b = 0.65, t(40) = 4.05, p < .001; women were more disturbed than men were, b = 0.67, t(40) = 2.13, p < .05; and Whites were more disturbed than minorities were, b = 1.15, t(40) = 3.30, p <.005. Most important, even after we controlled for political orientation, perceived social class, gender, and race, participants in the choice condition were less disturbed than participants in the control condition were, b = -0.76, SE = 0.29, t(40) = 2.57, p < .02, Bayes factor = 28.03, d = 0.61 (see Fig. 1). Experiment 2 thus replicated the findings of Experiment 1 using a different manipulation of choice. Because this manipulation used the same stimuli, presented for the same duration, for all participants, it could be considered more controlled than the experimental manipulation in Experiment 1; we therefore employed this priming manipulation of choice in all subsequent studies.

Experiment 3

In Experiment 3, we tested whether choice leads people to overemphasize the role of individual agency and to underemphasize the role of societal factors in wealthy people's successes. Although Americans tend to overestimate the role of internal characteristics in shaping individuals' actions and life outcomes (Markus & Kitayama, 1991, 2003; Morris, Menon, & Ames, 2001; Morris & Peng, 1994), they also recognize that personal success is determined by a combination of internal and external factors (Bryan, Dweck, Ross, Kay, & Mislavsky, 2009). The successes of the very rich, for example, stem both from individual efforts and from public structures set up to promote the creation and accumulation of wealth, such as free public education and the enforcement of property rights (Frank, 2011). We hypothesized that activating the concept of choice would lead people to deemphasize the role of societal institutions in shaping individual success.

Method

Participants. Sixty-seven participants (37 women, 30 men; mean age = 35.40 years; 52 European Americans, 15 minorities) were randomly assigned to condition (choice or control).

Procedure. After participants completed the experimental manipulation, they rated their agreement with nine statements claiming that societal institutions contribute to the creation, accumulation, and transfer of wealth (e.g., "Many rich people have become rich because there exists a society in which their property rights are protected"), using a scale from 1 (*do not agree*) to 6 (*agree strongly*). Each participant's responses to these items were averaged ($\alpha = .79$).

Results

Preliminary analyses revealed that participants in the choice condition rated themselves as more politically conservative (M=4.97) than participants in the control condition did (M=4.23), t(65)=1.99, p=.05, d=0.49. Because the experimental manipulation influenced participants' self-reported political orientation, we did not include political orientation as a covariate in our main analyses.

We found that participants in the choice condition were less likely than participants in the control condition to agree that societal institutions contribute to wealthy people's success, b = -0.48, SE = 0.22, t(65) = 2.25, p < .03, Bayes factor = 9.55, $d = 0.56^5$ (see Fig. 2). Thus, when the concept of choice was activated, people underemphasized the vital role of societal structures in the creation and accumulation of personal wealth.

Together, our results from Experiments 1, 2, and 3 showed that thinking in terms of choice makes people more comfortable with and more likely to justify wealth inequality. We next

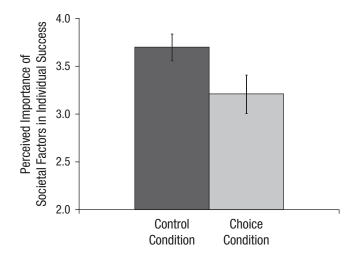


Fig. 2. Results from Experiment 3: mean rating of agreement with statements endorsing the role of societal factors in wealthy people's successes as a function of condition. Agreement was rated using scales from 1 to 6; higher values indicate greater perceived importance of societal factors in individual success. Error bars represent standard errors.

investigated how choice influences people's attitudes toward policies aimed at reducing wealth inequality.

Experiment 4

In Experiment 4, we investigated whether activating the concept of choice influences people's level of support for policies aimed at equalizing the distribution of resources between the wealthy and the poor. We focused on support for educational funding because of the existing inequality in this domain: U.S. schools are funded primarily by local property taxes, not state and federal revenue (as in most industrialized countries), which has resulted in substantial inequality in the educational resources available in wealthier and poorer school districts (Darling-Hammond, 2004). We hypothesized that priming participants with the concept of choice would make them less likely to support policies aimed at equalizing the distribution of educational resources.

Method

Participants. Sixty-one participants (34 women, 27 men; mean age = 34.13 years; 50 European Americans, 11 minorities) were randomly assigned to condition (control or choice).

Procedure. After participants completed the experimental manipulation, they rated their level of support for six policies aimed at distributing educational resources more equally between wealthier and poorer communities (items were adapted from Rattan, Savani, Naidu, & Dweck, 2012). For example, one policy involved increasing the compensation for fully credentialed teachers who teach in schools where at least half the children qualify for free or reduced lunch (an indicator of poverty); under this policy, wealthier schools would presumably lose some of their qualified teachers. Ratings were made using scales from 1 (*strongly oppose*) to 6 (*strongly support*). Each participant's responses to the six items were averaged ($\alpha = .74$).

Participants then rated the degree to which they endorsed individuals' rights to their wealth ("To what extent do you feel rich people are entitled to keep their wealth?" and "To what extent do you feel rich people have a responsibility to share their wealth with those who are less fortunate?"). Ratings were made using scales from 1 (*not at all*) to 7 (*extremely*; $\alpha = .59$).

Results

A regression analysis revealed that liberals were more supportive of the redistributive policies than conservatives were, b = 0.21, t(57) = 3.38, p = .001, and that older people were more supportive of these policies than younger people were, b = 0.03, t(57) = 2.92, p = .005. Most important, controlling for political orientation and age, participants in the choice condition were less supportive of the redistributive policies than participants in the control condition were, b = -0.59,

SE = 0.21, t(57) = 2.85, p = .006, Bayes factor = 39.48, d = 0.73 (see Fig. 3).

An analogous regression showed that participants in the choice condition were more likely than participants in the control condition to believe that the rich were entitled to keep their wealth, b = -0.79, SE = 0.32, t(57) = 2.50, p < .02, Bayes factor = 20.06, d = 0.66. After we controlled for endorsement of entitlement, the effect of the experimental manipulation on support for redistributive policies was no longer significant, b = -0.31, SE = 0.19, t(57) = 1.67, p > .10. However, endorsement of entitlement remained a significant predictor of support for redistributive policies, b = -0.36, SE = 0.07, t(56) =4.84, p < .001. A Sobel test indicated a significant mediation effect, z = 2.21, p < .05. These results show that the greater resistance to policies that would reduce inequality in the distribution of educational resources observed among participants in the choice condition (relative to participants in the control condition) was driven by the belief that the wealthy are entitled to their resources.

Experiment 5

We designed Experiment 5 to address an alternative explanation for the results of Experiment 4: that activating the concept of choice generates opposition to governmental programs or interventions in general, not just to redistributive policies in particular. We hypothesized that priming participants with the concept of choice would not influence their support for policies aimed at increasing the resources available to everyone without redistributing wealth, because such policies would not violate the perceived rights of the rich to their wealth.

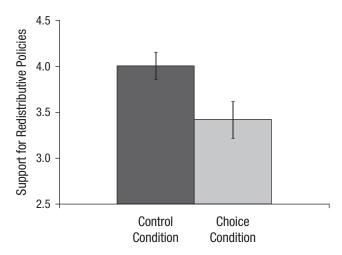


Fig. 3. Results from Experiment 4: mean rating of support for redistributive policies as a function of condition. Ratings of support for policies aimed at distributing educational resources equally between wealthy and poor communities were made using scales from I to 6; higher values indicate greater support. Error bars represent standard errors.

Method

Participants. One hundred forty-six participants (90 women, 53 men, 3 participants whose gender was unreported; mean age = 32.60 years; 105 European Americans, 41 minorities) took part in this study. Participants were randomly assigned to either the choice or the control condition and to either the redistributive-policies or the general-policies condition.

Procedure. After the experimental manipulation, participants were presented with either three redistributive educational policies or three general educational policies (adapted from Rattan et al., 2012). For example, one redistributive policy proposed providing free test-preparation materials to students from low-income communities because of their relatively low rates of meeting grade standards on standardized tests, whereas the corresponding general policy proposed providing free test-preparation materials to all students, irrespective of their household income level. Participants rated their support for the policies using scales from 1 (*strongly oppose*) to 6 (*strongly support*); each participant's responses to the three items were averaged ($\alpha = .64$ for redistributive policies, $\alpha = .75$ for general policies).

Results

A 2 (experimental condition: choice vs. control) \times 2 (policy condition: redistributive vs. general) analysis of covariance (ANCOVA) with political orientation and socially desirable responding as covariates revealed a significant effect of political orientation, F(1, 140) = 22.21, p < .001, such that liberals were more likely to support the policies than conservatives were, and a significant effect of socially desirable responding, F(1, 140) = 4.81, p < .05, such that people who were more concerned about social desirability were more likely to support the policies. Beyond these effects, we found a significant Experimental Condition \times Policy Condition interaction, F(1, 140) = 6.68, p = .01.

Additional ANCOVAs revealed that participants in the choice condition were less supportive of the redistributive policies than participants in the control condition were, F(1, 67) = 4.10, p < .05, d = 0.44; however, participants in the choice condition were marginally more supportive of the general policies than participants in the control condition were, F(1, 71) = 3.01, p < .09, d = 0.40 (see Fig. 4). Thus, thinking in terms of choice did not lead to a generalized reluctance to support governmental spending on public goods; rather, it led participants to specifically oppose policies that entailed redistributing resources from the wealthy to the poor.

Experiment 6

Whereas Experiments 4 and 5 examined how choice affects support for the redistribution of resources from the rich to the poor, Experiment 6 examined whether choice reduces support

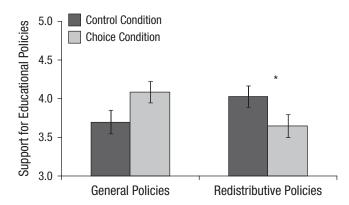


Fig. 4. Results from Experiment 5: mean support for general and redistributive educational policies as a function of condition. Participants rated their level of support using scales from 1 to 6; higher values indicate greater support. Error bars represent standard errors. The asterisk indicates a significant difference between conditions (p < .05).

for redistribution of resources from the wealthy to the nation as a whole. We tested this idea with reference to a real-world. nationally relevant context—the U.S. federal debt crisis during the summer of 2011. After the implementation of President Bush's tax cuts of 2001 and 2003, U.S tax rates were among the lowest in the industrialized world (Organisation for Economic Co-operation and Development, 2011). Low levels of taxes, particularly on the rich, help maintain wealth inequality (Frank, 2007, 2011) and can even reduce national subjective well-being (Oishi et al., 2011). Even the second-richest person in the United States at the time, billionaire Warren Buffett, publicly supported increasing taxes on the very rich (Buffett, 2011). We tested whether highlighting the concept of choice would reduce people's support for increasing taxes on the rich to help the country avoid a default on the national debt.

Method

Participants. Fifty participants (30 women, 20 men; mean age = 31.20 years; 36 European Americans, 13 minorities, 1 participant whose ethnicity was unreported) were randomly assigned to condition (choice or control).

Procedure. This experiment was conducted during the last week of July 2011, the week leading up to the U.S. federal government's deadline to either default on its debt payment or increase its debt ceiling. After the experimental manipulation, participants were presented with four proposals for policies to help resolve the U.S. federal debt crisis. All of the policies would effectively increase taxes on the rich—by increasing the tax on individual income above \$250,000 to 50%, by increasing the tax on corporate earnings above \$10 million to 50%, by charging Social Security and Medicare taxes on incomes above \$106,800 (these taxes are presently charged only on income up to \$106,800), and by eliminating tax deductions for individuals earning more than \$250,000. Participants rated their level of

support for these policies, using scales from 1 (*strongly oppose*) to 6 (*strongly support*; $\alpha = .80$). To provide participants with a common background, we informed them that the effective individual and corporate tax rates in the United States were much lower than those in Canada and most European countries.

Results

As might be expected, liberal participants were more supportive of the policies than conservatives were, b = 0.51, t(47) = 4.77, p < .001. Even when we controlled for political orientation, participants in the choice condition were less supportive of the tax policies than were participants in the control condition, b = -0.72, SE = 0.30, t(47) = 2.43, p < .02, Bayes factor = 16.98, d = 0.68 (see Fig. 5).

Thus, activating the concept of choice not only increases opposition to policies that would entail using wealthy people's resources to help the poor, as demonstrated in Experiments 4 and 5, but also increases opposition to policies that would entail using these resources to help the nation as a whole, as demonstrated in Experiment 6. Even when the relative leniency of U.S. tax policies was made salient, activating the concept of choice increased participants' opposition to increasing tax rates for the very rich.

General Discussion

Together, the results from these six experiments show that the concept of choice has significant ramifications for the maintenance of wealth inequality. We found that when the concept of choice was highlighted, people were less disturbed by statistics demonstrating wealth inequality, less likely to believe that societal factors contribute to the success of the wealthy, less willing to endorse redistributing educational resources more equally between the rich and the poor, and less willing to endorse increasing taxes on the rich to help the country as a whole. Believing that individuals are entitled to keep their

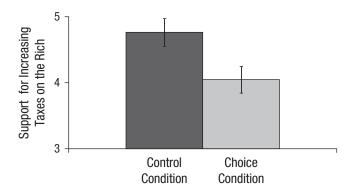


Fig. 5. Results from Experiment 6: mean support for policies that would increase taxes on the rich as a function of condition. Support for such policies was rated using scales from 1 to 6; higher values indicate greater support. Error bars represent standard errors.

wealth—that they do not have a responsibility to share a part of their wealth with society—accounted for the effects of a choice mind-set on attitudes toward redistributive policies. The studies reported here highlight a new area of research on how culturally valued concepts can play a profound role in shaping people's attitudes toward various types of inequalities present in society (Rattan et al., 2012; see also Ledgerwood, Mandisodza, Jost, & Pohl, 2011; Wakslak, Jost, Tyler, & Chen, 2007).

A deeper understanding of the sources of people's attitudes toward wealth inequality has the potential to help make policies addressing wealth inequality more palatable. Our research suggests that framing policies in terms of choice, or even incidentally highlighting the concept of choice in discussions about policies, might lead people to oppose policies that are in line with their ultimate ideals (Norton & Ariely, 2011). Long-term programs intended to lower high levels of wealth inequality might face substantial obstacles from both politicians and the general public if opponents frame discussions about the policies in terms of choice (cf. Porter, in press).

Examining the discourse of choice in political contexts may be a fruitful area for future research. Studies could test whether policy advocates already strategically use the choice frame to shape public support for various policies—for example, by incorporating the language of choice in editorials, campaign materials, and other forms of persuasive communications. Although the present experiments tested how priming choice in a politically neutral context shifts attitudes toward wealth inequality, future research might test whether framing other politically charged issues, such as health disparities and educational inequality, in terms of choice shifts individuals' support for policies aimed at addressing these issues.

The studies reported here highlight a new area of research on how seemingly unrelated, culturally valued concepts can play a profound role in shaping people's attitudes toward various types of inequalities present in society (Rattan et al., 2012; see also Ledgerwood et al., 2011; Wakslak et al., 2007). Although the present research focused on the issue of wealth inequality in an American context, future research might test the degree to which choice has similar consequences in other countries. Given that there are cross-national differences in the discourse of choice (e.g., Iyengar & Lepper, 1999; Savani et al., 2010; Tavakoli, 2012), the relationship between choice and wealth inequality might vary across cultures. Future research could also explore whether the increase in consumer choice in developing nations, which is largely driven by decreasing wealth inequality (i.e., a growing middle class), ironically leads to greater acceptance of and maintenance of wealth inequality.

Choice appears to be a powerful factor that influences people's views about diverse and pressing policy areas—inequality, redistribution, and taxation—in which the United States is an outlier among industrialized countries. Wealth inequality contributes to a large number of societal problems, such as poor schooling, crime, poor health, and even reduced economic growth, and many of these ills are disproportionally

borne by disadvantaged minority groups and people in low socioeconomic classes (Kluegel & Smith, 1986). The current research illuminates, for the first time, that the discourse of choice can be a barrier to reducing wealth inequality and achieving the positive outcomes that reduced inequality would bring about.

Acknowledgments

We thank Nalini Ambady, Carol Dweck, Jennifer Eberhardt, and Brian Lowery for helpful feedback; Veronika Job for help with designing experimental materials; and Amie Blocker and Elizabeth Goodman for assistance with research.

Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

Funding

This research was funded by Columbia Business School grants to Krishna Savani.

Supplemental Material

Additional supporting information may be found at http://pss.sagepub.com/content/by/supplemental-data

Notes

- 1. To identify nonattentive participants, we used Oppenheimer, Meyvis, and Davidenko's (2009) instruction check. At the beginning of each experiment, before the experimental manipulation was administered, participants were given two tests of whether they had read all instructions. Participants who failed either test were removed from the experiment without compromising random assignment. Additionally, at the end of each experiment, participants were asked, "Were you in any way distracted while completing the survey?"; participants in Experiments 2 through 5 were also asked, "Did you have any technical problems while watching the video?" (for details about the video used in the experimental manipulation, see the Method section for Experiment 2). Logistic regressions confirmed that the experimental condition did not predict participants' likelihood of being distracted or encountering technical problems, ps > .18. Therefore, data for participants who reported having technical problems or being distracted were excluded from analysis. Finally, if we discovered that the same individual had participated in two or more experiments, we excluded his or her data from all but the first experiment in our analyses.
- 2. We used a binary category for ethnicity (1 for European Americans and 0 for minorities) because the low proportion of participants from minority groups in our samples (ranging from .15 to .28) prevented us from creating a separate dummy variable for each minority group. All mixed-race participants were categorized as minorities.
- 3. Across the six studies, all Bayes factors estimated the null hypothesis against an alternative hypothesis described by a half-normal distribution, with both the mean and the standard deviation of the difference between conditions equal to 0.5 units (see Dienes, 2011, p. 287). The difference of 0.5 units between conditions was estimated

on the basis of our previous research on choice (Savani et al., 2011). A Bayes factor of X indicates that the alternative hypothesis is X times as likely as the null hypothesis, given the data (X > 3 indicates *substantial evidence*, and X > 10 indicates *strong evidence*; Jeffreys, 1961).

- 4. All Cohen's *d* statistics were computed using the residuals after controlling for covariates.
- None of the other covariates significantly predicted the dependent measure.

References

- Alesina, A., & Rodrik, D. (1994). Distributive politics and economic growth. The Quarterly Journal of Economics, 109, 890–895.
- Bartels, L. M. (2005). Homer gets a tax cut: Inequality and public policy in the American mind. *Perspectives on Politics*, 3, 15–31.
- Bryan, C. J., Dweck, C. S., Ross, L., Kay, A. C., & Mislavsky, N. O. (2009). Political mindset: Effects of schema priming on liberalconservative political positions. *Journal of Experimental Social Psychology*, 45, 890–895.
- Buffett, W. E. (2011, August 15). Stop coddling the super-rich. *The New York Times*. Retrieved from http://www.nytimes.com/2011/08/15/opinion/stop-coddling-the-super-rich.html
- Bureau of Economic Analysis. (2011). *National economic accounts*. Retrieved from http://www.bea.gov/national/index.htm
- Central Intelligence Agency. (2009). *The world factbook*. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/index.html.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349–354.
- Darling-Hammond, L. (2004). What happens to a dream deferred: The continuing quest for equal educational opportunity. In J. Banks & C. Banks (Eds.), *Handbook of research on multicultural education* (pp. 607–630). San Francisco, CA: Jossey-Bass.
- Dienes, Z. (2011). Bayesian versus orthodox statistics: Which side are you on? *Perspectives on Psychological Science*, *6*, 274–290.
- Fong, C. (2001). Social preferences, self-interest, and the demand for redistribution. *Journal of Public Economics*, 82, 225–246.
- Frank, R. H. (2007). *Falling behind: How rising inequality harms the middle class*. Berkeley: University of California Press.
- Frank, R. H. (2011). *The Darwin economy: Liberty, competition, and the common good.* Princeton, NJ: Princeton University Press.
- Hanson, J. D., & Hanson, K. (2006). The blame frame: Justifying (racial) injustice in America. *Harvard Civil Rights-Civil Liberties Law Review*, 41, 413–480.
- Inesi, M. E., Botti, S., Dubois, D., Rucker, D. D., & Galinsky, A. D. (2011). Power and choice: Their dynamic interplay in quenching the thirst for personal control. *Psychological Science*, 22, 1042–1048.
- Iyengar, S. S., & Lepper, M. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology*, 76, 349–366.

Jeffreys, H. (1961). Theory of probability. Oxford, England: Oxford University Press.

- Kluegel, J. R., & Smith, E. R. (1986). *Beliefs about inequality: Americans' views of what is and what ought to be.* New York, NY: Aldine Transaction.
- Korpi, W., & Palme, J. (1998). The paradox of redistribution and strategies of equality: Welfare state institutions, inequality and poverty in the Western countries. *American Sociological Review*, 63, 661–687.
- Ledgerwood, A., Mandisodza, A. N., Jost, J. T., & Pohl, M. (2011).
 Working for the system: Motivated defense of meritocratic beliefs. *Social Cognition*, 3, 322–340.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Markus, H. R., & Kitayama, S. (2003). Models of agency: Sociocultural diversity in the construction of action. In V. Murphy-Burman & J. Berman (Eds.), Nebraska Symposium on Motivation: Vol. 49. Cross-cultural differences in perspectives on the self (pp. 1–57). Lincoln: University of Nebraska Press.
- Morris, M. W., Menon, T., & Ames, D. R. (2001). Culturally conferred conceptions of agency: A key to social perception of persons, groups, and other actors. *Personality and Social Psychology Review*, 5, 169–182.
- Morris, M. W., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology*, 67, 949–971.
- Napier, J. L., & Jost, J. T. (2008). Why are conservatives happier than liberals? *Psychological Science*, 19, 565–572.
- Norton, M. I., & Ariely, D. (2011). Building a better America—one wealth quintile at a time. *Perspectives on Psychological Science*, 6, 9–12.
- Oishi, S., Kesebir, S., & Diener, E. (2011). Income inequality and happiness. *Psychological Science*, 22, 1095–1100.
- Oishi, S., Schimmack, U., & Diener, E. (2012). Progressive taxation and the subjective well-being of nations. *Psychological Science*, 23, 86–92.
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, 45, 867–872.
- Organisation for Economic Co-operation and Development. (2011). *OECD tax database*. Retrieved from http://www.oecd.org/document/60/0, 3746,en 2649 34533 1942460 1 1 1 1,00.html
- Porter, C. M. (in press). 'Choice': What we mean by it, and what that means for preventing childhood obesity. *Public Health Nutrition*. Advance online publication. doi:10.1017/S1368980012000596.
- Rattan, A., Savani, K., Naidu, N. V. R., & Dweck, C. S. (2012). Can everyone become intelligent? Cultural differences and societal consequences of the belief in a universal potential for intelligence. Unpublished manuscript, Stanford University, Stanford, CA.
- Savani, K., Markus, H. R., Naidu, N. V. R., Kumar, S., & Berlia, N. (2010). What counts as a choice? U.S. Americans are more likely

than Indians to construe actions as choices. *Psychological Science*, 20, 1–8.

- Savani, K., Stephens, N. M., & Markus, H. R. (2011). The unanticipated interpersonal consequences of choice: Victim blaming and reduced support for the public good. *Psychological Science*, 22, 795–802.
- Schwartz, B. (2004). *The paradox of choice: Why more is less*. New York, NY: Ecco.
- Stephens, N. M., & Levine, C. S. (2011). Opting out or denying discrimination? How the framework of free choice in American society influences perceptions of gender inequality. *Psychological Science*, 22, 1231–1236.
- Tavakoli, M. (2012). Do Iranian and Canadian females make different personal decisions? *Sociology Mind*, 2, 127–132.

- U.S. Census Bureau. (2011). *Income, poverty, and health insurance coverage in the United States: 2010*. Retrieved from http://www.census.gov/prod/2011pubs/p60-239.pdf
- Wakslak, C. J., Jost, J. T., Tyler, T. R., & Chen, E. (2007). Moral outrage mediates the dampening effect of system justification on support for redistributive social policies. *Psychological Science*, 18, 267–274.
- Wilkinson, R., & Pickett, K. (2009). The spirit level: Why greater equality makes societies stronger. New York, NY: Bloomsbury.
- Wolff, E. N. (2010). Recent trends in household wealth in the United States: Rising debt and the middle-class squeeze—an update to 2007. The Levy Economics Institute Working Paper Collection, 589, 1–59.