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Agreeableness, Empathy, and Helping: A Person × Situation Perspective

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This research program explored links among prosocial motives, empathy, and helping behavior. Preliminary work found significant relations among components of self-reported empathy and personality (N = 223). In Study 1, the authors examined the generality of prosocial behavior across situations and group memberships of victims (N = 622). In Study 2, empathic focus and the victim's outgroup status were experimentally manipulated (N = 87). Study 3 (N = 245) replicated and extended Study 2 by collecting measures of prosocial emotions before helping. In Study 4 (N = 244), empathic focus and cost of helping as predictors of helping behavior were experimentally manipulated. Overall, prosocial motivation is linked to (a) Agreeableness as a dimension of personality, (b) proximal prosocial cognition and motives, and (c) helping behavior across a range of situations and victims. In persons low in prosocial motivation, when costs of helping are high, efforts to induce empathy situationally can undermine prosocial behavior.

Keywords: prosocial, motives, empathy, agreeableness, helping

Since ancient times, people have puzzled over the processes that underlie helping and hurting others. In his modern social–cognitive analysis of the altruism question, Batson (1991a) noted that the issue of motivation was critical to understanding prosocial behavior. Over the years, definitions of motivation and its core phenomena shifted, but motivation is commonly described as a hypothetical construct that explains the direction, amplitude, and persistence of behavior (Kleinginna & Kleinginna, 2005). From this perspective, questions of motivation underlie understanding the consistency and predictability of behavior across time and situations (Dovidio, Piliavin, Schroeder, & Penner, 2006; Penner & Finkelstein, 1998; Penner, Fritzsche, Craiger, & Freifeld, 1995). Individuals in a motivational state with the ultimate goal of increasing another's welfare should help others in a pattern different from persons in a motivational state with the ultimate goal of increasing his or her own welfare. In this analysis, identifying sources of differences in motivation—both proximal and ultimate—becomes critically important (Graziano, Jensen-Campbell, & Finch, 1997; Preston & de Waal, 2002).

Conceptual complexities arise with the use of motivational constructs in social–cognitive analyses as they apply to prosocial behavior. First, motivation is a state with potential energy, a force within an individual, which is directed toward some goal. Motivation is typically defined as a hypothetical construct that explains the direction, amplitude, and persistence of goal-directed behavior. The language implies a proximal process: This state arises in part from an eliciting context (Batson, 1991a, pp. 6–7 and 78–82). That being granted, some corresponding psychological structure must be present to respond to the elicitation (Burnstein, Crandall, & Kitayama, 1994; Preston & de Waal, 2002). What is the source of this motivation if it is not attributes or dispositions of persons? The social–cognitive analysis does not require the abandonment of dispositional constructs per se. The social–cognitive analysis shifts the focus from attributes toward an Attributes × Contexts or Fields interaction as the unit of analysis. By extension, persons may have attributes like empathy that dispose them to prosocial motivation, but these dispositions are best understood in terms of an interaction between dispositions and contexts (Batson, 1991b; Burnstein et al., 1994; Ickes, 2001; Penner et al., 1995; Preston & de Waal, 2002). Taken together, this conceptual analysis suggests that a Person × Situation interaction approach will yield the most comprehensive account of the ways dispositions, motivation states, and situations combine to affect prosocial behavior. Second, identifying prosocial motivational differences is complicated by potential problems with the validity of self-report, including self-awareness of motives and self-favoring biases (Ainslie, 2001; Graziano & Tobin, 2002). An alternative assessment is through inference after behavioral observation, but this approach raises potential issues of validity of inferences and representativeness of settings and contexts. In a Person × Situation analysis, both would be combined: Self-reports of prosocial motivation would be elicited and expressed differentially by the context or field (manipulated experimentally) surrounding the disposition.

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In the present program of research, we used a converging, multimethod Person × Situation approach to link prosocial motivation to helping behavior. The preliminary study offered a baseline and an empirical analysis of the relations among prosocial motives. Studies 1 through 4 build on the preliminary study using the Person × Situation approach to identify interactive effects of prosocial motives (both dispositional and induced states) and experimentally manipulated situational contexts on reactions to victims in need of help. We focus on the personality dimension of Agreeableness because of its connection to prosocial motivation in general and to empathy in particular.

There were several reasons for exploring links among prosocial motivation, dispositional empathy, and situationally induced empathy and for proposing that prosocial motivation is the affective foundation for the presumably more general personality construct of Agreeableness. First, there is an issue of *surface similarity*, one of the five main principles practicing scientists use in generalizing (Shadish, Cook, & Campbell, 2002, pp. 359–361). Specifically, the natural language trait words associated with Agreeableness include *sympathetic*, *generous*, *forgiving*, and *helpful* (Goldberg, 1992; Graziano, Jensen-Campbell, Steele, & Hair, 1998; Graziano & Tobin, 2002; Kohnstamm, Halverson, Mervielde, & Havill, 1998). Moving past surface similarities, it is possible that prosocial affective and motivational elements provide the social–cognitive process or emotional core around which forms the natural language dispositional description of Agreeableness. That is, prosocial motivation and social responsiveness may be the underlying social–cognitive processes that perceivers observe and identify in others when they attribute Agreeableness traits to them (e.g., Finch, Panter, & Caskie, 1999; Tobin, Graziano, Vanman, & Tassinary, 2000). Second, prosocial motivation contains within its definition many forms of other-oriented, group-directed behaviors. The social-group origins of prosocial motives (Graziano & Eisenberg, 1997; Hogan, 1983; Jensen-Campbell, Graziano, & West, 1995) have also been mentioned as one possible source of altruism (e.g., Ashton & Lee, 2001; Cunningham, 1986; Eisenberg & Miller, 1987; Sober & Wilson, 1998). Finally, if studies of prosocial motivation could be linked systematically to the literature on Agreeableness, then the nomological network surrounding both sets of constructs could be expanded and coordinated.

From an empirical perspective, Agreeableness is a major dimension of personality, perhaps even the largest single dimension in terms of total variance explained (e.g., Goldberg, 1995; Graziano & Eisenberg, 1997; Kohnstamm et al., 1998). Empirically, the three major self-report measures of Agreeableness (Revised NEO Personality Inventory, Big Five Inventory, and Goldberg markers) show substantial convergence (John & Srivastava, 1999). Moreover, research with these self-report measures has accumulated considerable support for predictive validity. For example, self-reports show agreement with expert, peer, and spouse ratings (John & Srivastava, 1999). Self-reports also predict behaviors such as efforts to minimize interpersonal conflict (Graziano, Jensen-Campbell, & Hair, 1996; Jensen-Campbell & Graziano, 2001), to maintain intragroup cooperation (Graziano, Hair, & Finch, 1997), and to control negative emotions in the presence of others (Tobin & Graziano, 2006; Tobin et al., 2000).

Moving up from the empirical soil of observation towards structural empirical concepts (Feigl, 1970), Hafdahl, Panter, Gramzow, Sedikides, and Insko (2000) found that Agreeableness was the single most descriptive dimension among the Big Five for all selves (e.g., actual, ideal) but was especially descriptive of the ought self. The importance of Agreeableness as a dimension of personality is also evident in its close connection with communion, the desire to contribute to something bigger than the self (Ashton & Lee, 2001; Digman, 1997; Wiggins & Trapnell, 1997).

Moving to a process perspective, Graziano and Eisenberg (1997) defined the dimension of Agreeableness not in terms of empirical behavioral differences or structural properties per se but in terms of social motivation. They noted that the behavioral and structural aspects of Agreeableness can be explained by differences in the underlying motivation for maintaining positive relationships with others. That is, processes of prosocial motivation may explain the diverse outcome social behaviors associated with Agreeableness (e.g., conflict tactics, cooperation, social responsiveness). The next question, of course, is to ask about the source of such differences in motivation. Graziano and Eisenberg speculated that differences in prosocial motivation associated with Agreeableness were a product of social learning histories and parental socialization that stressed prosocial action but noted that direct evidence was sparse. Taking a different tack, Ahadi and Rothbart (1994) suggested that Agreeableness has its developmental origins in the control of frustration, specifically in the early-appearing temperament of *effortful control*. Effortful control is defined as the ability to suppress a dominant response so that one may perform a subdominant response (Rothbart, Ellis, Rueda, & Posner, 2003). It is a process related also to the ability to deploy attention strategically. If we apply this construct to prosocial behavior, we might speculate that the effortful control substrate of Agreeableness can moderate or suppress the dominant self-centered emotions like personal distress so that a subdominant, other-oriented empathic concern can be expressed and lead to prosocial action on behalf of the needy. This implies that prosocial motives may operate in sequence and are moderated by other psychological mechanisms linked to emotion regulation. At least in some people in some contexts, primitive self-centered egoist motives of personal distress may be dominant and block prosocial responding, whereas in other persons, the dominant self-centered motives are present but suppressed, allowing other-oriented empathic concerns to appear and to facilitate helping (cf. Batson, 1991a; Davis, 1996; Tobin et al., 2000). Whatever the developmental origins and moderation of prosocial motivation, a Person × Situation approach requires a contemporaneous, functional, process-centered analysis with empirical evidence linking differences in prosocial motives like empathy and Agreeableness to prosocial behavior.

Preliminary Study

We began by examining interrelations among several supposedly different prosocial motives. Because one concern is that self-reports of prosocial motivation are potentially contaminated by social desirability and self-favoring biases (e.g., Batson, 1991a; Graziano & Tobin, 2002; Paulhus & John, 1998), we also collected data to link self-reported prosocial motives to impression management and self-deception (Paulhus, 1991) from the same respondents. We then related these to the major personality dimensions of the Big Five, with special attention to the link between Agreeableness and empathy.

It is possible that Agreeableness is not the only Big Five dimension of personality related to prosocial motivation, empathy, or its components. To address issues of convergent and discriminant validity, we collected data for all of the Big Five dimensions and correlated them with the various measures of prosocial motivation. To measure prosocial motives, we used the 56-item Prosocial Personality Battery (PPB; Penner et al., 1995). The PPB is made up of seven subscales, including Social Responsibility (e.g., "No matter what a person has done, there is no excuse for taking advantage of them"), Empathic Concern (also Other-Oriented Empathy; e.g., "When I see someone being taken advantage of, I feel kind of protective towards them"), Perspective Taking (e.g., "I sometimes try to understand my friends better by imagining how things look from their perspective"), Personal Distress (e.g., "I tend to lose control during emergencies"), Mutual Moral Reasoning (e.g., "I choose alternatives that are intended to meet everybody's needs"), Other-Oriented Reasoning (e.g., "My decisions are usually based on my concern for other people"), and Self-Reported Altruism (e.g., "I have helped carry a stranger's belongings [e.g., books, parcels, etc.]"). All items are measured on a 5-point Likert-type scale (1 = *strongly disagree* to 5 = *strongly agree*). To measure the Big Five dimensions, we used the 44-item questionnaire-format Big Five Inventory (BFI; John & Srivastava, 1999). Following McCrae and John (1992), the Big Five dimensions are labeled Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness (Goldberg's Intellect) for ease of exposition. Across two academic terms, 223 Texas A&M University undergraduates (125 women) participated individually in this study. Order of presentation of instruments was counterbalanced across participants.

Zero-order correlations were computed, as well as partial correlations in which sex, Impression Management, Self-Deceptive Enhancement, and four dimensions of the Big Five (i.e., all except Agreeableness) were partialed. The zero-order correlation between Other-Oriented Empathy (Penner et al., 1995) and Agreeableness (John & Srivastava, 1999) was large, $r(223) = .53$, $p < .01$. This association between Other-Oriented Empathy and Agreeableness dropped only slightly to .48 ($p < .01$) when partialing sex, Impression Management, Self-Deceptive Enhancement, and each of the other Big Five dimensions. From the Davis (1996) multidimensional measures of empathy, Empathic Concern also correlated with Agreeableness, $r(223) = .53$, $p < .01$, more highly than with any of the other Big Five dimensions, measures of social desirability, or sex. For purposes of discriminant validity, we correlated Empathic Concern with the other dimensions of the Big Five; these variables correlated only weakly.

In general, zero-order correlations between prosocial motives and Agreeableness were larger than corresponding correlations with the other Big Five dimensions, and partialing produced no discernable systematic decrement on Agreeableness correlations. Sex differences in prosocial motivation, reported as zero-order correlations, were statistically significant (favoring women) across all facets except Self-Reported Altruism but were small in absolute magnitude (all rs $\leq .28$). Overall, there was no evidence that the association between prosocial motives and Agreeableness was reduced when sex or social desirability processes were partialed. (See Graziano & Tobin, 2002, for related discussion of social desirability confounds.)

The preliminary study has several potential limitations. First, the outcomes were based on correlations among traditional verbal self-report measures. How these responses relate to overt behavior in situ, however, remains an empirical question. Despite our efforts to isolate them, unmeasured self-favoring biases and selective retrospective recall may have distorted outcomes. A second, related limitation is that individuals were assessed in social isolation. In keeping with a Person × Situation approach, important aspects of prosocial motivation and empathy may be emergent and functionally interdependent with surrounding situational fields (e.g., relationships and interpersonal interaction). Furthermore, given the interpersonal nature of Agreeableness (Graziano, Bruce, Sheese, & Tobin, 2007; Graziano & Eisenberg, 1997; Jensen-Campbell & Graziano, 2001), interpersonal situations may be better than isolated situations for examining links between prosocial motives and Agreeableness. To overcome some of these limitations and to gain a better picture of the roles of prosocial motivation and Agreeableness in actual helping behavior, we designed four further studies that included manipulations to elicit different kinds of prosocial motivation.

Study 1

". . . and Who Is my Brother?"

Taking a neo-Darwinian perspective, Burnstein, Crandall, and Kitayama (1994) noted that when biological costs and benefits are trivial, helping decisions are made "to enhance reputation or satisfy conscience" (p. 776). However, when biological costs and benefits are high, decisions to help are affected by genetic relatedness. In a set of six vignette studies, Burnstein et al. explored the hypothesis that natural selection favors those who focus their helping efforts on individuals who are biological relatives or who have biological properties that increase the helper's inclusive fitness (Cunningham, 1986; Hamilton, 1964a, 1964b). Furthermore, this bias is especially strong when help is biologically significant (e.g., rescuing a person from life-threatening danger).

First, Burnstein et al. (1994) examined the link between various degrees of actual biological kinship (e.g., mother, aunt, cousin) and perceived kinship (e.g., sister-in-law) and found a strong association. The most precipitous declines in perceived relatedness occurred between (a) very close kin and moderately close kin and (b) distant kin and acquaintances. Second, Burnstein et al. created 24 different targets of helping based in part on kin relatedness and asked Japanese and American undergraduates to decide which persons to help. Targets were presented in triads of individuals, and the respondent's task was to decide which one of the three to help. Neither the sex nor the country of the respondent interacted with the main effects. In both the Japanese and the American samples, help increased with biological relatedness, for younger targets more than older targets, and for female targets more than male targets. Third, Burnstein et al. varied the nature of the helping situation (everyday helping vs. life-or-death helping) on the basis of the hypothesis that evolution has shaped humans to treat life-or-death helping in a qualitatively different way from everyday helping. Consistent with their hypothesis, Burnstein et al. found that in everyday helping contexts, respondents were more likely to help kin in poor health than kin in good health, whereas the reverse was true in life-or-death helping situations. Burnstein et al. (1994)

interpreted outcomes as good support for Hamilton's (1964a, 1964b) inclusive fitness hypothesis of altruism.

Neo-Darwinian accounts of prosocial behavior place a great deal of weight on distal, disposition-based processes of kin selection. Without denying that kinship may be a potent determinant of extraordinary helping, these descriptions can be recast in terms of a more proximal Person × Situation approach involving social motives and the immediate context (e.g., Graziano, Jensen-Campbell, Todd, & Finch, 1997). First, empathic emotional reactions to others may overcome social category boundaries like kinship when the victim's distress is conspicuous. Persons with high levels of prosocial motivation may give help to kin and nonkin almost reflexively. Moving toward a Person × Situation analysis, we note that Burnstein et al. (1994) suggested that perceived relatedness was a social–cognitive mediator for helping and that it did not map perfectly onto actual biological relatedness. It is possible that prosocial motives influence social–cognitive processes in ways that increase the perceived relatedness of persons in need. That is, when specific situations activate prosocial motives, those motives may induce perceivers to broaden inclusion classes and to regard others as being related to the perceiver. In dispositional terms, persons who score higher on prosocial motives linked to Agreeableness may perceive more persons as being related to them, especially in situations of need. Compared with their peers, persons high in Agreeableness may perceive that more persons qualify as relatives because they feel a sense of connectedness with an extended range of persons.

To replicate and extend Burnstein et al. (1994) and the original Cunningham (1986) research that inspired it, we constructed two types of helping vignettes that described strangers, friends, and siblings. One was an everyday helping situation, whereas the second was an extraordinary helping situation (Burnstein et al., 1994, Study 4). In keeping with previous findings, we hypothesized that perceivers would be more likely to help persons in need on the basis of perceived relatedness: siblings more than friends, and friends more than strangers. We also hypothesized that the prosocial motives associated with Agreeableness would moderate patterns of helping: Compared with their peers, persons high in Agreeableness would help all persons at each level of relatedness at higher rates, but this effect would be more pronounced in the extraordinary helping situation. More specifically, in extraordinary helping situations, helping behavior would be less closely associated with relative status for persons high in Agreeableness than it would be for their low Agreeableness peers because of differences in prosocial motivation.

Method

Research Participants

A total of 622 Texas A&M University undergraduates (336 women) volunteered in exchange for partial fulfillment of an introductory psychology course requirement.

Measures

Participants completed the Big Five Inventory (John & Srivastava, 1999) as a measure of personality. Participants also provided their reactions to two vignettes that were adapted from those used by Burnstein et al. (1994, Study 4). In the first vignette (ordinary or everyday helping), a situation in which an individual's car broke down on the side of the road was described. Participants were told that if they stopped to help, they might be late for an important meeting. Participants were asked what percentage chance they would be willing to risk being late to help a (a) sibling, (b) friend, and (c) stranger (choices ranged from 0% to 100%, in 10% increments). The second vignette (extraordinary helping) described a situation in which the participant can enter a burning house to save the life of the house's occupant. Participants were asked what percentage chance they would be willing to risk death or serious injury to help a (a) sibling, (b) friend, and (c) stranger.

The order of presentation of the personality measure and the two vignettes was completely counterbalanced across participants. Additionally, the order in which the helping targets were presented in each of the vignettes was also counterbalanced.

Results and Discussion

In the current and all subsequent studies, preliminary analyses examined sex differences in helping behavior. When there are sex differences, they are reported as part of the results. When there are not, primary analyses were collapsed across the sex of the participant.

For the subsequent analyses, scores for Agreeableness were centered around the mean to conduct cross-product regressions, as recommended by Aiken and West (1991). Agreeableness, relationship, and situation were significant predictors of willingness to incur costs for victims (all Fs > 3.83, all ps $< .05$). The centered Agreeableness × Relationship × Situation cross product was also significant, $F(2, 1236) = 10.63$, $p < .01$. This interaction is presented in Figure 1.

To examine more closely this significant three-factor cross product, we conducted follow-up analyses of variance (ANOVAs) for ease of exposition. Analyses were conducted separately for the ordinary and the extraordinary situations. For the ordinary situation, a 2 (Agreeableness) × 3 (relationship) mixed-design, repeated-measures ANOVA was conducted. There was again a significant Relationship × Agreeableness interaction, $F(1, 618) = 5.72$, $p < .02$, $\eta = .09$. Follow-up analyses indicated that in comparison to participants low in Agreeableness ($M = 64.45\%$, $SD = 2.21$), participants high in Agreeableness ($M = 69.62\%$, $SD = 1.95$) were significantly more likely to help a friend, $F(1, 620) = 9.52$, $p < .01$, $\eta = .12$. Participants high in Agreeableness ($M = 81.15\%$, $SD = 1.51$) were also significantly more likely than participants low in Agreeableness ($M = 78.29\%$, $SD = 1.80$) to help a sibling, $F(1, 620) = 4.61$, $p < .05$, $\eta = .08$. There was no evidence, however, that participants high in Agreeableness ($M = 24.68\%$, $SD = 1.94$) were more likely to help a stranger, $F(1, 620) = 0.20$, *ns*, than were participants low in Agreeableness ($M = 24.00\%$, $SD = 1.88$).

For the extraordinary situation, a 2 (Agreeableness) × 3 (relationship) mixed-design, repeated-measures ANOVA was conducted. As in the previous analyses, there was a significant Relationship × Agreeableness interaction, $F(1, 618) = 4.46$, $p < .05$, $\eta = .19$. Follow-up analyses indicated that in comparison to participants low in Agreeableness ($M = 46.00\%$, $SD = 2.58$), participants high in Agreeableness ($M = 49.42\%$, $SD = 2.59$) were somewhat more likely to help a stranger, $F(1, 620) = 2.72$, $p <$

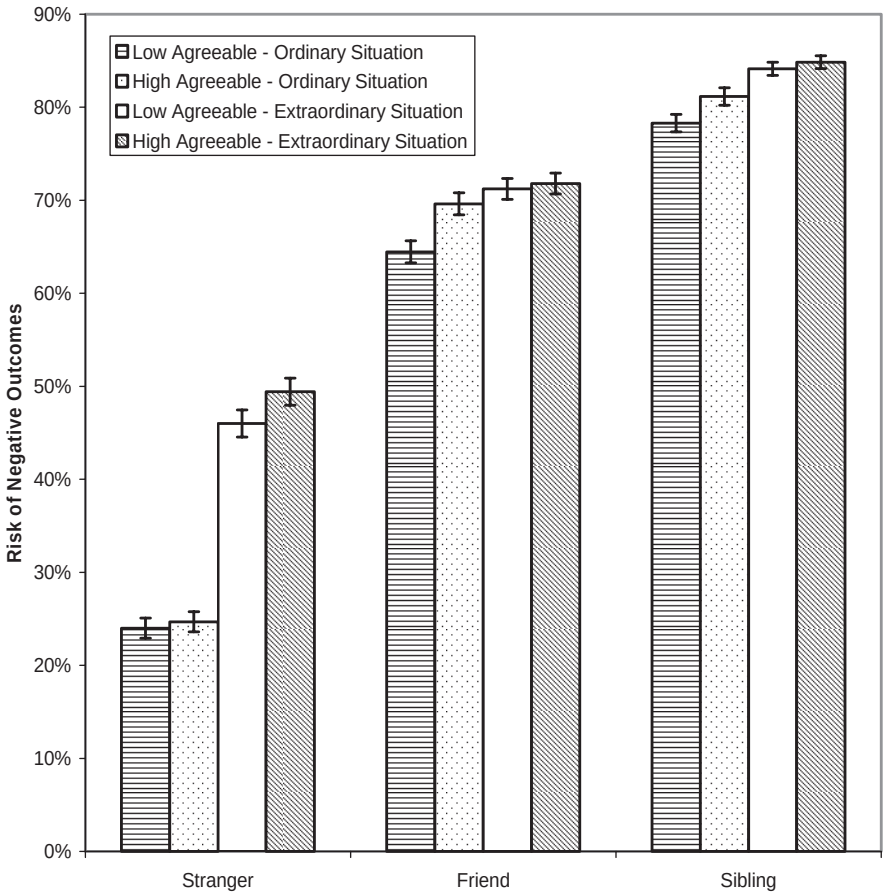

Figure 1. Helping by relationship type and nature of helping situation in Study 1.

.10, $\eta = .06$. There was no evidence, however, that participants high in Agreeableness differed from participants low in Agreeableness in their willingness to risk their lives to save either a friend, $F(1, 620) = 0.13$, *ns*, or a sibling, $F(1, 620) = 0.52$, *ns*.

These results suggest that persons high in Agreeableness were more willing to risk negative outcomes to help others in both ordinary and extraordinary situations than were the other participants. However, both the situational context and the nature of the relationship qualified this pattern. When it came to saving the lives of siblings and friends, there was no evidence that Agreeableness predicted helping differences. Instead, we found that persons high in Agreeableness were more willing than other participants to risk themselves to save strangers. The opposite pattern emerges in everyday helping situations. When it came to risking being late to a meeting to help a stranger, we found that persons high and low in Agreeableness were comparable in the reported likelihood of helping. Persons high in Agreeableness, however, were more likely to help than other participants when it came to assisting both their friends and their siblings.

Outcomes of Study 1 replicated the Burnstein et al. (1994) findings in that kin received more aid than did nonkin. Kin relations clearly have a dramatic affect on the willingness of individuals to offer aid in various kinds of situations. Our outcomes suggest, however, that some qualifications of this generalization are in order. First, respondents high in Agreeableness offered to risk more negative outcomes to help others, and their help was moderated by personal relationships, compared with the helping of respondents low in Agreeableness. Second, the inclusive fitness hypothesis implied that evolution had prepared humans to give aid in qualitatively different ways in everyday situations compared with life-or-death situations. There may be qualitative differences in these helping situations, and Pleistocene era events may have set the stage, but the different responses of our participants in the situation may be more precisely predicted and described in Person $\times$ Situation terms than in terms of the inclusive fitness hypothesis. Our data suggest that the qualitative difference in helping may be tied to the way persons perceive their relationships to nonkin others (friends vs. strangers) and has less to do with differences in reactions to kin. That is, in life-or-death helping situations, the difference between friends and strangers is less sharp than in everyday helping situations. Third, there may be a somewhat different Person $\times$ Situation alternative to the evolutionary analysis of prosocial behavior. It is not necessarily incompatible with the Burnstein et al. analyses, but it does offer a different focus. The nature of the helping situation may elicit different prosocial motives in different persons, which in turn influence Person $\times$ Situation processes and reactions to persons in need. In this analysis, differences in prosocial motives interact with the situational context to influence social–cognitive pro-

cesses, and these are the proximal causes of helping (Graziano, Hair, & Finch, 1997).

Study 1 had several potential limitations. First, it used hypothetical, verbally presented helping vignettes. Replication of previous work by Burnstein et al. (1994) required the use of their vignette methods. In terms of strengths, vignettes are direct and focus participants' attention on the variables of interest. In addition, the vignette method allows the researcher to control the helping situation and to avoid some ethical problems associated with deception and manipulation of participants' perceptions of helping situations. In terms of weaknesses, however, vignettes may prematurely focus, package, and define the critical elements in situations (e.g., relative need and risk to each participant; legitimacy of the victim's need). The experimenter's control over the helping situation may come at the price of subtle, implicit constraints and demands on the respondents. In terms of outcomes, even with demands and constraints, participants in vignette studies can give controlled, written reactions with no real consequences to themselves or to the purely hypothetical victim. Moreover, responses to vignettes may not predict how the same individual will react to other persons in vivo (cf. Graziano, 1987; Graziano & Tobin, 2002; Greenberg & Folger, 1988; Tobin et al., 2000).

To overcome these limitations, we conducted three additional, converging experiments using Batson's now-classic Katie Banks paradigm (Coke, Batson, & McDavis, 1978; Davis, 1996, pp. 118–120). In each of these experiments, we randomly assigned participants to conditions in which empathic focus was manipulated. For all studies, the main outcome was behavioral measures of the amount of help offered to a victim.

Study 2

Concern for Katie From Kokomo

The preliminary study provided evidence that prosocial motives are part of the nomological network surrounding helping and that prosocial concerns (especially the affective facets of empathy) may offer the distinctive foundation for one of the largest dimensions of personality, Agreeableness. From the Person × Situation approach, however, individual-centered variables like motives and personality by themselves can provide only an incomplete picture of prosocial behavior and helping. Prosocial tendencies and motives interact with the surrounding situational context to generate behavioral outcomes of helping. With Study 1, we provided evidence for such interactive outcomes by manipulating participants' exposure to different kinds of helping situations and measuring willingness to give aid to different kinds of victims. Consistent with the Person × Situation approach, Agreeableness was associated with higher rates of helping, not necessarily to close kin but specifically to strangers and friends. Because these two studies used correlational methods, however, plausible alternative explanations remained open. In particular, in our preliminary study, all predictor variables (prosocial motives of empathy and its facets, Big Five personality dimensions, social desirability, PPB) and all outcomes (helping variables) were derived from the self-reports of the same persons. However well these variables were measured, critics could still note legitimately that the Person × Situation hypotheses about prosocial motives and helping were correlational and open to alternative explanations based on unmeasured latent *Z* variables. By manipulating relationships between the respondent and the victims, Study 1 offered preliminary evidence for the social–cognitive Prosocial Motives × Situation interactive hypothesis, but prosocial motives were only inferred from self-reports of Agreeableness.

To address these issues, in Study 2, we explicitly manipulated the participants' listening perspective experimentally using the Katie Banks paradigm (Coke et al., 1978). Of the 16 published studies that have used imagine-other instructions with Katie Banks or some other target, 13 found significantly greater feelings of sympathy for the target in the experimental condition than in the control condition (Davis, 1996). In this paradigm, listening perspective is used to manipulate the empathic focus of the participants. More specifically, it is manipulated by directing participants to focus their attention on either the emotional situation of the victim (Katie) or some nonemotional secondary aspect of the presentation of Katie's situation. In terms of process, this paradigm's manipulation focuses attention on role taking and "imagin[ing] the other" (Davis, 1996, pp. 118–120). The precise process that transforms this manipulation of role taking into helping, however, remains unclear. One possibility is that the manipulation induces perception of greater similarity to the victim, and this similarity induces greater helping (e.g., Gruen & Mendelsohn, 1986; Sturmer, Snyder, Kropp, & Siem, 2006). A related Heiderian possibility is that the manipulation induces greater liking, and liking for the victim leads to greater helping (Graziano et al., 2007; cf. Toi & Batson, 1982).

If the Heiderian variables of similarity and liking are the preponderant social–cognitive elements underlying increased helping in the Katie Banks paradigm, then the perceived similarity of a person's group membership should also influence empathic concerns and patterns of helping. That is, helping should be greater for victims who belong to the perceivers' own ingroup than for comparable victims who hold membership in an outgroup. Empirical evidence linking prosocial motivation to helping for ingroup and outgroup members is mixed (Batson et al., 1997; Davis, 1996). Some kinds of outgroup memberships may induce stronger feelings of dissimilarity than other kinds (e.g., Eisenberg & Miller, 1987), and certain outgroup memberships could be construed as stigmatizing (e.g., Batson, Chang, Orr, & Rowland, 2002). That being said, in a Person × Situation analysis, the focus is on functional interdependence between an individual's prosocial motivation and the surrounding context. Persons with higher levels of prosocial motivation should be less influenced by a victim's ingroup or outgroup membership in giving help than would their peers. In the present case, this logic leads to the prediction of an Agreeableness × Group Status interaction. Persons high in Agreeableness will be influenced less by a victims' group membership, whereas persons low in Agreeableness will help ingroup victims more than outgroup victims.

A somewhat different Person × Situation explanatory possibility can be found by analogy with the cognitive developmental research on meta-cognitive monitoring and production deficiencies (Flavell, Green, & Flavell, 1995; for critical discussion of these and related utilization deficiency mechanisms, see Waters, 2000). Younger children may perform less well than older children on cognitive tasks (e.g., memory tasks) not from a lack of inherent memory capacity per se but from a failure to deploy strategic rehearsal strategies to help them maintain memory over time.

When given focused instruction in meta-cognitive strategies like rehearsal, younger children may perform as well as older children. By analogy, adults who appear to be low in prosocial skills and inherent motivation may be like younger children: They need remedial, focused training or to be reminded. Once focused and reminded of the need to attend to the plight of a victim, persons apparently low in prosocial motivation may provide help in ways comparable to their high prosocial peers. If this analogy is valid, then a major difference between persons who differ in prosocial motivation is not in the willingness to help but in the social–cognitive salience of the needs of victims.

Following this logic further, if the perspective-taking instructions are primarily a sophisticated way to overcome production deficiencies in motivation, in effect reminding persons of the needs of victims, and if some people will profit from the reminders more than others, then the perspective-taking instructions will have no systematic impact on persons for whom the needs of victims are already salient. By this logic, persons high in Agreeableness will not be influenced by the empathic focus manipulation, because the needs of victims are already salient for them and they will provide help with or without external reminders. In effect, persons high in Agreeableness appear "traited for helping" (Penner et al., 1995). In contrast, persons low in Agreeableness will increase their helping when reminded, relative to a baseline control. In sum, this logic predicts a Listening Perspective × Agreeableness × Group Status interaction.

Method

Participants and Design

A total of 87 university undergraduate students (48 women) participated in return for either partial fulfillment of their introductory psychology course requirement or a $10 payment. There was no evidence that women differed from men or that the volunteers differed from paid participants in hours volunteered, *F*s > 1.00, *ns*. Participants high (top 25%) and low (bottom 25%) in Agreeableness were randomly assigned to conditions in a 2 (ingroup vs. outgroup) × 2 (listening perspective: empathy focus vs. technical focus) randomized-block factorial design.

Procedure

Participants were brought into the laboratory one at a time for a 1-hr session. On the basis of an adaptation of Batson's Katie Banks paradigm (Coke et al., 1978), participants were told they would be listening to a pilot radio broadcast show used to test a new program for the Purdue campus radio station. Participants were randomly assigned to one of two listening perspective conditions: *empathy focus* or *technical focus* (labeled *Perspective A* or *Perspective B*, respectively, for participants).

Participants then listened to a tape-recorded interview with a college senior, Katie Banks. The program revealed that Katie had recently lost both of her parents and one of her younger siblings in a car accident and was left with no money, no car, and a younger sister and brother for whom to care. Katie was struggling to keep her family together while trying to graduate.

After listening to the tape, the experimenter left the participant with two letters. The first was a typed letter from the professor who organized the study. In this letter, participants were informed that because this was a pilot program used for research purposes, the program would never be aired, and Katie would not be given help. The letter then told participants that they would be given the opportunity to help if they would like. The second letter was a handwritten letter from Katie, explaining her situation and what participants could do to help. While the experimenter went to gather more forms, the participant read the letters and filled out a form on which they could volunteer to help Katie.

After completing the help scheduling form, the participants were given a short questionnaire on reactions to the radio program that served as a manipulation check of participants' adoption of assigned listening perspectives. Finally, the experimenter used the funnel-debriefing format (Aronson & Carlsmith, 1968) to probe participants for suspiciousness, to debrief them, and to pledge them to secrecy.

Predictor Variables

Listening perspective. Participants were randomly assigned to one of two listening perspective conditions. Participants in the empathy focus condition were given written instructions directing them to focus on the emotional aspects of the broadcast by trying to imagine how the person felt. Participants in the technical focus condition were given written instructions directing them to focus on the technical aspects of the broadcast by listening to the techniques and devices used by the programmers.

Group status. Participants were randomly assigned to one of two group status conditions. Group status was manipulated by identifying Katie as either an ingroup member (a fellow student at the participant's university) or an outgroup member (a student attending a different university nearby).[1]

Agreeableness. From a total of 334 participants who completed the BFI (John & Srivastava, 1999) during an earlier prescreening session, 87 participants were selected for participation because their Agreeableness scores fell in the top ($M = 4.28$, $SD = 0.27$) or bottom ($M = 3.03$, $SD = 0.47$) quartile of the total Agreeableness distribution.

Dependent Variables

Manipulation checks. We asked two questions on the reaction questionnaire to assess the effectiveness of the listening perspective manipulation. These questions were answered on a 9-point scale (1 = *not at all*, 9 = *very much*) and asked participants the extent to which they concentrated on the technical and emotional aspects of the broadcast.

Hours volunteered. To assess helping, we asked participants to complete a volunteer sheet on which they circled the number of hours they were willing to volunteer. Students were also asked to

[1] These data were collected at both Purdue University and Texas A&M University. Indiana University Kokomo and Sam Houston State University, respectively, were used to allow Katie Banks, the victim, to live in the same area as the student while seeking help. By keeping the victim in the same community as the participants, issues of distance and time were the same across all conditions in Studies 2 and 3. Preliminary analyses found no evidence that Purdue University students were different from Texas A&M University students.

list their availability during the week and to provide contact information if they were willing to help.

Similarity. We asked each participant to rate perceived similarity to the victim (i.e., "How similar to you do you think the person who was interviewed is?"). This item was measured on a scale of 1 (*not at all similar*) to 9 (*very similar*).

Likeability. Each participant was asked to assess the victim's likeability (i.e., "How likeable do you find the person who was interviewed?"). This item was measured on a scale of 1 (*not at all likeable*) to 9 (*very likeable*).

Results and Discussion

Manipulation Checks

ANOVA results indicated that the manipulations were successful. Participants in the empathy focus condition ($M = 7.44$, $SD = 1.64$) reported concentrating on the emotions of the victim more than did the participants in the technical focus condition ($M = 6.82$, $SD = 1.57$), $F(1, 79) = 4.29$, $p = .04$, $\eta = .22$. Participants in the technical focus condition ($M = 6.46$, $SD = 1.95$) reported concentrating on the technical aspects of the broadcast more than did participants in the empathy focus condition ($M = 4.54$, $SD = 2.29$), $F(1, 79) = 15.38$, $p < .001$, $\eta = .40$. Consistent with other studies, these results indicate that our listening perspective manipulation was effective.

Hours Volunteered

We used full-scale Agreeableness scores data in centered cross-product regression (see Aiken & West, 1991).[2] Results revealed a significant Agreeableness × Group Status interaction, $B(79) = 4.16$, $t(79) = 3.59$, $p < .01$. Follow-up analyses revealed no evidence that Agreeableness was a significant predictor of helping behavior for ingroup victims, $t(41) < 2.0$, *ns.* Agreeableness did, however, emerge as a significant predictor for outgroup victims, $B(38) = 2.75$, $t(38) = 3.36$, $p < .01$. Participants high in Agreeableness offered more help to outgroup victims than did participants low in Agreeableness (see Figure 2A).

An Agreeableness × Listening Perspective interaction also emerged, $B(79) = 2.15$, $t(79) = 1.81$, $p = .07$. Follow-up analyses revealed no evidence that Agreeableness was a significant predictor of helping in the empathic focus condition, $t(44) < 2.0$, *ns*. Agreeableness did, however, emerge as a predictor of helping behavior in the technical focus condition, $B(35) = 1.77$, $t(35) = 1.63$, $p = .11$. Participants high in Agreeableness tended to offer more help in the technical focus condition than did participants low in Agreeableness (see Figure 2B).

Supplementary Analyses

Similarity. We examined the possibility that the link between Agreeableness and helping was due to differential perception of similarity to Katie and not to prosocial motivation per se. A significant main effect of Agreeableness emerged for similarity, $B(79) = 0.712$, $t(79) = 2.25$, $p < .03$. Participants high in Agreeableness reported that Katie was more similar to them than did participants low in Agreeableness. To examine the mediating effects of similarity on helping, we conducted a 2 (Agreeableness) × 2 (group status) × 2 (listening perspective) between-subjects analysis of covariance (ANCOVA) with the participant response to the similarity item as a covariate and number of hours volunteered as the dependent measure. Results revealed that the Agreeableness × Group Status interaction remained significant, $F(1, 78) = 6.54$, $p < .01$. The Agreeableness × Listening Perspective interaction also approached significance, $F(1, 78) = 2.76$, $p = .10$. There was no evidence of a main effect for similarity or that similarity interacted with the other predictor variables. These results suggest that differential perception of similarity is probably

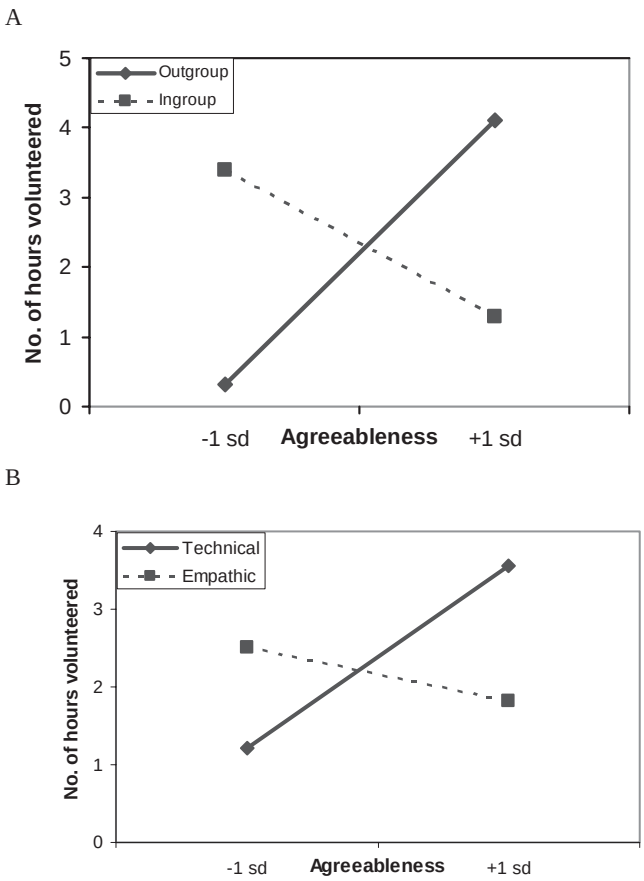

Figure 2. A: Predicted number of hours volunteered as a function of Agreeableness and group status in Study 2. B: Predicted number of hours volunteered as a function of Agreeableness and empathic perspective in Study 2.

[2] Helping responses in laboratory studies are often bimodal or badly skewed. In this case, 60% of participants offered no help. To explore the possibility the skew was introducing bias into our analyses, we performed basic chi-square analyses to examine differences in frequencies of helping in cells. Results were very similar to regression results. A greater percentage of participants high in Agreeableness (44%) than participants low in Agreeableness (11.8%) offered help to outgroup victims, $\chi^2(1, N = 42) = 4.92$, $p < .05$. This difference was not significant for ingroup victims, $\chi^2(1, N = 45) = 3.60$, *ns.* Participants high in Agreeableness also tended, although not significantly, to offer more help (44%) than participants low in Agreeableness (22.6%) in the technical focus condition, $\chi^2(1, N = 39) = 1.99$, *ns*. This difference was not evident in the empathic focus condition.

not the primary mediating process in this specific case of helping behavior.

Likeability. We also examined the possibility that the link between Agreeableness and helping is due to differential liking for Katie and not prosocial motivation per se. A significant main effect of Agreeableness emerged for likeability, $B(79) = 0.630$, $t(79) = 2.29$, $p < .03$. Participants high in Agreeableness reported that Katie was more likeable than did participants low in Agreeableness. To examine the mediating effects of likeability on helping, we conducted a 2 (Agreeableness) × 2 (group status) × 2 (listening perspective) between-subjects ANCOVA with the participant response to the likeability item as a covariate and number of hours volunteered as the dependent measure. Results revealed that the Agreeableness × Group Status interaction remained significant, $F(1, 78) = 6.20$, $p < .02$, and the Agreeableness × Listening Perspective interaction was unaffected, $F(1, 78) = 3.18$, $p < .08$. These results make less plausible the hypothesis that the perception of likeability is the preponderant underlying process by which empathy and Agreeableness are linked to helping behavior.

In keeping with previous research (Batson, 1991a), Study 2 suggests that empathic experience can be manipulated experimentally and that these manipulations can increase helping behavior, at least in some people. Persons low in Agreeableness increased their helping after being exposed to an empathy-focused induction, whereas persons high in Agreeableness did not. These results are probably not attributable to simple differences in perceived similarity or liking for the victim. In general, persons high in Agreeableness helped victims cross-situationally at higher rates, across variations in victims' group memberships, relative to their low Agreeableness peers. Persons high in Agreeableness appear to have higher levels of prosocial motivation than their peers, and reminders seem not to enhance already high rates of helping. For persons low in Agreeableness, however, helping is more selective and reminders can increase rates of helping.

Study 3

Emotions Are Linked to Agreeableness and Helping

Outcomes of the previous studies are consistent with the hypothesis that situations differentially elicit empathic emotions and helping behavior. Several questions, however, have been left unanswered in the previous studies. First, a critic could argue that the nature of the prosocial motives remains unclear. Does Agreeableness reflect primarily a dispositional readiness to experience empathic feelings or to overcome self-focused negative affect through effortful control? In theory, outcomes of the previous study could reflect either or both of these processes. Correlations with measures of social desirability from the preliminary study make the impression management explanation less plausible, but it used trait measures. Graziano and Tobin (2002) presented both experimental and correlational studies showing that Agreeableness effects were not artifacts of impression management or social desirability concerns, nor was self-rated Agreeableness distorted by egoistic self-favoring biases, but that research focused on interpersonal conflict rather than helping. Better evidence is needed for clarifying the links between Agreeableness, empathic emotions, and egoistic emotions.

In our previous studies, we inferred differences in empathic emotions but did not provide a direct, situated, individualized assessment of them. Manipulation checks showed group differences between the empathic and technical focus conditions, and Agreeableness was related to self-reported dispositional empathic concern. Still, what is needed are direct measures of the presumed emotional responses to Katie's situation that can be linked to Agreeableness at one end and helping behavior at the consequent end. Ideally, these measures would (a) assess emotions shown to be related to helping in previous research, (b) be sensitive to both situational and dispositional influences, and (c) be collected immediately after hearing about Katie's situation.

There are theoretical reasons for measuring antecedent emotional reactions directly. Conceptually, emotions are commonly presented as antecedent motivational processes that induce, steer, or affect the amplitude of subsequent responses. In the present case, empathic emotions can be conceptualized as antecedent processes that influence both decisions to help and the amount of help offered. Of particular interest in the present case are the initial emotional reactions of persons low in Agreeableness when they are induced to take an empathic focus. On the basis of previous findings, we concentrated on the two empathic emotions of personal distress and empathic concern. Batson (1991a; also see Davis, 1996) showed that when a person is exposed to a helping situation, one of two emotions may arise, namely empathic concern or personal distress. If the dominant emotional reaction of the potential helper is empathic concern toward the victim, then helping should occur across a wide range of situational contexts (Coke et al., 1978; Davis, 1983; cf. Davis et al., 2004). If, however, the dominant reaction toward the victim is self-focused personal distress, helping will be less likely and should occur only when escape from the helping situation is perceived by the potential helper to be difficult. The parallels between Batson's theorizing and our empirical outcomes are striking. The previous studies have demonstrated that persons high in Agreeableness help victims more than their counterparts low in Agreeableness, and it is plausible that Agreeableness is related to differential emotional reactions to victims, namely in empathic concern, across a range of situational contexts.

Another possibility is that these dispositional differences will be responsive to situational reminder manipulations. If persons low in Agreeableness are usually cold and indifferent to victims, then the situationally induced empathic focus reminder may stimulate them to experience personal distress, and this may induce them to be less responsive emotionally to the victim (e.g., Tobin et al., 2000). That is, for persons low in Agreeableness, a situationally induced empathic-focus reminder might induce not empathic concern for the victim but rather self-focused personal distress. Overall, we expected that Agreeableness would be related to helping, but the effect of Agreeableness on helping would be mediated by the prosocial emotion of empathic concern but not by the self-focused emotion of personal distress.

Method

Participants and Design

A total of 245 Purdue University students (120 women) participated in return for partial fulfillment of their introductory psychology course requirement. Conceptually, participants were randomly assigned to one of two listening perspective conditions, in

a 2 (Agreeableness) × 2 (listening perspective) randomized-block mixed-factorial design. Operationally, for purpose of data analysis, we ran centered cross-product regressions using full-scale Agreeableness scores.

Procedure

Procedures were identical to the procedures used in Study 2, with the addition of one measure. Immediately after the radio broadcast but before participants were aware of the opportunity to offer help, participants filled out an emotional reaction questionnaire assessing emotions.

Predictor Variables

Listening perspective. Using procedures identical to those used in Study 2, participants were randomly assigned to one of two listening perspective conditions: empathy focus or technical focus.

Group status. Using procedures identical to those used in Study 2, participants were randomly assigned to one of two group status conditions: ingroup victim or outgroup victim.

Agreeableness. The 245 participants were prescreened for Agreeableness, but participants at all levels of Agreeableness could participate in the study.

Mediating Variables

Immediately after the broadcast radio program, before participants were provided with the opportunity to help, participants were asked to rate two of their own emotions, empathic concern and personal distress, on a Likert-type scale (1 = *not at all*, 9 = *extremely*; taken from Davis, 1996). Empathic concern was measured using five items, including the adjectives *warm*, *tender*, *compassionate*, *softhearted*, and *sympathetic* ($M = 6.13$, $SD = 1.36$, $\alpha = .80$). Personal distress was also measured using five items, including the adjectives *alarmed*, *upset*, *disturbed*, *distressed*, and *anxious* ($M = 4.69$, $SD = 1.56$, $\alpha = .80$). These items were intermixed to create one scale labeled *Emotional Reaction Questionnaire*. The overall zero-order correlation between empathic concern and personal distress was .53, $p < .05$. The correlations were .54 and .66 for persons low and high in Agreeableness, respectively.

Dependent Variables

Manipulation checks. Similar to Study 2, we asked two questions on the reaction questionnaire to assess the effectiveness of the listening perspective manipulation. These questions used a 9-point scale (1 = *not at all*, 9 = *very much*) and asked participants the extent to which they concentrated on the technical and emotional aspects of the broadcast.

Hours volunteered. To assess helping, we asked participants to complete a volunteer sheet on which they circled the number of hours they were willing to volunteer. Students were also asked to list their availability during the week and to provide contact information if they were willing to help.

Results and Discussion

Manipulation Checks

ANOVA results indicated that the manipulations were successful. Participants in the empathy focus condition ($M = 7.67$, $SD = 1.34$) reported concentrating on the emotions of the victim more than participants did in the technical focus condition ($M = 6.80$, $SD = 1.92$), $F(1, 233) = 11.42$, $p < .01$, $\eta = .22$. Participants in the technical focus condition ($M = 6.25$, $SD = 1.83$) reported concentrating on the technical aspects of the broadcast more than participants did in the empathy focus condition ($M = 4.34$, $SD = 2.23$), $F(1, 233) = 40.94$, $p < .001$, $\eta = .40$. Consistent with Study 2, these results indicate that our listening perspective manipulation was effective. Agreeableness was measured as a continuous variable, so to examine possible Manipulation × Agreeableness interactions, we ran two separate centered cross-product regressions, using the two manipulation checks as the criteria. As in the previous studies, Agreeableness was a significant predictor of focusing on the emotional aspects of the broadcast, but this was qualified by an Agreeableness × Listening perspective cross-product, $\beta = -.12$, $t(237) = -2.05$, $p < .05$. In the technical focus condition, Agreeableness is a significant predictor of emotion focus, $\beta = .34$, $t(124) = 4.04$, $p < .01$. In the empathy focus condition, Agreeableness was also a significant predictor of emotional focus, $\beta = .20$, $t(117) = 2.16$, $p < .05$.

There was no evidence that the manipulation of listening perspective influenced ratings of state-level empathic concern, but it did influence state-level personal distress, $\beta = .18$, $t(237) = 2.84$, $p < .01$. There was also a significant Agreeableness × Listening Perspective cross-product for empathic concern, $\beta = -.15$, $t(237) = -2.40$, $p < .05$. (See subsequent mediation analyses for a more detailed account.)

Mediational Analyses

Recall that the overall zero-order correlation between empathic concern and personal distress was .53, $p < .05$. The correlations were .54 and .66 for persons low and high in Agreeableness, respectively. To examine whether the impact of Agreeableness on helping behavior was mediated by prosocial emotions, we conducted mediation analyses for both prosocial emotions, empathic concern and personal distress, using the full range of Agreeableness scores. (See Table 1 for means of empathic concern, personal distress, and number of hours volunteered.)

Empathic concern. To explore the possible mediation of Agreeableness by empathic concern, following Preacher and Hayes (2004), we obtained the unstandardized regression coefficient for the effect of Agreeableness on empathic concern, $B = 0.60$, $t(243) = 4.21$, $p < .001$. When Agreeableness and empathic concern were entered simultaneously, the impact of Agreeableness was not significant, whereas the effect of empathic concern on the number of hours volunteered was significant, $B = 0.38$, $t(242) = 2.26$, $p = .02$. To test the indirect effect of this mediational pattern, we used bootstrapping procedures outlined by Shrout and Bolger (2002; see also Preacher & Hayes, 2004). The analysis revealed that the bootstrapped estimate of the indirect effect ($M = 0.23$) was significantly different from zero ($p < .05$, 95% confidence interval = 0.04, 0.49).

To examine whether empathic concern mediated the relationship between Agreeableness, listening perspective, and helping behavior, we conducted moderated mediational analyses. We modeled the indirect effect of Agreeableness on helping behavior through empathic concern (the mediation model tested above). This indirect effect was hypothesized to be moderated by listening

Table 1
Means and Standard Deviations of Empathic Concern (EC), Personal Distress (PD), and Number of Hours Volunteered (HRS) as a Function of Agreeableness and Listening Perspective in Study 3

	Listening perspective					
	Technical			Empathic		
Agreeableness	EC	PD	HRS	EC	PD	HRS
Low						
M	5.73	4.18	1.99	6.14	5.08	2.79
SD	1.45	1.47	3.31	1.26	1.44	3.66
High						
M	6.33	4.72	2.55	6.38	4.83	3.14
SD	1.32	1.58	3.26	1.28	1.66	3.73

Note. The Agreeableness classification was based on a median split.

perspective using bootstrapping procedures adapted from Preacher, Rucker, and Hayes (2007). That is, we expected that in the technical focus condition, the relationship between Agreeableness and helping behavior would be mediated by self-reported empathic concern. In the empathic focus condition, however, we expected no mediation by empathic concern. Results supported our hypotheses. In the technical focus condition, the estimate of the indirect effect of empathic concern ($M = 0.31$) was significant, $p = .04$. In the empathic focus condition, however, this indirect effect was not significant, $p = .36$. These results remain the same when personal distress is entered as a covariate in the moderated mediational analyses. Overall, the results indicate that the effect of Agreeableness on helping behavior was mediated by participants' empathic concern for the victim, but only in the technical focus condition.

Personal distress. We also examined the possibility that the link between Agreeableness and helping behavior is mediated by personal distress. The unstandardized regression coefficient for the effect of Agreeableness on personal distress was $B = 0.20$, $t(243) = 1.20$, $p = .23$. The unstandardized regression coefficient for the effect of personal distress on the number of hours volunteered was $B = 0.03$, $t(243) = 0.23$, $p = .82$. No significant mediational effects of personal distress were found. Because the indirect effect of personal distress was not significant, moderated mediation analysis also resulted in nonsignificant effects, ps = .92 and .97 in the technical focus and empathic focus conditions, respectively.

In this study, responses on the empathic concern scale showed no evidence that the situational manipulation of empathy was effective, but that same manipulation affected helping behavior. It is possible that the scale itself was flawed or affected behavior in ways not tapped by the scale. The manipulation did affect behavior, however, so we concluded that the manipulation was effective somehow despite the lack of support from the scale. Taken together, the overall pattern of outcomes suggests that empathic concern and personal distress may be significantly correlated at the zero-order level, but the link between Agreeableness and helping is more closely tied to empathic concern than to personal distress.

Study 4

Would Everyone Help if People Were Just Reminded?

In Studies 2 and 3, results were generally consistent with main hypotheses. Persons high in Agreeableness offer more help to victims across a wider range of situational contexts than do persons lower in Agreeableness, presumably because of higher levels of prosocial motivation. Helping seems to be tied more closely to the prosocial emotion of empathic concern than to personal distress, at least in mediating the link between dispositional Agreeableness and helping. Nevertheless, important questions remain. The precise mechanisms that connect empathy and prosocial motivation underlying Agreeableness to helping still remain unclear. In Study 2, the production deficiency hypotheses fared better than the simpler Heiderian similarity and liking hypotheses, and although it was intuitively plausible, the inferential chain to the production deficiency hypothesis was long and indirect. Two hidden assumptions in the production deficiency hypothesis are that (a) a major difference between persons high and low in Agreeableness is in their absolute amount of positive prosocial motivation and (b) a simple reminder could remediate such motivational deficits. These assumptions are reasonable as a starting point, but they are probably too simplistic. It is true that in both Studies 2 and 3, helping increased when we reminded the presumably less motivated persons low in Agreeableness to empathize, making their helping comparable to persons high in Agreeableness.

There are other explanatory possibilities for differences in helping besides deficits in the quantity of prosocial motivation. One is that persons low in Agreeableness have levels of prosocial motivation similar to their peers but have alternative social–cognitive processes that block helping. The simplest possibility is that persons low in Agreeableness have interpersonal social learning histories that are less positive than those of their peers. They may have more negative experiences with others or have more inequitable social exchanges. In the language of interdependence theory (Kelley et al., 2003), their expectancies for interpersonal outcomes during social exchanges, based on their personal experiences (comparison level; CL), are low.

Outcomes of Study 3 suggest another admittedly speculative process-centered alternative. Rather than being inattentive or in-

sensitive to victims or having lower CL-type expectations for outcomes during social interaction, persons low in Agreeableness may interpret the victim's suffering in a more self-centered way than do their peers. Persons low in Agreeableness seem emotionally responsive to the victim's suffering, but in ego-centered ways that block other-oriented prosocial behavior. In this approach, persons low in Agreeableness offer less help not because they do not notice the victim's suffering or lack emotional responsiveness per se but because they do not shift the focus from their own emotional reactions to the victim and the victim's needs. (See Wilkowski, Robinson, & Meier, 2006, for a related discussion.)

This line of reasoning is similar to hypotheses presented by both Davis (1996; Davis et al., 2004) and Batson (1991a; Batson, Fultz, & Schoenrade, 1987; Batson, O'Quin, Fultz, Vanderplas, & Isen, 1983) in their discussions of personal distress. Davis (1996) summarized research on two broad classes of social affective outcomes: parallel responding and reactive responding. Parallel responding occurs when an observer experiences affective states that match or reproduce the target's affect. Motor mimicry is one form of parallel responding. Davis noted that some forms of imagine-the-other role taking, like the Katie Banks paradigm, also can generate parallel affective responding. In contrast, reactive responding goes beyond simple matching and consists of the observer's emotional reactions to the target's affect. The latter (reactive responding) is more developmentally advanced than the former (parallel responding), perhaps requiring a greater degree of cognitive and meta-cognitive activity. Davis noted that the distinction between the two processes is not always clear. Nevertheless, it is possible that Agreeableness is related to the differential deployment of parallel or reactive affective responses, with persons low in Agreeableness experiencing less cognitively modified, victim-centered reactive affect. Previous research has demonstrated that persons high in Agreeableness reported greater emotional responsiveness in social situations but also more active efforts to control emotions (e.g., Tobin et al., 2000; Tobin & Graziano, 2006). Persons low in Agreeableness may be generating parallel responding to victims rather than reacting to the victim's affect per se. Their reactions may be self-centered, not victim centered.

Going a bit further, controlling self-focused negative emotions in response to victims may take more effort from persons low in Agreeableness, especially if such control is less typical or automatic in them than in persons high in Agreeableness (Davis et al., 2004). If persons low in Agreeableness are prone to higher levels of parallel responding (Davis, 1996) to victims than to their peers, then when they are asked to focus empathically on a victim and are faced with any additional cognitive load, they would no longer be receiving a simple reminder to help from an empathy manipulation. Instead, the manipulations would combine to increase their relatively unregulated negative affect (Tobin et al., 2000). If this affect was self-centered, as opposed to victim-centered, then attention would be directed to the self and helping would decrease rather than increase. To explore this idea, in Study 4, we explicitly manipulated cost of helping. Penner et al. (1995) showed how the cost of helping placed an extra burden on potential helpers and reduced the amount of help given. If the cost of helping operates as an added cognitive–emotional load, then persons low in Agreeableness receiving the reminder of an empathic focus in a higher cost helping situation will help less than they will in a lower cost helping situation. This leads to the seemingly paradoxical prediction that when the costs of helping are high, by asking persons low in Agreeableness to empathize with a victim, they will help *less* than when they are not asked to empathize. In this kind of situation, increasing an empathy focus will undermine helping in these persons (Batson et al., 1983). No such process would occur in persons high in Agreeableness, for whom empathic reactions are chronic, typical, and other centered. For persons high in Agreeableness, neither cost of helping nor listening perspective will influence their rate of helping, which will be cross-situationally higher than the rate of their peers who are low in Agreeableness. In sum, this logic leads to the prediction of a Listening Perspective × Cost × Agreeableness interaction.

Method

Participants and Design

A total of 244 Texas A&M University students (139 women) participated in return for partial fulfillment of their introductory psychology course requirement. Participants were assigned to conditions in a 2 (Agreeableness: high vs. low) × 2 (cost of helping: high vs. low) × 2 (listening perspective: empathy focus vs. technical focus) randomized-block factorial design.

Procedure

Procedures were virtually identical to the procedures used in Study 2, except that we replaced group status with one new independent variable, namely cost of helping.

Predictor Variables

Cost of helping. Participants were randomly assigned to either a low-cost condition or a high-cost condition. Participants were not made aware of the cost of helping or the opportunity to provide help until after they listened to the radio broadcast. In the low-cost condition, participants were given a schedule in which they could volunteer from 1 to 20 hr. In the high-cost condition, participants were told that because of scheduling issues, if they wanted to volunteer, they must volunteer a minimum of 5 hr, increasing in 5-hr increments.

Listening perspective. Using procedures identical to those used in Studies 2 and 3, we randomly assigned participants to one of two listening perspective conditions: empathy focus or technical focus.

Agreeableness. From a total of 1,560 participants who completed the BFI (John & Srivastava, 1999) during an earlier prescreening session, 241 participants were selected for participation because their Agreeableness scores fell into the top ($M = 4.54$, $SD = 0.19$) or bottom quartile ($M = 3.03$, $SD = 0.53$) of the total Agreeableness distribution.

Dependent Variables

Manipulation checks. As in Studies 2 and 3, two questions were asked on the reaction questionnaire to assess the effectiveness of the listening perspective manipulation. These questions were answered on a 9-point scale (1 = *not at all*, 9 = *very much*) and asked participants the extent to which they concentrated on the

technical and emotional aspects of the broadcast. No checks were collected on the manipulation of the cost of helping because this manipulation was clear by the helping options on the volunteer sheet (see subsequent section).

Hours volunteered. To assess the number of hours volunteered, we gave each participant a volunteer schedule. This schedule asked participants to circle the number of hours they were willing to volunteer. Students were also asked to list their availability during the week and to provide contact information if they were willing to help.

Results and Discussion

Manipulation Checks

ANOVA results indicated that the manipulations were successful. Participants in the technical focus condition ($M = 6.93$, $SD = 1.47$) reported concentrating significantly more on the technical aspects of the broadcast than participants did in the empathy focus condition ($M = 4.37$, $SD = 2.31$), $F(1, 236) = 104.74$, $p < .001$, $\eta = .56$. Participants in the technical focus condition ($M = 6.79$, $SD = 2.05$) also reported concentrating significantly less on the emotions of the victim than participants did in the empathy focus condition ($M = 7.83$, $SD = 1.50$), $F(1, 236) = 17.98$, $p < .001$, $\eta = .26$.

A main effect for Agreeableness was also found for the manipulations. Participants high in Agreeableness ($M = 7.70$, $SD = 1.67$) reported concentrating more on the feelings of the person being interviewed than did participants low in Agreeableness ($M = 6.87$, $SD = 1.98$), $F(1, 236) = 9.78$, $p = .002$, $\eta = .20$. There was no evidence that Agreeableness was related to differences in attention paid to the technical aspects of the broadcast, $F(1, 236) = 2.03$, *ns.*

Hours Volunteered

Data were analyzed using a 2 (Agreeableness) × 2 (cost of helping) × 2 (listening perspective) randomized-block mixed-factorial ANOVA.[3] To make comparisons across cost conditions, in which the scales are not comparable (i.e., in the low-cost condition, hours increase in increments of 1; in the high-cost condition, hours increase in increments of 5), the number of hours participants volunteered was standardized within each cost condition. All subsequent analyses use the standardized number of hours volunteered as the dependent measure. Results revealed a significant Agreeableness × Cost of Helping × Listening Perspective interaction, $F(1, 224) = 4.27$, $p < .05$, $\eta = .14$ (see Figure 3). In the low-cost condition, the empathy focus increased the rates of helping for the participants low in Agreeableness but not for their counterparts high in Agreeableness. (This outcome replicated that of Study 3.) Persons low in Agreeableness helped more in the empathy focus condition ($M = 0.17$, $SD = 1.13$) than in the technical focus condition ($M = -0.36$, $SD = 0.75$) when costs of helping were low, $F(1, 54) = 3.04$, $p = .09$, $\eta = .22$; however, participants low in Agreeableness helped less in the empathy focus condition ($M = -0.36$, $SD = 0.92$) than in the technical focus condition ($M = 0.22$, $SD = 1.00$) when the costs were high, $F(1, 54) = 5.39$, $p = .03$, $\eta = .30$. There was no evidence that participants high in Agreeableness helped any less in the technical focus condition or in the empathy focus condition, $F < 1.00$, *ns*. Furthermore, there was no evidence that participants high in Agreeableness helped any less in the high-cost condition than in the low-cost condition, $F < 2.00$, *ns.* For participants low in Agreeableness, however, the pattern was different. In the technical focus condition, participants low in Agreeableness helped significantly more when the costs were high ($M = 0.22$, $SD = 1.00$) than when the costs were low ($M = -0.36$, $SD = 0.75$), $F(1, 56) = 5.07$, $p < .03$, $\eta = .29$. In the technical focus condition, however, there is no evidence that the participants high in Agreeableness differed in their rate of helping on the basis of cost.

Study 4 probed the Person × Situation hypothesis that experimental manipulations designed to increase empathy will not necessarily increase helping. Outcomes suggested that when costs of helping are high, persons low in Agreeableness help less when given an empathic focus induction compared with a technical focus induction. The listening perspective manipulation targeting empathic focus (or perhaps the request from the researchers to adopt it) seems to have undermined prosocial behavior, at least for persons low in Agreeableness. For persons high in Agreeableness, there was no evidence that the situationally induced empathic focus had any effect relative to a technical focus control. Taken together, these outcomes suggest that when the cost of helping is high, efforts to induce an empathic focus will not appreciably alter helping overall.

However, the empathy induction did increase helping among persons low in Agreeableness when costs of helping were low. The empathy induction seemed to operate like a simple reminder. At the behavioral level, helping differences between the two cost conditions suggest that the cost of helping is a critical moderator in the activation of prosocial motivation of persons low in Agreeableness. At the conceptual level, this suggests that persons low in Agreeableness experience some conflict of motives in helping situations that is not shared by their peers who are higher in Agreeableness.

General Discussion

In analyses of mercy and empathy, theorists recognized a potential tension between the affective and cognitive aspects of

[3] To make use of full-scale Agreeableness scores, we also analyzed results using centered cross-product regression (Aiken & West, 1991). Although main effects remained, the three factors of Agreeableness, listening perspective, and cost cross-product dropped to nonsignificance, $B(224) = -.41$, $t(224) = -1.27$, $p = .20$. First, we found that the variability in full-scale Agreeableness scores was almost three times greater within the low Agreeableness group ($SD = 0.53$) than within the high Agreeableness group ($SD = 0.19$). We then ran a Shapiro–Wilks test, which indicated that the residual variance for the centered cross-product regression was not normally distributed ($W = 0.93$, $p < .01$.). The violation of these basic assumptions of regression could explain why the ANOVA results did not replicate in the regression analyses. We also performed basic chi-square analyses to examine differences in the frequencies of helping in each condition. Mirroring the ANOVA results, significant differences emerged in the high-cost empathic focus condition, $\chi^2(1, N = 62) = 4.75$, $p < .05$. A greater percentage of participants high in Agreeableness (65.8%) than participants low in Agreeableness (37.5%) offered to help. No differences in frequency of helping were found in the technical focus or the low-cost condition.

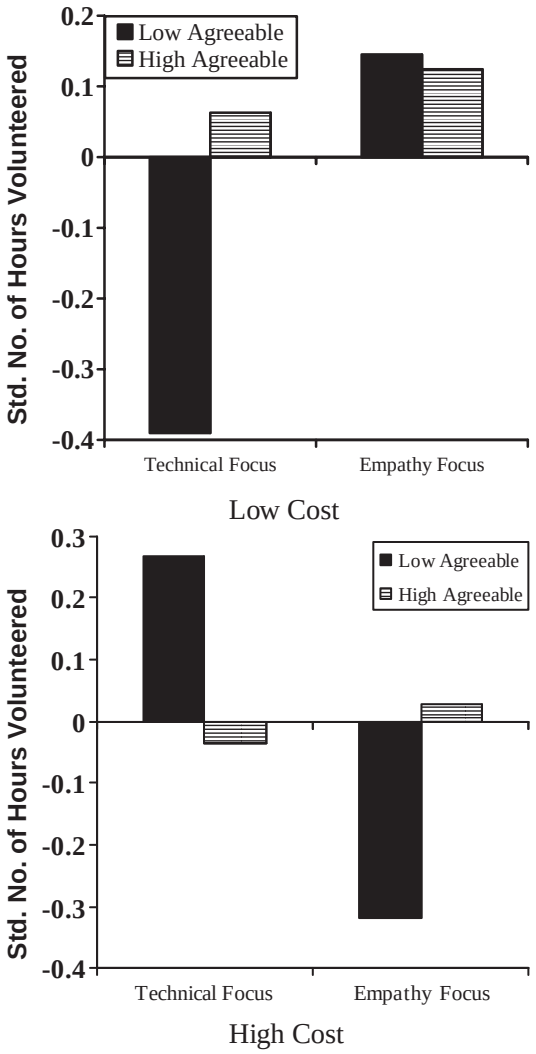

Figure 3. Standardized mean number of hours volunteered as a function of Agreeableness, empathic perspective, and cost of helping in Study 4. Std. = standard

prosocial motivation (Davis et al., 2004; Dovidio et al., 2006). These tensions may occur because the affective components (whether selfish or empathic) are seen as primitive, temperamental, almost reflexive tendencies that require guidance from the higher, educable, cognitive components of reason (Davis, Luce, & Kraus, 1994). Even with a clear-thinking cognitive overlord, the lower affective components can be influential or can even trick the higher cognitive component (e.g., Freud's ego–id relationships). In a Person × Situation approach, many of these behavioral phenomena are recognized, but assumptions about causal processes in higher and lower systems are rejected. In this research, we explicitly took a Lewinian Person × Situation approach to explore the idea that the affective processes underlying prosocial behavior are less reflexive and primitive and more orderly than the primitive and reflexive line of thinking implies. In particular, in the Person × Situation approach, prosocial motivation may dispose individuals to be more responsive to helping situations, but these motivational systems also organize the construal and action implications of situations selectively.

Study 1 replicated the Burnstein et al. (1994) findings that kin received more aid than did nonkin. Our outcomes suggested, however, that individual differences in prosocial motives may influence the breadth of the inclusion class of persons worthy of help. Respondents high in Agreeableness offered help to more victims, and their helping was tied less closely to kinship than was the helping offered by respondents low in Agreeableness. Second, the inclusive fitness hypothesis implied that evolution had prepared humans to give aid in qualitatively different ways in everyday situations compared with life-or-death situations. There may be qualitative differences in these helping situations, and Pleistocene era events may have set the stage, but there is a somewhat different Person × Situation qualification to the kinship analysis of prosocial behavior. Our data suggest that the qualitative difference in helping described by Burnstein et al. (1994) may be linked to prosocial motives, which in turn affect the way persons perceive their relationships to nonkin others (friends vs. strangers). Prosocial motives seem to have little to do with differences in reactions to kin. That is, most people show biases toward helping kin across levels of prosocial motivation; motive differences appear in helping different kinds of nonkin. In everyday helping situations, the difference in helping between friends and strangers is sharper than in life-or-death helping situations. In life-or-death helping situations, strangers seem to be drawn closer inside, not pushed further outside, the inclusion class of people worthy of help, at least for persons high in Agreeableness.

In Study 2, we experimentally manipulated the ingroup and outgroup status of a victim and empathic focus through listening perspective conditions, observing their interactive effects with dispositional prosocial motives on helping behavior. The study also probed an analogue of the cognitive developmental production deficiency hypothesis (e.g., Flavell et al., 1995; Waters, 2000), which suggested that if persons low in Agreeableness had deficits in dispositional prosocial motivation, then these deficits might be overcome with a simple, empathy-focused reminder manipulation. Outcomes for Studies 2 and 3 corroborated this hypothesis. In contrast, persons high in Agreeableness and presumably higher in prosocial motivation (as measured in the preliminary study) were largely uninfluenced by the manipulation of empathic focus. They offer more help to more kinds of victims across a wider range of interpersonal situations than do their peers who are low in Agreeableness. They appear to be traited for helping (Penner et al., 1995), presumably because they have higher levels of prosocial motivation than do their peers (e.g., Graziano et al., 2007).

Study 3 assessed two different emotional reactions immediately after participants were exposed to a victim in need of help. We focused on the self-centered emotion of personal distress and the victim-centered emotion of empathic concern. Outcomes suggested that empathic concern experienced immediately after hearing about the victim's situation mediated the relation between Agreeableness and subsequent helping. There was no evidence that personal distress mediated the Agreeableness–helping relationship. That is, despite the high zero-order correlation between these two emotional reaction variables, we infer that empathic concern is distinctively related to helping the victim, whereas personal distress is unrelated.

Outcomes of Study 4 suggest that empathic concern is telling only part of the story, at least in linking Agreeableness to helping. For those persons who need to be reminded to attend to victims (i.e., persons low in Agreeableness), inducing an empathic listening perspective may motivate helping, at least in low-cost situations. For persons who seem to need no reminding, inducing that empathic perspective may have no special motivational power. In our case, it is possible that in a situation with a high cost of helping, the empathic focus manipulation might have triggered unfamiliar negative emotions that undermined rather than promoted helping in participants low in Agreeableness. We speculated that persons low in Agreeableness, rather than feeling sympathy and concern for the victim, feel self-centered negative affect about the perceived interpersonal demands placed on them. Here is a seeming paradox: For persons low in Agreeableness, situationally induced empathy in high-cost situations seems not only to undermine other-oriented concerns but also to decrease helping. Similar outcomes were reported by Batson et al. (2003). In that study, participants asked to imagine themselves as victims of chance were more likely to act in a selfish manner than were participants asked to imagine another person as a victim. One possibility is that when people are self-focused and experience negative affect, they behave less prosocially. In some respects, this resembles the reduction in prosocial behavior following social exclusion (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007) and the dismissive behavior reported by attachment theorists (e.g., Shaver & Mikulincer, 2002).

Several theorists promoted the intuitively appealing idea that compassion can be present in more than one way, with both cognitive and emotional aspects. Such analyses typically omit situational factors or individual differences in reactions to victims, not to mention Person × Situation interactions. Evidence presented here suggests that situational factors interact with dispositional Agreeableness, a large personality dimension tied to prosocial motivation. Persons low in Agreeableness provide less help than their peers to a narrower range of victims across situational contexts, presumably because they have lower levels of prosocial motivation than do their peers who are high in Agreeableness. Focusing attention on a victim's needs can enhance helping from persons low in Agreeableness but probably not from persons high in Agreeableness. Persons high in Agreeableness are relatively unaffected by variations in situational manipulations relevant to empathy and prosocial motivation, presumably because empathic concerns are readily accessible and salient to them. They appear to be traited to help (Penner et al., 1995).

In terms of psychological processes, in most people, personal distress may be the first, semiautomatic reaction when encountering a victim. It may be comparable to the near-universal reaction of pain upon ostracism (e.g., Williams, 2007). This pain reaction may motivate persons to escape from the situation, not offering help but still reducing personal distress. This automatic escape response may be more chronic in persons low in Agreeableness. For persons higher in Agreeableness, however, after experiencing personal distress, emotional regulating processes may quickly swing into action, allowing persons to gain control over self-focused personal distress (e.g., Tobin et al., 2000, Study 2). Once self-focused pain is controlled, perhaps through social–cognitive reappraisal, there is room for the influence of other-oriented empathic concern. This suggests that persons high in Agreeableness are more emotionally responsive to others than their peers are (Finch & Graziano, 2007; Graziano et al., 2007; Tobin et al., 2000; Tobin & Graziano, 2006) but differ from their peers primarily in the speed with which other-oriented empathic concerns gain control over personal distress after encountering a victim.

Previous studies found that personal distress can motivate helping when the costs of escaping without helping are high (e.g., Batson, Duncan, Ackerman, Buckley, & Birch, 1981). Rather than being emotionally unresponsive to victims, persons low in Agreeableness may experience the victim's suffering in a more self-centered way than do their peers. In low-cost helping situations, they may be able to regulate negative affect, but in high-cost helping situations, the negative affect may be less well regulated. This protoempathic suffering may block other-oriented prosocial behavior. Persons low in Agreeableness may help less not because they lack empathic affect or prosocial motivation but because they lack skills in shifting the focus of these emotional reactions to the victim and her or his needs. If our goal is to produce a comprehensive understanding of processes underlying prosocial acts, then there is much to recommend Person × Situation research that includes these different motives and the situations that differentially activate them. These processes are worthy of further conceptual and empirical analysis.

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