EXPLAINING THE GENDER GAP IN CHARITABLE GIVING: LOWER EMPATHY LEADS MEN TO GIVE LESS TO POVERTY RELIEF*

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ABSTRACT

Relative to other industrialized, Western nations, the United States is uniquely reliant on non-governmental organizations to provide public goods, including relief services for the poor. Research on charitable provision, however, finds a consistent gender gap in Americans' giving, with women bearing a significantly greater share of the burden than men. Here we investigate what explains gender differences in giving and what can counteract the pattern by increasing men's giving. In a large-scale, internet-based experiment on a nationally representative sample, men reported less willingness to give money or volunteer time to a poverty relief organization. This gap was mediated by men's lower reported feelings of empathy for others. We tested a variety of different ways of framing antipoverty efforts and charitable giving suggested by past research. Framing the poverty issue as one that affects everyone increased men's willingness to give and volunteer, eliminating the gender gap. Mediation analysis revealed that this "shared fate" framing worked by increasing men's reported poverty concern, not by changing their understanding of the causes of poverty. No other framing approaches had consistent effects. These findings fit well with past research showing that self-interest can be transformed into group motivation when a feeling of shared fate among members of a group is induced.

INTRODUCTION

The United States is unique among developed, Western democracies for maintaining a relatively small welfare state and offering relatively limited public assistance to the poor (Lipset 1996; Smeeding 2008). Consequently, the U.S. is also distinct for its heavy reliance on nongovernmental organizations (e.g., churches, secular charities) for the funding and delivery of relief services to the poor (Katz 2001). As a result, the well-being and life chances of the American poor are more influenced by contributions to antipoverty organizations than in other advanced democracies. Because of this reliance on non-governmental organizations (NGOs) for the provision of assistance to the poor, it is especially important to develop a strong understanding of the factors that elicit concern and support among Americans for the poor and the NGOs that provide for them. In contrast to this, past research on Americans' poverty concern has overwhelmingly focused on support for governmental policy, while little research examines the factors influencing support for non-governmental poverty relief (Gilens 2000; Alesina and Glaeser 2004). However, such an understanding is essential if poverty relief is to be sustained, especially during difficult economic periods when demand for relief increases as contributions decline (Boris et al. 2010).

Among the most reliable findings in research on the determinants of Americans' charitable giving and voluntarism is the tendency for men to give less than women (Einolf 2011; Kamas, Preston, and Baum 2008; Mesch, et al 2006; Piper and Schnepf 2008; Mesch, et al 2011). Research finds that women are also more likely to be donors to causes that tend to benefit the poor, such as human services organizations, and some evidence suggests that this pattern extends to the specific domain of poverty relief (Marx, 2000; Regnerus, Smith, and Sikkink 1998). One implication of the gender difference in charitable giving is that women tend to carry

a disproportionate burden in the provision of most charitably-funded public goods in the U.S. But why is it that men give to such causes at lower levels? And how could this gap be reduced?

In seeking to explain and address the gender gap in charitable assistance we draw upon a burgeoning line of research from social psychology on gender and the emotional underpinnings of generosity. A variety of recent studies have shown consistent gender differences in the experience of empathy and compassion (Rueckert and Naybar 2009). These social emotions are primary motivators of helping behavior toward needy others, both in general (Dovidio et al. 2006) and in particular for poverty-related charitable giving (Slovic 2010). We argue that gender differences in empathy can help explain the gender gap in charitable giving, and giving to antipoverty efforts in particular. Further, knowledge of these underlying processes can help inform effective interventions.

To this end, we investigate a variety of ways in which poverty relief could be framed that might increase willingness to give, especially among men. Theory and research from linguistics, psychology, and political science show that message framing can have large impacts on individuals' attitudes and behaviors (Lakoff 1996; Rothman and Salovey 1997). We extend this research by investigating what sorts of messages might lead men to be more concerned about poverty and give at higher levels to poverty relief. We conducted a large-scale, controlled experiment on a nationally representative sample of Americans. Respondents were exposed to one of several different messages regarding poverty and poverty relief organizations. We then assessed the effects of these different messages on poverty concern and willingness to donate money and time to a fictitious poverty-relief organization. The messages we tested were culled from past research in sociology and social psychology. Most relevant to our research questions, we test the possibility that a message designed to foster a feeling of shared fate between the poor

and non-poor might transform individuals' self-interest into group motivation, a message framing that might be uniquely effective among men.

Our research makes a variety of contributions to the literatures on poverty, charitable giving, and gender. First, we seek to establish that the previously documented gender gap in charitable giving also obtains for poverty-related charities. Second, we test whether lower levels of empathy among men can account for this gender gap. Third, we test the effectiveness of reframing the poverty issue as a social problem that has negative effects for all Americans, an intervention we argue is uniquely likely to increase men's giving since it does not rely on empathy to motivate giving. Fourth, we explore whether these frames work by changing levels of poverty concern as opposed to some other mechanism, such as changing individuals' understandings of the causes and characteristics of poverty. In the sections that follow we review two relevant background literatures, one on factors influencing charitable giving and poverty concern, the other on the gender gap in compassion and generosity. We then present the results of a survey-based experiment designed to test our claims.

PAST RESEARCH

Gender and Charitable Giving

There exists a vast literature on factors influencing charitable giving (Bekkers and Wiepking 2011; Gittell and Tebaldi 2006; Mesch et al. 2006). Among other findings, this body of research finds that charitable giving is highly patterned by socioeconomic and demographic background characteristics, with past studies finding greater giving among higher income (Andreoni and Scholz 1998; Gittell and Tebaldi 2006), older (Andreoni and Scholz 1998; Gittell and Tebaldi 2006), white (Rooney et al. 2005), married (Andreoni, Brown, and Rischall 2003; Mesch, et al.

2006), more educated (Brown and Ferris 2007), and religious individuals (Regnerus, Smith, and Sikkink 1998) individuals.

Among the most consistent predictors of charitable giving is gender. Research on gender differences in charitable giving finds that women are more likely to donate money and volunteer time to charitable organizations than men (Einolf 2011; Kamas, Preston and Baum 2008; Mesch, et al 2006; Mesch 2011; Piper and Schnepf 2008; Mesch, et al 2011; Rooney et al. 2005; Simmons and Emanuele 2007; Leslie, Snyder, and Glomb 2012). Men and women also donate differently, with women and men giving at different levels to different causes. For example, studies find that women are more likely to give to education related causes and health care organizations (Einolf 2011; Mesch 2011; Piper and Schnepf 2008). Further, Marx (2000) finds that women are almost twice as likely as men to give to charities focused on human services, a category that includes child care centers, legal aid for the poor, foster care, homeless services, food assistance, emergency relief, housing or shelter, welfare agencies and various other causes and organizations with a focus on poverty. Consistent with these results, at least one study finds that women give at higher levels to poverty-related charities (Regnerus, Smith, and Sikkink 1998). By contrast, men's charitable giving and volunteering has a very different complexion, with men giving at higher levels to sports, adult recreation, veterans', and civil rights organizations (Einolf 2011).

Hypothesis 1: Men will contribute less to poverty relief than women

Despite the relatively large body of work documenting gender differences in charitable giving, the reasons for these differences are poorly understood (Mesch et al. 2011). Of note,

recent research highlights that giving to poverty-related causes may be driven more by emotion-laden intuition than rational calculation. For example, research on the "identified victim effect" (Small and Lowenstein 2003) shows that people make greater charitable contributions when confronted with a single individual in need than with statistical accounts of large numbers of needy people, a finding that highlights the importance of empathy in charitable giving (Small, Lowenstein, and Slovic 2007; c.f., Ein-Gar and Levontin Forthcoming). In turn, there is reason to expect that women are driven more by altruistic motivations like empathy and compassion, while men's giving may be more calculated. Preliminary evidence suggests that women are more likely to donate anonymously and more likely to feel a responsibility to help those in need (Brown and Rooney 2008; Dufwenberg and Muren 2006; Kamas, Preston, and Baum 2008). Conversely, men's charitable giving is more related to tax incentives, income, and cost than women's (Andreoni, Brown and Rischall 2003). Below we explore further the possible role that chronic differences in men and women's empathy might play in explaining the gender gap in charitable giving.

Gender Differences in Prosocial Behavior and Empathy

There are a variety of factors that might drive the gender gap in charitable giving, and giving to poverty relief in particular. For example, it is possible that gender differences exist in understandings of the sources of poverty, with men perhaps viewing success in the economy as a more direct function of individual effort, making individuals' economic outcomes appear more appropriate to men than women. Conversely, women might be more likely to view the economy and sources of poverty in systemic terms, with poverty resulting from class origins or bad luck as much or more than individual merit. Alternatively, men and women might hold different

opinions about the proper role of government versus NGOs in poverty relief, with men preferring governmental provision of poverty relief. Here we suggest another possibility. Drawing upon the social psychology literature on gender and prosocial behavior, we hypothesize that systematic gender differences in the tendency to respond to the suffering of others with compassion and empathy are a primary cause of the gender gap in charitable giving.

Charitable giving can be considered a specific class of prosocial behavior, behavior that benefits others often at a cost to the self (Simpson and Willer 2008). In contrast to research on charitable giving, past research on prosocial behavior has not found consistent differences in levels of prosociality by gender in either laboratory (Batson 1998; Simpson and van Vugt 2009) or field studies (Smith 2003). But research does suggest that men and women differ in the *forms* of prosocial behavior they favor, with men being more likely to engage in conspicuous acts of heroic helping and women more likely to engage in prosocial acts involving care and nurturance (Eagly and Crowley 1986; Howard and Piliavin 2000). One recent review found that, though women and men may behave prosocially at similar levels overall, women's prosociality tends to be more relational and communal in character (Eagly 2009).

Women's greater orientation towards relational and communal prosocial behavior fits well with work showing that women typically exhibit higher levels of empathy and compassion (e.g., Rueckert and Naybar 2009). Gender differences in levels of general empathy appear early in development (Eisenberg et al. 1989). For example, research finds that that adolescent girls show greater compassion for others and less materialism and competitiveness than boys (Beutel and Marini 1995). Further, research typically finds that women report being more altruistically orientated than men (Smith 2003). Research suggests that gender differences in prosocial behavior are maintained at least in part through the influence of gender role expectations

(Boschini, Muren, and Persson Forthcoming), with women and girls being expected to exhibit empathy and communalism, while individualism, competitiveness, and agency are expected among men and boys (Wood and Eagly 2010).¹

Taken together, this past work is consistent with our claim that gender differences in levels of general empathy may drive the gender gap in charitable giving. Individuals are often moved to give to charity because of an empathic feeling towards the intended target of the charitable act. Indeed, studies suggest that the existence and strength of an emotional connection with the target of charity may be the critical factor distinguishing between when one does and does not give to a cause (Slovic 2010). Thus, the higher levels of empathy generally observed among women may offer an explanation for their higher charitable giving.

Hypothesis 2: Men will contribute less to poverty relief at least in part because of lower dispositional levels of empathy

Message Framing and Charitable Giving

In our research we not only study the factors shaping individuals' willingness to give to poverty-related charities, we also test the effectiveness of a series of strategies designed to increase giving. Research from linguistics, psychology, and political science shows large impacts of framing on the interpretation of and reaction to messages (Lakoff 1996; Rothman and Salovey 1997). This body of work shows that even small wording changes in how an issue is presented can lead to substantial effects on attitudes and behavior. Here we extend research on message

¹ Researchers have cited a variety of mechanisms – e.g., conformity to social expectations, norm internalization, biological factors – in explaining the origins of gender differences on traits such as these (Wood and Eagly 2010). Testing these more distal causes of gender differences is beyond the scope of the present investigation.

framing to investigate what sorts of messages lead people, especially men, to care more about poverty. We draw on past research from sociology, political science, and psychology in identifying four potential approaches to framing that could affect support for poverty relief.

Conformity/Social Proof. Conformity pressure and social influence are among the most widely studied influences on attitudes and behavior (Asch 1951). Abundant research from social psychology and beyond shows that individuals tend to assimilate to the perceived attitudes of others. This tendency has been called the *principle of social proof*: "we view a behavior as correct in a given situation to the degree that we see others performing it" (Cialdini 2001). Past research finds that interventions based on the principle of social proof can work well. For example, field experiments on littering (Cialdini et al. 1990) and conservation (Goldstein et al. 2008) find that framing a pro-environmental behavior as highly popular is effective at increasing the rate of that behavior.

Efficacy. A critical factor influencing individuals' decisions to give to some collective effort is their feeling that their costly giving will have some discernible impact (Komorita and Parks 1994). If giving is unlikely to make a difference in correcting a social problem or producing a public good, then individuals are unlikely to engage in it, especially if it is individually costly. Feelings that one can make a difference have been implicated in diverse prosocial behaviors, from rescuing Jews during the holocaust (Oliner and Oliner 1988) to participating in the anti-Communist protests that eventually felled the Berlin Wall (Opp 1989). While perceived efficacy is likely always an issue in charitable giving, it is an especially likely impediment in the case of poverty relief. Individuals may worry that large portions of their giving will go toward administrative costs associated with maintaining relief organizations. They may also worry that organizations simply do not know how to successfully address poverty

(Walker 2000). Consistent with this, recent research finds that giving detailed information on charitable activities can increase giving by promoting prospective donors' feelings that their contribution will make an impact (Cryder, Lowenstein, and Scheines 2013).

Clear Injustice. A great deal of research in political psychology focuses on the reluctance of individuals to accept and attach significance to social injustice. This tendency has led researchers to conjecture that people have a widespread belief that the world is, in general, just and fair. People tend to bring other thoughts in line with their belief in a just world in order to reduce cognitive dissonance (Lerner and Miller 1977). Thus, when individuals hear information on the extent of social problems they often dismiss the information in favor of their deeply-seated belief in a just world (Lerner 1980). In the case of poverty relief, the belief that the world is just is a significant impediment given the well-documented tendency to attribute the causes of poverty to the poor themselves (e.g., Lipkus 1993; Lane 2001). When such an attribution is made, support for efforts to reduce poverty is less likely. A framing approach that avoids this tendency might involve focusing on targets that are not easily viewed as deserving their poverty, like the working poor or impoverished children (Furnham 1995).

Shared Fate. A powerful, fundamental motive for human behavior is self-interest. The temptation to behave in a strictly self-interested way reduces the likelihood that individuals will make costly contributions to public goods (Olson 1965; Kollock 1998a). Given the power of self-interest, a useful way to promote costly contributions to group efforts is to emphasize how individual and collective goals are in fact one and the same (Kollock 1998b). Creating a feeling of shared fate may be effective in leading individuals to view their own self-interest as indistinguishable from that of the larger group (Sherif et al. 1954; Tajfel and Turner 1979; Simpson 2004), including its impoverished members. In the case of poverty relief, a useful

approach might be to emphasize that the entire economy and society suffers because of poverty and unemployment, a perspective that may lead individuals to view their interests, and those of others they care about, as aligned with that of the poor.

Of these framing strategies, we believe that the "shared fate" treatment is most likely to help address the gender gap in charitable giving. Research finds that men are typically lower in altruistic motivation and the emotional experience of empathy, suggesting these other-oriented motivations for giving may be insufficient to motivate giving in many men. However, a treatment designed to harness self-interest could be more effective. In addition, past research shows that men are generally more likely than women to give to collectivities, e.g., families, corporations, and nations (Eagly 2009). Researchers have argued that gender role expectations encourage such giving in men because it is viewed as agentic and offers the prospect of enhanced status in the group (Gardner and Gabriel 2004). Thus, men might be uniquely receptive to a message that portrays giving to poverty-related charities as benefiting the entire society to the extent that it effectively reframes giving as an agentic act consistent with self-interest. If such a message was effective in increasing men's giving, this would offer evidence for our claim that men give less to charity because of lower levels of general empathy, while also pointing to a potentially effective messaging strategy for promoting men's giving.

Hypothesis 3: Framing poverty as an issue that affects, not just the poor, but all citizens will increase men's contributions to poverty relief

METHODS

We sought to test these hypotheses in a general population experimental study. In the study, a representative sample of Americans were presented with a description of a non-profit organization dedicated to poverty relief in the context of a larger internet-based experiment. Our description of the organization was additionally systematically varied to reflect one of the mechanisms detailed above (or, in a control condition, no framing). We then assessed respondents' reported willingness to contribute money and volunteer time to the organization. The study also featured several additional measures, including a survey items measuring dispositional empathy and several questions gauging views of poverty. Together this design and these items allow us to test whether men are less willing to contribute to poverty-related charities, whether this effect is driven by lower empathy, and whether a "shared fate" message designed to frame the poverty issue as one affecting everyone might be effective at increasing men's concern about poverty and willingness to contribute.

Sample

We conducted our survey-based experiment on a random sample (N = 1,715) of a nationally-representative respondent panel through the Time-Sharing Experiments in the Social Sciences program.² The panel was recruited by Knowledge Networks through random digit dialing and address-based sampling. Households without internet access were provided with a laptop and monthly internet access in exchange for their participation in occasional internet based surveys. Respondents to our survey were invited to participate via email. In all, 63.3% of contacted panel members completed the study. Knowledge Networks also provided post-stratification weights designed to align the demographic characteristics of the respondent sample with the benchmarks

² We excluded subjects who took less than one minute or more than one hour to complete the survey.

of age, gender, race/ethnicity, region, education level, metropolitan/rural residency, and household internet access identified by the most recent Current Population Survey.³

Procedure

Respondents completed the study as part of a larger internet survey including several other survey-based experiments. Respondents responded to a series of demographic questions.

Additionally, respondents' levels of *empathy* were measured via their strength of agreement on a seven-point scale ranging from "Strongly disagree" to "Strongly agree" with the statement "I am often quite touched by things that I see happen," a single item taken from a standard battery measuring empathic concern (the Interpersonal reactivity Index; Davis 1980). Table 1 gives descriptive statistics for these pre-manipulation measures. Appendix B gives full text of items used in analysis.

[Table 1 about here]

After collecting these initial measures, participants were presented with a brief description of a poverty relief organization, the "Coalition to Reduce Poverty" (CRP). Though presented as real, CRP was in fact a fictitious organization. Respondents were randomly assigned to one of five conditions. In the first four conditions, the description of the organization featured an excerpt from CRP's recent call for contributions. These excerpts were intended to employ one of the above-cited mechanisms (conformity, efficacy, clear injustice, and shared fate) to promote contributions to the organization. For example, in the shard fate condition respondents were shown the following excerpt:

³ Results reported here employ the provided weights, but results for unweighted analyses were substantively the same.

"When you give to CRP, your donation addresses a problem that hurts us all. Research shows that poverty weighs down our interconnected economy, leading to greater government spending, and exacerbating many social problems like crime. You can benefit everyone, and help make the economy strong and productive for us all through your donation to CRP."

Each excerpt was constructed similarly, with an initial statement soliciting donations in a way consistent with the mechanism and then two additional sentences elaborating and then repeating the message. Full text of the excerpts is given in Appendix A. In a fifth, control condition respondents were shown the initial, short description, but no excerpt from the call for contributions.

After presentation of the organizational description, respondents were asked several questions, the answers to which served as dependent measures in our study. As a measure of, willingness to give, respondents indicated how likely they would be to "give a \$10 donation to this group" on a seven-point scale ranging from "Not Likely At All" to "Extremely Likely." As a measure of willingness to volunteer, respondents indicated how likely they would be to "volunteer 2 hours of your time on a weekend afternoon with CRP" on an identical answer scale.

Finally, respondents were asked several questions regarding their views of poverty in general. As a measure of *poverty concern*, respondents were asked "How concerned are you about poverty relative to other major issues like national security or the environment?" indicating their concern on a seven-point scale ranging from "Not concerned at all" to "Extremely concerned." We also sought to measure participants' beliefs about poverty since past research shows that such beliefs, in particular how deserving people view the poor to be, can strongly shape decisions to give to the poor (Fong and Oberholzer-Gee 2009). To measure the extent to which respondents felt that the *poor are to blame for poverty*, respondents indicated their agreement on a seven point scale ranging from 'Strongly agree" to "Strongly disagree" with the

statement "The poor are not doing enough to help themselves out of poverty." To measure beliefs that *poverty is due to circumstance*, respondents indicated the extent of their agreement with the statement "People are poor because of circumstances beyond their control." Table 1 gives descriptive statistics for these dependent measures.

RESULTS

We first sought to test our hypothesis that men will give at lower levels to poverty-related charities than women. Table 2 gives results of multivariate analyses testing the predicted relationships between gender and our two measures of contribution while controlling for various other demographic characteristics of respondents as well as dichotomous variables for the four experimental treatment conditions of our design. Model 1 gives results for respondents' reported willingness to give. Here we see that none of the experimental treatments had a main effect on reported willingness to give. Among the control variables, only race and ethnicity was related to the outcome variable, with both black and Latino respondents reporting greater willingness to give. Most relevant to our hypothesis, men reported significantly less willingness to donate to the poverty-relief organization. Specifically, men reported a mean willingness to give 7.58% lower than women, offering support for our first prediction.

[Table 2 about here]

Model 2 gives parallel results for our other primary dependent variable, willingness to volunteer. Here again, none of the experimental treatments had a main effect on the outcome variable. Among the control variables, younger respondents were more likely to volunteer, as were black, Latino, and multiethnic respondents. Again, we also found a significant effect of

⁴ Because income was asked in categories, we code the categories at their midpoints to create a continuous variable. We then use the log of annual income to account for its skewed distribution.

gender with men reporting significantly less willingness to volunteer for the poverty-relief organization. Taken together, these results provide strong support for Hypothesis 1, showing that men were significantly less willing to donate resources or volunteer time to the fictitious poverty-relief organization in the study.

The Mediating Role of Empathy

Next we sought to assess our claim that men's lower levels of contribution to poverty-related charities would be driven by generally lower levels of empathy. To test this claim, we first tested whether men in fact reported lower levels of empathy. Model 3 of Table 2 gives results of a model analyzing the effects of gender, demographic variables, and the experimental treatments on reported empathy. Among the control variables we see that older and black respondents reported greater empathy. Consistent with our expectation, men reported significantly lower levels of empathy than did women.

The next two models add empathy as an independent variable to multivariate analyses predicting respondents' willingness to contribute money and time to the poverty-relief organization. Our expectation is that controlling for empathy will reduce the effect of gender on these dependent variables because that effect is at least partly attributable to lower levels of general empathy among men. Results for Model 4 show that empathy is significantly and positively related to respondents' reported willingness to give. Further, inclusion of this term reduced the effect of gender on willingness to give to insignificance. Results for Model 5 are substantively similar. Here also we find that empathy is positively related to willingness to volunteer time to the poverty-relief organization. Additionally, inclusion of this term reduced the

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⁵ Though empathy was measured prior to the experimental treatments, we control for the treatments to establish consistency across our models. Results were the same in alternate model that excluded these controls.

magnitude of the effect of gender on willingness to volunteer. These results are consistent with our second hypothesis which claims that men's lower willingness to contribute to poverty-relief organizations is at least partly due to lower levels of empathy.

We conducted mediation analyses to more fully explore the role of empathy as an intervening variable. Full results of these mediation analyses are given in Figure 1. Consistent with the above analyses, the figure shows that gender was positively related to empathy as well as both measures of willingness to contribute. Further, empathy was positively related to both measures of willingness to contribute. Finally, as above, in analyses including both gender and empathy, only empathy was significantly related to willingness to donate. Empathy was also significantly related to willingness to volunteer and the significance of gender was diminished in this model. Sobel tests confirmed that empathy mediated the effects of gender on both willingness to donate and volunteer (z's = 3.75 and 3.71, respectively; p's < .001). Again, these results are consistent with our claim that the gender gap in charitable giving can be partly explained by men's generally lower levels of empathy.

[Figure 1 about here]

Increasing Men's Giving

Here we have not only sought to empirically establish that a gender gap exists in charitable giving, but also test strategies by which the gap might be reduced. We reasoned that research on men's lower levels of empathy and altruistic motivation might help explain the gender gap in charitable contributions, an argument that found support in the above analyses. Given this, it is plausible that strategically framing contributions to poverty as offering broad social benefits to

all citizens might effectively transform self-interest into group motivation, leading less altruistic individuals to be more concerned about poverty and motivated to contribute.

In the above models we found no main effects of message framing on respondents' reported willingness to contribute, but our prediction was that men might specifically respond to the shared fate treatment. To test this claim we next tested for possible interaction effects between gender and the various experimental treatments of our study. Results of these analyses are presented in Table 3. Model 1 tests the effect of demographic variables, the experimental treatments, and the interaction of gender and the experimental treatments on respondents' reported willingness to give to the poverty relief organization. Results of this model show a significant positive interaction of the shared fate treatment and male. None of the experimental treatments, nor any of the other interactions with gender, were significant in this model.

[Table 3 about here]

Figure 2 presents this interaction effect with all control variables set to their means. As shown in the figure, men exposed to the shared fate treatment were significantly more willing to give to the poverty relief organization. Women exposed to the treatment reported slightly less willingness to give, underscoring the very different reactions of men and women to this treatment.

[Figure 2 about here]

Model 2 gives results of a parallel model but with respondents' willingness to volunteer to the poverty-relief organization as the dependent variable. Here again we found a significant, positive interaction of the shared fate treatment and male. However, we also found a negative main effect of the shared fate treatment. This indicates that women reported being significantly less willing to volunteer time to the organization when presented with the shared fate framing.

None of the other experimental treatments or interactions with gender were significant. Figure 3 portrays this interaction, showing that male participants presented with the shared fate message were more willing to volunteer time to the organization, but women were less willing. The latter negative effect for women suggests that the use of shared fate messaging in the field would be most effective when specifically targeted at men.

[Figure 3 about here]

While these analyses show that the shared fate treatment was effective in increasing men's giving to the poverty-relief organization presented in our study, they do not speak to why. We have argued that a shared fate message framing will be successful because it will increase concerns about the poverty issue among men who would normally be less motivated than women to contribute due to generally lower levels of empathy. However, it is possible that this treatment changed men's willingness to contribute for other reasons. For example, it could be that framing poverty as affecting the whole society primed respondents to think differently about the causes of poverty, possibly viewing it in more systemic, contextual terms. Past research finds that viewing social structural forces as the source of poverty is linked with more sympathetic reactions to poverty (e.g., Skitka and Tetlock 1992; Pellegrini et al. 1997).

We conducted a series of tests to evaluate whether the shared fate treatment increased men's contributions to poverty relief by increasing their concerns about poverty or by changing their understanding of the sources of poverty. Models 1 and 2 of Table 4 test the effects of demographic controls, the experimental treatments, and the interaction of the experimental treatments and gender on two measures of whether respondents viewed the causes of poverty as social: belief that the poor are to blame for poverty and, conversely, belief that poverty is due to circumstances. In neither model was the interaction of the shared fate treatment and male

significant. Thus, while we found that men reported greater belief that the poor are to blame for poverty and less belief that poverty is due to circumstances, we found no evidence that the shared fate treatment increased either belief. Model 3 conducts a parallel analysis for respondents' reported levels of poverty concern. This model shows a negative effect of male, but also a significant, positive interaction of shared fate and male, on poverty concern.

[Table 4 about here]

This latter finding is consistent with our claim that the shared fate treatment increased men's contributions to poverty relief by increasing their concern about poverty, not by changing their understanding of the sources of it. To more completely test this mediational claim, we next analyzed whether adding our measure of poverty concern might reduce or eliminate the interactive effects of the shared fate treatment and gender on contribution behavior. Models 4 and 5 of Table 4 give results of these analyses. Because this constitutes a test of "mediated moderation," we include in these models measures of not only the proposed mediating variable (poverty concern) but also a term for the interaction of the mediator and the moderator (poverty concern and shared fate treatment) (Muller et al. 2005). For both models, results reveal that the poverty concern was highly related to both measures of respondents' willingness to contribute, but the interactive effects of gender and the shared fate treatment on both outcome variables was reduced to insignificance in both models. Sobel tests confirmed that poverty concern mediated the interactive effects of shared fate and gender on willingness to donate and volunteer (z's = 3.00 and 2.98, respectively; p's < .01). Together, these findings offer strong evidence that the shared fate treatment increased men's contributions to poverty relief by increasing their concern about the poverty issue, not by changing their understanding of the sources of poverty.

DISCUSSION

The results of our study offered consistent support for our three hypotheses. First, we found that when presented with an appeal from a poverty-relief organization, men reported less willingness to contribute either money or time to the organization. This finding is consistent with past research on gender and charitable giving, which has typically found significant gender gaps in levels of contribution. Additionally, we found that empathy fully mediated the effect of gender on willingness to give and partially mediated the effect on willingness to volunteer. These findings support our prediction that men's generally lower levels of empathy at least partly accounted for the gender gap in contribution levels. This finding extends research on gender and empathy from social psychology to better understand one of the most frequently documented findings from research on charitable giving.

We also sought to test various message framing strategies that could be employed to reduce the gender gap in charitable giving. Of the messages we tested, we hypothesized that framing poverty as an issue that affects all citizens would be effective at increasing men's willingness to contribute. We found support for this hypothesis, as men exposed to such a "shared fate" message reported significantly greater willingness to give, contributing at levels comparable to women. Men also reported greater willingness to volunteer time to the poverty relief organization. Women, however, showed less interest in volunteering after exposure to the message, a finding we return to below. No other message frames were effective in increasing men's reported willingness to give or volunteer. These finding are consistent with our argument that men's lower charitable giving owes to lower levels of empathy, as men's contributions were increased by a message designed to align giving with self-interest, but was unaffected by messages highlighting the efficacy of giving or the injustice of poverty.

Finally, we sought to assess why the shared fate message was successful in increasing men's willingness to contribute. We found no evidence that the message changed male respondents' views of the causes of poverty. Instead, we found that men presented with a shared fate message reported greater concern about poverty, consistent with our reasoning that men would be more concerned with the issue when they viewed it as potentially affecting their own lives.

Taken together, these findings shed light on the underlying causes of the gender gap in charitable giving as well as how it could be reduced. A substantial body of research in social psychology has found that men tend to respond less empathically to the suffering of others. Here we applied that research to better understand a robust finding from past research, men's tendency to give at lower levels to charity. We found not only that lower levels of general empathy partially explained men's lower giving to a poverty-relief organization, but also that reframing the issue as one that could affect them increased their poverty concern and willingness to contribute to poverty relief. These latter findings echo past research on how the invocation of a feeling of shared fate can effectively transform self-interest in group motivation, increasing prosocial behavior (e.g., Sherif et al. 1954; Simpson 2004). Our findings also contribute to the literature on gender and prosocial behavior more generally, invoking an emotional factor – empathy – as an intervening variable that helps explain gender differences in generosity. Indeed, the forms of generous behavior that past research has found women are more likely to perform – helping within intimate relationships, caring for suffering others, giving to charities that benefit the needy – are exactly the forms of generosity that are most dependent on empathy.

It is worth highlighting that women in the shard fate condition reported lower willingness to give time or money to the poverty relief organization than women in the control condition, and

that these negative effects partly drove the significant interactions effects we observed. These findings suggest the possibility that women respond aversively to messages emphasizing that charitable giving is consistent with their own interests. The finding also suggests a practical limitation of framing strategies like our shared fate message, as the effectiveness of such messages among men might be countervailed by their ineffectiveness among women if deployed indiscriminately. On the other hand, it is possible that a message portraying giving as highly altruistic would be effective at increasing women's willingness to contribute, a framing strategy similar to those used by egg agencies in soliciting female donors (Almeling 2007). Together, our findings are consistent with the logic of segmentation, the notion that different groups of people find different messages more or less persuasive, a frequent finding in the framing literature (e.g., Anderson and Jolson 1980).

Our research also offers insight on the factors influencing Americans' concerns about poverty, where past research has largely focused on welfare, race, and policy attitudes (e.g., Gilens 2000, Hasenfeld and Rafferty 1989). While work in this vein is important, concerns about poverty and willingness to contribute to poverty relief are significant in their own right.

Developing a greater understanding of the dynamics of non-governmental giving to the poor and how to increase it is especially critical in light of the fact that, while poverty is cyclical, charitable giving is counter-cyclical; i.e., poverty is highest precisely when Americans have the fewest resources to give (Reich et al. 2011). Indeed, according to a recent survey of human services NGOs conducted by the Urban Institute, non-profits serving disadvantaged populations often rely on donations either as their largest source of funding or as a crucial source of unrestricted revenue within their overall budgets (Boris et al. 2010). Half of NGOs in this survey reported declines in contributions during the recession, precisely the time when need for services

was rising. Given that the United States is unique among rich nations in the degree to which it relies on NGOs to provide poverty relief and services, it is important to understand the factors determining giving, especially when giving can be expected to decline precisely when it is needed most.

Limitations and Future Directions

While we have sought in the present research to move beyond analysis of why people support government poverty assistance to instead look at what Americans are themselves willing to do for the poor, there are nonetheless significant limitations to our approach. First and foremost, we have relied extensively on self-reported behavioral intentions in our study. While it is plausible that reported intentions are more predictive of actual behavior than attitudes (e.g., Fishbein and Ajzen 2009), they are nonetheless a rough approximation. It is possible that social desirability bias may have led our respondents to exaggerate their willingness to donate time or money to the poverty-relief organization we presented them with. But while this concern would affect interpretation of the levels of reported willingness to contribute, there do not appear to be consistent gender differences in social desirability response bias (e.g., Riketta 2005; but see also Paulhus 1991) that would render our substantive findings spurious. Even if a tendency for women to give more desirable responses on surveys partially explains our finding regarding gender and charitable contribution, it would not account for the mediation and moderation findings we find converge with this initial pattern. Regardless, further field research using more ecologically valid measures of contribution behavior would be quite valuable.

Another limitation of the present study lies in our ability to craft vivid and effective messages. Within the randomized, controlled nature of the study, it was necessary to make the

differently messages as similar to one another as possible, with the only difference being the framing itself. But this is clearly not how marketing professionals would approach the task of creating a maximally effective message. To enhance the effectiveness of the messages one might focus on making the message as compelling as possible, supplementing the appeal with conspicuous and memorable visuals. The shared fate treatment is of particular relevance here as the chain of logic connecting poverty to one's self-interest is arguably the most complex among our experimental treatments. Given this complexity, it was perhaps particularly impressive that a short form version of the message frame showed such consistent effects on men's reported willingness to give to poverty relief.

This research suggests more generally the value of using message framing to target specific groups for charitable donation. The larger literature on gender and prosocial behavior implies some other possibly fruitful strategies. For example, it is plausible that presenting charitable contribution as heroic or courageous could be effective for promoting giving among men. Alternatively, increasing the prospect of reputational rewards for giving could also be effective for targeting men (Kamas, Preston, and Baum 2008). Likewise, women's giving could potentially be promoted by emphasizing the suffering of specific targets and by encouraging a relational or communal view of the beneficiaries of the charitable cause. Future work should explore other avenues for increasing charitable contributions, both to antipoverty organizations and to other types of charitable causes. It is unclear whether framings that appeal to one group involving one type of giving would apply to giving to other types of organizations, a gap that future research could be helpful in addressing.

CONCLUSION

The U.S. is unique among its peer nations for its reliance on private funding of various public goods, in particular poverty relief. The necessity to mobilize private provision of poverty relief has become even more critical with the recent economic downturn and attendant rising unemployment. Yet little academic research has studied how best to promote such charitable contributions. Here we focused on the gender gap in charitable giving and what strategies might be effective at reducing it by increasing men's giving. We found that a message which emphasizes the interdependence of society and the economy was effective for increasing men's willingness to contribute, effectively closing the gender gap. These results suggest that this view, in which the direct and indirect deleterious effects of poverty are felt by all, is both substantively consistent with the sociological literature on the dynamics of poverty, and potentially helpful in fostering a more equitable provision of this important public good.

REFERENCES

- Alesina, Alberto, and Edward Glaeser. 2004. *Fighting Poverty in the US and Europe: A World of Difference*, New York: Oxford University Press.
- Almeling, Rene. 2007. "Selling Genes, Selling Gender: Egg Agencies, Sperm Banks, and the Medical Market in Genetic Material." *American Sociological Review*. 72:319-340.
- Anderson, Rolph, and Marvin A. Jonson. 1980. "Technical Wording in Advertising: Implications for Market Segmentation." *Journal of Marketing*. 42:59-70.
- Andreoni, James, Eleanor Brown, and Isaac Rischall. 2003. "Charitable Giving by Married Couples: Who Decides and Why Does it Matter?" *The Journal of Human Resources*. 38: 111-133.
- Andreoni, James, and John Karl Scholz. 1998. "An Econometric Analysis of Charitable Giving with Interdependent Preferences." *Economic Inquiry*. 36:410-428.
- Batson, Daniel C. 1991. *The Altruism Question: Toward A Social- Psychological Answer*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Batson, Daniel C. 1998. "Altruism and Prosocial Behavior." Pp. 282-316 in *Handbook of Social Psychology, Vol.* 2. (Eds. Susan T. Fiske, Daniel T. Gilbert, and Gardner Lindzey). Boston: McGraw-Hill.
- Bekkers, Rene and Pamela Wiepking. 2011. "A Literature Review of Empirical Studies of Philanthropy: Eight Mechanisms That Drive Charitable Giving." *Nonprofit and Voluntary Sector Quarterly.* 40:924-973.
- Beutel, Ann M., and Margaret Mooney Marini. 1995. "Gender and Values." *American Sociological Review*. 60:436-448.
- Boris, Elizabeth T., Erwin de Leon, Katie L. Roeger, and Milena Nikolova. 2010. *Human Service Nonprofits and Government Collaboration: Findings from the 2010 National Survey of Nonprofit Government Contracting and Grants*. Washington, DC: The Urban Institute.
- Boschini, Anne, Astri Muren, and Mats Persson. Forthcoming. "Constructing Gender Differences in the Lab." *Journal of Economic Behavior and Organization*.
- Brown, Eleanor, and James M. Ferris. 2007. "Social Capital and Philanthropy: An Analysis of the Impact of Social Capital on Individual Giving and Volunteering." *Nonprofit and Voluntary Sector Quarterly*. 36:85-99

- Brown, Melissa, Patrick Rooney, Hao Han, and Shaun Miller. 2008. *Generational and Gender Differences in Motivations for Giving*. Indianapolis, IN: The Center on Philanthropy at Indiana University.
- Cryder, Cynthia, George Lowenstein, and Richard Scheines. Forthcoming. "The Donor is in the Details." *Organizational Behavior and Human Decision Processes*.
- Davis, Mark H. 1980. "A Multidimensional Approach to Individual Differences in Empathy." JSAS Catalog of Selected Documents in Psychology. 10:85.
- Dovidio, John F., Jane Allyn Piliavin, David A. Schroeder, and Louis A. Penner. 2006. *The Social Psychology of Prosocial Behavior*. Mahwah, NJ.: Lawrence Ehrlbaum.
- Dufwenberg, M. and Muren, A. 2006. "Generosity, Anonymity, Gender." *Journal of Economic Behavior & Organization*. 61:42-49.
- Eagly, Alice H. 2009. "The His and Hers of Prosocial Behavior: An Examination of the Social Psychology of Gender." *American Psychologist*. 644-658.
- Eagly, Alice H., and M. Crowley. 1986. "Gender and Helping Behavior: A Meta-Analytic Review of the Social Psychological Literature." *Psychological Bulletin.* 100:283-308.
- Ein-Gar, Danit, and Liat Levontin. Forthcoming. "Giving from a Distance: Putting the Charitable Organization at the Center of the Donation Appeal." *Journal of Consumer Psychology*.
- Einolf, Christopher J. 2006. "The Roots of Altruism: A Gender and Life Course Perspective." Retrieved from ProQuest Digital Dissertations. (AAT 3235030).
- Einolf, Christopher J. 2011. "Gender Differences in the Correlates of Volunteering and Charitable Giving." *Nonprofit and Voluntary Sector Quarterly*. 40:1092-1112.
- Eisenberg, Nancy, Richard A. Fabes, Mark Schaller, and Paul A. Miller. 1989. "Sympathy and Personal Distress: Development, Gender Differences, and Interrelations of Indexes." *New Directions for Child and Adolescent Development*. 44: 107–126.
- Fishbein, Martin, and Icek Ajzen. 2009. *Predicting and Changing Behavior: The Reasoned Action Approach*. New York: Taylor and Francis.
- Fong, Christina M. and Felix Oberholzer-Gee. 2009. "Truth in Giving: Experimental Evidence on the Welfare Effects of Informed Giving to the Poor." *Journal of Public Economics*. 95:436-444.
- Gardner, Wendi L., and Shira Gabriel. 2004. "Gender Differences in Relational and Collective Interdependence: Implications for Self-Views, Social Behavior, and Subjective Wellbeing." Pp. 169-1991 in *The Psychology of Gender*, 2nd ed. (Eds. A. H. Eagly, A. Beall, & R. J. Sternberg). New York: Guilford Press.

- Gilens, Martin. 2000. Why Americans Hate Welfare: Race, Media, and the Politics of Antipoverty Policy. Chicago: University of Chicago.
- Gittell, Ross and Edinaldo Tebaldi. 2006. "Charitable Giving: Factors Influencing Giving in the United States. *Non-Profit and Voluntary Sector Quarterly*. 35:721-737.
- Hasenfeld, Yeheskel, and Jane A. Rafferty. 1989. "The Determinants of Public Attitudes Toward the Welfare State." *Social Forces*. 67:1027-1048.
- Howard, Judith A., and Jayne A. Piliavin. 2000. "Altruism." Pp. 114-120 in *Encyclopedia of Sociology*. (Eds. E.F. Borgatta and R.J.V. Montgomery). New York: Macmillan.
- Kamas, Linda, Ann Preston, and Sandy Baum. 2008. "Altruism in Individual and Joint-Giving Decisions: What's Gender Got to Do With It?" *Feminist Economics*. 14:23-50.
- Katz, Michael B. 2001. *The Price of Citizenship: Redefining the American Welfare State*. New York: Metropolitan Books.
- Lakoff, George. 1996. *Moral Politics: How Liberals and Conservatives*. Chicago: University of Chicago.
- Leslie, Lisa M., Mark Snyder, and Theresa M. Glomb. Forthcoming. "Who Gives? Multilevel Effects of Gender and Ethnicity on Workplace Charitable Giving." *Journal of Applied Psychology*.
- Lipset, Seymour Martin. 1996. *American Exceptionalism: A Double-Edged Sword*. New York: Norton.
- Marx, Jerry D. 2010. "Women and Human Services Giving." Social Work. 45: 27-38.
- Mesch, Debra J., Patrick M. Rooney, Kathryn S. Steinberg, and Brian Denton. 2006. "The Effects of Race, Gender, and Marital Status on Giving and Volunteering in Indiana." *Nonprofit and Voluntary Sector Quarterly*. 35:565-587.
- Mesch, Debra J., Melissa S. Brown, Zachary I. Moore, and Amir Daniel Hayat. 2011. "Gender Differences in Charitable Giving." *International Journal of Nonprofit and Voluntary Sector Marketing*. 16: 342-355.
- Muller, Dominique, Charles M. Judd, and Vincent Y. Yzerbyt. 2005. "When Moderation is Mediated and Mediation is Moderated." *Journal of Personality and Social Psychology*. 89:852-863.

- Paulhus, Delroy L. 1991. "Measurement and Control of Bias." Pp. 17-59 in *Measures of Personality and Social Psychological Attitudes* (Eds. J.P. Robinson, P.R. Shaver, and L.S. Wrightman). San Diego: Academic Press.
- Pellegrini, R. J., Queirolo, S. S., Monarrez, V. E., and Valenzuela, D. M. 1997. "Political Identification and Perceptions of Homelessness: Attributed Causality and Attitudes on Public Policy." *Psychological Reports*. 80:1139-1148.
- Piper, Greg, and Sylke V. Schnepf. 2008. "Gender Differences in Charitable Giving in Great Britain." *Voluntas: International Journal of Voluntary and Nonprofit Organizations*. 19:103-124.
- Regnerus, Mark D., Christian Smith, and David Sikkink. 1998. "Who Gives to the Poor? The Role of Religious Tradition and Political Location on the Personal Generosity of Americans Toward the Poor." *Journal for the Scientific Study of Religion*. 37:481–93.
- Reich, Rob, Christopher Wimer, Shazad Mohamed, and Sharada Jambulapathi 2011. "The Great Recession, Philanthropy, and the Nonprofit Sector: Has the Great Recession Made Americans Stingier?" Pp. 294 -313 in Grusky, David B., Bruce Western, and Christopher Wimer (Eds.) *The Great Recession*. New York, NY: Russell Sage.
- Riketta, Michael. 2005. "Gender and Socially Desirable Responding as Moderators of the Correlation Between Implicit and Explicit Self-Esteem." *Current Research in Social Psychology*. 11:14-28.
- Rooney, Patrick, Eleanor Brown, and Debra Mesch. 2007. "Who Decides in Giving to Education? A Study of Charitable Giving by Married Couples." *International Journal of Educational Advancement*. 7:229-242.
- Rooney, Patrick M., Debra J. Mesch, William Chin, and Kathryn S. Steinberg. 2005. "The Effects of Race, Gender, and Survey Methodologies on Giving in the U.S." *Economics Letters*. 86:173-180.
- Rothman, Alexander J., and Peter Salovey. 1997. "Shaping Perceptions to Motivate Healthy Behavior: The Role of Message Framing. *Psychological Bulletin*. 121:3-19.
- Rueckert, Linda, and Nicolette Naybar. 2008. "Gender Differences in Empathy: The Role of the Right Hemisphere." *Brain and Cognition*. 67:162–167.
- Simmons, Walter, and Rosemarie Emanuele. 2007. "Male–Female Giving Differentials: Are Women More Altruistic?" *Journal of Economic Studies*. 34:534–550.
- Simpson, Brent. 2004. "Social Values, Subjective Transformations, and Cooperation in Social Dilemmas." *Social Psychology Quarterly*. 67:385-395.

- Simpson, Brent and Robb Willer 2008. "Altruism and Indirect Reciprocity: The Interaction of Person and Situation in Prosocial Behavior." *Social Psychology Quarterly.* 71:37-52.
- Simpson, Brent, and Mark Van Vugt. 2009. "Sex Differences in Cooperation: Integrating the Evolutionary and Social Psychological Perspectives." *Advances in Group Processes*. 26:81-103.
- Skitka, Linda J., and Philip E. Tetlock. 1992. "Allocating Scarce Resources: A Contingency Model of Distributive Justice." *Journal of Experimental Social Psychology.* 28: 491-522.
- Slovic, Paul. 2010. "The More Who Die, The Less We Care." Pp. 30-40 in *The Irrational Economist: Making Decisions in a Dangerous World* (Eds. Paul Slovic and Erwann Michel-Kerjan). New York: Public Affairs Press.
- Small, Deborah A., and George Lowenstein. 2003. "Helping a Victim or Helping the Victim: Altruism and Identifiability." *The Journal of Risk and Uncertainty*. 26:5-16.
- Small, Deborah A., George Lowenstein, and Paul Slovic. 2007. "Sympathy and Callousness: The Impact of Deliberative Thought to Donations to Identifiable and Statistical Victims." *Organizational Behavior and Human Decision Processes*. 102:143-153.
- Smeeding, Timothy M. 2008. "Poverty, Work, and Policy: The United States in Comparative Perspective." Pp. 327-329 in *Social Stratification: Class, Race, and Gender in Sociological Perspective, 3rd ed.* (Ed. David Grusky). Boulder, CO: Westview.
- Smith, Tom. 2003. "Altruism in Contemporary America: A Report from the National Altruism Study." *GSS Topical Report No. 34*. Chicago, IL: National Opinion Research Center, University of Chicago.
- Wood, Wendy, and Alice H. Eagly. 2010. "Gender." Pp. 629-667 in *Handbook of Social Psychology* (Eds. S.T. Fiske, D.T. Gilbert, and G. Lindzey). Hoboken, NJ: Wiley.

Table 1. Weighted Descriptive Statistics for Variables Used in Analysis

	Mean	SD	Minimum	Maximum
Male	0.48	0.5	0	1
Race (white omitted)				
Black	0.12	0.32	0	1
Other race	0.03	0.18	0	1
Hispanic	0.15	0.35	0	1
Two races	0.03	0.17	0	1
Age (years)	49.15	16.64	18	93
Income (logged)	10.46	0.92	7.82	12.41
Education (less than HS ommitted)				
High school	0.34	0.47	0	1
Some college	0.27	0.44	0	1
College or more	0.25	0.43	0	1
Other variables (pre-manipulation)				
Empathy	4.83	1.43	1	7
Other variables (post-manipulation)				
Willingness to Give	2.86	1.85	1	7
Willingness to Volunteer	2.82	1.89	1	7
Poverty Concern	4.46	1.66	1	7
Poor are to Blame	3.92	1.75	1	7
Poverty Due to Circumstance	4.27	1.51	1	7

Notes: N=1,715

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Table 2: Coefficients from OLS Models Analyzing Effects of Gender on Contribution and the Mediating Role of Empathy

	Willingness to Give Model 1		Willingness to Volunteer Model 2		Empathy Model 3		Willingness to Give Model 4		Willingness to Volunteer Model 5	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Experimental Treatment										
Conformity	0.250	0.162	0.056	0.177	0.192	0.137	0.201	0.158	0.006	0.172
Efficacy	0.191	0.165	-0.126	0.172	-0.059	0.134	0.199	0.160	-0.117	0.167
Injustice	-0.078	0.162	-0.097	0.177	-0.007	0.137	-0.083	0.162	-0.100	0.173
Shared Fate	0.146	0.168	-0.177	0.178	0.123	0.139	0.112	0.166	-0.210	0.177
Control (Omitted)										
Race										
Black	1.393 ***	0.202	1.583 ***	0.204	0.326 *	0.143	1.318 ***	0.195	1.509 ***	0.200
Other race	0.224	0.297	0.428	0.275	0.068	0.247	0.202	0.280	0.412	0.269
Hispanic	0.385 *	0.193	0.646 **	0.205	-0.065	0.160	0.403 *	0.195	0.667 ***	0.204
Two races	0.303	0.284	0.535 *	0.237	0.245	0.184	0.247	0.285	0.480 *	0.238
White (Omitted)										
Education										
High School	-0.049	0.186	-0.219	0.200	-0.191	0.153	-0.012	0.183	-0.180	0.196
Some college	-0.019	0.198	-0.048	0.212	0.177	0.162	-0.068	0.200	-0.092	0.213
College or more	0.300	0.209	0.061	0.219	0.187	0.164	0.249	0.209	0.014	0.217
Less than high school (ommitted)										
Age	-0.002	0.003	-0.011 ***	0.003	0.014 ***	* 0.003	-0.005	0.003	-0.014 ***	0.003
Income (logged)	0.035	0.061	-0.062	0.072	-0.035	0.052	0.044	0.062	-0.053	0.072
Male	-0.226 *	0.107	-0.543 ***	0.108	-0.437 ***	* 0.085	-0.128	0.107	-0.447 ***	0.106
Empathy							0.230 ***	0.042	0.225 ***	0.042
Constant	2.331 ***	0.639	4.097 ***	0.737	4.618 ***	* 0.577	1.272	0.668	3.058 ***	0.763
N	1,696		1,694		1,707		1,696		1,694	
R-Squared	0.068		0.118		0.065		0.098		0.145	

Significance Levels: *<0.05; **<0.01; ***<0.001 Notes: Listwise deletion used for missing data.

Table 3: Coefficients from OLS Models Analyzing Interactive Effects of Gender and Experimental Treatments on Contribution

	Willingess	s to Give	Willingness to Volunteer			
	Mode	el 1	Model 2			
	Coef.	S.E.	Coef.	S.E.		
Experimental Treatment						
Conformity	0.056	0.240	-0.061	0.263		
Efficacy	-0.076	0.241	-0.328	0.251		
Injustice	-0.171	0.255	-0.080	0.268		
Shared Fate	-0.251	0.235	-0.528 *	0.258		
Control (Omitted)						
Race						
Black	1.384 ***	0.202	1.620 ***	0.201		
Other race	0.252	0.297	0.433	0.273		
Hispanic	0.376 *	0.191	0.637 **	0.203		
Two races	0.298	0.281	0.526 *	0.237		
White (Omitted)						
Education						
High School	-0.010	0.186	-0.164	0.199		
Some college	0.032	0.198	0.013	0.211		
College or more	0.348	0.209	0.114	0.219		
Less than high school (ommitted)						
Age	-0.003	0.003	-0.011 **	0.003		
Income (logged)	0.042	0.061	-0.058	0.072		
Male	-0.596 **	0.212	-0.802 **	0.254		
Treatments X Gender						
Confomity X Male	0.407	0.321	0.238	0.348		
Efficacy X Male	0.626	0.328	0.470	0.339		
Injustice X Male	0.218	0.322	-0.046	0.349		
Shared Fate X Male	0.800 *	0.332	0.750 *	0.350		
Constant	2.412 ***	0.641	4.095 ***	0.741		
N	1,68	89	1,687			
R-Squared	0.0		0.123			

Significance Levels: *<0.05; **<0.01; ***<0.001 Notes: Listwise deletion used for missing data.

Table 4: Further Analyses of Interactive Effects of Gender and Experimental Treatments and Mediating Role of Poverty Concern

	Poor are to Blame Model 1		Poor Due to Circumstance Model 2		Poverty Concern Model 3		Willingness to Give Model 4		Willingness to Volunteer Model 5		
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	
Experimental Treatment											
Conformity	-0.254	0.220	0.105	0.178	0.273	0.207	-0.070	0.212	-0.186	0.231	
Efficacy	0.061	0.210	-0.054	0.181	-0.196	0.230	0.024	0.210	-0.240	0.206	
Injustice	0.290	0.219	-0.322	0.192	-0.312	0.214	-0.026	0.238	0.060	0.231	
Shared Fate	0.156	0.213	-0.062	0.186	-0.377	0.223	0.257	0.380	-0.343	0.358	
Control (Omitted)											
Race											
Black	-0.688 *	** 0.162	0.694 ***	* 0.140	0.690 **	* 0.176	1.064 **	** 0.178	1.309 ***	0.169	
Other race	-0.104	0.297	-0.025	0.211	0.092	0.240	0.193	0.290	0.392	0.243	
Hispanic	-0.363	0.192	0.152	0.171	0.255	0.175	0.273	0.178	0.524 **	0.178	
Two races	-0.087	0.304	0.288	0.227	0.314	0.237	0.160	0.271	0.386	0.231	
White (Omitted)											
Education											
High School	0.106	0.191	-0.111	0.171	-0.085	0.171	0.032	0.173	-0.126	0.176	
Some college	0.060	0.200	-0.379 *	0.174	0.074	0.180	0.003	0.183	-0.020	0.186	
College or more	-0.338	0.200	-0.041	0.180	0.268	0.185	0.237	0.193	-0.009	0.196	
Less than high school (ommitted)											
Age	0.002	0.003	-0.002	0.003	0.003	0.003	-0.004	0.003	-0.012 ***	0.003	
Income (logged)	0.244 *:	** 0.065	-0.290 ***	* 0.054	-0.203 **	* 0.058	0.129 *	0.056	0.033	0.069	
Male	0.499 *	0.198	-0.403 *	0.185	-0.638 **	0.214	-0.297	0.190	-0.516 *	0.224	
Treatments X Gender											
Confomity X Male	-0.087	0.305	0.002	0.265	-0.106	0.297	0.454	0.286	0.287	0.316	
Efficacy X Male	-0.180	0.294	0.260	0.260	0.504	0.310	0.383	0.290	0.244	0.294	
Injustice X Male	-0.548	0.303	0.608 *	0.264	0.267	0.305	0.092	0.300	-0.172	0.312	
Shared Fate X Male	-0.235	0.326	0.174	0.286	0.960 **	0.313	0.374	0.307	0.318	0.316	
Poverty Concern							0.466 **	** 0.033	0.449 ***	0.035	
Shared Fate X Poverty Concern							-0.077	0.079	-0.003	0.075	
Constant	1.237	0.726	7.623 ***	* 0.589	6.541 **	* 0.633	-0.573	0.609	1.163	0.735	
N	1,7	07	1,70	07	1,696		1,689		1,68	1,687	
R-Squared	0.0)56	0.08	86	0.00	64	0.	226	0.26	8	

Significance Levels: *<0.05; **<0.01; ***<0.001

Notes: Listwise deletion used for missing data.

Figure 1: Results of mediation analyses of the effects of gender on willingness to donate and volunteer to the poverty-relief organization, with empathy as the hypothesized mediator. A dotted arrow indicates that the strength of a relationship is reduced in the full model. Age, race/ethnicity, income, education, and dummy variables for the four experimental treatments were control variables in all analyses.

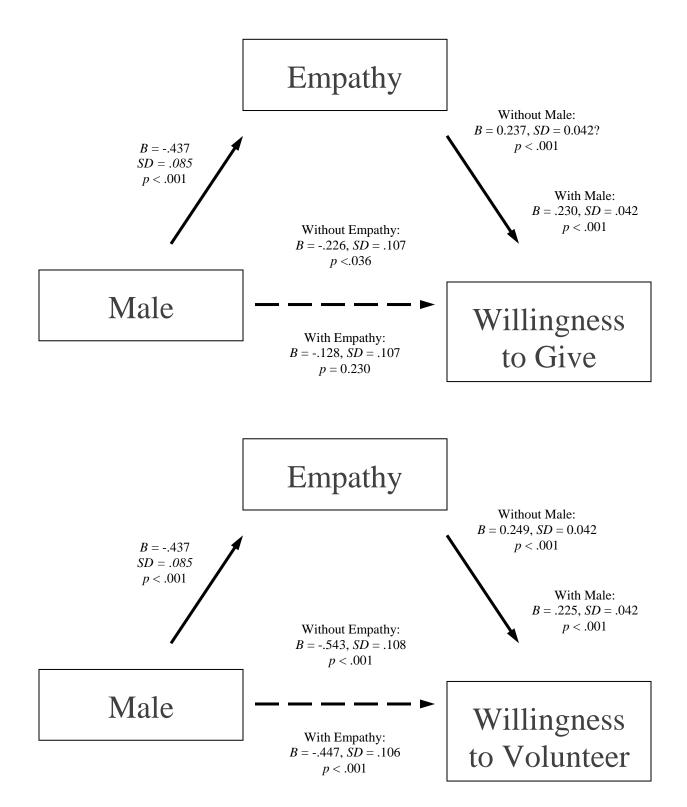


Figure 2: Graph of the effect of the shared fate message on men's and women's reported willingness to give money to the poverty relief organization (all control variables set to their means)

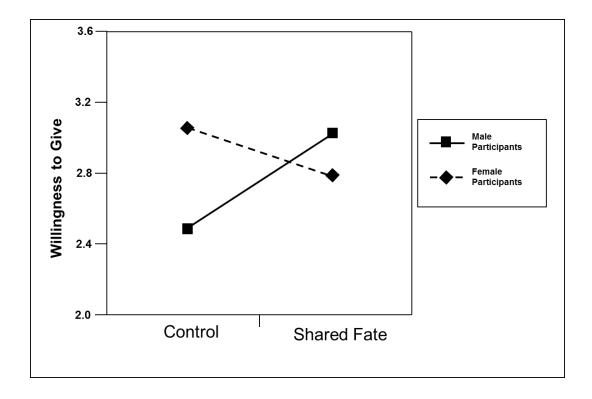
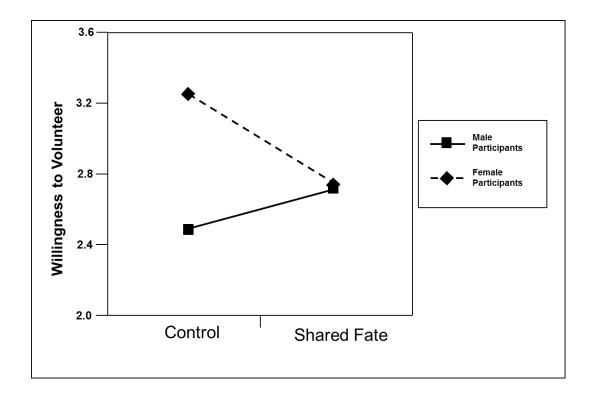


Figure 3: Graph of the effect of the shared fate message on men's and women's reported willingness to volunteer time to the poverty relief organization (all control variables set to their means)



APPENDIX A

Description of poverty relief non-profit organization

INTRODUCTION (All Conditions)

The Coalition to Reduce Poverty (CRP) today announced the launch of a fundraising drive to raise \$2 million dollars through small donations. CRP provides direct assistance and services to help low-income families escape poverty.

Condition 1: No Message (Control)

Condition 2: Conformity/Social Proof

Below is an excerpt from CRP's recent call for contributions:

"When you give to CRP, you join your fellow citizens in helping to fight poverty. The poor are now being helped by record numbers of charitable givers across the country. You can join the movement to eliminate poverty with your contribution to CRP."

Condition 3: Efficacy

Below is an excerpt from CRP's recent call for contributions:

"When you give to CRP, your donation counts. Multiple external audits confirm that more than 98% of donations to CRP go on to directly benefit the poor. You can be assured CRP will put your contribution to work by using your donation to fight poverty effectively."

Condition 4: Clear Injustice

Below is an excerpt from CRP's recent call for contributions:

"When you give to CRP, you help fight the injustice of poverty today. Of the millions of people who fall below the poverty line, many of them were born into poverty and never had the opportunities that other Americans did. You can help address the injustice of poverty through your donation to CRP."

Condition 5: Shared Fate

Below is an excerpt from CRP's recent call for contributions:

When you give to CRP, your donation addresses a problem that hurts us all. Research shows that poverty weighs down our interconnected economy, leading to greater government spending, and exacerbating many social problems like crime. You can benefit everyone, and help make the economy strong and productive for us all through your donation to CRP.

APPENDIX B: Full text of survey items used in analysis

How much do you agree or disagree with the following statement? "I am often quite touched by things that I see happen." Strongly Disagree 1-2-3-4-5-6-7 Strongly Agree

If contacted by CRP, how likely would you be to give a \$25 donation to this group? Not Likely At All 1-2-3-4-5-6-7 Extremely Likely

How likely would you be to volunteer 2 hours of your time on a weekend afternoon with CRP? Not Likely At All 1-2-3-4-5-6-7 Extremely Likely

How concerned are you about poverty relative to other major issues like national security or the environment?

Not Concerned At All 1-2-3-4-5-6-7 Extremely Concerned

How much do you agree with the following statement? "The poor are not doing enough to help themselves out of poverty." Strongly Disagree 1-2-3-4-5-6-7 Strongly Agree

How much do you agree with the following statement? "People are poor because of circumstances beyond their control." Strongly Disagree 1-2-3-4-5-6-7 Strongly Agree