

Empathy-Based Helping: Is It Selflessly or Selfishly Motivated?

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A substantial body of evidence collected by Batson and his associates has advanced the idea that pure (i.e., selfless) altruism occurs under conditions of empathy for a needy other. An egoistic alternative account of this evidence was proposed and tested in our work. We hypothesized that an observer's heightened empathy for a sufferer brings with it increased personal sadness in the observer and that it is the egoistic desire to relieve the sadness, rather than the selfless desire to relieve the sufferer, that motivates helping. Two experiments contrasted predictions from the selfless and egoistic alternatives in the paradigm typically used by Batson and his associates. In the first, an empathic orientation to a victim increased personal sadness, as expected. Furthermore, when sadness and empathic emotion were separated experimentally, helping was predicted by the levels of sadness subjects were experiencing but not by their empathy scores. In the second experiment, enhanced sadness was again associated with empathy for a victim. However, subjects who were led to perceive that their moods could not be altered through helping (because of the temporary action of a "mood-fixing" placebo drug) were not helpful, despite high levels of empathic emotion. The results were interpreted as providing support for an egoistically based interpretation of helping under conditions of high empathy.

The existence of pure altruism among humans has been a topic of long-standing debate in both philosophical and general psychological circles (see, e.g., Bentham, 1789/1879; Campbell, 1975; Comte, 1851/1875; Hoffman, 1981; Hume, 1740/1896; McDougall, 1908). Recent attention to this issue within social psychology has been stimulated by the contributions of Batson and his associates (Batson, 1984; Batson & Coke, 1981; Batson, Duncan, Ackerman, Buckley, & Birch, 1981; Batson, O'Quin, Fultz, Vanderplas, & Isen, 1983; Coke, Batson, & McDavis, 1978; Toi & Batson, 1982). The significance of the work of these last authors lies in their presentation of an experimental method for assessing the possibility of selflessly motivated aid and in their presentation of systematic empirical support for the existence of such aid among empathically oriented subjects. If research continues to verify their data and conceptual analysis, they will have provided the first persuasive argument that we are capable of truly selfless action. The implications for fundamental characterizations of human nature are considerable.

In constructing their experimental method, Batson and his colleagues proposed that an observer of a suffering other is likely

to react in one of two primary ways to the victim's plight: by reducing the other's need through helping or by escaping the situation. The egoistically motivated observer would be expected to choose the option entailing the smallest personal cost (Piliavin, Dovidio, Gaertner, & Clark, 1981). An altruistically motivated observer, however, should be principally concerned with reducing the other's suffering. Although the operations have changed from study to study, the basic paradigm of these researchers is as follows: Subjects are exposed to the plight of a suffering victim under conditions of high or low empathy for the victim. The subjects are next given the opportunity to aid the victim under conditions that allow them easy or difficult escape from the helping situation. The consequence is a factorial design crossing two levels of the empathy factor (high vs. low) with two levels of the escape factor (easy vs. difficult).

On the basis of the hypothesis that selflessly motivated helping occurs under conditions of high empathic concern for a victim, Batson and his colleagues predicted a three-versus-one pattern of helping within the design. That is, they suggested that the factor of ease of escape from the helping situation should play a role in a subject's helping decision only when the subject's behavior is motivated by egoistic concerns. Thus, when subjects are not oriented toward others (low empathy), they should help less when escape from helping is easy than when it is difficult. However, when empathy is high, egoistic concerns such as ease of escape are dwarfed by the subject's primarily altruistic motive to relieve the victim's suffering; highly empathic subjects, then, should help at elevated levels whether escape from the helping situation is easy or difficult. This predicted pattern—that subjects in the low-empathy, easy-escape condition will

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help less than subjects in the other three cells of the design—has been borne out repeatedly in the previously cited studies (e.g., Batson et al., 1981; Batson et al., 1983; Toi & Batson, 1982).

A critical piece of support for the selfless altruism explanation of this data pattern has come from the elevated helping scores of subjects in the high-empathy, easy-escape condition of the design. According to the selfless altruism interpretation, the heightened benevolence of these subjects occurs because their empathic state motivates them to help the victim with little regard for egoistic considerations (such as the ease of escape) that would otherwise reduce aid. Yet, there is at least one alternative interpretation that could explain this finding in egoistic terms. That is, it may be that an empathic orientation causes individuals viewing a suffering victim to feel enhanced sadness. A substantial body of research exists to indicate that temporary states of sadness or sorrow reliably increase helping in adults (for reviews see Cialdini, Kenrick, & Baumann, 1982, and Rosenhan, Karylowski, Salovey, & Hargis, 1981), especially when the sadness is caused by another's plight (Thompson, Cowan, & Rosenhan, 1980). Moreover, the research of Cialdini and his associates has suggested that these saddened subjects help for egoistic reasons: to relieve the sadness in themselves rather than to relieve the victim's suffering (Baumann, Cialdini, & Kenrick, 1981; Cialdini, Darby, & Vincent, 1973; Cialdini & Kenrick, 1976; Kenrick, Baumann, & Cialdini, 1979; Manucia, Baumann, & Cialdini, 1984). Because helping contains a rewarding component for most normally socialized adults (Baumann et al., 1981; Harris, 1977; Weiss, Buchanan, Alstatt, & Lombardo, 1971), it can be used instrumentally to restore mood.

Thus, it may be that in the typical experiment of Batson and his associates the high-empathy procedures increased helping not for selfless reasons, but for an entirely egoistic reason: personal mood management. It is important to recognize that the mood at issue is rather specific to the temporary state of sadness or sorrow. Cialdini and his coworkers have argued (see Cialdini, Baumann, & Kenrick, 1981) that their data on negative mood effects implicate only temporary sadness in the enhancement of helping, and they have repeatedly asserted that other negative moods that are normally not reduced through benevolence (e.g., anger, frustration, agitation, anxiety) consequently would not be expected to increase helping. This distinction among negative moods may help explain why, in the research of Batson and associates, an index of personal distress has not been systematically related to helping among high-empathy subjects. The adjectives making up this index (e.g., *alarmed*, *disturbed*, *upset*, *worried*) are agitation or anxiety based rather than sadness based. Because empathic concern, sadness, and distress all involve negative feelings, we would expect them to be strongly intercorrelated. At the same time, however, we see them as functionally distinct in their relation to helping.

A major implication of our analysis, then, is that empathy-induced helping in the Batson et al. design is mediated by the increased sadness of high-empathy subjects witnessing a suffering other and that the help is an egoistic response designed to dispel the temporary depression. This interpretation is crucially different from that of Batson and his colleagues, in which empathy is said to stimulate helping through a selfless concern

for the welfare of others. To test these alternative explanations against one another, it would be necessary to separate subjects' feelings of sadness from the empathic orientation that is said to bring about that sadness. Our first experiment sought to provide such a test by (a) replicating the basic Batson et al. empathy procedures for all subjects; (b) presenting some subjects with a gratifying event (money or praise) designed to relieve any sadness that an empathic orientation may have produced, without simultaneously interfering with that empathic orientation; (c) allowing subjects the opportunity to help a victim or escape the situation; and (d) assessing whether subjects' helping tendencies are related primarily to Batson's measures of empathic concern or to traditional measures of sadness.

The experimental design, then, included a replication of the standard four cells of the paradigm of Batson and his associates (two levels of empathy orientation and two levels of ease of escape). We also included additional high-empathy orientation cells in which subjects received a gratifying event (either money or praise) between the empathy manipulation and the chance to help. From our egoistic, sadness-based interpretation of helping in the Batson et al. paradigm, we made the following predictions. First, subjects in the high-empathy conditions of the Batson et al. design would show (Prediction 1a) greater empathic concern and (Prediction 1b) greater sadness than would those in the low-empathy conditions of that design. This pair of predictions, if confirmed, would establish the possibility that the helping pattern of previous Batson et al. studies was not caused by the action of empathic concern but by the action of sadness. Second, high-empathy subjects who received a gratifying intervention would have their (Prediction 2a) greater sadness but (Prediction 2b) not their greater empathic concern canceled by the gratifying events. This pair of predictions, if confirmed, would provide the basis for a test of whether empathic concern or sadness was functionally related to helping in this design. Third, high-empathy subjects who did not receive a sadness-canceling intervention (i.e., those subjects expected to show the greatest sadness) would show greater helping than all other subjects (i.e., those subjects in whom enhanced sadness was canceled or in whom enhanced sadness had not been experimentally induced). If confirmed, this prediction (Prediction 3) would support the idea that empathically oriented subjects in this study and in the general Batson et al. paradigm help for a primarily egoistic reason (i.e., personal mood management) rather than a primarily selfless reason (i.e., concern for the other's welfare).

Experiment 1

Method

Subjects. Eighty-seven female introductory psychology students at Arizona State University participated in the study as partial fulfillment of a course requirement. Six subjects were dropped from the analyses because they expressed suspicion about the legitimacy of the need situation. These subjects were distributed approximately evenly across experimental conditions.

Procedure. With the exception of a different empathy manipulation and several changes necessary for the inclusion of the rewards manipulation, the procedures of the study followed those of Batson et al. (1981,

Experiment 1) and Batson et al. (1983, Experiment 1). Only the manipulations and important changes are described in detail here.

All subjects were randomly assigned to conditions and run individually by either a male or a female experimenter. On arrival, subjects read a short introduction while waiting for the other subject, "Elaine," to appear. They read that one subject—the worker—would be performing a series of learning trials while receiving mild electric shocks, and the other—the observer—would watch her and form impressions. The instructions went on to say that because the study involved personal perceptions of others, it would be necessary to have subjects take a short personality test as well. The subject then drew lots to determine whether she would be the worker or the observer. The drawing was rigged so the subject always drew the role of the observer. The experimenter then ushered the subject into an experimental room where she was told she would be watching the worker over closed-circuit television.

At this point, the subject was given the "Remington-Hughe Scale of Social Abilities." The experimenter stated that this was a previously validated instrument that was shown to measure social abilities very reliably. The test was actually the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964). The experimenter left, announcing that she or he would check to see if the other subject had arrived yet.

Ease-of-escape manipulation. When subjects finished the scale, the experimenter returned and began telling them what they would be watching over the closed-circuit television. At this time, the experimenter introduced the escape manipulation. Subjects in the easy-escape condition were told, "Although the worker will be completing between two and ten trials, it will be necessary for you to observe only the first two." Subjects in the difficult-escape condition were told, "The worker will be completing between two and ten trials, all of which you will observe."

Empathy-set manipulation. Just before turning on the television monitor, the experimenter presented subjects with written instructions on the perspective they should adopt while observing Elaine. These instructions were adapted from those used in research by Batson and his colleagues (Fultz, Batson, Fortenbach, McCarthy, & Varney, 1986; Toi & Batson, 1982). The experimenter was blind to the empathy-set manipulation. Subjects in the low-empathy-set condition read the following:

While you are observing the trials, try to pay careful attention to the information presented. Try to be as objective as possible, carefully attending to all the information about the situation and about the person performing the trials. Try not to concern yourself with how the person performing the trials feels about what is happening. Just concentrate on trying to watch and listen objectively to the information presented.

Subjects in the high-empathy-set condition read the following:

While you are observing the trials, try to imagine how the person performing them feels. Try to take the perspective of the person performing the trials, imagining how she feels and how it is affecting her. Try not to concern yourself with all of the information presented. Just try to imagine how the person performing the trials is feeling.

The videotape showed Elaine reacting more and more strongly to the shocks presented to her during the learning trials. Toward the end of the second trial, the assistant stopped the procedure and asked Elaine if she was all right. Elaine responded that she was, but would like a glass of water. The assistant agreed and left. During this break, the experimenter returned to the experimental room, turned off the television monitor and announced that as long as there was this break, they could do some things they would have to do anyway during the experiment.

Reward manipulation. To subjects in the high-empathy/money con-

dition the experimenter said, "First of all, we were awarded some additional funding for this experiment to pay subjects, so everyone who participates gets one dollar." The experimenter gave the subject a \$1 bill and then presented two short questionnaires to fill out: a mood questionnaire and an emotional-reactions questionnaire. To subjects in the high-empathy/praise condition, the experimenter said that he or she had just scored the subject's responses on the Remington-Hughe scale and noted that the subject had scored a 26, indicating a high level of social ability. The subject was shown a brief explanation of her score:

People scoring in this category have fine social abilities. They are normally liked by their peers, who enjoy spending time with them. This is so partially because people scoring in this category tend to be interesting and versatile conversationalists who can contribute intelligently on a fairly wide range of topics. They also bring a creative flare to the social situations they find enjoyable. Finally, they are known for their capacity for recognizing which of their friends and acquaintances will get along together.

After reading this false feedback, subjects were given the two questionnaires to fill out. In the high-empathy/no-rewards condition and the low-empathy condition, the experimenter simply presented subjects with the two questionnaires.

Mood and emotional-reactions questionnaires. The order of the two questionnaires was counterbalanced across subjects. The mood questionnaire consisted of nine 7-point bipolar scales. On the first of these scales subjects were asked to rate how much happier or sadder they were relative to how they felt before the experimental session. On the other eight scales subjects were asked to rate how they presently felt. The poles of these eight scales were *depressed-elated*, *happy-sad*, *hopeful-hopeless*, *active-passive*, *good-bad*, *exhilarated-dejected*, *useless-useful*, and *satisfied-dissatisfied*. The emotional-reactions questionnaire was an abridged form of the list of 28 adjectives used in previous research (Batson et al., 1981, Experiment 2; Batson et al., 1983) and consisted of the 20 adjectives Batson and Coke (1981) found to load highly on either an empathic-concern factor (e.g., *moved*, *compassionate*, *sympathetic*) or a personal distress factor (e.g., *alarmed*, *upset*, *worried*). Subjects were asked to rate on 7-point scales the extent to which they were presently experiencing each of the emotions.

When the subject had finished filling out the questionnaires, the experimenter returned, announced that Elaine was about ready to start again, turned on the monitor, and left. Subjects saw the assistant ask Elaine about her strong reaction to the shocks and Elaine hesitantly reply that she had previously experienced problems with electric shock. The assistant suggested she not continue. Elaine resisted until the assistant suggested that perhaps the other subject—the observer—might be willing to help her out by trading places. Elaine acquiesced, the assistant left, and the screen went blank.

Dependent measure: Helping Elaine. After about half a minute, the experimenter returned to the experimental room and began explaining to the subject what her options were, following verbatim the script used by Batson et al. (1981; 1983, Experiment 1). During this discourse, the experimenter reiterated the subject's escape condition: In the easy-escape condition, subjects were reminded that if they chose not to trade places they would be free to go; in the difficult-escape condition subjects were reminded that if they chose not to trade places they would have to remain and continue to watch Elaine perform the trials. Subjects were asked what they would like to do. If they volunteered to take Elaine's place, they were asked how many of the remaining trials they would like to do, as Elaine had agreed to do any of the remaining eight that the subject did not. The dependent measure was the number of trials subjects chose to do.

Debriefing. The experimenter left briefly to note the subject's helping response and then returned and presented the subject with a brief questionnaire to assess subjects' suspicions about the procedures. This ques-

tionnaire asked subjects to describe what they thought the hypothesis of the experiment was and to note if they had entertained any doubts about any aspects of the procedures. After responding to these questions, subjects were verbally probed for suspicion and then fully debriefed.

Results

Reported empathic concern and distress. To measure empathic concern, three adjectives from the emotional-response questionnaire were averaged to comprise an empathy index: *compassionate*, *moved*, and *sympathetic* (Cronbach's $\alpha = .60$). These adjectives were selected to be consistent with those currently refined for use by Batson and his colleagues (e.g., Batson et al., 1983). To measure personal distress, five other adjectives from the same questionnaire were similarly selected: *alarmed*, *worried*, *upset*, *disturbed*, and *grieved* (Cronbach's $\alpha = .89$). Two subjects were dropped from the analyses on reported empathy, and three were dropped from the analyses on reported distress because they did not respond to all the items on the appropriate index.

Two of the predictions of this experiment involved subjects' reported empathy scores.¹ The first (1a) stated that in the four replication cells of the Batson et al. paradigm, high-empathy-set subjects would report more empathic concern than would low-empathy-set subjects, replicating the prior Batson et al. results. This was the case, as the two high-empathy-set/no-reward cells ($M = 5.40$) showed greater empathic concern than did the two low-empathy-set/no-reward cells ($M = 4.63$), $F(1, 71) = 4.10$, $p < .05$. The second empathy-related prediction (2b) suggested that the reward interventions of the current design would not interfere with the heightened empathic concern produced in the high-empathy-set conditions. Therefore, it was expected that the empathy index scores in the four high-empathy-set cells with a reward intervention ($M = 5.10$) would not differ from the two such cells without a reward intervention ($M = 5.40$). This prediction was also supported, $F(1, 71) < 1$.

A less hypothesis-driven analysis comparing the two low-empathy-set cells against the six high-empathy-set cells approached but did not achieve conventional levels of significance, $F(1, 71) = 2.98$, $p < .09$. An examination of cell means (see Table 1) suggests that the empathy-set manipulation was more effective under difficult-escape conditions than under easy-escape conditions. A contrast demonstrated that there was indeed a significant Escape $\times$ Empathy Set interaction on the measure of empathic concern, $F(1, 71) = 5.38$, $p < .03$.

Although none of our experimental predictions involved the Batson et al. distress index (owing to the lack of relevance of this index to the crucial sadness variable), we conducted a similar set of analyses to those performed on the empathy index to examine certain general expectations. First, a contrast pitting the high-empathy-set/no-reward cells against the low-empathy-set/no-reward cells was significant, $F(1, 70) = 10.37$, $p < .005$, indicating that in the Batson et al. replication cells the high-empathy-set subjects exhibited more distress ($M = 5.02$) than did the low-empathy-set subjects ($M = 3.54$). Such a result is in keeping with the work of Batson and his coworkers, who have regularly found a strong correlation between their empathy and

Table 1

Experiment 1: Mean Scores on the Empathic Concern, Mood, and Helping Measures

	High-empathy set			Low-empathy set
	Money	Praise	No reward	No reward
Easy				
Empathic concern	4.29	5.23	4.90	4.84
Mood	3.61	3.10	2.50	3.42
Helping	1.71 (29)	2.27 (45)	3.60 (50)	1.75 (33)
<i>n</i>	7	11	10	12
Difficult				
Empathic concern	5.24	5.41	5.85	4.40
Mood	3.40	2.92	2.73	3.52
Helping	1.82 (36)	4.00 (56)	4.73 (73)	2.60 (40)
<i>n</i>	11	9	11	10

Note. For the mood measure, lower scores represent more depressed mood; for the other measures, high scores indicate more of the quality. For the helping measure, proportions of helpers are presented in parentheses.

distress indexes, as did we in this study, $r(77) = .55$, $p < .001$. A second contrast examined the effects of the reward interventions of our design on the heightened distress of subjects in the high-empathy-set conditions. Unlike in the pattern for empathy index scores wherein no effect was found, the high-empathy-set subjects who received a reward subsequently reported less distress ($M = 4.22$) than did those who did not receive a reward intervention ($M = 5.02$), $F(1, 70) = 5.76$, $p < .02$. This result is hardly surprising, as the receipt of money or praise would be expected to reduce personal distress.

Reported sadness. It was suggested that an empathic orientation toward a suffering other may depress one's mood, leading to a state of temporary sadness or sorrow. Three of the 7-point scales on the mood questionnaire were relevant to this type of affect. On the first, subjects rated how much happier or sadder they felt relative to their mood before the experiment. On the other two, subjects rated their present mood on bipolar scales of *elated-depressed* and *happy-sad*. Responses on these three scales were averaged for each subject to form an overall index of mood (lower numbers indicating sadder mood). Not surprisingly, this resulting mood index was correlated with both the empathy index ($r = -.44$) and the distress index ($r = -.49$). The relation to empathy is clearly predicted by the Negative State Relief model; the relation to distress is not formally a part of the model but is to be expected, as both measure a negative emotion and both are related to empathy.² Apparently because

¹ Unless otherwise noted, all experimental predictions were tested via planned comparisons and two-tailed significance criteria.

² We made no predictions involving the correlation of mood and helping because of the tendency of both happiness and sadness to be related to helping in prior work (see Cialdini et al., 1981, and Manucia et al., 1984, for reviews). Given this curvilinear relation, correlational

of a confusing placement in the mood questionnaire, 12 subjects failed to respond to the scale assessing relative change in mood, and these subjects were therefore dropped from the mood analyses.³

A pair of experimental hypotheses directly involved the mood measure. The first (1b) predicted that within the four replication conditions (i.e., the no-reward cells of the present design), high-empathy-set subjects would show greater sadness than would low-empathy-set subjects. This prediction was confirmed, $F(1, 61) = 5.73, p < .02$ ($M_s = 2.63$ and 3.47 , respectively). This outcome supports the contention that empathically oriented subjects experience a saddened mood when observing a suffering other. The second mood-related experimental prediction (2a) stated that the greater sadness of high-empathy-set subjects would be canceled through the presentation of an unexpected reward such as money or praise. This prediction was tested by a set of contrasts showing that the high-empathy-set subjects who received a reward ($M = 3.25$) were equivalent in mood to the low-empathy-set subjects ($M = 3.47$), $F(1, 61) < 1$, and were less sad than the high-empathy-set subjects who had not received a reward ($M = 2.63$), $F(1, 61) = 3.81, p < .06$. Combined with the outcomes of the earlier analyses, these results support the argument that rewards such as those of this study will cancel the saddened mood but not the empathic orientation of subjects empathizing with a suffering other.

Helping. The nature of the dependent variable allows for two different helping measures: a continuous measure based on the number of learning trials for which subjects volunteered in taking Elaine's place, and a dichotomous measure based on the proportion of subjects in each condition who chose to help Elaine. Table 1 presents results on both measures. The analyses reported here are on the continuous measure. Parallel analyses were performed on the dichotomous measure, which yielded results consistent with those reported but short of conventional levels of significance.

In keeping with our predictions, a pair of planned contrasts was performed. First, the helping scores of the high-empathy-set subjects who did not receive a reward intervention ($M = 4.19$) were contrasted with the helping scores of the subjects in the other cells of the design (i.e., those subjects in whom enhanced sadness had been canceled or had not been experimentally induced; $M = 2.34$). This contrast proved significant, $F(1, 73) = 4.09, p < .05$. Second, the helping scores of the high-empathy-set subjects who received a reward intervention ($M = 2.45$) were tested against those of the low-empathy-set subjects ($M = 2.14$) and, as predicted, were found to be no different, $F(1, 73) < 1$. An additional contrast, somewhat redundant with the two reported above, showed that the difference in helping between high-empathy-set/reward and high-empathy-set/no-

reward subjects was marginally significant, $F(1, 73) = 3.19, p < .08$.

Besides the tests of the experimental prediction regarding the helping measure, an additional analysis was conducted to determine whether the basic one-versus-three pattern of the Batson et al. paradigm showed the form of the traditional pattern, in that the easy-escape/low-empathy-set subjects helped the least ($M = 1.75$) compared with subjects in the other three no-reward conditions (combined $M = 3.68$), $F(1, 73) = 2.53, p < .12$. Although this difference is not conventionally significant, it would appear to be sufficient for the purpose of replication. The failure of this analysis to reach conventional significance is in large part a function of the unexpectedly low level of helping in the low-empathy-set/difficult-escape cell. Fortunately, helping scores in that particular cell hold relatively minor theoretical weight in our argument.

Relation of social desirability to helping. All subjects took the Marlowe-Crowne Social Desirability Scale at the outset of the experiment. An initial analysis determined that the effects of social desirability did not qualify the predicted effects of empathy set and mood on helping. The primary six-versus-two contrast previously reported was entered into a regression equation simultaneously with subjects' social-desirability score. Although social desirability had a near-significant effect on helping, $F(1, 78) = 3.30, p < .09$, the effect of the contrast remained strong, $F(1, 78) = 4.62, p < .04$.

Looking more closely at the relation between social desirability and helping, it appeared that within-cell correlations between the two did not differ reliably except along one dimension: high- versus low-empathy set. Subjects in each of the six high-empathy-set cells showed a positive relation between their social-desirability scores and their tendency to help, $r(40) = .29, p < .03$, with a range from .18 to .56. However, subjects in the two low-empathy-set cells showed a mildly negative relation, $r(39) = -.13, ns$, with a range from $-.03$ to $-.42$. The difference between the two sets of combined correlations (.29 vs. $-.13$) was marginally significant ($Z = 1.62, p < .06$, one-tailed).

To examine this relation further, a median split was performed on subjects' social-desirability scores, dividing subjects into high-social-desirability and low-social-desirability conditions. This factor was crossed with the eight experimental conditions, yielding a marginally significant interaction ($p < .13$) consistent with the implication of the correlational analysis. The effect is most striking in the no-reward conditions, where the effects of mood on helping were not experimentally manipulated. A comparison of the high-empathy-set/high-social-desirability/no-reward subjects ($M = 6.00$) and all other no-reward subjects ($M = 2.27$) was significant, $F(1, 65) = 7.43, p < .01$, suggesting that—mood-management concerns aside—

analyses are not meaningful. Even using a procedure that involved standardizing the mood scores, dropping the valence signs and then correlating these scores with helping would not be informative with regard to the influence of negative mood on helping. That is, such a procedure would produce a correlation for which it would not be possible to know how much of its magnitude was due to the effects of just negative mood on helping.

³ So as not to ignore almost 15% of the data, it seemed useful to create an abbreviated mood index that included only the happy-sad and elated-depressed scales. All subjects but one were included in the analyses using the shorter mood scale. These analyses produced results parallel to, although not quite as robust as, those with the three-item index. The analyses contrasting the high-empathy-set/no-reward cells against the low-empathy-set/no-reward cells and against all six other cells achieved conventional levels of significance.

empathy leads to enhanced helping only when it evokes strong social-desirability concerns.

Discussion

In this study we sought to provide data to help to explain the frequently demonstrated tendency for empathically oriented individuals to be more helpful toward a needy other (Eisenberg & Miller, 1987). The Empathy-Altruism model of Batson and associates, which views empathically concerned individuals as primarily selfless in their approach to helping, was examined relative to the Negative State Relief model of Cialdini and associates, which posits the egoistic desire to manage personal sadness as a primary cause of helping in such individuals. To pose a proper test of these conceptually opposed models of helping, we considered it necessary to demonstrate several effects within the Batson et al. empathy-altruism paradigm: first, that empathic orientation toward a sufferer not only increased a person's empathic concern but also that person's sadness and, second, that the receipt of a gratifying event (money or praise) would serve to reduce the increased sadness but not the increased empathic concern. The results of the study supported both of these sets of conditions. Relevant high-empathy-set subjects reported greater empathic concern and sadness than did low-empathy-set subjects; furthermore, the receipt of a rewarding event by high-empathy-set subjects relieved their sadness but not their empathic concern. With these two sets of conditions in place, it was then possible to examine whether helping was related to manipulated levels of sadness or empathic concern. It was found that high-empathy-set subjects did show elevated helping scores, except when they had received a sadness-canceling reward, whereupon they were no more helpful than low-empathy-set subjects.⁴ Therefore, it appeared to be personal sadness rather than empathic concern that accounted for the increased helping motivation of our empathically oriented subjects.

One other finding of our study is relevant to the general issue of selfless versus egoistic bases for helping under conditions of empathy. We found consistently positive relations between subjects' helping scores and their previously obtained social-desirability scores only when subjects were oriented empathically to the victim. This pattern suggests that an empathic orientation toward a sufferer brought with it attention to the social desirability of helping, leading those subjects with higher social-desirability concerns to help more. Thus, aside from the effects of personal sadness, it appears that a second egoistic concern—social approval/disapproval—was involved to some degree in our subjects' helping decisions. Recent work by Fultz et al. (1986) has demonstrated that social desirability alone cannot fully explain helping patterns in empathically oriented individuals. However, our results do implicate social-desirability concerns to some degree, in keeping with the thinking of Archer (Archer, 1984; Archer, Diaz-Loving, Gollwitzer, Davis, & Foushee, 1981).

Although the data of Experiment 1 appear mostly confirmatory of our egoistic reinterpretation of prior empathy-altruism findings, interpretive caution seems warranted on two fronts. First, our empathy manipulation proved somewhat problem-

atic. The overall tendency of high-empathy-set subjects to report higher empathy index scores was weak. Furthermore, that tendency was stronger in the difficult-escape than the easy-escape conditions. Perhaps these effects can be attributed to a self-presentational reluctance of low-empathy-set subjects (especially under conditions of easy escape) to report that they experienced little empathic concern toward a victim who was suffering so dramatically. However, there is no internal experimental evidence available to support this explanation. Thus, it would seem important to collect additional data that are not subject to ambiguity in this regard. Second, and more generally, confidence in a conceptual account must be considered rather tentative when support for that account springs from a single experimental paradigm. The possibility exists that the support is due to peculiar features of that paradigm rather than to the larger relation between the variables under consideration. For this reason, we deemed it important to test our preferred conceptual account in an experimental paradigm different from that of Experiment 1.

Experiment 2

The crux of the difference between the Empathy-Altruism model of Batson and his associates and the Negative State Relief model of Cialdini and his associates lies in the hypothesized nature of the helping motive (selfless vs. selfish) that is engaged by an empathic orientation. In Experiment 1, we sought to contrast these formulations by using personally gratifying events designed to cancel the need to relieve one's own unpleasant state but not that of a suffering other. In Experiment 2, we took a different tack in an attempt to perform a conceptually similar test. An earlier experiment (Manucia, Baumann, & Cialdini, 1984) used a placebo procedure to convince potential helpers that their helping actions could not change their mood states. In that experiment, subjects were given a placebo drug that they were led to believe would freeze their moods, that is, render the moods temporarily resistant to change. As expected, subjects who had been saddened (by recalling sad events) were significantly more helpful than were neutral-mood controls only if they had not received the "mood-fixing" placebo drug. These data were interpreted as support for the argument that personally saddened subjects will not help at increased levels if they believe the help cannot improve their own unpleasant states.

Experiment 2 was designed to apply the logic of this procedure to the question of whether empathically oriented individuals help a sufferer for selfless or selfish reasons. According to the Negative State Relief model, subjects who are empathizing with a victim have as their prime motive the relief of their own sadness; consequently, only those who do not receive the mood-fixing drug should show increased helping, because only they

⁴ It is perhaps noteworthy that in the one high-empathy-set/reward cell where levels of helping remained strong (high-empathy set/difficult escape/praise), the reward intervention did not serve to relieve subjects' sadness, leaving them more than a full unit sadder (2.92) than the mood scale's 4.0 neutral point. In a rather backhanded confirmation of the hypothesis, then, when the reward intervention failed to cancel enhanced sadness, it also failed to cancel enhanced helping.

will expect helping to change their lowered moods. According to the Empathy-Altruism model, on the other hand, empathically oriented subjects have as their prime motive the relief of the victim's unpleasant state; thus, high-empathy subjects should show increased helping regardless of whether they believe their moods to be fixed by the drug, because their own emotional relief is presumably irrelevant to their desire to help the victim.

To test these differing expectations, Experiment 2 was conducted in the context of the helping procedures of the Toi and Batson (1982) experiment. Because the two models under consideration make differential predictions only in the easy-escape conditions of the Batson et al. paradigm, just the easy-escape conditions of the Toi and Batson (1982) study were used. As a consequence, Experiment 2 was conducted as a 2×2 design in which subjects adopted either a high-empathy or a low-empathy set when experiencing the victim's plight and either were or were not led to believe that a drug they were given would temporarily fix their mood state. On the basis of the results of Experiment 1, we predicted a one-versus-three pattern of results such that only high-empathy-set subjects who did not believe their moods were fixed would help at elevated levels, as only these subjects would possess both increased sadness and a perceived means for relieving that sadness through helping.

Method

Subjects. Thirty-five female introductory psychology students at Arizona State University participated in the study as partial fulfillment of a course requirement. Subjects were assigned through a randomized procedure to each condition of the 2 (low vs. high empathy) $\times$ 2 (fixed vs. labile mood) experimental design. Three additional students were dropped from the design owing to suspicion.

Procedure. The procedures and materials duplicated as much as possible those of Toi and Batson (1982). Therefore, only the manipulations and important changes are described in detail here.

On arrival, a subject read a brief introduction stating that the experiment was part of an ongoing project for pilot testing new radio programs for the university radio station and that for one of the tapes, the subject would be asked to adopt a specific listening perspective. In addition, the introduction stated that the researchers were interested in studying the effects of Mnemoxine, an experimental drug known to affect information-processing ability as well as mood. Subjects then drank a small medication-cup dose of Mnemoxine (actually a placebo composed of decarbonated soda water and ginger ale). At this point, subjects were told that they would hear a pair of radio pilot tapes. After listening to a "Bulletin Board" tape containing two rather bland announcements that lasted a total of 4 min,⁵ subjects filled out baseline measures of mood (consisting of three 7-point bipolar scales: *happy-sad*, *depressed-elated*, *positive mood-negative mood*) and of empathic concern and personal distress (identical to those of Experiment 1). As with Toi and Batson (1982), these initial measures were taken mostly to familiarize subjects with the questionnaires. Using them as covariates in the analyses produced no differences in obtained effects.

Empathy-set manipulation. Subjects then listened to a 5-min "News From the Personal Side" tape, which described the plight of Carol Marcy, a University freshman who had broken her legs in an auto accident and needed another introductory psychology student to go over lecture notes with her. Before hearing this tape, subjects were instructed via written instructions (to which the experimenter was blind) to take either an objective (low empathy) or imagine-other (high empathy) perspective while listening. These perspective instructions were

virtually identical to those of Toi and Batson (1982) and to those of Experiment 1.

Mood-fixing manipulation. At the conclusion of the tape, the experimenter returned and presented subjects with another copy of the mood questionnaire. After it had been completed, the experimenter told those subjects in the fixed-mood condition:

This is the mood you'll be in the next thirty minutes or so because of a side effect of Mnemoxine that I hadn't told you about earlier. This side effect is that Mnemoxine chemically preserves whatever mood you are in when it takes effect. By that I mean that Mnemoxine is from that family of drugs whose effect is not to create a mood, but to take whatever mood is present in an individual and prolong it artificially. So the mood you are in right now is the mood you will be in for the next half hour or so. It is important to realize that the mood you're in now has not been caused by Mnemoxine, but Mnemoxine will preserve this mood until it wears off. The reason I didn't tell you about this earlier is that we didn't want your concern about this side effect to interfere with the way you listened to and reacted to the tapes.

For subjects in the labile-mood condition, the experimenter did not mention mood fixing and simply went on to the next procedure.

All subjects were given another copy of the emotional-response questionnaire (the empathic-concern and personal distress measures) to fill out while the experimenter left the room to locate additional materials. Before leaving, the experimenter also gave subjects a manila envelope addressed to "Student Listening to the Carol Marcy Pilot Tape." The experimenter claimed to know nothing about the contents of the envelope and said she or he had simply been asked by the professor in charge of the research to give it to the student who had listened to the Carol Marcy tape. Subjects were instructed to read it after filling out the emotional-response questionnaire.

Request for help. The contents of the envelope, identical to those of the easy-escape condition of the Toi and Batson (1982) study, contained a cover letter from the professor in charge and a letter from Carol describing her desperate situation and asking the subject to help by going over lecture notes with her.

Dependent measure: Helping Carol. In her letter Carol requested that if the subject would like to help, she should write her name, address, and phone number on the enclosed sheet of paper and also record how many hours she would be willing to spend going over notes. On the sheet there were four ranges of hours that subjects could circle: 3-5, 6-10, 11-20, and 21-30. These ranges were coded as 1, 2, 3, and 4, respectively, with a 0 being coded if subjects did not agree to help.

When the experimenter returned, he or she gave the subject the "News From the Personal Side" evaluation form, which included two scales to assess to what degree subjects concentrated only on the objective facts presented in the broadcast and to what degree they concentrated only on imagining how the person being interviewed felt.

Debriefing. When subjects had completed the evaluation form, they were probed for suspicion and fully debriefed.

Results

Effectiveness of the empathy manipulation. Two items on the "News From the Personal Side" evaluation form assessed the degree to which subjects followed the perspective-taking instructions they were given. Subjects rated on 7-point scales the

⁵ The "Bulletin Board" tape used by Toi and Batson (1982) consisted of only one announcement of about a minute long. However, pretesting indicated the need for a second such announcement to bring subjects' moods to a neutral level.

extent to which they concentrated only on imagining how the person being interviewed felt and the extent to which they concentrated only on the objective information presented in the broadcast. As expected, responses to the first of these questions showed that subjects in the high-empathy-set condition reported concentrating more on imagining how Carol felt ($M = 5.83$) than did subjects in the low-empathy-set condition ($M = 3.47$), $F(1, 31) = 24.21$, $p < .001$. Conversely, subjects in the low-empathy-set condition reported concentrating more on the objective information presented ($M = 5.18$) than did subjects in the high-empathy-set condition ($M = 3.44$), $F(1, 31) = 10.55$, $p < .003$. Neither the mood-fixing manipulation nor the interaction had an effect (all F s < 1).

More important than subjects' self-reports of perspective were subjects' self-reports of empathic emotion after listening to the Carol Marcy tape. To measure emotional responses, indices of empathy and personal distress were formed, consisting of the same adjectives used in Experiment 1. A principal-components analysis with a varimax rotation confirmed that the adjectives *moved*, *compassionate*, and *sympathetic* did indeed load on a different factor than did the five distress adjectives. The internal structure of each index proved to be highly reliable (Cronbach's alpha for the empathy and distress indices were .92 and .94, respectively). Subjects' reports of empathy after listening to the Carol Marcy tape demonstrated that the perspective-taking instructions had a powerful effect. Subjects in the high-empathy condition reported significantly greater empathic concern ($M = 4.54$) than did those in the low-empathy condition ($M = 3.10$), $F(1, 30) = 7.57$, $p < .01$. (One subject was excluded from these analyses because she failed to complete the second emotional-reactions scale.) Neither the mood-fixing manipulation ($F < 1$) nor its interaction with empathy set, $F(1, 30) = 2.43$, had any reliable effect on empathy scores.

Effect of the empathy manipulation on mood. We predicted that the subjects instructed to imagine how Carol felt would experience a depressed mood state not experienced by subjects who attended just to the objective facts. Mood state was measured by averaging subjects' scores on the three 7-point scales on the mood questionnaire presented immediately after the Carol Marcy tape. Responses were scaled so that lower numbers represented more negative mood. As expected, scores on the mood index were negatively correlated with scores on both the empathy index ($r = -.60$) and the distress index ($r = -.75$). More importantly, as predicted, subjects in the high-empathy-set condition reported being significantly sadder ($M = 3.80$) than did those in the low-empathy-set condition ($M = 4.57$), $F(1, 31) = 4.53$, $p < .05$. Neither the mood-lability main effect, $F(1, 31) = 3.23$, nor the Empathy $\times$ Mood Lability interaction ($F < 1$) proved conventionally significant. Examination of the cell means presented in Table 2 shows the nonsignificant tendency for fixed-mood subjects to report being somewhat sadder than labile-mood subjects. However, because the mood measure preceded the lability manipulation, the difference could not have been caused by the manipulation.

Amount of help offered to Carol. As in Experiment 1, both a dichotomous and a continuous helping measure were taken of subjects' responses to Carol's request; Table 2 presents both measures. As in Experiment 1, both measures show a similar

Table 2

Experiment 2: Mean Scores on the Empathic Concern, Mood, and Helping Measures

Mood-lability condition	High-empathy set	Low-empathy set
Fixed		
Empathic concern	4.83	2.54
Mood	3.33	4.30
Helping	0.63 (63)	0.56 (56)
<i>n</i>	8	9
Labile		
Empathic concern	4.30	3.67
Mood	4.17	4.87
Helping	1.30 (80)	0.75 (63)
<i>n</i>	10	8

Note. For the mood measure, lower scores represent more depressed mood; for the other measures, high scores indicate more of the quality. For the helping measure, proportions of helpers are presented in parentheses.

pattern of helping across cells, although analyses performed on the less sensitive dichotomous measures did not achieve conventional levels of significance. For the analyses reported here, helping response was measured by the number of hours subjects agreed to spend going over class notes with Carol. No subjects offered more than 10 hr. With high-empathy-set subjects demonstrating a depressed mood state, the Negative State Relief model predicts that they should help Carol more than should those in a neutral mood, but only if they perceive that helping her can improve their mood. Therefore, those subjects in the high-empathy-set/fixed-mood condition should be no more helpful than should low-empathy-set subjects. Subjects in the high-empathy-set/labile-mood condition, on the other hand, should help at a higher level than should subjects in the other three cells.

Table 2 presents the amount of help offered in each of the four conditions of the 2×2 design, with the actual pattern of means closely resembling the one-versus-three pattern predicted by the Negative State Relief formulation. A planned comparison contrasting the high-empathy-set/labile-mood condition against the other three was significant, $F(1, 31) = 6.96$, $p < .02$, whereas pair-wise comparisons among these other three cells showed no significant differences (all F s < 1). Another planned comparison, contrasting the high-empathy-set/labile-mood cell against the high-empathy-set/fixed-mood cell, was also significant, $F(1, 31) = 4.58$, $p < .04$.

General Discussion

These two studies offer support for an egoistic alternative account of the previously obtained positive relation between empathy for a victim and helping the victim. Both experiments demonstrated that an empathic orientation toward a suffering other results in not only increased empathic concern but increased personal sadness as well. In addition, both studies found that other experimental manipulations generated helping levels that were predicted only by the conditions of personal sadness—rather than empathic concern—that subjects were expe-

riencing. In Experiment 1, empathic subjects were more helpful than were low-empathy control subjects only when they were also sadder than the controls. High-empathy subjects whose increased sadness had been relieved through a reinforcing event (but whose increased empathic concern remained intact) were no longer more helpful. In Experiment 2, empathic subjects were more helpful than their nonempathic counterparts only when it seemed possible that their personal moods could be raised as a consequence of helping. High-empathy subjects who learned that their saddened mood states could not be altered by the helping act (because of the temporary action of a "mood-fixing drug") did not help at enhanced levels, despite their still-elevated empathic-concern scores.

Together, these experiments appear to support an egoistic (Negative State Relief model) interpretation over a selfless (Empathy-Altruism model) interpretation of enhanced helping under conditions of high empathy. It might be argued, however, that the case is not airtight. That is, it could be contended that our experimental procedures designed to affect subjects' experience of sadness may have distracted subjects from their empathic concern. For example, perhaps the reward procedures of Experiment 1 or the placebo-drug procedures of Experiment 2 may have turned subjects' attention away from their empathic emotions. However, one feature of our designs reduces the likelihood of such a distraction possibility: In those conditions that included the potentially distracting procedures, subjects did not report less empathic concern ($F_s < 1$). Thus, there is no straightforward support for the distraction explanation.

Nonetheless, a more complex process might be postulated. It is possible that the mood-related experimental procedures distracted subjects from their empathic concern but that the measurement process reinstituted that concern. Although this explanation can account for the high levels of empathic concern among subjects whose sadness had been relieved or fixed, it does not explain why these high levels of empathic concern then failed to produce increased helping. To do so, one must assume that the reinstituted concern, which was powerful enough to register strongly on the empathy index, was not powerful enough to influence helping or was of a character (e.g., cognitive rather than affective) unrelated to the helping decision. In this latter instance, it is possible that our procedures distracted subjects from the emotional experience of empathy but left them with the memory of it, which is what they reported on the empathy index (even though they were instructed to record their current emotions). In all, then, an empathy-distraction interpretation of our findings, although conceivable, seems unparsimonious. Nonetheless, our results offer no strong disconfirmation of this more complex distraction interpretation, and subsequent work should be undertaken to examine it more fully.

Conclusion

The nature of benevolent motivation has been a long-standing issue of philosophical and psychological inquiry. Recently, psychologists have examined the role of empathy in the generation of and explanation of such motivation (see Eisenberg & Miller, 1987, and Hoffman, 1981, for reviews). An impressive and important body of research by Batson and his associates

has repeatedly provided evidence for the selfless mediation of helping under conditions of heightened empathy for a needy other. The two studies reported here offer a reinterpretation of that evidence by associating increased personal sadness with such empathy and by supporting the egoistic motive of sadness reduction as the mediator of this form of helping. We recognize fully that no mere pair of experiments is capable of resolving so fundamental a question as the motivational nature of benevolence; accordingly, we do not see our studies in such light. Instead, we view them as providing a plausible egoistic explanation for the first powerful experimental evidence for pure altruism.

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