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# What drives the gender gap in charitable giving? Lower empathy leads men to give less to poverty relief



Robb Willer<sup>a,\*</sup>, Christopher Wimer<sup>b</sup>, Lindsay A. Owens<sup>a</sup>

<sup>a</sup> Department of Sociology, Stanford University, 450 Serra Mall, Building 120, Room 160, Stanford, CA 94305-2047, United States

<sup>b</sup> School of Social Work, Columbia University, 1255 Amsterdam Avenue, New York, NY, 10027, United States

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## ABSTRACT

We draw upon past research on gender and prosocial emotions in hypothesizing that empathy can help explain the gender gap in charitable giving. In a nationally representative survey, we found that men reported less willingness to give money or volunteer time to a poverty relief organization, gaps that were mediated by men's lower reported feelings of empathy toward others. We also experimentally tested how effective a variety of different ways of framing poverty relief were for promoting giving. Framing poverty as an issue that negatively affects all Americans increased men's willingness to donate to the cause, eliminating the gender gap. Mediation analysis revealed that this "aligned self-interest" framing worked by increasing men's reported poverty concern, not by changing their understanding of the causes of poverty. Thus, while men were generally less motivated by empathy, they responded to a framing that recast charitable giving as consistent with their self-interest. Exposure to the same framing, however, led women to report lower willingness to volunteer time for poverty relief, suggesting that framing giving as consistent with self-interest may discourage those who give because of an empathic response to poverty.

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## 1. 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 non-governmental 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).

\* Corresponding author.

E-mail addresses: [willer@stanford.edu](mailto:willer@stanford.edu) (R. Willer), [cw2727@columbia.edu](mailto:cw2727@columbia.edu) (C. Wimer), [owens.lindsay@gmail.com](mailto:owens.lindsay@gmail.com) (L.A. Owens).

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 et al., 2008; Mesch et al., 2006, 2011; Piper and Schnepf, 2008). Research finds that women are specifically more likely to be donors to causes that 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 et al., 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 might 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 likelihood of experiencing empathy and compassion in response to the suffering of others (Rueckert and Naybar, 2008). Research finds that these prosocial 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). Here we hypothesize that gender differences in the likelihood of responding empathetically to others' distress can help explain the gender gap in charitable giving, and giving to antipoverty efforts in particular. Further, knowledge of these underlying processes may help inform effective interventions to promote giving among men.

To this end, we investigate a variety of ways in which poverty relief could be framed that might increase men's poverty concern and willingness to give. 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 want to give at higher levels to poverty relief. We conducted a survey-embedded experiment on a nationally representative sample of Americans. Respondents were surveyed for their chronic levels of empathic concern before being presented with one of several different messages regarding poverty and poverty relief organizations. We then assessed the effects of these different messages on respondents' reported 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 sense that poverty negatively affects everyone might lead respondents to view poverty relief as in line with their self-interest, a framing that could be uniquely effective among men, who we predict are less likely to give on the basis of a spontaneous empathic response to poverty.

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 the willingness to give to 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 poverty concern and charitable giving. 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.

## 2. Past research

### 2.1. Gender and charitable giving

Among the most consistent demographic 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 et al., 2008; Mesch et al., 2006, 2011; Piper and Schnepf, 2008; Rooney et al., 2005; Simmons and Emanuele, 2007; Leslie et al., 2013). Men and women also donate differently, with women and men differing in their preferences for different causes. For example, studies find that women are more likely to give to education related causes and health care organizations (Einolf, 2011; Mesch et al., 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 et al., 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).

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 likely importance of empathy in charitable giving (Small et al., 2007; c.f., Ein-Gar and Levontin, 2013). In turn, there is reason to expect that women are driven more by prosocial emotions 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 et al., 2008; Dufwenberg and Muren, 2006; Kamas et al., 2008). Conversely, men are more likely to give where reputational gain is possible (Bohm and Regner, 2013), and the amount of their giving is more responsive to tax incentives, income, and cost than women's (Andreoni et al., 2003). In addition, as noted above, women are more likely than men to give to charities specifically oriented toward alleviating human suffering, like health care and human services more generally. Below we explore further the possible role that chronic differences in men and women's likelihood of responding empathically to the suffering of others might play in explaining the gender gap in charitable giving.

## 2.2. 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, behaviors 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 toward 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, 2008). While empathy has been conceptualized in a variety of ways, we focus here on *empathic concern*, previously defined as a "tendency . . . to experience feelings of warmth, compassion and concern for others undergoing negative experiences" (Davis, 1980, p.6). Research finds that individuals vary in their chronic tendencies to exhibit empathic concern in response to the suffering of others (Davis, 1983). Where research finds that a distress reaction to others' misfortune can stimulate avoidance of victims and other self-focused tactics for mitigating one's own emotional reaction, empathic concern is strongly linked to motivations to reduce the suffering of others and helping behavior (Batson et al., 1987).

Robust gender differences exist across most conceptualizations of empathy, including empathic concern, with men exhibiting lower levels than women (e.g., Davis, 1980). These results are consistent with the larger finding that women report greater altruistic motivations to help others than men do (Smith, 2003). Gender differences in levels of general empathic concern appear early in development (Eisenberg et al., 1989). For example, research finds that adolescent girls show greater compassion for others and less materialism and competitiveness than boys (Beutel and Marini, 1995). Theory and research suggest that gender differences in prosocial emotions and behavior are maintained at least in part through the influence of gender role expectations (Boschini et al., 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).<sup>1</sup>

Taken together, this past work is consistent with our claim that gender differences in levels of empathy may lead to gender gaps in charitable giving. Individuals are often moved to give to charity because of empathic concern felt toward the prospective target of a charitable act. Indeed, studies suggest that the existence and strength of an emotional connection with the target of charity may be the critical factor determining whether individuals do or do 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.

## 2.3. 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 framing to investigate what sorts of messages

<sup>1</sup> 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.

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.

We tested several message frames because we were interested in the possibility that one or more of these approaches to framing poverty relief might increase giving overall, but we were also specifically interested in identifying a framing approach that might increase men's giving in particular. Our above theoretical reasoning suggests that men will be most influenced by messages that do not depend on an empathic response, thus messages that tap into individual self-interest might be uniquely effective.

*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, 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. 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 et al., 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, 1978). 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 and Siegler, 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).

*Aligned self-interest.* A powerful, fundamental motive for human behavior is self-interest. The temptation to behave in a strictly self-interested way typically reduces the likelihood that individuals will make costly contributions to public goods (Olson, 1965). However, research also shows that aligning self-interest with the provision of a public good – either by modifying the actual material incentives facing individuals, or the perception of those incentives – can be an effective means for encouraging prosocial behavior (Kollock, 1998). Creating the subjective sense that a public good will have a meaningful impact on one's own well-being may be effective in leading individuals to view contribution to a group effort, including poverty relief, as consistent with their own self-interest. In the case of poverty relief, a useful approach might be to emphasize that everyone, including the individual targeted by the message, suffers the effects of poverty and unemployment, a perspective on poverty that could 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 “aligned self-interest” treatment is most likely to reduce the gender gap in charitable giving. This messaging strategy does not rely on individuals having an empathic response to the poor. In fact, it actively recruits self-interest by arguing that giving to the poor serves the targeted individuals' self-interest. Research finds that men are typically lower in altruistic motivation and the emotional experience of empathy, suggesting that such other-oriented motivations for giving may be insufficient to motivate giving for 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 personal status gains in the group (Gardner and Gabriel, 2004; Willer, 2009). 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 that could benefit themselves and yield enhanced prestige.

If such a message was effective in increasing men's giving, this would be consistent with 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 giving among men. By contrast, it is unlikely that the clear injustice or efficacy framing strategies would uniquely increase men's giving as they both rely on counter-acting another factor (belief in a just world, concerns about the efficacy of giving) that would stand between a spontaneous empathic reaction to poverty and the decision to help. It is possible that the conformity message frame could also be effective among men in that it does not require an empathic response, however

it is unlikely to reduce the gap between men's and women's giving as it does not recruit motivations unique to men. Further, it is possible that stereotypically masculine traits such as agency and individuality would lead men to respond negatively to this frame.

## 2.4. Hypotheses

Based on our reasoning and the prior research reviewed above, we propose the following hypotheses regarding the relationships between gender, empathy, and charitable giving:

**Hypothesis 1.** Men will be less willing to contribute to poverty relief than women.

**Hypothesis 2.** Men will be less willing to contribute to poverty relief than women at least in part because of lower dispositional levels of empathy.

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

## 3. Material and 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 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 an "aligned self-interest" 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. Central to our approach are efforts to establish discriminant validity, e.g., that men's lower interest in giving to poverty relief stems specifically from lower levels of empathic concern, that a treatment designed to tap self-interest increases men's giving more than treatments that do not, and that this treatment increases men's giving by increasing their concern about poverty, not by changing their understanding of the phenomenon.

### 3.1. Data

We conducted our survey-based experiment through the Time-Sharing Experiments in the Social Sciences (TESS) program. Funded by the National Science Foundation, the TESS program reviews experimental designs proposed by researchers. Accepted studies are embedded in larger internet-based surveys deployed by Knowledge Networks.

Our study was conducted on a random sample ( $N = 1715$ ) of Knowledge Networks' nationally-representative respondent panel.<sup>2</sup> 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 by email to participate. In all, 63.3% of contacted panel members completed the study. Knowledge Networks calculated post-stratification weights designed to align the demographic characteristics of the respondent sample with the benchmarks of age, gender, race/ethnicity, region, education level, metropolitan/rural residency, and household internet access identified by the most recent Current Population Survey.<sup>3</sup>

### 3.2. 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 representative item taken from a standard battery measuring empathic concern (the Interpersonal Reactivity Index; Davis, 1980).<sup>4</sup> Table 1 gives descriptive statistics for these pre-manipulation measures. Appendix B gives full text of items used in analysis.

<sup>2</sup> Our sample excludes respondents who took less than one minute or more than one hour to complete the survey. Details on the Knowledge Networks sampling structure can be found at: <http://www.tessexperiments.org/introduction.html#data>.

<sup>3</sup> Results reported here employ the provided weights. Results for unweighted analyses were substantively the same.

<sup>4</sup> Ideally, our measure of empathy would be derived from the full battery of questions used to create an index measuring empathic concern. Preserving sample size from our TESS-generated national sample, however, required limiting the number of survey questions asked of respondents.



**Table 1**  
Weighted descriptive statistics for variables used in analysis by sex.

	Male		Female	
	Mean	SD	Mean	SD
<b>Race (white omitted)</b>				
Black	0.12	0.32	0.12	0.32
Other race	0.02	0.15	0.04	0.20
Hispanic	0.16	0.37	0.13	0.34
Two races	0.02	0.14	0.04	0.20
<b>Age (years)</b>	48.80	16.70	49.46	16.59
<b>Income (logged)</b>	10.47	0.93	10.44	0.92
<b>Education (less than HS omitted)</b>				
High school	0.32	0.47	0.36	0.48
Some college	0.28	0.45	0.26	0.44
College or more	0.26	0.44	0.24	0.42
<b>Other variables (pre-manipulation)</b>				
Empathy	4.60	1.43	5.04	1.39
<b>Other variables (post-manipulation)</b>				
Willingness to Give	2.76	1.76	2.96	1.92
Willingness to Volunteer	2.55	1.78	3.06	1.95
Poverty Concern	4.29	1.69	4.62	1.61
Poor are to Blame	4.07	1.79	3.78	1.69
Poverty Due to Circumstance	4.15	1.56	4.37	1.45
<b>Sample size</b>	854		861	

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 aligned self-interest) to promote contributions to the organization. For example, in the aligned self-interest condition respondents were shown the following excerpt:

“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.

#### 4. Results

Because of the ordinal nature of our dependent variables, we estimated a series of ordered probit models to evaluate our hypotheses. Sample sizes vary slightly between models with different dependent variables in order to not discard valid information on individual survey items where such information existed, though results did not substantively change when a consistent sample with no missing information across all variables was used.

**Table 2**

Coefficients from ordered probit models analyzing effects of gender on contribution and the mediating role of empathy.

	Willingness to Give		Willingness to Volunteer		Empathy		Willingness to Give		Willingness to Volunteer	
	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
<b>Experimental Treatment</b>										
Conformity	0.15	0.10	0.07	0.11	0.13	0.10	0.12	0.10	0.04	0.11
Efficacy	0.13	0.10	−0.04	0.11	−0.06	0.10	0.14	0.10	−0.03	0.10
Injustice	−0.02	0.10	−0.03	0.11	−0.02	0.10	−0.02	0.10	−0.03	0.11
Shared Fate	0.05	0.10	−0.07	0.11	0.08	0.10	0.04	0.10	−0.09	0.11
Control (Omitted)										
<b>Race</b>										
Black	0.78***	0.11	0.88***	0.11	0.26*	0.11	0.75***	0.11	0.85***	0.11
Other race	0.12	0.17	0.24	0.16	0.06	0.18	0.10	0.17	0.23	0.16
Hispanic	0.19	0.12	0.36**	0.12	−0.04	0.12	0.21	0.12	0.37**	0.12
Two races	0.17	0.16	0.34**	0.13	0.17	0.14	0.14	0.16	0.32*	0.13
White (Omitted)										
<b>Education</b>										
High School	−0.01	0.11	−0.09	0.12	−0.14	0.11	0.01	0.11	−0.06	0.12
Some college	0.01	0.12	0.02	0.13	0.14	0.12	−0.01	0.12	0.00	0.13
College or more	0.21	0.12	0.12	0.13	0.14	0.12	0.19	0.13	0.10	0.13
Less than high school (Omitted)										
<b>Age</b>	0.00	0.00	−0.01***	0.00	0.01***	0.00	0.00	0.00	−0.01***	0.00
<b>Income (logged)</b>	0.01	0.04	−0.04	0.04	−0.03	0.04	0.02	0.04	−0.04	0.04
<b>Male</b>	−0.13*	0.06	−0.32***	0.07	−0.34***	0.06	−0.07	0.06	−0.27***	0.07
<b>Empathy</b>							0.14***	0.03	0.14***	0.03
cut 1	−0.15	0.39	−1.15	0.43	−2.02	0.44	0.51	0.42	−0.49	0.46
cut 2	0.29	0.39	−0.72	0.43	−1.44	0.43	0.95	0.42	−0.05	0.46
cut 3	0.60	0.39	−0.42	0.43	−1.03	0.43	1.27	0.42	0.26	0.46
cut 4	1.10	0.39	0.08	0.43	−0.22	0.43	1.78	0.42	0.76	0.46
cut 5	1.58	0.39	0.50	0.43	0.50	0.43	2.27	0.42	1.19	0.46
cut 6	1.95	0.40	0.88	0.43	1.26	0.43	2.65	0.43	1.58	0.46
<b>Wald <math>\chi^2</math> (d.f.)</b>	68.64 (14)	131.03 (14)	90.80 (14)		95.35 (15)		153.93 (15)			
<b>N</b>	1695	1693	1707		1695		1693			
<b>Log pseudolikelihood</b>	−2856.42	−2779.74	−2820.40		−2829.60		−2752.89			

Notes: Listwise deletion used for missing data.

\*  $\leq 0.05$  Significance levels.\*\*  $\leq 0.01$  Significance levels.\*\*\*  $\leq 0.001$  Significance levels.

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 reported willingness to contribute while controlling for various other demographic characteristics as well as dichotomous variables for the four experimental treatment conditions of our design.<sup>5</sup> Model 1 gives results for respondents' reported willingness to give. Though not our primary interest in this paper, we see here that none of the experimental treatments had a main effect on reported willingness to give, a finding we return to in the Discussion. 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.

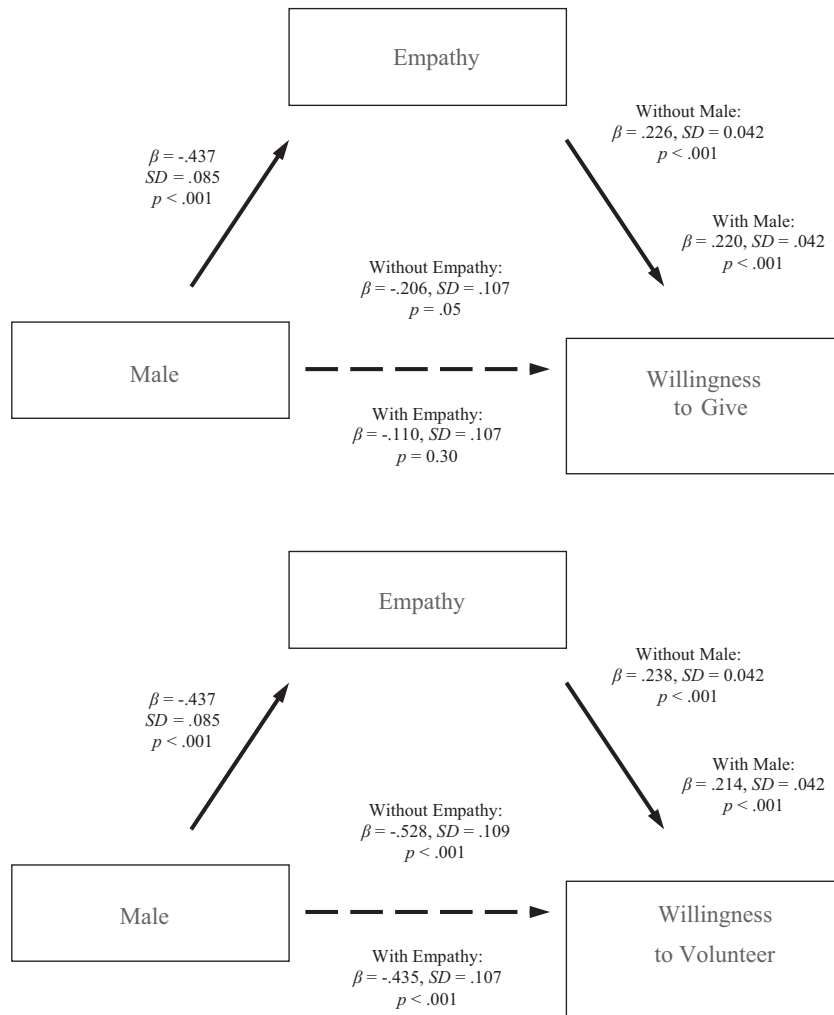
Model 2 gives a parallel test for our other primary dependent variable, willingness to volunteer. Here again, none of the experimental treatments had a main effect on the outcome variable. Among the control variables, younger respondents were more likely to volunteer, as were black, Latino, and multiethnic respondents. Again, we also found a significant effect of gender with men reporting significantly less willingness to volunteer for the poverty-relief organization. Taken together, these results provide support for Hypothesis 1, indicating that men were significantly less willing to donate money or volunteer time to the fictitious poverty-relief organization in the study.<sup>6</sup>

#### 4.1. The mediating role of empathy

Next we sought to assess our claim that men's lower levels of contribution to poverty-related charities are driven by generally lower levels of empathy. To test this claim, we first tested whether men in fact reported lower levels of

<sup>5</sup> 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.

<sup>6</sup> We ran alternate versions of these and all subsequent models including squared terms for age and education in the event that these variables had non-linear effects. Their inclusion did not affect our substantive findings.



**Fig. 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.

empathic concern than women. Model 3 of Table 2 gives results of a model analyzing the effects of gender, demographic variables, and the experimental treatments on reported empathy.<sup>7</sup> 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 associated with willingness to volunteer time to the poverty-relief organization. Additionally, inclusion of this term reduced the 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.

<sup>7</sup> 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 models that excluded these controls.



**Table 3**

Coefficients from ordered probit models analyzing interactive effects of gender and experimental treatments on contribution.

	Willingness to Give Model 1		Willingness to Volunteer Model 2	
	Coef.	S.E.	Coef.	S.E.
<b>Experimental treatment</b>				
Conformity	0.04	0.14	0.01	0.15
Efficacy	−0.04	0.14	−0.17	0.15
Injustice	−0.11	0.15	−0.04	0.15
Shared fate	−0.20	0.14	−0.31*	0.15
Control (Omitted)				
<b>Race</b>				
Black	0.79***	0.11	0.88***	0.11
Other race	0.11	0.17	0.22	0.16
Hispanic	0.19	0.11	0.36**	0.12
Two races	0.19	0.16	0.35**	0.13
White (Omitted)				
<b>Education</b>				
High School	−0.01	0.11	−0.08	0.12
Some college	0.01	0.12	0.02	0.13
College or more	0.22	0.12	0.13	0.13
Less than high school (omitted)				
<b>Age</b>	0.00	0.00	−0.01***	0.00
<b>Income (logged)</b>	0.02	0.04	−0.04	0.04
<b>Male</b>	−0.38**	0.13	−0.49**	0.16
<b>Treatments × Gender</b>				
Conformity × Male	0.24	0.19	0.12	0.21
Efficacy × Male	0.36	0.20	0.28	0.21
Injustice × Male	0.19	0.20	0.01	0.21
Shared Fate × Male	0.53**	0.20	0.50*	0.22
cut 1	−0.25	0.39	−1.22	0.44
cut 2	0.19	0.39	−0.79	0.44
cut 3	0.50	0.39	−0.49	0.44
cut 4	1.01	0.39	0.02	0.44
cut 5	1.49	0.39	0.43	0.43
cut 6	1.85	0.40	0.82	0.43
<b>Wald <math>\chi^2</math> (d.f.)</b>	83.72 (18)	138.66 (18)		
<b>N</b>	1695	1693		
<b>Log pseudolikelihood</b>	−2850.65	−2773.74		

Notes: Listwise deletion used for missing data.

\*  $\leq 0.05$  Significance Levels.\*\*  $\leq 0.01$  Significance Levels.\*\*\*  $\leq 0.001$  Significance Levels.

We conducted mediation analyses to more fully establish that empathy mediated the effect of gender on willingness to give and volunteer time to the poverty-related charity. Full results of these mediation analyses are given in Fig. 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. Bootstrap analyses (Preacher and Hayes, 2008) indicated that the 95% confidence interval for each mediation analysis did not include zero (lower limits = .05 and .05, upper limits = .13 and .13).<sup>8</sup> These results offer further support for our claim that the gender gap in charitable giving is partly explained by men's generally lower levels of empathy.

#### 4.2. Increasing men's giving

Here we not only seek to empirically establish that a gender gap exists in charitable giving, but also to 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 social benefits to all citizens might effec-

<sup>8</sup> Note that bootstrap analyses of mediation are based on OLS regression models. Results of these regression models are substantively the same as the ordered probit models we present here.

**Table 4**

Further analyses of interactive effects of gender and experimental treatments and mediating role of poverty concern.

	Poor are to Blame		Poor Due to Circumstance		Poverty Concern		Willingness to Give		Willingness to Volunteer	
	Model 1		Model 2		Model 3		Model 4		Model 5	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
<b>Experimental Treatment</b>										
Conformity	-0.16	0.13	0.08	0.13	0.15	0.14	-0.05	0.13	-0.07	0.14
Efficacy	0.03	0.13	-0.03	0.13	-0.13	0.15	0.03	0.13	-0.13	0.13
Injustice	0.19	0.13	-0.23	0.14	-0.22	0.14	-0.01	0.15	0.06	0.14
Shared Fate	0.09	0.13	-0.04	0.14	-0.25	0.14	0.14	0.29	-0.32	0.29
Control (Omitted)										
<b>Race</b>										
Black	-0.42***	0.10	0.51***	0.11	0.47***	0.12	0.65***	0.11	0.76***	0.11
Other race	-0.04	0.18	-0.01	0.15	0.05	0.15	0.10	0.19	0.21	0.16
Hispanic	-0.23	0.12	0.11	0.12	0.18	0.11	0.14	0.12	0.31**	0.12
Two races	-0.04	0.18	0.21	0.17	0.21	0.15	0.11	0.17	0.26	0.14
White (Omitted)										
<b>Education</b>										
High School	0.08	0.12	-0.08	0.12	-0.04	0.11	0.03	0.12	-0.06	0.12
Some college	0.05	0.12	-0.28*	0.12	0.06	0.12	0.00	0.12	0.00	0.12
College or more	-0.19	0.12	-0.04	0.13	0.17	0.12	0.17	0.13	0.07	0.13
Less than high school (omitted)										
<b>Age</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.01***	0.00
<b>Income (logged)</b>	0.15***	0.04	-0.21***	0.04	-0.14***	0.04	0.08*	0.04	0.02	0.05
<b>Male</b>	0.31**	0.12	-0.27*	0.13	-0.42**	0.14	-0.21	0.13	-0.35*	0.15
<b>Treatments × Gender</b>										
Conformity × Male	-0.05	0.19	-0.01	0.19	-0.04	0.19	0.28	0.19	0.16	0.21
Efficacy × Male	-0.10	0.18	0.17	0.19	0.33	0.20	0.22	0.19	0.16	0.20
Injustice × Male	-0.33	0.18	0.42*	0.19	0.21	0.19	0.11	0.20	-0.09	0.21
Shared Fate × Male	-0.13	0.20	0.10	0.20	0.63**	0.20	0.29	0.21	0.25	0.22
<b>Poverty Concern</b>										
<b>Shared Fate × Poverty Concern</b>										
cut 1	0.42	0.45	-4.19	0.43	-2.99	0.43	1.85	0.43	0.73	0.49
cut 2	0.93	0.45	-3.63	0.42	-2.55	0.42	2.33	0.43	1.21	0.49
cut 3	1.35	0.45	-3.13	0.42	-2.09	0.42	2.68	0.43	1.55	0.49
cut 4	1.99	0.45	-2.25	0.42	-1.39	0.42	3.25	0.43	2.11	0.49
cut 5	2.56	0.45	-1.59	0.42	-0.82	0.42	3.79	0.43	2.58	0.49
cut 6	3.05	0.45	-0.99	0.42	-0.21	0.42	4.20	0.44	3.01	0.50
<b>Wald <math>\chi^2</math> (d.f.)</b>	63.23 (18)		96.70 (18)		80.40 (18)		268.56 (20)		294.10 (20)	
<b>Log pseudolikelihood</b>	-3112.94		-2896.73		-3037.61		-2696.10		-2614.54	
<b>N</b>	1707		1707		1710		1695		1693	

Notes: Listwise deletion used for missing data.

\*  $\leq 0.05$  Significance levels.\*\*  $\leq 0.01$  Significance levels.\*\*\*  $\leq 0.001$  Significance Levels.

tively tap self-interest rather than empathy as a motivation for giving, leading men to be more concerned about poverty and motivated to contribute.

We predicted that men would specifically respond to the aligned self-interest treatment. To assess this claim we tested for possible interaction effects between gender and the 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 aligned self-interest treatment and male, indicating that this message had significantly different effects on men and women. None of the other interactions with gender were significant in this model.

To determine what drove the significant interaction of gender and aligned self-interest, we conducted follow-up models for men and women independently. These models revealed that the aligned self-interest message had a significant, positive effect on men's willing to give to the poverty relief organization ( $p = .01$ ). The aligned self-interest treatment had a negative, though insignificant ( $p = .20$ ), effect on women's reported willingness to give.

Model 2 gives results of a parallel model but with respondents' willingness to volunteer to the poverty-relief organization as the dependent variable. We found a negative main effect of the aligned self-interest treatment and, again, a significant, positive interaction of the aligned self-interest treatment and male, indicating that men and women had significantly

different responses to this treatment. Follow-up regression models were run on men and women separately to assess what drove the significant interaction. These models revealed that women presented with the aligned self-interest treatment were marginally significantly less likely to report being willing to volunteer time to poverty relief work ( $p = .06$ ), an unanticipated result we revisit in the Discussion. By contrast, the aligned self-interest treatment had a positive, though insignificant ( $p = .18$ ) effect on men's willingness to volunteer.

While the above analyses show that the aligned self-interest 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 an aligned self-interest 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 as the result of more systemic or structural forces. 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 aligned self-interest 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 aligned self-interest 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 aligned self-interest treatment increased either belief.<sup>9</sup> 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 aligned self-interest and male on poverty concern, indicating that the aligned self-interest treatment had very different effects on men's and women's levels of poverty concern. Follow-up regression models run on men and women separately revealed that men presented with the aligned self-interest message reported higher levels of poverty concern ( $p = .004$ ), while women actually showed diminished levels of poverty concern, though this effect was marginally significant ( $p = .07$ ).

These findings are consistent with our claim that the aligned self-interest treatment increased men's contributions to poverty relief by increasing their concerns 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 aligned self-interest 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 aligned self-interest treatment) (see Muller et al., 2005). For both models, results reveal that the poverty concern was highly related to both measures of respondents' willingness to contribute, while the interactive effects of gender and the aligned self-interest treatment on both outcome variables was reduced to insignificance in both models. Bootstrap analyses indicated that the 95% confidence interval for each mediation analysis did not include zero (lower limits = .13 and .11, upper limits = .41 and .38). Together, these findings offer strong evidence that the differential effects of the aligned self-interest treatment on men's and women's contributions to poverty relief were driven by the very different effects of the treatment on their concerns about poverty. We found no effects, however, of this treatment on men's and women's understanding of the sources of poverty.

## 5. Discussion

The results of our study offer 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 of gender on willingness to volunteer. These findings are consistent with our theoretical reasoning that women's tendency to give at higher levels to charity at least partially results from their generally higher levels of empathic concern. This finding applies research on gender and empathy from social psychology to better understand one of the most robust findings from research on charitable giving.

We also sought to test various message framing strategies that might reduce the gender gap in charitable giving. Of the messages we tested, the aligned self-interest message presented a reason why one might give to poverty relief that did not rely on an empathic response to the suffering of the poor. We hypothesized that a message framing poverty as an issue that

<sup>9</sup> It is possible that men were more responsive to the aligned self-interest treatment because the text of this treatment emphasized the societal costs of poverty and men were more averse to government spending on poverty. To evaluate this possibility we explored whether the aligned self-interest treatment was uniquely effective in increasing the contributions of more conservative male respondents, or male respondents reporting less faith in government on a standard measure administered prior to the study. The aligned self-interest treatment did not significantly interact with either liberalism or faith in government in predicting men's willingness to give or volunteer.

affects all citizens would be uniquely effective at increasing men's willingness to contribute because it would portray contribution as consistent with individual self-interest. We found partial support for this hypothesis. Men and women presented with such a message did respond significantly differently for both dependent measures, and the gender gap was significantly reduced for both measures. Specifically, men reported significantly greater willingness to give, contributing at levels comparable to women. However, men did not show significantly greater willingness to volunteer time to the poverty relief organization, though women reported significantly less interest in volunteering after exposure to the message, an unpredicted finding we return to below. No other message frames were effective in increasing men's reported willingness to give or volunteer. These findings are partially consistent with our argument that men will be more responsive to messages designed to align giving with self-interest. Messages highlighting social conformity, the efficacy of giving, or the injustice of poverty did not reduce the gender gap in giving.

Finally, we sought to assess why the aligned self-interest message had such different effects on men and women's willingness to contribute. We found evidence that the effects of the message operated through levels of poverty concern, and no evidence that they influenced respondents' views of the causes of poverty. Men presented with the aligned self-interest 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 than women. Here we applied that research to explain 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 donate money to poverty relief. Our findings also contribute to the literature on gender and prosocial behavior more generally, invoking an emotional factor – empathic concern – 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 aligned self-interest condition reported lower willingness to volunteer time to the poverty relief organization and less poverty concern than women in the control condition, and that these negative effects partly drove the significant interactions effects we observed. These unanticipated findings, however, are consistent with the idea that the aligned self-interest condition successfully reframed giving to poverty relief as consistent with self-interest. While this reframing resonated with men, who were otherwise less likely to spontaneously express concern about poverty, it had the opposite effect for women, who might have felt less motivated to express concern about poverty when doing so seemed inconsistent with feeling empathy for the poor. Individuals chronically high in empathy may respond negatively to messages that reframe prosocial acts as consistent with self-interest, preferring instead to view such acts as purely altruistic, untainted by egoism.

These findings suggest the possibility that women may respond aversively to messages emphasizing that charitable giving is consistent with their own interests. The findings also suggest a practical limitation of framing strategies like our aligned self-interest message, as the effectiveness of such messages among men might be countervailed by their ineffectiveness among women if deployed indiscriminately. Conversely, 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 to motivate 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 Jonson, 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 non-governmental poverty relief efforts are significant in their own right. Developing a greater understanding of the dynamics of such 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.

Our results also revealed another interesting association between respondents' demographic characteristics and their reported willingness to contribute to poverty-related charities, as African-Americans in our sample consistently reported greater willingness to both give money and volunteer time. We explored the relationship in follow-up analyses and found that this association was not mediated by either political ideology or past levels of charitable giving. As revealed in Models 3–5 of Table 4, we did find evidence that African-Americans' greater concern about the issue of a poverty partly explained

their greater willingness to contribute. Developing a fuller explanation of why African-Americans were more willing to contribute to a charity of this sort would be a valuable avenue for future research.

### 5.1. 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 behavioral intentions are more predictive of actual behavior than attitudes (e.g., Fishbein and Ajzen, 2009), they are nonetheless a rough and imperfect 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 explained our finding regarding gender and charitable contribution, it would not account for the mediation and moderation findings we found that 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 different 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. Consistent with this, the messages were not particularly persuasive. Though each of the messages was based on past research, none had main effects on respondents' reported willingness to contribute, likely due to the brevity and low impact of these stimuli. 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 aligned self-interest 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 et al., 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 also help address.

## 6. 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 levels of empathy explained gender differences in willingness to contribute to poverty relief. A message that emphasized that poverty hurts everyone in society increased men's poverty concern and willingness to contribute money, effectively closing these gender gaps. Our 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.

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## 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: Aligned Self-Interest

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 \$10 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 h 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

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