The rich are easily offended by unfairness: Wealth triggers spiteful rejection of unfair offers

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ABSTRACT

What does it do to people when they are rich or poor? Do they differ in their responses to unfair treatment? For example, are the wealthy more or less likely to accept an unfair offer in an ultimatum game where it is costly to reject an unfair offer? How about when it is not costly to reject an unfair offer? In the present research, we measured self-reported wealth (i.e., family income, Studies 1–3) and manipulated wealth using a "lucky draw" game (Studies 2 and 3) to examine how wealth affects responses to unfairness in an ultimatum game (Studies 1–3) and a new game called the cost-free rejection game (CFRG, Study 3). Across three studies, we found that wealthy people rejected an unfair offer (i.e., being offered 20% while the other kept 80% of the endowment) more frequently than the less wealthy, and that this tendency to reject unfairness was mediated by their increased feelings of entitlement. This suggests that the wealthy, or even people who temporarily perceive themselves to be wealthy, are more easily offended by unfairness than the less wealthy.

Inequality is a basic fact of nearly any group, collective, or society. Some people are more fortunate, have more resources, or are richer than others. What does wealth do to people? In particular, do the rich and poor differ in their responses to unfairness? For example, are the wealthy more or less likely to accept an unfair offer in an ultimatum game where it is costly to reject an unfair offer? How about when it is not costly to reject an unfair offer? These questions are of great scientific interest, especially in light of the growing literature on the psychological effects of social class, money, and power (e.g., Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012; Magee & Galinsky, 2008; Vohs, Mead, & Goode, 2006). They are also of strong societal interest because income inequality has been shown to be a determinant of aggression, violence, and distrust in societies (e.g., Van Lange, Rinderu, & Bushman, 2016; Wilkinson & Pickett, 2009).

However, at present little is known about how wealth might affect people's responses to others, in particular others' unfair treatment toward themselves. This research aimed to fill this research gap by testing whether "the rich" are more or less ready than "the poor" to accept unfair offers in an ultimatum game (UG) and in a newly developed game in which it is not costly to reject unfair offers (cost-free rejection game, CFRG). We focus on recent experiences of being fortunate as a basis of "being wealthy" (e.g., Mani, Mullainathan, Shafir, & Zhao, 2013; Shah, Mullainathan, & Shafir, 2012; Tricomi,

Rangel, Camerer, & O'Doherty, 2010), and tested two competing hypotheses: (a) the rich are *more* likely than the poor to accept unfairness if wealth induces feelings of responsibility to promote others' welfare; (b) the rich are *less* likely than the poor to accept unfairness if wealth induces a sense of entitlement.

One general argument suggests that wealth promotes social responsibility. People with more resources often face decisions to share resources with others to promote others' welfare. This argument, often referred to as *noblesse oblige*, implies that the wealthy are more prosocial toward others who ask for benefits that promote the collective interest. A well-replicated finding for this reasoning is that people contribute more to a public good or offer more in an ultimatum game when they are initially endowed with more economic resources (De Cremer, 2007; Smeets, Bauer, & Gneezy, 2015; Van Dijk & Wilke, 1994). That the wealthy give more than the poor can be explained by feelings of responsibility and a general tendency to promote others' or collective interests (De Cremer & Van Dijk, 2002; Van Dijk, de Kwaadsteniet, & De Cremer, 2009). Thus, this perspective suggests that wealthy (vs. poor) people might be more tolerant of unfairness if such tolerance serves the welfare of others and the collective (e.g., Fehr, Bernhard, & Rockenbach, 2008). Put differently, the wealthy are better able to afford accepting an unfair offer, and a motive to help the collective, including the less wealthy, can explain why they can

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overcome (some) ambivalence caused by an unfair offer.

Another logic suggests that wealth enhances feelings of entitlement. Entitlement often refers to one's perceived sense to deserve more resources or better outcomes and treatment than others (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004). It is linked to privilege, which is about the resources, outcomes, or rights one already has. Also, privilege and entitlement often relate to the notion that what one has (privilege) or may receive (entitlement) is superior to what most others have or may receive, and that this advantage is well-deserved. For example, the wealthy, compared to the poor, find it easier to justify their superior resources (Jost, Banaji, & Nosek, 2004; Lerner, 1980). But is there evidence for the thesis that wealth enhances entitlement?

Some research suggests that social class might relate to entitlement (Piff, 2014). For example, high-class (vs. low-class) individuals tend to be less prosocial (Piff, Kraus, Côté, Cheng, & Keltner, 2010), more self-serving and unethical (Dubois, Rucker, & Galinsky, 2015). They tend to prioritize material wealth when they perceive a chaotic environment (Piff, Stancato, Côté, Mendoza-Denton, & Keltner, 2012), focus more on their internal goals (Kraus et al., 2012), and show less compassion toward others' suffering (Stellar, Manzo, Kraus, & Keltner, 2012). Moreover, even mere reminders of money can lead people to prioritize self-sufficiency, to be more selfish, and to support free-market systems and social inequality that favor themselves (Caruso, Vohs, Baxter, & Waytz, 2013; Vohs et al., 2006). Given this evidence, Piff (2014) argued that high-class individuals might readily develop a sense of entitlement—-they feel entitled to behave in a self-serving fashion. It is therefore plausible that wealth, a key aspect of social class (Oakes & Rossi, 2003; Piff et al., 2010), would enhance entitlement.

Another line of research on power also supports this argument. Power, which is defined as asymmetrical control over resources (e.g., wealth; Magee & Galinsky, 2008), is associated with less justice and less fairness (Blader & Chen, 2012). Powerful people tend to demand more resources for themselves, thereby violating norms of fairness, especially equality (De Cremer & Van Dijk, 2005; Van Dijk & De Cremer, 2006). Crucially, when they are victim of unfairness, powerful people identify their disadvantageous situation quickly and are more likely to take action against this situation (e.g., Sawaoka, Hughes, & Ambady, 2015). Taken together, this initial evidence suggests that wealth might increase one's perceived sense of entitlement—wealthy people feel entitled to receive fair or better outcomes and treatment and, as a result, are more likely to react against unfairness that violate their expectation.

1. Hypotheses and research overview

As noted earlier, it is plausible that wealth can either (a) elicit feelings of responsibility to promote others' welfare, and lead to less rejection of unfair offers (*Hypothesis 1*) or (b) elicit feelings of entitlement in response to unfairness that favors others, and lead to more rejection of unfair offers (*Hypothesis 2*). We conducted three studies using both nationwide and university student samples in China to test these two opposing hypotheses. Across our studies, unfairness was implemented in an ultimatum game (UG), a well-established paradigm to investigate fairness violations (Güth, Schmittberger, & Schwarze, 1982). In this game, the proposer gives the responder an unfair offer of CN¥2, but keeps the remaining CN¥8 out of CN¥10. If the responder accepts the offer, each receives the proposed amounts; otherwise both receive nothing. We chose the ¥2/¥8 offer that can elicit roughly 50% rejection rates (see Camerer, 2003).

Importantly, we should note that rejection in the UG is costly for the responder, and thus may challenge the poor. An alternative hypothesis could be that, relative to the wealthy, the poor are more likely to accept an unfair offer because they are less able to afford the cost of rejecting an unfair offer. To investigate this alternative explanation, we also designed a cost-free rejection game (CFRG)—a modified ultimatum game that allows for rejection with no personal cost in Study 3. A new

feature of this game was that responders receive asymmetric information that they would also receive the proposed amount (i.e., ¥2) even if they reject the offer (i.e., ¥2/¥8). Because rejection in this game involves no personal cost, rejecting an unfair offer should therefore be equally feasible for both the wealthy and the poor.

We either measured or manipulated wealth across three studies. In Study 1, we measured participants' family income instead of personal income, because some people might have no income themselves, but could benefit from family income. To manipulate wealth, we randomly assigned participants into either high-income or low-income group (Study 2) or included an extra moderate-income group (Study 3) based on whether they win a "lucky draw" game. This manipulation is "clean" in that it is unrelated to achievement, effort, or other aspects of income differences that naturally occur. All measures, manipulations, and exclusions were reported in our studies. All studies were approved by the Research Ethics Committee of the Faculty of Psychology at Southwest University.

2. Study 1

Study 1 provided an initial test of whether wealthy people were more or less likely to accept an unfair offer in a one-shot ultimatum game (Hypothesis 1 vs. 2).

2.1. Method

2.1.1. Participants

Two hundred seventy-eight participants (151 females) recruited from Sojump completed the study. Sojump is an online participant recruitment platform in China, with more demographically diverse samples. This sample size was determined based on previous studies (Piff, 2014; Piff et al., 2010). Participants' age ranged from 16 to 62 years (M_{age} = 30.17 years, SD = 11.78), and 86.7% of them were Han Chinese, the largest ethnic group (over 90% of the population) in China.

2.1.2. Procedure

Participants were informed to play a "money allocation" game (i.e., a one-shot ultimatum game) in which they had to split CN¥10 (¥1 = US $0.16 at the time of the studies) with a stranger. In this game, participants acted as a responder and decided whether or not to accept the offer of "¥8 for the proposer, ¥2 for you" proposed by a stranger (i.e., the "ostensible" proposer). After their decision, they reported their family income, educational background, age, gender, ethnicity, and religiosity (see Piff et al., 2010). Family income was their annual family income per capita ranging from ¥2000 to ¥80,000 (M = ¥19,557, SD = 11,019). This was very close to China's average family income per capita (¥20,167) in 2014 (National Bureau of Statistics of China, 2015). Education was assessed with four categories (1 = *did not complete high school*, 2 = *high school graduate*, 3 = *college graduate*, 4 = *postgraduate degree*). Finally, participants who accepted the unfair offer were paid.

2.2. Results

Overall, 43% of all participants rejected the ¥2/¥8 offer. A binary logistic regression revealed that family income (standardized) significantly predicted the decision to reject the unfair offer, b = 0.40, Wald $\chi^2(1)$ = 9.11, p = 0.003, odds ratio = 1.50, 95% CI (confidence interval) [1.15, 1.94].[1] After controlling for age, gender (1 = female, 0 = male), education, ethnicity (1 = Han Chinese, 0 = Other) and religiosity, this effect remained significant, b = 0.43, Wald $\chi^2(1)$ = 9.98, p = 0.002, odds ratio = 1.54, 95% CI [1.18, 2.01]. Thus, in

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[1] Unless otherwise mentioned, the rejection decision was coded as 1 if participants rejected the ¥2/¥8 offer, and 0 if they accepted this offer.