# Selfish or Selfless? On the Signal Value of Emotion in Altruistic Behavior

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Theories that reject the existence of altruism presume that emotional benefits serve as ulterior motives for doing good deeds. These theories argue that even in the absence of material and reputational benefits, individuals reap utility from the feelings associated with doing good. In response to this normative view of altruism, this article examines the descriptive question of whether laypeople penalize emotional prosocial actors. Six studies find that emotion serves as a positive signal of moral character, despite the intrapsychic benefits associated with it. This is true when emotion motivates prosocial behavior (Studies 1, 2, 3, and 5) and when emotion is a positive outcome of prosocial behavior (i.e., "warm glow"; Studies 4, 5, and 6). Emotional actors are considered to be moral because people believe emotion provides an honest and direct signal that the actor feels a genuine concern for others. Consequently, prosocial actors who are motivated by the expectation of emotional rewards are judged differently than prosocial actors who are motivated by other benefits, such as reputational or material rewards (Study 6). These results suggest that laypeople do not view altruism as incompatible with all benefits to the self.

Keywords: prosocial behavior, moral character, emotion, authenticity, altruism

I feel from my own experience that when I practice compassion there is an immediate direct benefit to myself, not for others. By practicing compassion, I get one hundred percent benefit, while the benefit to others may be fifty percent. (Dalai Lama, quoted in Goleman, 2003)

Emotion plays a fundamental role in prosocial behavior. Although scholars debate the exact nature of it (Batson, 1991; Cialdini et al., 1987), there is little doubt that emotion provides a motivating force that explains when and for whom human beings care and help (Batson, 1990; Darwin, 1872/1965; Davis, 1994; de Waal, 1996; Frank, 1988; Hume, 1777/1960; Loewenstein & Small, 2007; McDougall, 1908; Slovic, 2007; Smith, 1790/1976). Emotion is also a natural consequence of prosocial behavior. Helping others can lift people out of a negative mood (Cialdini et al., 1987), sustain a positive mood (Forest, Clark, Mills, & Isen, 1979), and generally improve subjective well-being (Aknin, Sandstrom, Dunn, & Norton, 2011; Andreoni, 1990; Diener & Lucas, 2000; Dunn, Aknin, & Norton, 2008; Harbaugh, 1998; Lyubomirsky, Sheldon, & Schkade, 2005; Weinstein & Ryan, 2010).

However, the fact that people often feel good after helping calls into question the true motivation for their behavior. Al-

truism is characterized by a motivation to increase another person's welfare and is presumed to be driven by a selfless concern for others (Batson, 1990; Batson & Powell, 2003; Darwin, 1871; Eisenberg & Miller, 1987; MacIntyre, 1967). Consistent with this conceptualization, there exists considerable empirical support demonstrating that individuals will incur a significant cost to the self in order to help others (Batson, 1991; Camerer & Thaler, 1995). Yet, even in anonymous settings in which individuals cannot reap material or social benefits, it is possible that good deeds are still driven by selfish desires. Rather than being motivated to reduce the suffering of others, individuals may instead be motivated by intrapsychic rewards, such as feeling good for having done a good deed (Andreoni, 1990) or experiencing relief from distress caused by witnessing suffering (Cialdini, Darby, & Vincent, 1973; Cialdini et al., 1987). The logic of altruism suggests that an individual's intentions for engaging in prosocial behavior should be discounted when actors are motivated by the benefits that result from the behavior-be they material, social, or intrapsychic.

As such, the debate in social psychology over whether people are truly altruistic focuses on the direction of emotion that people feel when engaging in prosocial behavior. Are their feelings directed toward themselves or toward those whom they are helping? Although some argue that emotion can genuinely be about others' welfare, claiming that empathy triggers the altruistic motivation to help others in need (e.g., Batson, 1987; Batson, Duncan, Ackerman, Buckley, & Birch, 1981; Batson, Fultz, & Schoenrade, 1987; Batson, O'Quin, Fultz, Vanderplas, & Isen, 1983; Hoffman, 1976; Krebs, 1975), others argue that emotion-driven prosocial behavior is necessarily at odds with true altruism. These scholars suggest that helping, when motivated by emotion, is selfish because emotional actors are motivated by intrapsychic rewards, rather than a desire to help others (Cialdini et al., 1973; Cialdini et al., 1987).

Similar debates in philosophy and economics question the interpretation of emotion in altruism. Bentham (1843/1948) and Mill

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(1906) argued that morality is a function of reason and is thus incompatible with "passion," and Kant (1785/1959) argued that emotion was impure and only duty-based reasons reflected moral behavior. Economists are similarly skeptical that emotion-driven giving reflects genuine altruism; emotion is believed to represent a self-interested motive that provides an economically rational explanation for generous behavior. For instance, Andreoni (1988) posited that "giving is motivated by many things other than altruism. Guilt, sympathy, an ethic for duty, a taste for fairness, or a desire for recognition may all influence an individual's contribution to charity" (p. 57). In this way, both emotion-driven prosocial behavior and prosocial behavior that results in emotional benefits are considered self-gratifying, rather than truly altruistic.

In this paper, we investigate lay theories about the role of emotion in altruistic behavior. Although emotion has been depicted by scholars as inherent to as well as incongruous with altruism, little prior work has investigated how laypeople judge the moral character of prosocial actors as a function of their emotion. We propose that naive theories about the relationship between emotion and altruism run counter to psychological, philosophical, and economic theories that consider emotion to be selfish. To test this, we examine the signal value of emotion when it triggers prosocial behavior and when it is the consequence of prosocial behavior. We expect that in both cases (feeling emotion prior to helping and feeling emotion as a result of helping), judgments of an actor's character will be a function of the actor's emotional experience: The more emotion he (or she) feels, the more he will be judged as having high moral character. As a result, laypeople will view an emotional actor as altruistic, even though they recognize that an emotional actor reaps intrapsychic rewards.

Investigating how lay theories contrast with normative models is a fundamental tool for understanding intuitive psychological processes. Just as the findings from behavioral decision theory reveal psychological processes by showing that judgments about risk, probability, and utility violate normative standards of economics, it is important to understand when lay theories of moral judgment run counter to normative theories of morality, rather than reserving these questions for specialists and overlooking commonsense intuitions (e.g., Knobe & Nichols, 2008; Monin, Pizarro, & Beer, 2007). Although showing an inconsistency does not necessarily invalidate the normative models, it does provide insight into the processes that govern moral judgment (Baron, 2008). Ultimately, lay intuitions are the "heart of morality" (Guglielmo, Monroe, & Malle, 2009), as they drive moral reasoning (Haidt, 2001) and can also guide behavior (e.g., Candee & Kohlberg, 1987; Nucci, 2004).

Moreover, investigating lay theories of altruistic behavior is important for understanding how individuals ascribe moral character to others. Moral character is a predominant factor in social judgment and person perception (e.g., Brambilla, Sacchi, Rusconi, Cherubini, & Yzerbyt, 2012; Goodwin, Piazza, & Rozin, 2014; Leach, Ellemers, & Barreto, 2007), and it greatly influences interpersonal cooperation and trust (Alicke, 1992; Darley & Pittman, 2003; Pizarro, Uhlmann, & Bloom, 2003). Perceptions of moral traits, such as generosity, also influence the way in which individuals assign status and power to others (Flynn, 2003; Flynn, Reagans, Amanatullah, & Ames, 2006; Hardy & Van Vugt, 2006). Given the importance of moral character judgments, it is essential to understand who does and who does not get credit for their good deeds and what factors drive these inferences (e.g., Critcher, Inbar, & Pizzaro, 2013; Inbar, Pizarro, & Cushman, 2012; Pizarro, Uhlmann, & Salovey 2003).

In the subsequent sections, we review literature on lay theories of altruism, followed by literature on perceptions of emotion. We integrate and build on these two streams of research to generate our thesis about the signal value of emotion in altruistic behavior.

#### Naive Theories of Altruism

Previous work that examined naive theories of altruism has focused primarily on the norm of self-interest, finding that individuals generally regard prosocial behavior with suspicion. For example, individuals tend to assume that prosocial actors have personal investments in the causes they support (Miller, 1999; Ratner & Miller, 2001). Further, the more that an observer contemplates another person's motives for good deeds, the more the observer is likely to believe that an individual was motivated by selfishness rather than genuine altruism (Critcher & Dunning, 2011; see also Fein, 1996).

Indeed, recent work on perceptions of altruism suggests that evidence of personal benefits is likely to lead to the discounting of prosocial behavior (Lin-Healy & Small, 2012, 2013; Newman & Cain, 2014). For example, Lin-Healy and Small (2013) found that the reflexive association between altruism and sacrifice is so strong that people grant less credit to those who benefit materially from good deeds, even when benefits are completely unforeseeable and outside of the actor's control. Similarly, when companies perform good deeds, their actions are perceived as disingenuous if the campaign appears to have produced benefits for the company (Forehand & Grier, 2003; Yoon, Gürhan-Canli, & Schwarz, 2006).

This skepticism about prosocial acts also influences behavior. Individuals are motivated to convince themselves and others that their generosity is pure and that their good deeds are not motivated by selfish desires. For example, people behave more prosocially when doing so is painful and effortful and therefore costly to the self (Olivola & Shafir, 2013). In this case, personal suffering acts as a costly signal of authentic prosocial motivation. Individuals will also adjust their behavior in public in order to appear as if they are not motivated by material rewards, including reducing the effort they put into prosocial tasks that provide financial benefits (Ariely, Bracha, & Meier, 2009) or rejecting advertisements that link prosocial behavior with emotional benefits to the self (White & Peloza, 2009). In sum, the desire to signal sacrifice and avoid personal benefit when behaving prosocially suggests that people generally believe that altruism is inconsistent with benefits to the self.

## The Signal Value of Emotion

Although the research described above suggests that people are often skeptical about prosocial behavior and view benefits to the self as evidence of insincere motives, there is reason to believe that people may view emotional benefits less cynically. Building on prior work, we propose that emotion provides information about the sincerity of one's underlying motives, which leads others to perceive emotional prosocial actors as altruistic.

In general, emotion provides an interpersonal signal of motives and behavioral intentions, and it therefore helps individuals understand each other and coordinate their interactions in meaningful ways (Frank, 1988; Keltner & Haidt, 1999; Van Kleef, 2009). Because emotion is perceived as spontaneous and natural (Hochschild, 1983; Tiedens, 2001), people believe that it is an untainted signal of an individual's underlying state and is therefore more informative and credible than other forms of communication (e.g., Newcombe & Ashkanasy, 2002). For example, people often use an actor's emotional display to make inferences about his traits and dispositions (e.g., Harker & Keltner, 2001; Knutson, 1996), sincerity (Dasborough & Ashkanasy, 2002), honesty (e.g., Ekman, Friesen, & O'Sullivan, 1988), and satisfaction in a relationship (e.g., Carstensen, Gottman, & Levenson, 1995).

Individuals also use others' displayed emotion to deduce the intentions behind their behavior. For instance, if an actor displays positive affect when performing a certain behavior, individuals assume the action was intentional, whereas if an actor displays negative affect when performing a behavior, individuals assume the action was unintentional (Ames & Johar, 2009). Similarly, facial expressions can provide honest signals of cooperative intent (Reed, Zeglen, & Schmidt, 2012). These findings are consistent with a larger body of research demonstrating that certain contextual cues-such as the speed of a decision-are used to make inferences of underlying desires and motives, which in turn influence trait inferences (e.g., Inbar et al., 2012; Pizarro, Uhlmann, & Salovey, 2003; Read, Jones, & Miller, 1990; Reeder, Kumar, Hesson-McInnis, & Trafimow, 2002). Building on these findings, we suggest that emotion, both as an antecedent and as a consequence of prosocial behavior, signals information about an actor's true motives and character. Specifically, the level of emotion displayed by an actor provides information about the degree to which he or she truly cares.

Not only does emotion contain positive signal value, but a lack of emotion also carries negative stigma. Suppressing emotion or being unemotional can generate suspicion (Butler et al., 2003; Collins & Miller, 1994) and can reflect poorly on individuals even if they take a morally superior action (Uhlmann, Zhu, & Tannenbaum, 2013). Furthermore, violating emotional norms-such as not displaying the expected or appropriate emotional reactioncan lead to moral outrage (Szczurek, Monin, & Gross, 2012). Prosocial behavior may represent one context for which emotion is normatively appropriate. Society teaches children at a young age to be sympathetic toward others, and professional schools provide the same advice to managers (e.g., Salovey & Mayer, 1989). Politicians on both sides attempt to portray themselves as emotionally attuned to the needs of constituents, with the expectation that such signals (from "liberal sympathy" to "compassionate conservatism") sway voters. Thus, emotion may be regarded as the natural or correct response in many relational contexts.

We theorize that emotion that motivates prosocial behavior and emotional benefits that result from prosocial behavior each serve as positive signals of moral character. Just as individuals make inferences about others' personality traits and intentions from their emotions (Ekman, Friesen, & Ellsworth, 1972; Fridlund, 1994; Frijda, 1986; Parkinson, 1996; Van Kleef, 2009), in the context of prosocial behavior, we suggest, emotion influences judgments of moral character and corresponding motive inferences. Unlike previous work that varies the valence of emotion (Ames & Johar, 2009), our studies focus on feelings that have been characterized as ulterior motives and as evidence for impurity in the altruism debate. That is, we compare empathy and distress as emotions that motivate good deeds (e.g., Batson et al., 1983) and examine how each is viewed in the eyes of others. In addition, we examine whether experiencing emotional benefits (i.e., a "warm glow"; Andreoni, 1990) signifies that an actor was motivated by selfishness. We predict in each case that emotion signals authentic concern for others, which leads to higher perceived moral character.

To summarize, we make three key predictions. First, when a donor's emotion toward a cause motivates his prosocial action, laypeople will infer that he genuinely cares about the cause. We expect this inference to hold, even when the emotion is described as distress, an emotion with self-focused connotations. As a result, more emotional donors will be judged to be more moral than those who are less emotional.

Second, individuals will expect that those who feel emotional toward a cause will receive emotional benefits as a result of performing a good deed. In other words, feeling emotional toward a cause simultaneously leads to inferences about altruistic motivation and to inferences about intrapsychic rewards that result from doing good. This union of judgments does not concur with the normative view that pure altruism cannot be self-gratifying.

Third, we predict that when the level of emotional benefits is specified, rather than the level of emotion toward a cause, emotion will have a similar positive effect on judgments of authentic prosocial motivation and moral character. When a donor receives, or expects to receive, emotional benefits as a consequence of his prosocial actions, individuals will infer that the donor was motivated by an authentic concern for others and, thus, will perceive him as being moral. In other words, feeling good as a result of doing good signals that the prosocial actor valued the act of helping others. Thus, we theorize a causal relationship between emotional benefits and judgments of moral character based on the same underlying mechanism: Emotion signals an authentic concern for others.

Note that authentic prosocial motivation is related to, but distinct from, intrinsic motivation. Authentic prosocial motivation is characterized by both authenticity-acting in a way that is consistent with one's internal feeling (Kernis & Goldman, 2006; Le & Impett, 2013; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997)-and true concern for others (Batson & Powell, 2003). Alternatively, intrinsic motivation is characterized as engaging in an activity for the self because it is inherently enjoyable or satisfying (Ryan & Deci, 2000). For example, in the domain of education, a student is intrinsically motivated if he enjoys or finds personal pleasure in learning. The crux of authentic prosocial motivation is not the satisfaction derived from the act but rather the genuine desire to help others. In addition, the construct of intrinsic motivation is typically contrasted to extrinsic motivation, for which an external reward is theorized to crowd out or reduce the pleasure inherent in an activity. Our theorizing and operationalization hold constant any extrinsic benefits.

#### **Overview of Current Research**

To reiterate, we predict that the greater emotion a prosocial actor feels, the more moral he or she will be perceived. In the eyes of others, emotional prosocial actors are authentically generous and also reap emotional benefits, a combination of judgments that conflicts with the normative view that altruism is incompatible with any benefits to the actor.

Six studies test these predictions, employing a diverse set of stimuli that vary whether emotion is self-reported by the actor or is purportedly objective information. The first three studies examine perceptions of emotion that motivates prosocial behavior. Study 1 investigates a wide range of emotion levels in order to explore the causal relationships between emotion that motivates prosocial behavior and judgments of (a) moral character, (b) altruistic motivation, and (c) emotional benefits. This study provides initial evidence that judgments of emotional benefits and moral character are not incongruous. Study 2 then examines how the description of the actor's emotion (sympathy or distress) affects perceptions of moral character. Study 3 contrasts character inferences made about emotion that motivates prosocial behavior with emotion that does not motivate prosocial behavior.

The next three studies employ manipulations of emotional benefits. These studies examine perceptions of prosocial actors who feel emotion (i.e., happiness) in response to doing good deeds. Study 4 conceptually replicates Study 1, except participants learn about the extent to which a donor experienced emotional benefits across a wide range of emotion levels. Study 5 independently manipulates emotion that motivates prosocial behavior and emotional benefits that result from it, to further tease apart how each of these, controlling for the other, influences judgments of moral character. Finally, Study 6 documents a causal relationship between the expectation of emotional benefits and moral character. This study demonstrates that in the context of prosocial behavior, emotional benefits are different from other types of rewards, namely, reputational and material rewards.

#### Study 1

Study 1 tests whether the level of emotion a donor feels toward a cause affects perceptions of moral character, emotional benefits, and related judgments. In addition, this study examines judgments about a donor when no explicit information about his emotional state is provided. Our main hypothesis is that the greater emotion a donor feels, the more that donor is judged as being motivated by authentic concern for others and, thus, moral. Further, we predict that the greater emotion a donor feels, the more that donor feels, the more that donor is expected to receive emotional benefits. Thus, the present study examines whether greater emotion felt toward a cause simultaneously signals greater emotional benefits and greater moral character.

#### Method

Two hundred fifty-six individuals (53.5% female; mean age = 31 years) participated in an online survey via Amazon.com's Mechanical Turk in exchange for payment. The recruitment announcements for all our studies specified that participants should be over 18 years of age and be U.S. residents. In this study and across all our studies, we included all participants in our analysis and made no exclusions (Simmons, Nelson, & Simonsohn, 2011).

At the beginning of the study, participants read that the researchers had previously administered a survey to recent donors to the African Children's Fund. Participants then viewed a screenshot of one such survey filled out by a donor and provided their judgments of the donor. Although the donor survey was ostensibly real, it was in fact fictitious. Appendix A includes an example of the stimuli that was presented to participants. All information in the fictitious donor survey was the same across all conditions except for the response to the question "When you think about children in Africa, how emotional do you feel?" Participants were randomly assigned to view one survey that had one of the five possible responses to that question (not at all emotional, slightly emotional, moderately emotional, very emotional, or extremely emotional) or to a survey that omitted the question about emotion altogether. This last condition is referred to as the no-information condition. The purpose of the no-information condition was to examine inferences people make about prosocial actors in the absence of explicit information relating to emotion.

So that the no-information condition would not appear completely devoid of content, the fictitious donor survey also included an open-ended question: "Please tell us more about why you donated to the African Children's Fund." In all conditions, the donor responded, "I recently read an article in the newspaper about how many children are hungry in Africa."

**Measures.** All of the measures described below refer to judgments made by participants about the donor's character, motivation, and feelings. The key outcome measure across studies is a scale measuring the donor's moral character. In addition to the measure of moral character, this study examines judgments about (a) whether the donor's motivation to help is driven by authentic concern for others, (b) the magnitude and nature of the donor's emotion, and (c) the donor's emotional benefits. The measures below were collected in the order in which they are listed here.

**Moral character.** Participants rated the donor on a 12-item scale of moral character ( $\alpha = .89$ ), which included six positive items (moral, altruistic, sincere, pure, good, nice) and six negative items reverse-coded (immoral, selfish, insincere, impure, bad, mean). Participants rated all items on 7-point Likert scales ranging from 1 (*Not at all*) to 7 (*Extremely*). This measure is similar to existing measures of moral character (e.g., Reeder & Spores, 1983; Wojciszke, Bazinska, & Jaworski, 1998) but is more focused on altruism-relevant traits than these previous scales (which typically also include altruism-irrelevant traits that are not central to our theory, such as honest, righteous, and tolerant).

Authentic prosocial motivation. Participants rated the donor on a 5-item scale of authentic prosocial motivation ( $\alpha = .87$ ), which was designed to measure the extent to which donors were motivated to donate because they truly cared about the cause. The items included "How authentic do you find the donor's decision to donate to the African Children's Fund" ( $1 = Not \ at \ all \ authentic$ to  $7 = Extremely \ authentic$ ), "How suspicious are you of the donor's intentions" ( $1 = Not \ at \ all \ suspicious$  to  $7 = Extremely \ suspicious$ ; reverse coded), "The donor has a genuine passion for the African Children's Fund," "The donor sincerely cares about children in Africa," (both adapted from Yoon et al., 2006), and "The donor donated to the African Children's Fund to benefit children in Africa." The last three items were rated on scales ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*).

*Emotional benefits.* Participants also rated the degree to which they believed the donor would experience intrapsychic rewards from donating. Specifically, participants answered two questions: "How good will the donor feel after s/he donates to the African Children's Fund" on a scale ranging from 1 (*Not at all good*) to 7 (*Extremely good*) and "How much will donating to the

African Children's Fund improve the donor's mood?" on a scale ranging from 1 (*Not at all*) to 7 (*A great deal*). These items were averaged to create a measure of emotional benefits, r(256) = .72, p < .001.

*Emotional benefits motivation.* Participants also rated the degree to which they believed the donor's decision was motivated by intrapsychic rewards. Participants responded to the item, "The donor donated to the African Children's Fund to make him/herself feel better" on a scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*).

*Emotion-level manipulation check.* Participants rated the extent to which the donor was motivated by feelings, ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*).

Inferred emotion type. Participants also made inferences about the specific emotions that the donor felt. Batson and colleagues (Batson et al., 1983, 1987) argue that two distinct emotions, empathy and distress, produce different motives for helping: Empathy evokes the altruistic goal of helping another person in need, whereas distress evokes the selfish goal of relieving personal emotional tension. Given this distinction, participants rated the extent to which they thought the donor felt distress, discomfort, sympathy, and compassion when donating (adapted from Batson et al., 1983). The average of distress and discomfort serve as the measure of perceived distress, r(256) = .54, p < .001, and the average of sympathy and compassion serve as the measure of perceived empathy, r(256) = .77, p < .001. All items were rated on 7-point Likert scales, ranging from 1 (Not at all) to 7 (Very much). Consistent with previous findings, distress and empathy are correlated, r(256) = .38, p < .001, but load on separate factors in a factor analysis in all studies in which they are measured.

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# Results

The analyses below omit the no-information condition and examine just the five conditions for which the donor reported a level of emotion in order to calculate the trends across these levels using linear regression (N = 213). In Figures 1 and 2, we plot the means of the no-information condition relative to the five levels of emotion and indicate which levels of emotion are significantly different from the no-information condition.

# Preliminary analyses.

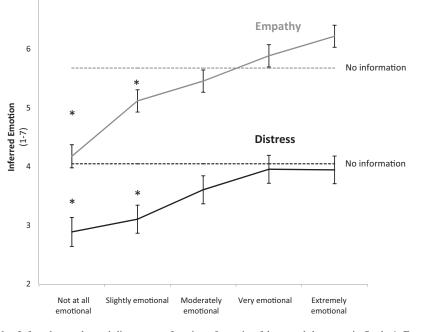
*Emotion-level manipulation check.* Consistent with the intent of the manipulation, the higher the reported emotion level of the donor (from "not at all emotional" to "extremely emotional"), the more participants evaluated the donor as motivated by feelings,  $\beta = .64$ , SE = 0.07, t(211) = 9.32, p < .001.

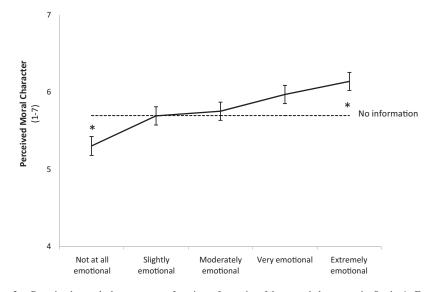
Inferred emotion type. Donors' emotion level affected both perceived empathy,  $\beta = .47$ , SE = 0.06, t(211) = 7.77, p < .001, and perceived distress,  $\beta = .23$ , SE = 0.08, t(211) = 3.88, p < .001 (see Figure 1), such that more emotional donors were perceived as feeling both more empathy and more distress.

In addition, a repeated measures analysis of variance (ANOVA) with manipulated emotion level as a between-subjects factor and inferred emotion (empathy vs. distress) as a within-subjects factor revealed that participants inferred greater empathy (M = 5.37, SD = 1.44) than distress (M = 3.50, SD = 1.61), F(1, 208) = 262.15, p < .001. There was not a significant emotion × condition interaction, F(4, 208) = 1.91, p = .11.

**Main analyses.** Regression results document the same linear trend across the focal dependent measures. Specifically, the more emotion the donor felt, the higher he was rated on moral character,

*Figure 1.* Inferred empathy and distress as a function of emotion felt toward the cause in Study 1. Error bars represent  $\pm 1$  standard error. Means that are significantly different (p < .05) from the no-information condition are indicated by a star (\*).





*Figure 2.* Perceived moral character as a function of emotion felt toward the cause in Study 1. Error bars represent  $\pm 1$  standard error. Means that are significantly different (p < .05) from the no-information condition are indicated by a star (\*).

 $\beta$  = .34, *SE* = 0.04, *t*(211) = 5.19, *p* < .001 (see Figure 2), and the more the donor was judged as authentically motivated to help,  $\beta$  = .27, *SE* = 0.05, *t*(211) = 5.47, *p* < .001. Moreover, the more emotional the donor felt, the more participants believed that the donor reaped emotional benefits from donating,  $\beta$  = .35, *SE* = 0.05, *t*(211) = 5.45, *p* < .001. More emotional donors were also perceived as more motivated by emotional benefits,  $\beta$  = .07, *SE* = 0.08, *t*(211) = 8.60, *p* = .39, although this effect did not reach significance.

Taken together, these results suggest that, in the eyes of others, reaping emotional benefits is not associated with reduced moral character and altruistic motivation; to the contrary, judgments of moral character and beliefs about emotional benefits are positively correlated (r = .56, p < .001).<sup>1</sup>

**Mediation analysis.** We predicted that authentic prosocial motivation would mediate the effect of emotion level on moral character. Using bootstrap analyses (Hayes, Preacher, & Myers, 2011; MacKinnon, Fairchild, & Fritz, 2007), we find that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (indirect effect = 0.13, SE = 0.04; 95% CI [0.06, 0.20]), such that increasing the level of emotion increases perceived authentic prosocial motivation (a = 0.27, p < .001), which in turn increases perceptions of moral character (b = 0.56, p < .001). Once we include authenticity in the model, the relationship between emotion level and moral character becomes insignificant (c = 0.19, p < .001; c' = .04, p = .11). This suggests that more emotional donors are perceived as more altruistic because their motivation appears more authentically directed toward others.<sup>2</sup>

#### Discussion

The present study shows that when donors experience greater emotion, they are perceived to have higher moral character, despite also being perceived to reap intrapsychic rewards. In other words, participants do not view emotional benefits as selfish per se. Rather, donors who are perceived as feeling good as a result of giving are also the ones who are considered more moral.

In addition, as can been seen in Figures 1 and 2, in the absence of any emotion-relevant information (no-information condition), participants infer that donors do experience emotion and thus perceive them to be of similar moral character to those who report feeling emotion and of higher moral character than those who report feeling no emotion. These findings suggest that people view emotion as a natural part of prosocial behavior and that those who do not express emotion are penalized.

Yet, the effects are not merely due to the fact that unemotional donors are penalized for an abnormal reaction. When the not-at-all-emotional condition is omitted from the analysis, the positive linear trend between emotion level and moral character remains significant,  $\beta = .16$ , SE = 0.05, t(171) = 3.33, p < .001. This is also true for the measures of authentic prosocial motivation, emotional benefits, and inferred empathy and distress (ps < .01).

In sum, the study shows that the greater emotion a donor reports feeling toward a cause, the more he is judged to be a moral person. However, this effect may depend on the specific emotion that motivates a donor's behavior. The type of emotion was not spec-

<sup>&</sup>lt;sup>1</sup> In all studies, there was one additional exploratory measure. Participants rated how "human" the donor appeared on a 7-point Likert scale, which ranged from *not at all human* to *extremely human*. This measure is always significantly predicted by emotion level and follows the same pattern as the measure of emotional benefits.

<sup>&</sup>lt;sup>2</sup> Multiple mediation analysis that included authentic motivation plus all other dependent measures (e.g., emotional benefits, inferred empathy and distress, and humanness) revealed that authentic prosocial motivation had the largest indirect effect of any potential mediator, although empathy and emotional benefits also had significant indirect effects. Across all studies in which authentic prosocial motivation was measured, it had the largest indirect effect of any potential mediator and was the only dependent variable that always mediated the effect of emotional benefits on moral character when included by itself in the mediation analysis.

ified in Study 1, and participants inferred both empathy and distress from our manipulation, albeit greater empathy than distress. It is possible that participants would judge a prosocial actor as less moral when distress is emphasized, because distress is presumed to reflect the selfish motive to reap emotional benefits. To test this, the next study varies whether a donor is motivated by other-focused empathy or by self-focused distress.

## Study 2

As discussed above, previous work reveals two distinct emotions that motivate prosocial behavior: empathy and distress. Empathy is defined as other-focused (i.e., directed toward the beneficiaries of one's good deeds), whereas distress is defined as self-focused (i.e., evoking an "egoistic motivation to reduce one's own aversive arousal"; Batson et al., 1987, p. 19). Distress is theorized to be selfish, because it is associated with a desire to relieve personal discomfort rather than a desire to help others.

Study 2 investigates whether emotion that is specified as either empathy or distress differentially affects perceptions of moral character. This permits an examination of whether lay beliefs about the nature of personal distress concur with psychological theories that position distress as selfish.

We hypothesize that greater emotion will increase perceptions of moral character, regardless of whether the emotion is described as empathy or distress. Although we expect distress to be recognized as self-focused, we also expect it to signal authentic prosocial motivation. Thus, we predict that high levels of distress will increase perceptions of moral character and authentic prosocial motivation because people will not view emotional self-focus as incompatible with a genuine desire to help others.

## Method

Three hundred fifty-one individuals (35% female; mean age = 28 years) participated in an online survey via Amazon.com's Mechanical Turk in exchange for payment. Instructions described a previous study in which people had been connected to a galvanic skin response (GSR) instrument while watching a video about hungry children in Africa and could subsequently donate to help the children.

Participants in the present study viewed the record of one donor from the previous study, who unbeknownst to them was fictitious (see Appendix B). The donor record included the target's GSR level and donation amount. Unlike Study 1, in which the level of emotion was self-reported by the target donor, in Study 2, the reported GSR level served as a seemingly objective measure of the target's emotion. This helps rule out the possibility that participants' perceptions are sensitive to the way in which donors describe their feelings, rather than to donors' actual feelings. Last, the GSR record explicitly stated that the target donated \$5 in all conditions to control for inferences about the magnitude of donation across conditions.

Participants were randomly assigned to one of four conditions in a 2 (emotion type: sympathy vs. distress)  $\times$  2 (emotion level: high vs. low) between-subjects design. Across all conditions, participants learned that the GSR instrument measured the electrical conductance of the skin. Whereas the actual GSR is not sensitive to the specific nature of the emotional response, participants in this study were led to believe that it measures a specific emotion. Half of the participants read that the GSR measured sympathy, and the other half read that the GSR measured distress.<sup>3</sup> Sympathy was described as "the feeling of sensitivity and concern for others," and distress was described as "the feeling of personal uneasiness and discomfort" (Batson et al., 1983, 1987). To rule out the possibility of an effect being driven by a negative reaction toward a donor without any emotion, this study compared a high level and a low level of emotion (rather than no emotion), as indicated on the GSR record of the donor.

After viewing the record of the fictitious donor, participants answered the same set of questions as in Study 1 (each scale  $\alpha > .77$ ), plus two new measures to examine whether participants interpreted sympathy as other-focused and distress as self-focused, as intended. Specifically, to capture other-focus, participants answered the question, "To what extent was the donor thinking about others?"

Participants were also asked, "To what extent was the donor thinking about him/herself?" This item loaded with one item from the previous study ("To what extent did the donor donate to make him/herself feel better?"), and these two items were combined to create a measure of self-focus, r(351) = .42, p < .001. This conceptualization of self-focus is consistent with theories that characterize distress as an emotion that activates the selfish motive to help others in order to improve one's own emotional state, rather than out of true concern for others (e.g., Batson, 1987).

It is important to note that other-focus and self-focus were positively, but insignificantly, correlated, r(351) = .05, p = .37. This suggests that lay people may not necessarily believe that a focus on the self is incongruous with caring about others.

# **Results**

First, we present preliminary analyses, which include manipulation checks of the emotion-level manipulation (high vs. low), the emotion-type manipulation (sympathy vs. distress), and the degree to which sympathy and distress were accurately perceived as other- and self-focused, respectively. We then present our main analyses of moral character and authentic prosocial motivation, followed by mediation analyses.

# Preliminary analyses.

*Emotion-level manipulation check.* As a manipulation check of level of emotion level, a two-way ANOVA revealed that participants viewed the donor as significantly more motivated by feelings in the high emotion-level condition (M = 5.74, SD = 0.93) than the low emotion-level condition (M = 3.97, SD = 1.55), F(1, 347) = 165.55, p < .001. There was no effect of emotion type (sympathy vs. distress), F(1, 347) = 0.48, p = .83, nor was there a significant emotion-type  $\times$  emotion-level interaction, F(1, 347) = 1.39, p = .24.

*Emotion-type manipulation check.* First, we examine how the manipulations affected perceived sympathy. A two-way ANOVA revealed a main effect of emotion level, F(1, 347) = 98.37, p < .001, such that that participants perceived donors in the high emotion-level condition as more sympathetic than donors in the low emotion-level condition. Consistent with the intent of the

<sup>&</sup>lt;sup>3</sup> In this study, we use the term *sympathy* rather than *empathy* in the stimuli because prior research has indicated that laypeople are less familiar with the latter term (Batson et al., 1983).

manipulations, this main effect was qualified by a significant emotion-level × emotion-type interaction, F(1, 347) = 10.38, p < .001, such that manipulated emotion level had a stronger effect on perceived sympathy when the GSR allegedly measured sympathy ( $M_{\text{High}} = 5.51$ ,  $SD_{\text{High}} = 1.07$  vs.  $M_{\text{Low}} = 3.63$ ,  $SD_{\text{Low}} = 1.52$ , t(175) = 9.31, p < .001) than when it measured distress ( $M_{\text{High}} = 5.26$ ,  $SD_{\text{High}} = 1.29$  vs.  $M_{\text{Low}} = 4.30$ ,  $SD_{\text{Low}} = 1.43$ , t(174) = 4.73, p < .001).

We next examine how the manipulations affected perceived distress. A two-way ANOVA revealed a main effect of emotion level, F(1, 347) = 110.65, p < .001, such that participants perceived donors in the high emotion-level condition as more distressed than donors in the low emotion-level condition. Consistent with the intent of the manipulations, this main effect was qualified by a significant emotion-level × emotion-type interaction, F(1, 347) = 10.65, p < .001, whereby emotion level had a stronger effect on perceived distress when the GSR allegedly measured distress ( $M_{\text{High}} = 5.04$ ,  $SD_{\text{High}} = 1.48$  vs.  $M_{\text{Low}} = 3.01$ ,  $SD_{\text{Low}} = 1.41$ , t(174) = 9.73, p < .001) than when it measured sympathy ( $M_{\text{High}} = 4.14$ ,  $SD_{\text{High}} = 1.18$  vs.  $M_{\text{Low}} = 3.07$ ,  $SD_{\text{Low}} = 1.41$ , t(175) = 5.14, p < .001).

In sum, judgments about sympathy were more sensitive to manipulated sympathy levels than to manipulated distress levels. Similarly, judgments about distress were more sensitive to manipulated distress levels than to manipulated sympathy levels.

**Other- vs. self-focus.** Performing a final check of the manipulations, we examined whether sympathy and distress were interpreted as other-focused and self-focused, as intended. We expected, consistent with the definitions provided to participants regarding the nature of sympathy and distress (Batson, 1987), that the manipulated sympathy level would affect judgments of other-focus and that the manipulated distress level would affect judgments of self-focus. Each inference is examined in turn.

A two-way ANOVA on perceived other-focus revealed a significant main effect of emotion level, F(1, 347) = 58.46, p < .001, such that donors in the high emotion-level condition were perceived as being more other-focused than donors in the low emotion-level condition. However, this main effect was qualified by a significant emotion-level × emotion-type interaction, F(1, 347) = 4.88, p = .03. Consistent with the intent of the manipulations, emotion level had a stronger effect on other-focus when the GSR allegedly measured sympathy ( $M_{\text{High}} = 5.31$ ,  $SD_{\text{High}} = 1.17 \text{ vs. } M_{\text{Low}} = 3.95$ ,  $SD_{\text{Low}} = 1.45$ , t(175) = 6.98, p < .001) than when it measured distress ( $M_{\text{High}} = 5.13$ ,  $SD_{\text{High}} = 1.22 \text{ vs. } M_{\text{Low}} = 4.38$ ,  $SD_{\text{Low}} = 1.28$ , t(174) = 3.84, p < .001).

A two-way ANOVA on perceived self-focus also revealed a significant main effect of emotion level, F(1, 347) = 10.42, p < .001, such that donors in the high emotion-level condition were perceived as being more self-focused than donors in the low emotion-level condition. This main effect was qualified by a significant emotion-level × emotion-type interaction, F(1, 347) = 6.68, p = .01. Consistent with the intent of the manipulations, emotion level had a significant effect on self-focus when the GSR allegedly measured distress ( $M_{\text{High}} = 4.63$ ,  $SD_{\text{High}} = 1.23$ , vs.  $M_{\text{Low}} = 3.92$ ,  $SD_{\text{Low}} = 1.21$ , t(174) = 4.10, p < .001), but emotion level had no effect when the GSR measured sympathy

 $(M_{\text{High}} = 4.53, SD_{\text{High}} = 1.11, \text{ vs. } M_{\text{Low}} = 4.45, SD_{\text{Low}} = 1.06, t(175) = 0.45, p = .65).$ 

#### Main analyses.

*Moral character.* Consistent with the hypothesis that emotion is a positive signal of moral character, a two-way ANOVA revealed a significant effect of emotion level on moral character, F(1, 347) = 39.24, p < .001. Specifically, participants believed that donors who felt a high level of emotion (M = 5.50, SD =0.71) were more moral than donors who felt a low level of emotion (M = 4.99, SD = 0.86). This was true for both sympathy and distress. Donors who felt high sympathy (M = 5.54, SD = 0.68) were judged as more moral than donors who felt low sympathy (M = 4.76, SD = 0.91), t(175) = 6.68, p < .001, and donors who felt high distress (M = 5.47, SD = 0.75) were perceived as more moral than donors who felt low distress (M = 5.21, SD = 0.74), t(174) = 2.18, p = .03.

Due to the fact that donors who felt low sympathy were judged as the least moral (significantly lower than the other three cells, p < .05), there was an unpredicted main effect of emotion type, F(1, 347) = 5.33, p = .02. Donors in the distress conditions were perceived as more moral than donors in the sympathy conditions. Finally, there was a significant emotion-level  $\times$  emotion-type interaction, F(1, 347) = 10.07, p < .01, such that the difference between high and low sympathy was greater than the difference between high and low distress.

We also examined the effect of each manipulated emotion on moral character, controlling for inferences about the nonmanipulated emotion. When controlling for inferred distress, the effect of manipulated sympathy level on moral character remains significant, F(1, 173) = 31.26, p < .01. When controlling for inferred sympathy, the effect of manipulated distress level on moral character is no longer significant, F(1, 172) = .00, p = .99. This result demonstrates that although high distress is perceived as more self-focused than low distress, it is also perceived to be a signal of sympathy, which drives perceptions of moral character.

Authentic prosocial motivation. A similar pattern resulted for judgments of authentic prosocial motivation. Participants believed that donors who felt a high level of emotion (M = 5.05, SD =1.04) were more authentically motivated than donors who felt a low level of emotion (M = 4.36, SD = 1.17), F(1, 347) = 34.50, p < .001. This was true for both sympathy and distress. Donors who felt high sympathy (M = 5.19, SD = 0.99) were judged as more authentically motivated than donors who felt low sympathy (M = 4.17, SD = 1.25), t(175) = 6.19, p < .001, and donors who felt high distress (M = 4.91, SD = 1.07) were perceived as more authentically motivated than donors who felt low distress (M =4.56, SD = 1.05), t(174) = 2.12, p = .04. However, there was a significant emotion-level  $\times$  emotion-type interaction, F(1, 347) =8.24, p < .01, such that the difference between high and low sympathy was greater than the difference between high and low distress. There was no main effect of emotion type (sympathy vs. distress), F(1, 347) = 0.20, p = .65.

*Emotional benefits.* Participants believed that donors who felt a high level of emotion (M = 4.77, SD = 0.97) reaped greater emotional benefits than donors who felt a low level of emotion (M = 4.12, SD = 1.13), F(1, 347) = 33.04, p < .001. There was no main effect of emotion type, F(1, 347) = 1.28, p = .26; nor was there a significant emotion-level × emotion-type interaction, F(1, 347) = 0.88, p = .35.

Mediation analysis. We hypothesized that the level of emotion would significantly increase perceived authentic prosocial motivation, which would increase perceptions of moral character. Thus, we used bootstrap analyses to test the following model: emotion level as the independent variable, authentic prosocial motivation as the mediator variable, and moral character as the dependent measure. This analysis revealed that the 95% biascorrected confidence interval for the size of the indirect effect on authentic prosocial motivation excluded zero (indirect effect = 0.32, SE = 0.06; 95% CI [0.21, 0.43]). Specifically, increasing the level of emotion increases perceived authenticity (a = 0.69), which in turn increases perceptions of moral character (b = 0.46). Once we include authenticity in the model, the relationship between emotion level and moral character decreases significantly (c = 0.52, p < .001; c' = .20, p < .01), suggesting that perceived authenticity partially mediates the relationship between emotion level and moral character.

We also ran a moderated mediation analysis to examine whether the mechanism underlying the effect of emotion level was different for sympathy and distress. This model included emotion level as the independent variable, emotion type as the moderator variable, authentic prosocial motivation as the mediator variable, and moral character as the dependent measure. Consistent with our hypothesis, we find that authentic prosocial motivation mediates in the expected direction for both sympathy, 95% CI [0.31, 0.67], and distress, 95% CI [0.24, 0.31].

Last, we conducted a multiple-mediation analysis, which included emotion level as the independent variable, and authentic prosocial motivation, inferred sympathy, and inferred distress simultaneously as mediators. Both authentic prosocial motivation (indirect effect = 0.26, SE = 0.06; 95% CI [0.16, 0.38]) and inferred sympathy (indirect effect = 0.15, SE = 0.05; 95% CI [0.07, 0.25]) mediate the effect of emotion level on moral character; perceived distress does not (indirect effect = -.02, SE = 0.03; 95% CI [-0.09, 0.06]).

## Discussion

The present study finds, consistent with the results of Study 1, that a donor's level of emotion is predictive of perceptions of moral character. This is true regardless of whether the donor's emotion is described as sympathy or as distress. We find evidence of this relationship when the level of emotion is obtained from a seemingly objective and nonfakeable measure of the target's emotion (i.e., a galvanic skin response score).

Past research characterizes distress as a self-focused emotional response to others in need and thus, as not purely altruistic (Batson, 1987; Batson et al., 1981; Cialdini et al., 1973, 1987). However, this study finds that high distress is not penalized in the eyes of others. Although donors high in distress are judged to be significantly more self-focused than donors who are low in distress (i.e., they are perceived as thinking about themselves and as motivated by emotional benefits), high distress still signals stronger moral character. This is likely because high-distress donors are presumed to feel sympathy as well and to be focused on others in addition to themselves. That is, when evaluating emotion in the context of prosocial behavior, people do not view self-focus as incompatible with other-focus.

# Study 3

An alternative explanation for the findings thus far is that emotion, regardless of the behavior it motivates, signals moral character. Study 3 examines whether emotion signals moral character even when it fails to promote prosocial behavior. We expect that when individuals choose not to engage in prosocial behavior, emotion level will no longer predict moral character. To test this hypothesis, Study 3 independently manipulates the actor's level of distress and the actor's behavior.

#### Method

Four hundred seventy individuals (35% female; mean age = 28 years) participated in an online survey via Amazon.com's Mechanical Turk in exchange for payment. As in Study 2, the instructions of Study 3 described a previous study in which people had been connected to a galvanic skin response instrument while watching a video about hungry children in Africa and could subsequently donate to help the children. The materials in Study 3 were similar to those used in Study 2, with two notable changes. First, the GSR was always described as measuring distress, "the feeling of personal uneasiness and discomfort." We used distress, rather than sympathy, because it is more plausible that distress would motivate either prosocial or self-interested behavior (Batson et al., 1987).

Second, all participants were informed that people in the previous study earned a \$2 bonus for their participation and had the choice of either donating the \$2 bonus to the African Children's Fund or receiving the bonus in the form of a \$2 iTunes gift card. This allowed us to manipulate whether the target behaved prosocially.

Participants were randomly assigned to one of six conditions in a 2 (distress: high vs. low)  $\times$  3 (action: donation, gift card purchase, no-information) between-subjects design. As in Study 2, participants viewed the target's GSR reading, which showed that the target felt either low or high levels of distress while watching the video about hungry children in Africa. In the donation and gift card conditions, participants viewed the target's "Donation Summary," which indicated that the target opted for either the \$2 donation or the \$2 iTunes gift card. In the no-information condition, participants learned no further information about the bonus or the target's behavior. The purpose of the no-information condition was to examine the signal value of distress when there is uncertainty about a target's subsequent behavior.

After viewing the record of the fictitious donor, participants provided judgments of moral character ( $\alpha = .94$ ) and inferred emotion type (empathy and distress, each r > .83), using the same items as Studies 1 and 2. We did not collect authentic prosocial motivation or emotional benefits measures in this study because the items referred to a donation action and thus would not make sense in the no-information and gift card conditions. However, we added an additional item that measured perceived likelihood of donating ("How likely is it that this person donated money to the African Children's Fund?" 1 = Not at all likely to 7 = Extremely likely). This item was used to examine whether emotional targets are perceived as more likely to donate in the absence of explicit information about their prosocial behavior (i.e., in the no-information).

We also asked two multiple-choice questions at the end of the study, as attention checks: "What were the person's galvanic skin response results?" (Choices: Low, Neutral, High) and "What was the person's payment selection?" (Choices: \$2 donation to the African Children's Fun, \$2 iTunes gift card, I don't know). A total of 87.4% of participants correctly answered both questions. We include all participants who completed the entire study in our analyses, but the results are unchanged when we restrict the sample to participants who correctly answered these questions.

## Results

**Distress manipulation check.** Individuals perceived targets in the high distress condition as more distressed (M = 5.28, SD =1.33) than targets in the low distress condition (M = 2.69, SD =1.38), F(1, 464) = 432.68, p < .001. The target's action had no effect on perceived distress, F(1, 464) = 0.75, p = .47. However, there was a significant distress × action interaction, F(1, 464) =3.04, p = .05. In all conditions, the distress manipulation significantly influenced perceived distress (donate:  $M_{\text{LowDistress}} = 2.78$ , SD = 1.48 vs.  $M_{\text{HighDistress}} = 5.32$ , SD = 1.31, t(156) = 11.84, p <.001; no donate:  $M_{\text{LowDistress}} = 2.76$ , SD = 1.34 vs.  $M_{\text{HighDistress}} =$ 5.00, SD = 1.49, t(154) = 10.30, p < .001), but the effect was greatest in the no-information condition ( $M_{\text{LowDistress}} = 2.54$ , SD =1.30 vs.  $M_{\text{HighDistress}} = 5.53$ , SD = 1.12), t(157) = 13.88, p < .001.

**Moral character.** A two-way ANOVA revealed a significant effect of distress on judged moral character, F(1, 464) = 51.56, p < .001. Specifically, participants believed that targets who felt high distress (M = 4.80, SD = 1.19) were more moral than targets who felt low distress (M = 4.20, SD = 1.07). There was also a main effect of action on moral character, F(1, 464) = 105.69, p < .001. Targets in the donate condition were judged as more moral (M = 5.17, SD = 0.91) than targets in the no-information condition (M = 4.67, SD = 1.14), t(314) = 4.95, p < .001, and the gift card condition (M = 3.67, SD = 0.91), t(311) = 14.27, p < .001. Targets in the no-information condition were also perceived as more moral than targets in the gift card condition, t(312) = 9.37, p < .001.

Consistent with our predictions, these effects were qualified by a significant distress × action interaction, F(1, 464) = 12.73, p < .001. Distress increased perceptions of moral character when the target donated ( $M_{\text{Donation}} = 5.41$ , SD = 0.88 vs.  $M_{\text{NoDonation}} = 4.92$ , SD = 0.89), t(156) = 3.35, p = .001, and when there was no information about the target's action, ( $M_{\text{Donation}} = 5.25$ , SD = 0.90 vs.  $M_{\text{NoDonation}} = 4.06$ , SD = 1.04), t(157) = 8.08,  $p < .001.^5$ However, distress did not significantly increase perceptions of moral character when the target chose not to donate ( $M_{\text{Donation}} = 3.75$ , SD = 0.99 vs.  $M_{\text{NoDonation}} = 3.59$ , SD = 0.80), t(154) = 1.05, p = .15.

## Discussion

The present study finds, consistent with the results of Study 2, that a target's level of distress predicts perceptions of moral character. However, this effect is attenuated when distress does not motivate a prosocial action. Individuals who experience distress when witnessing the suffering of others, and then relieve their distress with other rewards (i.e., an iTunes gift card), do not receive credit for their emotional response. Alternatively, when there is uncertainty about the target's behavior, distress signals that the actor likely engages in prosocial behavior and the target is consequently judged to have high moral character.

# Study 4

The first three studies examined emotion as an antecedent of giving; these studies indicate that people do not view emotiondriven prosocial behavior as selfish, despite inferring that emotional donors reap emotional benefits. To the contrary, emotion signals that the donor's motivation was authentically prosocial, and thus, he is judged as having high moral character. Study 4 examines emotion that is experienced as a consequence of giving. This study manipulates emotional benefits directly, rather than measuring emotional benefits as an inference resulting from emotion toward the cause.

Specifically, Study 4 varies how much the donor experiences a "warm, positive feeling" as a result of his charitable behavior. This language reflects the "warm glow" typically believed to result from prosocial behavior and to serve as a selfish motivation for engaging in prosocial acts (e.g., Andreoni, 1990). Note that this manipulation also corresponds to the measured variable of emotional benefits in Studies 1 and 2.

#### Method

Two hundred forty-one individuals (43% female; mean age = 28.3 years) participated in an online survey via Amazon.com's Mechanical Turk in exchange for payment. All materials and methods were similar to those used in Study 1, except for the following changes. First, the fictitious donor gave to Nothing but Nets, an organization that works with UN partners to purchase mosquito nets, transport them to Africa, and distribute them to families in order to protect people from malaria. In the open-ended textbox, all donors wrote, "I recently read an article about the need for malaria nets in Africa."

Second, the experimental manipulation varied the level of emotional benefits rather than the level of emotional motivation. That is, donors responded to the question "How much did donating give you a warm, positive feeling?"

Participants were randomly assigned to view one fictitious survey that had one of the five possible responses to that question checked (not at all, slightly, moderately, very, or extremely) or to a survey that omitted the question about emotional benefits altogether (no-information condition). As in Study 1, the purpose of the no-information condition was to examine inferences made about prosocial actors in the absence of explicit information relating to emotional benefits.

Last, because the study manipulated whether the donor received emotional benefits, the two emotional benefits items from the previous studies served as the manipulation check for this study: "How good will the donor feel after s/he donates to Nothing but

<sup>&</sup>lt;sup>4</sup> We also measured perceived empathy. Consistent with prior literature and Studies 1 and 2, distress and empathy were highly correlated, r(470) = .627, p < .001, and followed the same pattern of results. However, there was also a main effect of action on perceived empathy, such that targets in the donate condition were perceived to be the most empathic.

<sup>&</sup>lt;sup>5</sup> We examined the perceived likelihood of donating item to understand why the distress manipulation significantly influenced moral character in the no-information condition. As expected, targets in the no-information condition were perceived as more likely to donate than targets in the gift card condition, t(312) = 14.02, p < .001. In other words, distress likely increased moral character in the no-information condition because it signaled prosocial behavior.

Nets" and "How much will donating to Nothing but Nets improve the donor's mood?"; r(241) = .82, p < .001. All other scales were the same as those used in Study 1 (all  $\alpha s > .69$ ).

# Results

The analyses below omit the no-information condition and examine just the five conditions for which the donor reported a level of emotion in order to calculate the trends across these levels using a linear regression (N = 199). Figure 3 plots the means of the no-information condition relative to the five levels of emotion for ratings of moral character and indicates which levels of emotion are significantly different from the no-information condition.

**Preliminary analyses.** Confirming the manipulation, the level of emotional benefits significantly predicted the extent to which participants believed that the donor reaped emotional benefits from donating,  $\beta = .77$ , *SE* = 0.06, *t*(197) = 13.53, *p* < .001.

For consistency across studies, we also included the other emotion-related measures from Study 1. As the donor's emotional benefits increased, so did judgments of how much he was motivated by feelings,  $\beta = .63$ , SE = 0.07, t(197) = 8.89, p < .001; how much empathy he felt,  $\beta = .40$ , SE = 0.06, t(197) = 7.11, p < .001; and how much distress he felt,  $\beta = .33$ , SE = 0.08, t(197) = 4.43, p < .001.

**Main analyses.** Regression results demonstrate a linear trend across both of our main dependent measures. Specifically, as the donor's emotional benefits increased, so did judgments of his moral character,  $\beta = .20$ , SE = 0.04, t(197) = 5.67, p < .001, and so did judgments of his authentic prosocial motivation,  $\beta = .23$ , SE = 0.04, t(197) = 5.73, p < .001. Donors who reaped emotional benefits were also perceived as being more motivated by those benefits,  $\beta = .24$ , SE = 0.03, t(197) = 8.01, p < .001, suggesting that perceptions of self-focused motivation can coexist with perceptions of moral character.

Because the emotional benefits manipulation also influenced inferences of sympathy, distress, and the degree to which the donor

7

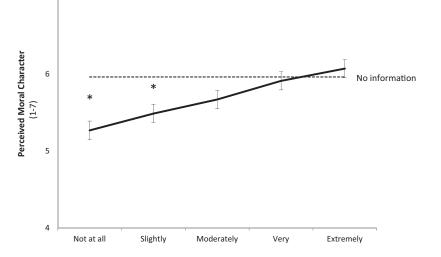
was motivated by feelings, we conducted additional regression analyses that control for these inferences. The effect of the emotional benefit manipulation remains significant, controlling for the degree to which the donor was motivated by feelings,  $\beta = .217$ , SE = 0.03, t(238) = 6.28, p < .001, and when also controlling for inferred empathy and inferred distress,  $\beta = .086$ , SE = 0.04, t(236) = 3.53, p < .001.

**Mediation analysis.** As predicted, authentic prosocial motivation mediated the effect of emotional benefits level on moral character. Using bootstrap analyses, we find that the 95% bias-corrected confidence interval for the size of the indirect effect excluded zero (indirect effect = 0.15, SE = 0.03; 95% CI [0.10, 0.22]), such that increasing the level of emotional benefits increases perceived authenticity (a = 0.23, p < .001), which in turn increases perceptions of moral character (b = 0.68, p < .001). Once we include authenticity in the model, the relationship between emotional benefits and moral character becomes less significant (c = 0.24, p < .001; c' = .05, p = .05). This suggests that the greater emotional benefits a donor receives, the more the donor is perceived as having high moral character because his motivation appears more authentically directed toward others.

## Discussion

The results of Study 4 conceptually replicate the results from Study 1. Just as emotion that motivates prosocial behavior signals moral character, so does emotion that follows from prosocial behavior. Donors who experience intrapsychic rewards (i.e., "warm, positive feelings" as a result of donating) are not perceived as selfish. Rather, emotional benefits signal authentic prosocial motivation and moral character. Although prior work has documented a robust negative relationship between personal benefits and perceptions of altruism (e.g., Lin-Healy & Small, 2013; Newman & Cain, 2014), emotional benefits appear to defy this relationship. This suggests that

*Figure 3.* Perceived moral character as a function of emotional benefits in Study 4. Error bars represent  $\pm 1$  standard error. Means that are significantly different (p < .05) from the no-information condition are indicated by a star (\*).



emotional benefits lead to different inferences than material benefits in the context of altruistic behavior, which we test directly in our final study.

Furthermore, in the absence of any emotion-relevant information (no-information condition), participants infer that donors do experience emotional benefits. These findings suggest that people view emotional benefits as a natural part of prosocial behavior and penalize those who do not feel them.

As was found in Study 1, donors who report feeling no emotion at all—in this case, no warm, positive feeling—were perceived as having weaker moral character than donors in the no-information condition. However, the results are not driven exclusively by this condition. The positive linear trend between emotional benefits and moral character is significant even when the not-at-all condition is removed from the analysis,  $\beta = .20$ , SE = 0.05, t(157) = 4.28, p < .001, as are the effects on all other dependent variables.

In order to disentangle the role of emotion felt toward a cause and emotional benefits even further, we independently manipulate these constructs in the next study. In Study 5, we demonstrate that each inference plays a unique role in informing judgments of moral character.

#### Study 5

We have theorized that emotion positively affects moral character, both when it is an antecedent for doing a good deed (Studies 1, 2, and 3) and when it is a consequence of doing a good deed (Study 4). However, in each of the previous studies, we manipulate only one of these two categories of emotion and find that people naturally infer one from the other. Therefore, we cannot know the independent casual effect of each, holding constant the other. In Study 5, we disentangle distress and emotional benefits by manipulating them orthogonally. Consistent with Studies 2 and 3, distress is utilized to describe the emotion that motivates prosocial behavior.

In addition to the orthogonal manipulation of distress and emotional benefits, Study 5 attempts to control for the target's expectation of an intrapsychic reward. Scholars presume that distress motivates prosocial behavior because distressed individuals are hoping to relieve their negative state. In this study, we hold expected intrapsychic benefits constant and examine if distress and emotional benefits still positively and independently signal moral character.

Finally, Study 5 employs a different type of stimuli from the previous studies. Participants read a third-person scenario in which the emotional state of the individual is described as if it were an objective fact. Moreover, this study also manipulates the gender of the individual in the scenario, to make sure the effects of emotion on judgments of moral character are generalizable across genders.

#### Method

Two hundred seventy-six individuals (36.6% female; mean age = 29 years) participated in an online survey via Amazon.com's Mechanical Turk in exchange for payment. All participants read a scenario about an individual who reads the newspaper online every morning. The scenario explained that while reading

the newspaper, this individual stumbled upon an article about hungry families in his community. After the article, there was a link that allowed readers to donate money to a local soup kitchen (see Appendix C for scenario wording).

Participants were randomly assigned to one of eight conditions in a 2 (distress: yes vs. no)  $\times$  2 (emotional benefits: yes vs. no)  $\times$ 2 (gender: male vs. female) between-subjects design. In the no distress conditions, participants learned that reading the article did not affect the individual's mood. In the distress conditions, participants learned that reading the article made the individual feel "distressed and uncomfortable." This manipulation mirrors Studies 1, 2, and 3 in that it reflects the individual's emotional state before engaging in prosocial behavior.

Participants then read that the individual decided to click on the link and donate money to the soup kitchen. As a manipulation of emotional benefits, participants learned either that donating had "no effect" on the individual's mood or that donating made the individual "feel happy." This manipulation characterizes the individual's emotion after engaging in prosocial behavior, similar to the emotional benefits manipulation in Study 4.

All participants also read that the individual expected that donating would make him [her] feel happy. Thus, in this study, it was explicit that the individual anticipated receiving intrapsychic rewards from his/her prosocial action.

The individual's name in the scenario was manipulated to be either male or female. Half of the participants read about an individual named Jeff and half of the participants read about an individual named Jane.

Consistent with the previous studies, participants judged Jeff/Jane's moral character and authentic prosocial motivation (each  $\alpha > .85$ ). Two items served as a manipulation check of distress: "Jeff [Jane] felt uncomfortable after reading the article" and "Jeff's [Jane's] decision to donate was motivated by his [her] feelings of distress." These items were measured on 7-point Likert scales, ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*), r(276) = .70, p < .001. As a manipulation check of emotional benefits, participants answered, "How happy did Jeff [Jane] feel after he [she] donated to his local soup kitchen?" and "How much did donating improve Jeff's [Jane's] mood?"; r(276) = .80, p < .001. These items were measured on 7-point Likert scales, ranging from 1 (*Not at all*) to 7 (*Extremely*).

Finally, one additional item served to check that participants understood that the individual in the scenario anticipated emotional rewards from donating: "Jeff [Jane] expected that donating would make him [her] feel happy" (either "Yes" or "No"). A total of 94.9% of participants responded "Yes" to the question asking if the individual expected to feel happy from donating. We include all participants who completed the entire study in our analyses, but the results are unchanged when we restrict the sample to participants who correctly answered this question.

# Results

A three-way ANOVA revealed that there were no interaction effects of gender across any of the dependent measures. Therefore, we collapsed across gender for all subsequent analyses. The results are unchanged if we include gender as a factor.

#### Preliminary analyses.

*Distress manipulation check.* Consistent with the intent of the distress manipulation, there was a significant main effect of ma-

nipulated distress on perceived distress, F(1, 272) = 285.96, p < .001. Participants believed that the donor felt more distressed before donating in the distress condition (M = 5.85, SD = 1.21) than in the no distress condition (M = 3.08, SD = 1.61). The emotional benefits manipulation also influenced perceived distress, F(1, 272) = 27.65, p < .01, such that participants believed that the donor felt more distressed in the emotional benefits condition (M = 4.96, SD = 1.90) than in the no emotional benefits condition (M = 4.06, SD = 1.90) than in the no emotional benefits condition (M = 4.06, SD = 1.97). There was no interaction between distress and emotional benefits on perceived distress, F(1, 272) = 0.19, p = .66.

*Emotional benefits manipulation check.* The emotional benefits manipulation effectively influenced how good participants believed the individual felt after donating, F(1, 272) = 517.82, p < .001. Participants believed that the individual felt better after donating in the emotional benefits condition (M = 5.72, SD = 0.89) than in the no emotional benefits condition (M = 2.54, SD = 1.39). The distress manipulation also influenced perceived emotional benefits, F(1, 272) = 5.51, p = .02, such that participants believed that the donor felt better after donating in the distress condition (M = 3.88, SD = 1.97). There was not a significant distress × emotional benefits interaction, F(1, 272) = 0.12, p = .73.

# Main analyses.

**Moral character.** A two-way ANOVA revealed a significant effect of distress on moral character, F(1, 272) = 5.92, p = .02. Participants believed that the donor was more moral when he felt distressed from reading the article (M = 5.71, SD = 0.83) than when the article did not affect his mood (M = 5.46, SD = 0.85). In addition, there was a significant effect of emotional benefits on moral character, F(1, 272) = 12.64, p < .001. Participants believed that the donor was more moral when he felt happy from donating (M = 5.78, SD = 0.78) than when donating had no effect on his mood (M = 5.42, SD = 0.88). There was not a significant distress × emotional benefits interaction, F(1, 272) = 0.70, p = .40.

We also examined the effect of each of our manipulations, controlling for inferences about the nonfocal manipulation. When controlling for inferred distress, the effect of the emotional benefits manipulation on moral character remains significant, F(1, 273) = 7.48, p < .01. Similarly, when controlling for inferred emotional benefits, the effect of manipulated distress on moral character remains significant, F(1, 273) = 4.23, p = .04. In other words, both distress and emotional benefits causally and independently influence moral character.

Authentic prosocial motivation. A similar pattern emerged for judgments of authentic prosocial motivation. Participants believed that the individual was more authentically motivated when he felt distressed from reading the article (M = 5.22, SD = 1.10) than when the article did not affect his mood (M = 4.89, SD =1.23), F(1, 272) = 5.32, p = .02. In addition, there was a significant effect of emotional benefits on authentic prosocial motivation, F(1, 272) = 7.01, p < .01. Participants perceived that the individual was more authentically motivated when he felt happy from donating (M = 5.25, SD = 1.11) than when donating had no effect on his mood (M = 4.88, SD = 1.20). There was not a significant distress × emotional benefits interaction, F(1, 272) =0.03, p = .87.

**Mediation analysis.** We predicted that authentic prosocial motivation would mediate the effect of both distress and emotional

benefits on moral character. That is, we expected each emotion to independently predict authentic prosocial motivation and in turn increase moral character, controlling for the other emotion. We test these relationships by running two bootstrap mediation analyses (Hayes et al., 2011; SPSS Macro PROCESS, Model 4). In the first model, we enter manipulated distress as the independent variable, manipulated emotional benefits as the covariate, authentic prosocial motivation as the mediator, and moral character as the dependent measure. In the second model, we enter manipulated emotional benefits as the independent variable, manipulated distress as the covariate, authentic prosocial motivation as the mediator, and moral character as the dependent measure.

Consistent with the predictions, authentic prosocial motivation mediates the effects of both distress and emotional benefits on moral character. Specifically, there is a significant indirect effect of authentic prosocial motivation condition in the first model (indirect effect = .155, SE = 0.066; 95% CI [0.034, 0.293]), such that increasing the level of distress, controlling for emotional benefits, increases perceived authenticity ( $a_1 = 0.32, p < .05$ ), which in turn increases perceptions of moral character (b = 0.48, p < .001). Once we include authenticity in the model, the relationship between distress and moral character becomes insignificant (c = 0.25, p = .01; c' = .09, p = .23), suggesting that authenticity fully mediates the effect of distress. There is also a significant indirect effect of authentic prosocial motivation in the second model (indirect effect = .178, SE = 0.067; 95% CI [0.058, 0.307]), such that increasing the level of emotional benefits, controlling for distress, increases perceived authenticity ( $a_2 = 0.37$ , p < .01), which in turn increases perceptions of moral character (b = 0.48, p < .001). Once we include authenticity in the model, the relationship between emotional benefits and moral character becomes less significant (c = 0.35, p < .001; c' = .17, p = .02), suggesting partial mediation.

## Discussion

By independently manipulating emotion as an antecedent and emotion as a consequence of prosocial behavior, this study isolates the effect of each on moral character. As in Studies 1, 2, and 3, feeling emotional before doing a good deed is perceived as more moral than not feeling any emotion. In addition, as in Study 4, the happier someone feels after helping others, the more moral they are perceived to be. Of importance, these results hold even when the prosocial actor is explicitly described as expecting to receive emotional rewards.

This study conceptually replicates the prior studies while diversifying the stimuli in several ways. First, this study uses a thirdperson scenario in which the donor's feeling is described as fact. Second, this study utilizes different descriptions of emotional benefits levels: donating either makes the individual feel happy or has no effect on the individual's mood. Most important, this study independently manipulates emotion as a driver of prosocial behavior (i.e., distress) and emotion as a consequence (i.e., warm glow). The results lend support to the general prediction that emotion positively signals moral character and that this true for both emotional motivation and for emotional benefits, even when an individual does not display the other form of emotion.

# Study 6

We have shown that emotion, both as an antecedent and as a consequence of prosocial behavior, predicts moral character, even when individuals recognize that emotional prosocial actors anticipate intrapsychic benefits. In the final study, we investigate whether expecting intrapsychic benefits causally affects moral character. Similar to Study 5, Study 6 employs a third-person scenario in which the prosocial actor's expectations are described as if they were an objective fact: He either expects to receive emotional benefits (i.e., to feel happy) from donating or does not expect donating to affect his mood. We test whether individuals perceive prosocial actors who anticipate these emotional rewards as more moral than those who do not expect such rewards.

In addition, Study 6 examines whether the relationship between emotional benefits and moral character is unique by comparing emotional benefits to other types of benefits, such as material or reputational rewards. Previous work demonstrates that when prosocial actors reap certain material or reputational benefits, individuals discount their character (Berman, Levine, Barasch, & Small, 2014; Lin-Healy & Small, 2013; Newman & Cain, 2014). Study 6 compares the expectation of these types of benefits to the expectation of emotional benefits and demonstrates that they have divergent effects on moral character.

## Method

Two hundred seventy-six individuals (41.3% female; mean age = 34 years) participated in an online survey via Amazon.com's Mechanical Turk in exchange for payment. All participants read a scenario about an individual who was reading the newspaper online one morning and stumbled upon an article about hungry families in his community. After the article, there was a link to donate money to a local soup kitchen.

Participants were randomly assigned to one of six conditions in a 3 (benefit type: emotional vs. material vs. reputational)  $\times 2$ (expected benefit: yes vs. no) between-subjects design. In all benefit type conditions, participants learned that the individual either expected to receive the particular type of benefit or did not expect to receive that type of benefit. In the emotional benefits conditions, participants learned that the individual either expected that donating would make him feel happy or did not expect that donating would affect his mood. In the material benefits conditions, participants learned that the individual either expected to receive a tax break for his donation or did not expect to receive a tax break. In the reputational benefits conditions, participants learned that the individual either expected to receive public recognition for his donation because his name would appear in the local newspaper or did not expect to receive public recognition because his donation was anonymous. Participants then read that the individual decided to click on the link and donate money to the soup kitchen.

Consistent with the previous studies, Jeff's moral character and authentic prosocial motivation (each  $\alpha > .90$ ) were judged by participants. We also asked one multiple-choice question at the end of the study, to ensure participants understood the benefit manipulation: "What benefit does Jeff expect to receive from donating to the soup kitchen?" (choices: Receive a tax break, Get his name in the newspaper, Feel happy, No benefit, or I don't know). When the scenario specified that Jeff received a benefit (choices: Emotional, Material, or Reputational), 80% of participants identified the correct benefit.<sup>6</sup> We include all participants who completed the entire study in our analyses, but the pattern of results is identical when we restrict the sample to participants who correctly answered this question. However, sometimes the effects are not significant due to the reduced sample size.

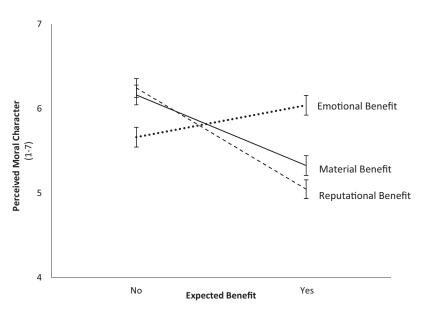
# Results

Moral character. A two-way ANOVA revealed a significant main effect of expected benefit on moral character, F(1, 280) =34.68, p < .001. Participants believed that Jeff was more moral when he did not expect to benefit from donating (M = 6.03, SD =0.77) than when he did expect to benefit from donating (M = 5.46, SD = 0.93). However, consistent with our predictions, this effect was qualified by a significant benefit type  $\times$  expected benefit interaction, F(1, 280) = 25.43, p < .001. Expecting a benefit decreased perceptions of moral character when the benefit was material ( $M_{\text{Benefit}} = 5.33$ , SD = 0.92 vs.  $M_{\text{No Benefit}} = 6.16$ , SD =(0.47), t(96) = 5.19, p = .001, and when the benefit was reputational ( $M_{\text{Benefit}} = 5.04$ , SD = 0.98 vs.  $M_{\text{No Benefit}} = 6.24$ , SD =(0.79), t(96) = 7.44, p < .001. However, for emotional benefits, the opposite pattern emerged: Jeff was seen as higher in moral character when he anticipated emotional benefits than when he did not anticipate emotional benefits ( $M_{\text{Benefit}} = 6.04$ , SD = 0.54 vs.  $M_{\text{No Benefit}} = 5.66, SD = 0.87), t(91) = 2.29, p = .023$ . These results are depicted in Figure 4.

**Authentic prosocial motivation.** A similar pattern emerged for judgments of authentic prosocial motivation. Participants believed that Jeff was more authentically motivated when he did not expect to benefit from donating (M = 5.91, SD = 1.65) than when he did expect to benefit from donating (M = 4.83, SD = 1.47), F(1, 280) = 68.59, p < .001. In addition, there was a significant effect of benefit type on authentic prosocial motivation, F(1, 280) = 7.46, p = .001. Participants perceived the individual as less authentically motivated in the reputational benefits condition (M = 4.97, SD = 1.65) than in the material benefits condition (M = 5.52, SD = 1.23), t(193) = 3.31, p = .001, and the emotional benefits condition (M = 5.57, SD = 0.94), t(188) = 3.35, p = .001.

As predicted, these effects were qualified by a significant benefit type × expected benefit interaction, F(1, 280) = 25.82, p < .001. Expecting to receive a benefit decreased perceptions of authentic motivation when the benefit was material ( $M_{\text{Benefit}} = 4.90$ , SD = 1.34 vs.  $M_{\text{No Benefit}} = 6.20$ , SD = 0.55), t(96) = 5.79, p = .001, and when the benefit was reputational ( $M_{\text{Benefit}} = 3.98$ , SD = 1.56 vs.  $M_{\text{No Benefit}} = 6.06$ , SD = 0.89), t(96) = 9.23, p < .001. However, for emotional benefits, the opposite pattern emerged: The individual was seen as directionally higher in authentic prosocial motivation when he did expect to receive a benefit than when he did not expect to receive a benefit ( $M_{\text{Benefit}} =$ 

<sup>&</sup>lt;sup>6</sup> In conditions for which participants were told that there was no (emotional, material, or reputational) benefit, 50% of participants correctly chose "No Benefit." The majority (84%) of incorrect responses in the no expected benefit conditions were individuals who responded "I don't know" or "Feel happy." This is consistent with the findings in Studies 1 and 4, which show that when there is no information about a prosocial actor's emotion, emotion is expected.



*Figure 4.* Perceived moral character as a function of benefit type and expected benefits in Study 6. Error bars represent  $\pm 1$  standard error.

5.66, SD = 0.91 vs.  $M_{\text{No Benefit}} = 5.46$ , SD = 0.97), t(91) = 0.88, p = .38.

Mediation analysis. We predicted that authentic prosocial motivation would mediate the interaction effect between benefit type and expected benefit on moral character. We test this relationship by running a bootstrap mediated moderation analysis (Hayes et al., 2011; SPSS Macro PROCESS, Model 8). In this model, we enter expected benefit as the independent variable, benefit type as the moderator, authentic prosocial motivation as the mediator, and moral character as the dependent measure. As predicted, authentic prosocial motivation mediates the interaction effect between benefit type and expected benefit on moral character. Specifically, there is a significant indirect effect of the highest order interaction in our model (indirect effect = .661, SE = 0.098; 95% CI [0.478, 0.864]). Once we include authenticity in the model, the interaction effect between benefit type and benefit result becomes insignificant (c = 0.79, p < .001; c' = .12, p = .10), suggesting that authentic prosocial motivation fully mediates the interaction.

#### Discussion

By directly manipulating expectations of emotional benefits, this study identifies a causal effect of anticipated emotional benefits on moral character. Prosocial actors who expect to receive emotional rewards prior to donating are perceived to be more moral than actors who do not expect to receive emotional rewards. However, emotional benefits are unique in this context: the expectation of emotional rewards increases moral character, whereas, the expectation of reputational rewards (i.e., public recognition) or material rewards (i.e., a tax break) decreases moral character.

Similar to Study 5, this demonstrates that even when prosocial actors are explicitly motivated by their emotional benefits, people do not discount their moral character. Individuals can be perceived as being motivated by emotional rewards and being motivated by

authentic concern for others, but this is not the case for other rewards. That is, the negative association between personal benefits and altruism (Berman et al., 2014; Lin-Healy & Small, 2013; Newman & Cain, 2014; Yoon et al., 2006) does not hold for emotional benefits.

## **General Discussion**

Six studies demonstrate that emotion is perceived as a signal of a prosocial actor's moral character. In Study 1, there is a direct relationship between the level of a donor's felt emotion toward a cause and judgments of his moral character and authenticity, even though emotional donors are perceived as reaping emotional benefits. In Study 2, we find that this pattern of results holds when a donor's emotion is described as other-focused sympathy and when it is described as self-focused distress. In Study 3, we demonstrate that distress signals moral character only to the extent it is believed to motivate prosocial behavior.

Studies 4, 5, and 6 manipulate the emotional consequences of doing good deeds (i.e., warm glow). Contrary to economic theories that consider emotional benefits to be evidence of impure altruism, in the eyes of laypeople, feeling good from doing good causally affects judgments of moral character. This is true across a range of levels of emotion benefits (Study 4) and is independent of the level of emotion the donor feels toward the cause (Study 5). In Study 6, we document a causal relationship between the expectation of emotional benefits and moral character judgments; unlike other benefits, anticipating emotional benefits increases perceptions of authentic prosocial motivation and moral character.

These results are robust across studies that differ in how an actor's emotion is conveyed and portrayed. In Studies 1 and 4, emotion was self-reported by the actor. In Studies 2 and 3, a galvanic skin response ostensibly captured the actor's true level of either sympathy or distress. In Studies 5 and 6, the emotional state of the actor was described in an objective narrative account.

In addition, the description of the levels of emotion varied across studies. In Study 1, the level of emotion felt toward a cause ranged from "not at all" to "extremely," as did the range of emotional benefits in Study 4. Although it was expected and found that a completely unfeeling prosocial actor is penalized, this condition alone cannot explain our findings: In both Studies 1 and 4, there remained a positive linear trend between emotion level and judged moral character, even when the lowest emotion level ("not at all" emotional) was omitted from the analyses. Studies 2, 3, 5, and 6 provide further evidence that the results are not driven solely by reactions toward a wholly unemotional donor by introducing new control conditions. In Studies 2 and 3, the level of emotion was designated as either high or low, and in Studies 5 and 6, the donor's mood was described as being unaffected by donating, rather than explicitly lacking emotion.

The present research suggests that people may not always be skeptical about altruism. Although a large body of research has argued that emotional motivation and emotional benefits are inconsistent with pure altruism (e.g., Andreoni, 1990; Cialdini et al., 1973, 1987), we find that naive theories reflect the opposite. The fact that a prosocial actor is emotional could be interpreted as genuine other-focused empathy or as self-focused distress. Previous work on the norm of self-interest and lay beliefs of altruism (e.g., Critcher & Dunning, 2011; Miller, 1999) suggests that such signals will be interpreted with skepticism, leading people to believe that emotion reflects selfishness. However, the present research shows that people generally infer that prosocial actors are empathic and genuinely motivated to help the cause in question. Even when lacking information about a prosocial actor's emotional state, when the emotion is described as self-focused distress, and when the donor explicitly expects emotional rewards, people still view the actor favorably.

These findings indicate that emotional benefits are a special kind of benefit; unlike other personal benefits, emotional benefits do not undermine perceptions of altruism. Whereas prior work found that personal benefits such as monetary rewards (e.g., Lin-Healy & Small, 2013) or a positive reputation (e.g., Berman et al., 2014; Yoon et al., 2006) trigger suspicion about a prosocial actor's motives, emotional benefits trigger the opposite. Laypeople hold the intuition that emotion and altruism are positively related. Just as people utilize their own emotional reactions to inform moral judgments (Greene & Haidt, 2002; Greene, Morelli, Lowenberg, Nystrom, & Cohen, 2008; Haidt, 2001), they also view others' emotion as a valid signal of moral character. As originally posited by Adam Smith (1790/1976) in The Theory of Moral Sentiments, moral sentiments (i.e., emotion) serve as discernible cues that allow outsiders to determine a person's true intentions (see also Darwin, 1872/1965; Frank, 1988).

#### **Limitations and Future Directions**

Many questions remain about how people interpret the emotional reactions of others when they behave prosocially. Although the present results suggest that emotional prosocial actors are perceived as more altruistic, they may be judged more negatively along other dimensions. For instance, people may view emotional actors as meaning well but not acting in ways that have as much impact as those whose actions are based purely on reason. Future research can examine how people make inferences about prosocial actors motivated by emotion compared to prosocial actors motivated by reason. Although moral character inferences are highly connected to inferences about motives, judgments about competence depend on beliefs about one's ability to achieve those motives (Wojciszke, 1994) or, in the prosocial domain, on one's ability to make an impact. The evidence herein finds that emotion signals moral character. However, reason-based motives—such as duty or utilitarianism—may be a stronger signal of competence, and emotion may signal low competence. Such competence judgments might be sensible, given that aid allocation decisions are often distorted by emotion (e.g., Baron, 1993; Singer, 2009; Small, Loewenstein, & Slovic, 2007).

Prior research has also found that emotion, particularly happiness, signals warmth (Knutson, 1996). As a result, it is possible that the present findings are driven by perceptions of warmth rather than moral character per se. However, when warmth-related traits (sincere, good, nice; e.g., Fiske, Cuddy, Glick, & Xu, 2002) are removed from our scale of moral character, the results do not change. Across all studies, more emotional prosocial actors are perceived as more moral when moral character is measured on a scale consisting of only the six purely moral traits (altruistic, pure, and moral; selfish, impure, and immoral—reverse scored; all ps < .01).

Future research could also examine if the lay theories investigated in the present research shape people's attempts to signal to others that they are altruistic. If the connection between emotion and moral character is strong enough, it might encourage people to fake emotion to appear more altruistic. If this were the case, it would be beneficial to understand whether observers are able to detect real versus false emotion and whether they would discount altruistic behavior associated with faked sentiments. Evidence finds that people can distinguish between true and posed smiles (e.g., Frank, Ekman, & Friesen 1993); however, less is known about people's ability to detect other faked emotions, such as empathy.

Another extension would be to explore the signaling power of emotion in domains other than charity donations and volunteering. We suspect that the link between emotion and authentic prosocial motivation applies to a broader class of behaviors in which people have to make inferences about others' underlying motives. For example, paying someone a compliment or doing someone a favor could be interpreted as a genuine desire to praise or help, or as a behavior motivated by selfish expectations of reciprocity. Expressions of emotion in the context of bargaining, or even marriage, can help individuals signal that they can be trusted and are committed (Frank, 1988; Reed et al., 2012). Similarly, the signal value of emotion might be relevant to leaders (e.g., politicians or executives) who want to demonstrate an honest concern for their constituents.

A final extension of this work lies in the possibility for promoting prosocial behavior within the constraints of human limitations. Previous research finds that material benefits from doing good decrease perceptions of moral character (Lin-Healy & Small, 2013; Newman & Cain, 2014) and that awareness of selfish incentives can crowd out prosocial behavior (Ariely et al., 2009). However, emotional benefits may be the one selfish benefit that does not diminish character judgments. In the epigraph that opens this paper, the Dalai Lama explicitly admits that his charitable acts produce emotional benefits. This could be considered a "win-win" situation; both the actor and the targets benefit from the prosocial action. Acknowledging that it is still charitable to feel good about doing good could encourage more people to give, resulting in the creation of more charitable behavior overall.

By uncovering the power of emotion in signaling moral character, the present research offers novel insights into lay theories of altruism. Normative theories suggest that emotional benefits undermine the purity of a prosocial act. The present research explores not what emotional benefits should signal but rather what they do signal. In doing so, we provide a contradictory descriptive account of the relationship between emotion and altruism: Emotion signals moral character.

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(Appendices follow)

# Appendix A

# Sample Stimulus Used in Study 1

# Thank you for your donation to the African Children's



Please fill out this post-donation survey.

#### Personal information:

City, State, Zip Code: Philadelphia, PA 19003  Gender  Male Female  When you think about children in Africa, how emotional do you feel?  Not at all Slightly emotional Moderately Very emotional Extremel	Please tell us m	ore about why you d		African Children's F	
City, State, Zip Code: Philadelphia. PA 19003   Sender   Male  Female  When you think about children in Africa, how emotional do you feel?  Not at all Slightly emotional Moderately Very emotional Extremel	۲	0	0	0	0
City, State, Zip Code:       Philadelphia. PA 19003         Sender <ul> <li>Male</li> <li>Female</li> </ul>		Slightly emotional		Very emotional	Extremely emotional
City, State, Zip Code: Philadelphia. PA 19003	When you think	about children in Afr	rica, how emot	ional do you feel?	
City, State, Zip Code: Philadelphia. PA 19003	Male  Fer	nale			
City, State, Zip Code: Philadelphia. PA 19003	sender				
Jei jei	City, State, Zip (	Code: Philadelph	ia, PA 19003		
		Jeff			

*Note*. This version depicts the not-at-all-emotional condition. See the online article for the color version of this figure.

(Appendices continue)

# Appendix B

# Sample Stimulus Used in Study 2

	GSR Study F	articipant Record	
articipant Summary			
Participant number:	68345		
Gender:	male		
Age:	20		
Donated?	yes		
Amount donated:	\$5		
Galvanic Skin Response *The GSR measures an i		ess, the feeling of <u>personal unea</u>	asiness and discomf
	Low	Medium	High
GSR leve	-		

*Note.* This version depicts the condition for which emotion type is "distress" and emotion level is "low." See the online article for the color version of this figure.

# Appendix C

## Scenario Used in Study 5

Every morning, Jeff reads the newspaper online while he drinks his coffee.

One morning, Jeff stumbles upon an article about hungry families in his community.

After the article, there is a link that allows readers to donate money to a local soup kitchen.

Reading the article does not affect Jeff's mood [makes Jeff feel distressed and uncomfortable].

Jeff expects that donating will make him feel happy.

He decides to click on the link and donate money to the soup kitchen.

Donating has no effect on Jeff's mood [makes Jeff feel happy].

Note. This version depicts the male conditions.

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