

# Two on Morality

## Helping Behavior, Dispositional Empathic Concern, and the Principle of Care

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*This research investigates the relative strength of two correlates of helping behavior: dispositional empathic concern and a moral principle to care about others. The empathy–helping and care–helping relationships are investigated using data from the General Social Survey, a nationally representative random sample of the U.S. adult population. Ten helping behaviors are investigated. The results show that the care–helping relationship is stronger than the empathy–helping relationship for most helping behaviors, and that the empathy–helping relationship is mediated by the principle of care. That dispositional empathic concern is mediated by the principle of care requires new theoretical interpretations of the empathy–helping relationship, and suggests new directions for research on helping behavior.*

**Keywords:** prosocial behavior, empathy, altruism, moral development, moral identity

### INTRODUCTION

Upon observing the need of another, some people emotionally react with concern, sympathy, or compassion—“empathy”—and sometimes their empathy leads them to help the other (Eisenberg and Miller 1987; Batson 1991, 1998; Davis 1994). Sometimes people are not necessarily empathically aroused when observing another’s need, but they help nonetheless because they have internalized a value that one should

help those in need. Following Batson (1994) and Hoffman (2000), we call this internalized value the “principle of care.”

The present research investigates the relative strength of *dispositional empathic concern*—the tendency to experience concerned, sympathetic, or compassionate reactive outcomes in response to the needs of others—and the *principle of care*—the endorsement of a moral principle that one should help others in need—as correlates of helping behavior. The innovations in our investigation are that we (1) investigate dispositional empathic concern and the principle of care as separate correlates of helping behavior; (2) examine the consistency of the empathy–helping and principle of care–helping relationships across many different types of helping behavior; and (3) provide evidence based on a nationally representative random sample.

### Empathy and the Principle of Care

Empathy and the principle of care are explicitly connected in Hoffman’s (2000) theory of moral development and Eisenberg’s (1982, 1986) stage theory of prosocial moral reasoning. Hoffman’s moral development

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theory is that (1) empathy develops in five stages from the reactive crying of infants to truly empathic distress (parallel feelings in response to another's immediate situation) to more abstract empathizing with others (e.g., people who are poor) "beyond the [immediate] situation"; (2) empathic distress leads to sympathetic distress—caring about the other (possible only after self-other differentiation is achieved); (3) and finally, caring may be internalized into a moral principle of care. Hoffman writes (2000:225): "[the principle of] caring seems like a natural extension of empathic distress in specific situations to the general idea that one should always help people in need." In this way empathy and the principle of care work together to produce helping behavior.

In Eisenberg's theory, prosocial moral reasoning becomes more sophisticated as children age, reaching an empathic orientation stage in which children often express sympathetic concern for the other. In some children empathic orientation develops further into the internalized value orientation stage defined as an "orientation to an internalized responsibility, duty, or need to uphold the laws and accepted norms or values, for example, 'She has a duty to help needy others'" (Eisenberg 1982:233). This description of an internalized value orientation is clearly akin to Hoffman's principle of care.

In both Eisenberg's and Hoffman's theory, the principle of care refers to a cognitive process that involves a deliberate evaluation of a situation from the perspective of a moral standard. In contrast, empathy is an almost automatic emotional process that involves very little conscious deliberation. The principle of care is a higher stage of development because a basic level of cognitive sophistication is required for the principle of care.

Although the theoretical literature points to both empathy and the principle of care as co-determinants of helping behavior, the empirical literature puts the empathy–helping relationship in a more prominent position. The empirical literature has produced abundant evidence that empathy and helping are related; see the reviews by Eisenberg and Miller (1987), Batson (1991, 1998), and Davis

(1994). A large portion of this evidence is from experiments that manipulate empathy in specific situations, and that experimental evidence most likely generalizes to spontaneous, short-term types of helping, such as giving food or money to a homeless person.

However, there also is a good deal of evidence supporting a dispositional empathy–helping relationship that most would think generalizes to planned, long-term types of helping behavior, such as volunteering for, or giving money to, a charity. Eisenberg and Miller's Table 2 reviews 36 studies that find numerous positive dispositional empathy–helping relationships. Of these relationships, 13 are for volunteering (or time spent helping) and 7 of the relationships are for giving to a charity: For example, Davis (1983b) finds that dispositional empathy is correlated with donations to the Muscular Dystrophy Telethon. Recent research continues to find a dispositional empathy–helping relationship for planned, long-term types of help (Staub 2003, Chapter 9; Penner and Finkelstein 1998; Bekkers 2005, 2006). Staub analyzes responses to a *Psychology Today* "Values and Goals" survey and concludes that empathy is correlated with helping, although a "prosocial orientation index" and helping are more strongly correlated.<sup>1</sup> Penner and Finkelstein (1998) survey a sample of volunteers from a Tampa organization that serves people with HIV/AIDS and find correlations between "other-oriented empathy" and volunteering intensity–length of service, time spent volunteering, and the frequency of contact with HIV-positive clients; however, the correlations are small and even then mostly restricted to male volunteers. Bekkers (2005, 2006) studies a nationally representative Dutch sample and finds that empathy is associated with volunteering and charitable giving, though not with blood donation; the

<sup>1</sup> Staub's (2003) helping index includes both spontaneous, short-term types of helping and planned, long-term help such as volunteering, giving to charity, and blood donation.

associations persist in multiple regression models even with statistical controls for a wide range of socioeconomic characteristics and the “Big Five” (Costa and McCrae 1992) personality characteristics.

With the exception of Bekkers’s (2005, 2006) work, most of the evidence of a dispositional empathy–helping relationship has been generated in psychological literature. However, the psychological literature’s evidence has established firmly the idea of a dispositional empathy–helping relationship in the minds of sociologists. For example, Musick and Wilson (2008:43) conclude that “there is quite convincing evidence that volunteers are more empathic people than non-volunteers.”

In contrast to empathy, the principle of care holds a much less prominent position in the empirical literature. Indeed, in much empirical work evidence about the principle of care is either indirect (so that care cannot be identified clearly as a determinant of helping behavior) or confounded with another construct (so that care cannot be identified separately as a determinant apart from the other construct). For example, because prosocial moral reasoning taps the principle of care about the welfare of others, Eisenberg and Mussen’s (1989:129) conclusion that children’s prosocial moral reasoning and helping behavior are correlated is indirect evidence of a care–helping relationship.<sup>2</sup> Evidence that role identity determines helping behavior (Piliavin and Callero 1991; Lee, Piliavin, and Call 1999; Grube and Piliavin 2000; Piliavin, Callero, and Grube 2002) also may be indirect evidence of a care–helping relationship because role identity depends on personal norms. *Personal norms* are

defined as “feelings of moral obligation to perform or refrain from specific action” (Schwartz and Howard 1984:234), and personal norms are generated from higher level moral values. Along this line, Aquino and Reed’s (2002) finding that a higher level “moral identity” is correlated with volunteering and giving likely is evidence of a care–helping relationship; we will take up their work further in the Discussion section.

Perhaps the strongest evidence that the principle of care is related to helping behavior comes from the functional approach to volunteering in the work of Clary et al. (1998). One of the six functions that volunteering can serve is to express a value of “concern for others.” Tapping this concern for others with items such as “I feel it is important to help others” and “I feel compassion toward people in need,” and using a nationally representative survey, Clary, Snyder, and Stukas (1996) find a significant relationship between the value scale built with these items and whether a person does any volunteering. Notice, however, that although one of the items (“I feel it is important to help others”) taps what we mean by the principle of care, the other item (“I feel compassion toward people in need”) focuses on a feeling of “compassion” and is very close to an item from a standard dispositional empathic concern scale: “I often have tender, concerned feelings for people less fortunate than me” (from the Interpersonal Reactivity Index; Davis 1994). Because the value scale combines dispositional empathic concern and principle of care constructs, the care–helping relationship cannot be identified separately apart from the empathy–helping relationship.

Indeed, one reason that the principle of care holds a less prominent position in the empirical literature is that previous empirical work often combines the principle of care with other constructs. For example, Penner and Finkelstein’s (1998) “other-oriented empathy” construct combines the dispositional empathic concern scale from the Interpersonal Reactivity Index with items that tap into the principle of care (e.g., “My decisions are usually based on my

<sup>2</sup> Eisenberg and Mussen conclude that the correlation among children is statistically significant, but not large. Among adults there is limited evidence and that evidence is mixed: In a sample of Detroit elderly adults Midlarsky et al. (1999) find a strong correlation between internalized value orientation and helping behavior, but Dyck et al.’s experiment (discussed by Batson 1991:192–9) concludes that the relationship between a caring perspective and helping is positive but weak. For additional discussion of the relationship between prosocial moral reasoning and helping behavior see the reviews by Eisenberg (1986:154–8) and Eisenberg and Fabes (1998:731–3).

concern for other people”); therefore the care–helping relationship cannot be identified separately apart from the empathy–helping relationship when the evidence is about their combination. Similarly, consider Oliner and Oliner’s (1988:221) interviews of rescuers of Jews from the Nazis; although they find that empathy aroused more rescuers to act than did principles, they also document that large percentages of rescuers talked about learning principles of care from parents. Once again, the separate strengths of the empathy–helping relationship (holding constant the principle of care) and the principle of care–helping relationship (holding constant empathy) cannot be identified from this evidence. Along the same lines, Staub’s (2003, Chapter 9) “prosocial orientation index” contains items that tap into the principle of care (e.g., “I am concerned about the welfare of human beings everywhere in the world”), but these items are combined with items measuring other constructs, such as the ascription of responsibility (Schwartz 1968) and social responsibility (Berkowitz and Lutterman 1968), making it impossible to identify separately the strength of the care–helping relationship apart from these other constructs.

In short, Hoffman’s (2000) and Eisenberg’s (1982, 1986) developmental theories clearly indicate that empathy and the principle of care should be modeled as separate determinants of helping behavior, but previous empirical work has not investigated them as such. The present research investigates the relative strength of dispositional empathic concern and the principle of care as separate correlates of helping behavior.

### The Present Research

To investigate the relative strength of dispositional empathic concern and the principle of care as correlates of helping behavior we use nationally representative data from the General Social Survey (GSS; Davis and Smith 1992, 2005). The 2002 and 2004 GSS contains items that measure empathic concern, the principle of care, and helping

behaviors, and we use these items to evaluate several hypotheses drawn from the developmental theories discussed above.

The first hypothesis is simply that dispositional empathic concern and the principle of care are each positively related to many types of helping behavior. This hypothesis is drawn from Hoffman’s and Eisenberg’s theories that dispositional empathic concern and the principle of care are separate, albeit connected, constructs in the development of moral reasoning. We examine many different types of helping behavior because theory posits that empathic concern becomes an enduring disposition and that the principle of care becomes an internalized value; hence, support for these theoretical propositions requires evidence of positive relationships with many types of helping behavior, rather than with just one or two types.

The second hypothesis is that the principle of care mediates the dispositional empathic concern–helping relationship; in other words, care is a mechanism that explains in part why empathy has an effect on helping. The mediation hypothesis is drawn from two arguments in the theory. First, in both Hoffman’s and Eisenberg’s theories empathy develops into a principle of care among people reaching the internalized value stage of moral development. To the extent that the principle of care replaces empathy as an explanation of the helping behavior of these people, the principle explains part of the empathy–helping relationship. The idea is that the mechanism occurred in the past: During child development the empathy that produces children’s helping behavior (empathy → helping) for some children is transformed (by family, schools, religious organizations, etc.) into an internalized value called the principle of care (empathy → care), and for these children care → helping. Although this mechanism occurred in the past, its present-day echo can be seen in a cross-section of adults if (1) there is an empathy–helping relationship and (2) that relationship weakens once the principle of care is added to the model.

The second argument is from Hoffman: Empathy and the principle of care work together to produce helping behavior, suggesting that empathic emotion is responsible for evoking adherence to the principle of care as an ultimate motive. In this argument care did not “replace” empathy in the past during child development (as in the first argument), but rather empathy produces helping behavior in the present-day in part by working through care. With the cross-sectional data available to us we can establish whether the results are consistent with these mediation arguments, but we cannot distinguish between the first argument and the second. And as is always the case with cross-sectional data, we cannot establish the causality implied by mediation. We discuss ideas to get at causal mediation in the Discussion section.

The third hypothesis is that the principle of care mediates the dispositional empathic concern–helping relationship more strongly for planned, long-term types of helping behavior involving abstract contact with the other in need (e.g., giving money to a charity) but not as much for spontaneous, short-term types of helping behavior involving close contact with the other in need (e.g., allowing a stranger to cut ahead in line). The distinction between planned, long-term help and spontaneous, short-term help is fundamental (see Dovidio et al. 2006). Our hypothesis that the principle of care is a stronger mediator of the dispositional empathic concern–helping relationship for planned, long-term help is drawn from the theoretical suggestion that people reaching the empathic orientation stage will be motivated to help when they are in close contact with the other in need; their further development toward the principle of care/internalized value orientation is not necessary. In contrast, when the help involves planning, perhaps making a long-term commitment to another in need known only in the abstract, the decision to help requires the development of empathy “beyond the situation,” that is to say, further development toward the principle of care/internalized value orientation.

Indeed, being able to recognize the need of another known only in the abstract is more cognitively demanding than recognizing the obvious need of another in one’s close, visual presence. For this reason—and because emotions likely play a smaller role in planned, long-term helping situations—Dovidio et al. (2006:177) conclude that “because planned prosocial behavior often takes more time to formulate and execute, emotional reactions play less of a role than in situations, such as emergencies, requiring immediate assistance.”

The third hypothesis also is drawn from the theory that in-group/out-group membership moderates the empathy–helping relationship (Stürmer, Snyder, and Omoto 2005; Stürmer et al. 2006). The theory is that empathy is a stronger force to evoke helping an in-group member because the helper feels stronger attachment to (or identification with) the in-group member. Less attachment is felt with out-group members, and consequently empathy is a weaker force to evoke helping out-group members. Stürmer et al. (2006:954) point out that other forces such as normative considerations may evoke “help [to] outgroup members despite a lack of empathic motivation to do so.” The principle of care is one such normative consideration. Therefore, we hypothesize that dispositional empathic concern will not be mediated by care as much when the helping behavior involves close contact with the recipient, because the helper can judge whether the potential recipient is an ingroup member and base the decision to help (at least in part) on ingroup membership—in this situation dispositional empathic concern is a stronger force to evoke help. We hypothesize that empathy will be more strongly mediated by care when the helping behavior involves distant, more abstract contact with the recipient, because the helper is less able to judge whether the potential recipient is an ingroup or outgroup member and therefore less able to condition the help on group membership. In this situation where the helper realizes that any help offered likely will help out-group members, the principle of care becomes a stronger force to evoke help and, once

care is controlled for, dispositional empathic concern will be associated weakly with help.

Our investigation of these hypotheses offers several innovations. First, to our knowledge this is the first investigation to consider dispositional empathic concern and the principle of care as separate correlates of helping behavior, following the suggestion of development theory. Second, we investigate the consistency of the dispositional empathic concern–helping and care–helping relationships across many different types of helping behavior, again following the theory that empathic concern is an enduring disposition and that the principle of care is an internalized value. Third, (again to our knowledge) this is the first investigation of empathic concern, the principle of care, and helping behavior to use data from a representative random sample of the U.S. adult population. Lastly, we subject our results to extensive sensitivity checks, including the use of advanced estimation techniques as well as the use of statistical controls for more numerous stable and situational determinants of helping behavior than are usually controlled for in correlational studies. This mitigates the chance that these stable and situational determinants reveal their relationships to helping behavior erroneously through our measures of dispositional empathic concern and the principle of care.

#### METHOD

We use General Social Survey data to estimate multiple regression and structural equation models in which the main independent variables are dispositional empathic concern and the principle of care, and the dependent variables are different types of helping behavior. The core questions in the GSS are designed to track social, political, and religious attitudes over time; this is an advantage for our research because respondents have agreed to participate in a general survey and have not self-selected into a study they think is primarily about helping behavior. However, the 2002 and 2004 surveys included an Altruism Topical Module (Smith 2003,

2006) containing the items central to our research.

#### Dispositional Empathic Concern and the Principle of Care

Our definition of *dispositional empathic concern*—the tendency to experience concerned, sympathetic, or compassionate reactive outcomes in response to the needs of others—follows Davis (1994), and we use the seven-item empathic concern subscale from Davis's (1994) Interpersonal Reactivity Index to measure dispositional empathic concern. The seven items solicit a respondent's agreement on a five-point scale (1 = does not describe me very well to 5 = describes me very well) with descriptions of his/her tendency to experience concern for those less fortunate (sample item: "I often have tender, concerned feelings for people less fortunate than me") and general feelings of warmth (sample item: "I would describe myself as a pretty soft-hearted person").

The empathic concern scale has been widely used as a measure of dispositional empathic concern (Batson et al. 1986; Davis 1983a, b; Penner and Finkelstein 1998; Bekkers 2005, 2006) and, equivalently, dispositional sympathy (Eisenberg et al. 1989, 2002; Eisenberg 1991 discusses the equivalence). There is evidence that the scale is tapping an enduring disposition: The scale has high internal and test-retest reliabilities (Davis 1994:57; also 1983c, 1994), and Eisenberg et al. (2002) reported that empathic concern measured at age 15 to 18 is strongly correlated with a prosociality composite index measured at ages 21 to 26. In the GSS sample, the empathic concern  $\alpha$  is .74. A factor analysis of the empathic concern items reveals one factor with an Eigenvalue of 2.06, and factor loadings ranging from .42 to .66.

Henceforth we will use "empathic concern" with the understanding from the literature that "dispositional empathic concern" is implied. Also, in some cases we will simply say "empathy" (e.g., as in the "empathy–helping association") and again it should be understood that we are talking about

dispositional empathic concern, not situation-specific empathy. In the Discussion section, when we intend to talk about situation-specific empathy the “situation-specific” part will be explicit.<sup>3</sup>

We define the *principle of care* as the moral position that one should help those in need, and measure a respondent’s endorsement of the principle by the strength of his/her agreement on a five-point scale (1 = *strongly disagree* to 5 = *strongly agree*) with three items from the Altruism Module: “people should be willing to help others who are less fortunate”; “personally assisting people in trouble is very important to me”; and “these days people need to look after themselves and not overly worry about others” (reverse-coded). The first two items were developed by Webb, Green and Brashear (2000) and the third by Nickell (1998). We did not use a fourth GSS item (“those in need have to learn to take care of themselves and not depend on others”), because unlike the other three items, the fourth item (1) refers to a principle (self-reliance) held by a potential help-receiver rather than a potential help-giver and (2) makes reference to the recipient becoming dependent on the helper (adding the fourth item yields a negligible change in  $\alpha$  while having a factor loading of only .33).

The three-item principle of care results in  $\alpha = .54$ . Although at first glance this  $\alpha$  may appear to be low, it must be remembered that holding average item intercorrelation constant, increasing the number of items increases  $\alpha$  (Cortina 1993; Streiner 2003). Cortina provides an example in which the average item intercorrelation is  $r = .30$ , but with six items,  $\alpha = .72$ . Our principle of care measure has a similar average item intercorrelation of  $r = .31$ , but with only three items,  $\alpha = .54$ . We

also note that  $r = .31$  is in the middle of the ranges for various research uses recommended by Streiner.

Indeed, the key question is whether  $\alpha = .54$  is sufficient for the research use at hand—is it sufficient to distinguish between levels of helping behavior? The answer is yes, as the results to follow will demonstrate.<sup>4</sup>

Items similar, though not identical, to the principle of care were used by Eisenberg et al. (2002) in their “care orientation” construct (sample item: “My decisions are usually based on my concern for other people”); the care orientation items were originally developed by Penner et al. (1995; therein called the “other-oriented” scale). The principle of care items differ somewhat from the care orientation items in that the principle of care items make explicit reference to a less fortunate other and they do not explicitly refer to the respondent making a decision. Nevertheless, the principle of care items are similar to responses to prosocial moral dilemmas that indicate an internalized value orientation (Eisenberg et al. 2002; sample response: “All citizens of a society have a responsibility to help others when they need assistance”). In other words, the principle of care items likely tap the tendency to use high-level prosocial moral reasoning.

The principle of care is a higher level moral principle than the concept of personal norms used in previous research. The definition of a personal norm has been tied to a specific situation or a specific action in previous research: Recall Schwartz and Howard’s definition above that a personal norm is a “feeling of moral obligation to perform [a] *specific* action” (emphasis added). Using this definition involving a specific action, Lee et al. (1999) measure a personal norm for blood donation with the item: “How many times during a year do you think a healthy person should donate blood?” Another personal norm

<sup>3</sup> Of course, experimental methods are the best way to investigate situation-specific empathy. After hearing about a specific situation in an experiment (e.g., a child whose home has been destroyed by fire), situation-specific empathy can be measured with Batson’s “Emotional Response Scale” that asks the subject to rate on a seven-item scale (1 = *not at all* to 7 = *extremely*) whether he/she feels sympathetic, softhearted, compassionate, etc.

<sup>4</sup> The three-item principle of care measure is unidimensional: A factor analysis reveals one factor with an Eigenvalue of 0.81, and factor loadings ranging from .38 to .58.

for volunteering is measured by the item: "About how many hours per week do you think a person should volunteer to charities and community service organizations?" Another personal norm is used for giving money to a charity. Where do all these specific personal norms come from? Schwartz and Howard (1984) argue that personal norms are generated from a smaller set of higher level "internalized moral values," an argument that directly brings to mind Eisenberg's internalized value orientation stage. Why introduce personal norms between higher level values and behavior? Schwartz and Howard argue that the construct of personal norms is necessary, because a single higher level value is not likely to be predictive of many types of specific, albeit related, behaviors.

We use the factor scores saved from the factor analyses of the empathic concern and principle of care items to form the main independent variables in our linear probability models of 10 helping behaviors. The correlation between scores is .48, but fortunately the very large sample size of the General Social Survey mitigates the effect this correlation might otherwise have.<sup>5</sup>

#### Helping Behaviors and Empirical Models

We analyze empathic concern and the principle of care relationships with 10 types of helping behaviors. The helping behaviors

are items (sometimes with minor modifications) from Rushton, Chrisjohn, and Fekken's (1981) Self-Report Altruism scale. A respondent was asked how often during the past 12 months he/she had:

1. returned change to a cashier after getting too much change,
2. allowed a stranger to go ahead in line,
3. offered a seat on a bus or in a public place to a stranger who was standing,
4. carried a stranger's belongings, like groceries, a suitcase, or shopping bag,
5. given food or money to a homeless person,
6. looked after a person's plants, mail, or pets while he or she was away,
7. let someone you didn't know well borrow an item of some value like dishes or tools,
8. given money to a charity,
9. done volunteer work for a charity, and
10. donated blood.

Most of the items are about help given to recipients who are "strangers" (ahead in line, offered a seat, carried belongings, gave food or money to a homeless person, gave money to a charity, volunteered, donated blood) or not well known to the respondent (lent an item, returned change). Strangers and recipients not well known can include both ingroup and outgroup members.

Furthermore, items 1 through 7 refer to spontaneous helping behaviors that involve close, less abstract contact with the stranger in need, but items 8 through 10 refer to planned helping behaviors benefiting distant others. Such helping behaviors involve more cognitively demanding, abstract contact with the stranger. We therefore predict that the principle of care will mediate the empathic concern–helping relationship more strongly for help items 8 through 10 based on the two arguments developed in the discussion of our third hypothesis. First, because items 8 through 10 involve more abstract contact with the stranger in need, these types of

<sup>5</sup> The standard error associated with the estimated relationship between, say, empathic concern and helping is (from a regression of helping on empathic concern and the principle of care):

$$\text{standard error } (B_{ec}) = \frac{\sigma}{s_{ec}\sqrt{n}\sqrt{(1-R_{ec}^2)}}$$

where  $\sigma$  is the root mean square error of the regression,  $s_{ec}$  is the sample standard deviation of empathic concern,  $n$  is the sample size, and  $R_{ec}^2$  is the squared correlation between empathic concern and care (Wooldridge 2006, p. 101). A larger  $R_{ec}^2$  lowers the precision (the reciprocal of the standard error) of estimation, but a larger  $n$ , of course, mitigates this by increasing the precision. In fact, our precision using the very large GSS sample of  $n \approx 2,680$  is 5.2 times the precision that would obtain in a study with a more typical  $n = 100$  sample size (and the same  $R_{ec}^2$ ,  $\sigma$ , and  $s_{ec}$ ):  $\sqrt{2680/100}$ .

help require the development of empathy beyond the immediate situation toward the principle of care. Second, items 8 through 10 refer to situations in which the respondent is less able to condition the help offered on whether the stranger in need is an ingroup or outgroup member. In such situations where the respondent-helper realizes that any help offered will likely help outgroup members we hypothesize that the principle of care is a normative consideration that is a stronger force than empathic concern to evoke help. In contrast, not only does the close contact with another human being give empathic concern a better chance to work in the helping behaviors described by items 1 through 7, we hypothesize that empathic concern will be more strongly related to items 1 through 7 to the extent the respondent-helper can choose to help based on the observable characteristics (e.g., race, ethnicity, class) that identify the stranger as an ingroup member.

The respondents' answers describe the frequency that each helping behavior is performed. However, our first analysis treats each helping behavior as a binary variable with outcomes either not performed or performed once or more in the past year (coded as 0 and 1), and considers each of the 10 helping behaviors separately. The 0/1 specification of helping behavior is a linear probability model (Wooldridge 2006:252ff), a model that produces easily interpretable estimates:  $B$  is the effect of a one standard deviation change in empathic concern or the principle of care on the probability of

performing the helping behavior. In addition, linear probability models produce unbiased estimates (under the usual least-squares assumptions), and if there is only one independent variable the square-root of the regression  $R^2$  is the Pearson product-moment correlation. Estimates from non-linear probability models (e.g., probit, logit) that relax the linear probability assumptions, including models of the frequency that each helping behavior is performed, are very close to those from the linear probability model; so we present only the latter, more easily interpretable results.<sup>6</sup> Because standard errors in any linear probability model are heteroskedastic, we perform significance tests with heteroskedastic-consistent calculations of the standard errors.

Table 1 shows the fractions of the respondents that performed each of the 10 helping behaviors at least once during the past year. Nearly all respondents allowed a stranger to go ahead in line (88 percent), just under half volunteered for a charity (47 percent), and many fewer donated blood (16 percent). The 10 helping behaviors are our dependent variables in the 10 separate linear probability models.

We estimate four specifications of each linear probability model: Empathic concern is the only independent variable (specification "e"); the principle of care is the only independent variable ("pc"); empathic concern and the principle of care are the only independent variables ("epc"); and empathic concern and the principle of care plus additional controls for other stable and situational characteristics ("all") that likely affect helping behavior and may be correlated with empathic concern and the principle of care. We select additional controls based on evidence in previous literature identifying them as correlates of helping behavior (e.g., Schroeder et al. 1995; Wilson 2000): demographics, denominational identity and religious views, political party identity and political views, education, income, parents' socioeconomic status, and the region and population of the respondent's place of residence. For the sake of brevity we do not present or discuss the results concerning the additional controls themselves, but simply

<sup>6</sup> Models of the frequency that each helping behavior is performed are estimated as ordered probits. In addition, we estimate a multivariate probit model (see Cappellari and Jenkins 2003) in which the 10 dependent variables are whether the helping behaviors are not performed/performed (just like the linear probability models, probits, and logits) but in which the underlying randomness in the 10 helping behaviors is allowed to be correlated across the 10 probits: the 10 probits are jointly estimated. The multivariate probit estimates of the dispositional empathic concern and principle of care coefficients are very similar to the 10 (separately estimated) linear probability models, probits, and logits.

Table 1. Averages for Empathic Concern, the Principle of Care, and the Helping Behaviors

Variable	Average
Empathic Concern (scale 1–5)	3.99 (.69)
Principle of Care (scale 1–5)	3.82 (.64)
Fractions performing each helping behavior at least once in the past year	
1. Returned change	.50
2. Ahead in line	.88
3. Offered a seat	.46
4. Carried belongings	.47
5. Gave food or money to a homeless person	.64
6. Looked after plants, mail, or pets	.59
7. Lent an item to person not well-known	.42
8. Gave money to a charity	.78
9. Volunteered for a charity	.47
10. Donated blood	.16

Note: Standard deviations in parentheses. The sample size is  $n = 2,680$  (there are negligible differences in the sample size used for each variable depending upon respondents who have missing data for that variable).

present the empathic concern and principle of care coefficients from specification with all the controls included. Detailed discussion of the controls and results concerning the controls is available in an appendix at [www.asanet.org/journals/spq](http://www.asanet.org/journals/spq). Because of occasional missing data in the additional controls, the sample size used to estimate the “all” specification is about three percent smaller.

Our second analysis estimates structural equation models in which the observable helping behaviors are indicators of either spontaneous, short-term latent help or planned, long-term latent help. First, we create a variable coded 0–3 for each of the 10 helping behaviors indicating the frequency help is performed (the categories are *not in the past year*, *once in the past year*, *at least 2 or 3 times in the past year*, *once a month or more*). Second, we use items 1 through 7 as indicators of spontaneous, short-term latent help and items 8 through 10 as indicators of planned, long-term latent help.

The  $\alpha$  for items 1 through 7 indicating spontaneous help is .63; a factor analysis reveals one factor with an Eigenvalue  $>1$  (1.35). Factor

loadings range from .32 to .53. The  $\alpha$  for items 8 through 10 indicating planned help is .45; the largest Eigenvalue from the factor analysis is .58 with factor loadings .52 and .53 for giving to charity and volunteering, but only .19 for donating blood. The planned help  $\alpha$  can be raised to .56 by excluding blood donation, but we retain the donating blood item because theoretically donating blood is a form of planned helping and the structural equation model estimates are very close whether donating blood is included or not.

In the structural equation models, empathic concern and the principle of care are modeled as latent variables with care mediating empathic concern, as in Hoffman’s and Eisenberg’s theories. We estimate one set of structural equation models using no controls and a second of structural equation models using all the controls as background covariates of empathic concern, care, and helping. We use Mplus 4.1 to estimate the structural equation models (Muthén and Muthén 2007).

## RESULTS

### Overview

The results show that although empathic concern is associated with many of the helping behaviors, the principle of care is more consistently associated with helping. Considering empathic concern and care each in isolation from the other, both empathic concern and care are associated with large percentage increases (10 percent or higher) in baseline probabilities of performing many helping behaviors. However, the empathy–helping associations weaken after the principle of care is partialled out. In contrast, the care–helping associations do not weaken much even after empathic concern is partialled out. These results are confirmed in the structural equation models: The principle of care–helping association is much stronger than the empathy–helping association.

### Separate Types of Helping Behavior: Linear Probability Models

For each of the 10 helping behavior models Table 2 presents four rows. Each row

Table 2. Helping Behavior: Linear Probability Model Coefficients for Empathic Concern and the Principle of Care

Helping Behavior	Specification	Empathic Concern	Principle of Care	Model Fit
		<i>B</i> (1)	<i>B</i> (2)	<i>R</i> <sup>2</sup> (3)
1. Returned change	(e)	.043***	—	.007
	(pc)	—	.055***	.012
	(epc)	.022*	.044***	.013
	(all)	.019 <sup>†</sup>	.036**	.072
2. Ahead in line	(e)	.060***	—	.034
	(pc)	—	.047***	.021
	(epc)	.048***	.025**	.038
	(all)	.044***	.022**	.116
3. Offered a seat	(e)	.029**	—	.003
	(pc)	—	.065***	.017
	(epc)	−.003	.066***	.017
	(all)	.017	.063***	.135
4. Carried belongings	(e)	.052***	—	.011
	(pc)	—	.078***	.025
	(epc)	.019 <sup>†</sup>	.069***	.023
	(all)	.044***	.066***	.089
5. Gave food or money to a homeless person	(e)	.078***	—	.027
	(pc)	—	.092***	.037
	(epc)	.045***	.071***	.043
	(all)	.050***	.059***	.109
6. Looked after plants, mail, or pets	(e)	.034***	—	.006
	(pc)	—	.035***	.005
	(epc)	.027*	.022*	.007
	(all)	.022*	.020 <sup>†</sup>	.086
7. Lent an item to person not well-known	(e)	.034***	—	.005
	(pc)	—	.067***	.020
	(epc)	.001	.069***	.020
	(all)	.025*	.068***	.094
8. Gave money to a charity	(e)	.051***	—	.016
	(pc)	—	.073***	.031
	(epc)	.022*	.062***	.033
	(all)	.006	.052***	.215
9. Volunteered for a charity	(e)	.061***	—	.015
	(pc)	—	.101***	.041
	(epc)	.017	.093***	.041
	(all)	.009	.075***	.141
10. Donated blood	(e)	−.005	—	.000
	(pc)	—	.015*	.002
	(epc)	−.016*	.023**	.003
	(all)	−.010	.019**	.050

*Specification:* (e): empathic concern only; (pc): principle of care only; (epc): empathic concern and principle of care only; (all) empathic concern, principle of care, and all additional controls. In columns 1 and 2 the *B* coefficients are the change in probability of performing the helping behavior associated with a one standard deviation increase in the independent variable. Column 3 reports the regression *R*<sup>2</sup>. For specifications (e), (pc), and (epc) *n* ≈ 2,680 (there are negligible differences in the sample size depending upon respondents who have missing data). For specification (all) *n*s ≈ 2,590 (the smaller sample size is due to respondents who have missing data for the additional controls).

<sup>†</sup>*p* < .10; \**p* < .05; \*\**p* < .01; \*\*\**p* < .001.

contains  $B$  coefficients indicating how unit standard deviation increases in empathic concern and the principle of care are associated with increases in the probability of performing the helping behavior at least once during the past year. Fourteen of the 20  $B$ s in the (e) and (pc) rows indicate probability increases in the .043 to .101 range. The largest increases are for volunteering (care  $B = .101$ ), giving to a homeless person (empathy  $B = .078$ , care  $B = .092$ ), carrying a stranger's belongings (care  $B = .078$ ), and giving money to a charity (care  $B = .073$ ).

Whether the .043 to .101 probability increases are seen as "large" or "small" depends upon the increase relative to the baseline probabilities of performing the corresponding helping behavior (from Table 1). For example, a one standard deviation increase in care is associated with a 21 percent increase in the probability of volunteering ( $.101/.47 = 21$  percent). This is a very large increase in volunteering, especially given that a one standard deviation increase in care represents only a 17 percent increase in care ( $.64/3.82$  from Table 1): The 17 percent increase in care is associated with a larger than 17 percent increase in volunteering. For 9 of the 14  $B$ s indicating probability increases in the .043 to .101 range, the percentage increase in the baseline probability of performing the corresponding helping behavior is ten percent or higher—not as large as the care-volunteering association but still large. And the .073 care-giving to a charity association represents a percentage increase just under ten percent ( $.073/.78 = 9.4$  percent) in the probability of giving. Moreover, one of the  $B$ s outside the .043 to .101 range—the .015 care-blood donation association—represents a large percentage increase ( $.015/.16 = 9.4$  percent) in the probability of blood donation.

The  $B$  coefficients in the (e) and (pc) rows also indicate that both empathic concern and the principle of care are significantly associated with almost all of the helping behaviors. All but one of the 20  $B$ s are statistically significant with 17 of the  $ps < .001$ . The one insignificant  $B$  is the empathy-blood donation association.

The  $B$  coefficients in the (epc) rows indicate that the empathy-helping association falls in every one of the 10 behaviors once the principle of care is partialled out. The principle of care-helping behavior association falls too (empathic concern having been partialled out) for 7 of the behaviors, but for all helping behaviors except one (allowing a stranger ahead in line), the empathic concern association falls more than does the principle of care association. Empathic concern remains significantly positive in only 6 behaviors (returning change, ahead in line, carrying a stranger's belongings, giving to a homeless person, looking after plants and pets, and giving money to a charity) once the principle of care is partialled out, but the principle of care remains significant in all 10 of the behaviors even after empathic concern is partialled out.

There are only three qualitative changes in the  $B$  coefficients when controls for all the other stable and situational characteristics are added to the regressions in the (all) rows. The three qualitative changes are for empathy-helping associations: The carrying a stranger's belongings and lent an item associations are more positive, but the giving money to a charity association goes from small positive to essentially zero. In the regressions with all the controls six empathic concern  $B$ s are significant with only one of the six at .050 or higher (giving food or money to a homeless person); for giving to a homeless person, the percentage increase in baseline probability (associated with a one standard deviation increase in empathic concern) is 8 percent. In contrast, all of the regressions with controls have principle of care coefficients that are significant. In six of these regressions the  $B$ s are .050 or higher; for these six the percentage increases in baseline probabilities of performing the corresponding helping behavior (associated with a one standard deviation increase in the principle of care) range from 7 to 16 percent. The care-donating blood association is .019 (seemingly small), but this represents a 12 percent increase in the baseline probability of donating blood (again,

Table 3. Path Coefficients for Helping Behavior, Empathic Concern, and the Principle of Care

	Path coefficient (standardized)		Model fit		
	From: Empathic Concern		Principle of Care	$\chi^2$ (df)	Root mean square error of the approximation (4)
	To:	Help (1)			
<b>Helping behavior</b>					
<b>Panel A: No controls</b>					
Spontaneous, short-term help (items 1–7)	–.015	.419***	2691 (97)	.102	
Planned, long-term help (items 8–10)	–.196***	.566***	3651 (83)	.130	
All help (items 1–10)	–.079	.517***	1312 (107)	.067	
<b>Panel B: All controls</b>					
Spontaneous, short-term help (items 1–7)	.080 <sup>†</sup>	.367***	2592 (433)	.044	
Planned, long-term help (items 8–10)	–.117**	.365***	3476 (394)	.055	
All help (items 1–10)	.012	.432***	1697 (441)	.033	

Note: In Panel A, rows 1–3 are path models for latent helping behavior. The entries in column 1 are the standardized path coefficients from empathic concern to helping. The entries in column 2 are the standardized path coefficients from the principle of care to helping. The standardized path coefficient from empathic concern to care (not shown in the table) is .714 ( $p < .001$ ). Panel A has no background covariates. Panel B is laid out just the same as Panel A, except that Panel B includes all the controls for stable and situational characteristics as background covariates of empathic concern, care, and helping (a MIMIC model). In Panel B, the standardized path coefficient from empathic concern to care (not shown in the table) is .692 ( $p < .001$ ). The sample size ( $n = 2,546$ ) is slightly smaller than in Table 2 specification (all) because an observation is not used if the respondent provided missing data on any of the ten helping behaviors.

<sup>†</sup> $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ . \*\*\* $p < .001$ .

associated with a one standard deviation increase in the principle of care).<sup>7</sup>

**Spontaneous and Planned Help: Structural Equation Models**

Table 3 presents standardized path coefficients from structural equation models of latent help, in which the principle of care mediates empathic concern. In Panel A three

structural equation models are estimated: row 1—spontaneous, short-term help (help items 1 through 7); row 2—planned long-term help (items 8 through 10); and row 3—all help (items 1 through 10). The Panel A models do not include any other controls. The Panel B models (rows 4 through 6) are identical to Panel A except that all the controls for stable and situational characteristics now are included as background covariates of empathic concern, care, and helping (a MIMIC model). Recall that each help item used in the structural equation models indicates the frequency the help is performed during the past 12 months.

Panel A row 1 shows a small (and insignificant) –.015 direct path coefficient between empathic concern and spontaneous help, but the care–helping coefficient is larger, .419, and statistically significant. The path coefficient for care implies that a one standard deviation increase in the principle of care is

<sup>7</sup> We checked the empathic concern and principle of care coefficients for sensitivity to the addition of further controls for subjective well-being, locus of control, adherence to a principle of government-generated economic equality, and religious worldview. Adding these further controls causes only negligible changes in the empathic concern and principle of care coefficients. The detailed results are available upon request. We did not include these further controls in our main analysis because the questions necessary to construct the controls were posed to only a portion of the GSS sample (due to the GSS’s ballot design), and as a consequence adding these controls reduces the sample size that can be used for analysis.

associated with a .419 standard deviation increase in spontaneous helping. The structural model for planned help in row 2 has a negative direct empathy–helping coefficient. In contrast, the care coefficient again is large and significant (.566). In the model for all help in row 3 the direct empathy–helping coefficient is negative and not significant, and the principle of care coefficient is large and significant (.517).

The Panel B models, including all the controls as background covariates, show stronger positive empathy–helping relationships. Nevertheless, the empathic concern coefficients remain small. The largest positive relationship is for spontaneous helping: A one standard deviation increase in empathic concern is associated with a .080 standard deviation increase in spontaneous helping. The principle of care coefficients are a little smaller than in Panel A, but still large: The path coefficients imply that a one standard deviation increase in the principle of care is associated with .367, .365, and .432 standard deviation increases in spontaneous, planned, and all helping. Note that the structural equation models including covariates in Panel B have much smaller root mean square error of the approximations (RMSEAs) than the models without covariates in Panel A, indicating a better fit to the data. Furthermore, “separate effects” models (not shown in Table

3) that do not include the empathic concern–care path have much higher RMSEAs than the Table 3 mediation models, and chi-square tests indicate that the separate effects models can be rejected strongly in favor of the mediation models.<sup>8</sup> Also, chi-square tests indicate that “single effect” models (not shown in Table 3) that assume the seven empathic concern items and the three principle of care items can be combined as measurements of a single underlying latent variable can be rejected strongly ( $ps < .000$ ) in favor of the Table 3 models where empathic concern and the principle of care are modeled as different latent constructs.<sup>9</sup>

The structural equation estimates indicate that empathic concern is mediated strongly by care. In Panel B’s spontaneous helping model the empathy–helping total effect is .334 (.080 + .692 \* .367; .692 is the path

<sup>8</sup> For example, a “separate effects” model of all helping behaviors (items 1 through 10) including only direct paths of empathic concern and care to helping but no path from empathic concern to care has a RMSEA = .054, compared to the RMSEA = .033 in Table 3’s mediation model. A chi-square test of  $H_0$ : separate effects model versus  $H_1$ : Table 3’s mediation model for all helping yields a strong rejection ( $p < .001$ ). Even in the Panel B models that include background covariates, the chi-squares suggest the poor fits typical of structural equation models estimated with large sample sizes. The chi-square fit statistics can be improved substantially by permitting (and estimating) non-zero correlations among the empathy indicators, and by permitting/estimating correlations among the help indicators. However, improving the fit in this way produces negligible change in the estimates of the empathy–helping and principle of care–helping relationships. Even without permitting/estimating correlations among the empathic concern and help indicators, the RMSEAs in Panel B indicate acceptable model fits.

<sup>9</sup> For the seven spontaneous helping behaviors, the three planned helping behaviors, and all 10 helping behaviors the chi-square test statistics are 2741.7 ( $df = 447$ ), 3606.1 ( $df = 410$ ), 1918.4 ( $df = 441$ ), all  $ps < .000$ . A frequently made comment in response to our results is that empathic concern and the principle of care are strongly correlated and therefore should be combined into one variable. This comment overlooks four points. First, according to the theories of Hoffman and Eisenberg empathic concern and the principle of care are different theoretical constructs. Therefore, unless this theory is to be set aside at the onset, the theory-based difference in constructs should be maintained in the empirical analysis. Second, the theoretical argument from Hoffman and Eisenberg is not that empathic concern and the principle of care are unrelated. Indeed, Hoffman’s and Eisenberg’s theories imply that empathic concern and the principle of care should be strongly correlated, and that is exactly what we find. Rather, the theoretical argument from Hoffman and Eisenberg suggests that empathic concern and care have different relationships with helping behavior. Third, when it comes to assessing different relationships between two independent variables (e.g., empathic concern and care) and a dependent variable (helping behavior) what is important are the standard errors, and the standard errors depend on more than just the correlation between the two independent variables; see footnote 3. Finally, the chi-square tests provide a statistical justification to maintain empathic concern and care as distinct variables in the empirical analysis, and provide empirical support for the implication of Hoffman’s and Eisenberg’s theories that empathic concern and care have different relationships with helping behavior.

coefficient from empathic concern to care) and the indirect effect through care is .254. Using Shrout and Bolger's (2002) proposed calculation for the proportion of a relationship that is mediated suggests that about three-quarters (.254 / .334) of the empathy-spontaneous helping relationship is mediated by care. In the planned helping model the positive empathy-helping relationship is mediated completely by the principle of care: The empathy-helping total effect is .135, smaller than the .253 indirect effect empathic concern has through care. In the model of all 10 helping behaviors, nearly all (96 percent) of the empathy-helping relationship is mediated by care.

### DISCUSSION

The results from a nationally representative sample support the hypothesis that the principle of care is related to many types of helping behavior. Even in models with an extensive array of controls for other stable and situational characteristics of respondents, the principle of care retains a significant relationship with all 10 helping behaviors examined. The relationships are substantial: A unit standard deviation increase in the principle of care is associated with a 16 percent increase in the baseline probability of volunteering and a 12 percent increase in the baseline probability of blood donation. Although the sizes of the principle of care relationships with volunteering and blood donation are of special interest because these two helping behaviors have been frequently studied in previous research, the overall finding is the consistency of the principle of care in its relationships with many types of helping behavior. We think this is a striking finding, given that the moderate reliability of the General Social Survey items available to measure the principle of care may imply that we underestimate the care-helping relationship.

At a cursory level the results also support the hypothesis that empathic concern is related to many types of helping behavior: There are 9 (out of 10) significant relationships in the simple regressions of helping behavior on empathic concern. These cursory

level results replicate the previous literature's well-established empathy-helping relationship. A deeper analysis shows, however, that all of the empathy-helping associations drop in magnitude and three lose significance when the principle of care is partialled out. Moreover, for all helping behaviors except one, when both empathic concern and the principle of care are included as independent variables, the empathy-helping association drops more than does the care-helping association. These results suggest the principle of care mediates the dispositional empathy-helping relationship.<sup>10</sup>

The mediation of empathy by care is confirmed in the structural equation models. Although there is strong evidence of an empathy-helping relationship in the absence of the principle of care (again, replicating the previous literature), once care is added the direct empathy-helping path coefficient is much smaller. Indeed, once care is added the direct empathy-helping path coefficient is significantly positive only in the model of spontaneous help. In contrast, the direct principle of care-helping path coefficients are large and significant in each model: spontaneous help, planned help, and all help. Across the three models, between three-quarters and all of the empathy-helping relationship is mediated by the principle of care.

Finally, the results support the hypothesis that the principle of care mediates the empathy-helping relationship more strongly for planned helping behavior. Once the principle of care is partialled out in the linear probability models, the empathy-helping relationship is essentially zero for the planned, long-term helping behaviors involving abstract contact

<sup>10</sup> After finishing the first version of our paper we learned of independent work by Einolf (2008) who also analyzes the GSS data (2002 only) and concludes that empathic concern is not correlated consistently with all helping behaviors (and those correlations that arise are weak). This leads him to conjecture that other factors such as moral thoughts, perhaps caused by empathy, may be better explanations of helping behavior. Our results confirm this conjecture for one type of moral factor: the principle of care.

with the other in need (giving to charity, doing volunteer work for a charity, donating blood). Empathic concern maintains its relationship only with spontaneous, short-term helping behaviors involving close contact with another in need. Again these results are confirmed in the structural equation models: Care mediates three-quarters of the empathy–spontaneous, short-term helping relationship, but completely mediates the empathy–planned, long-term helping relationship.

The strong mediation of empathic concern by the principle of care—and the complete mediation for planned, long-term help—require new theoretical interpretations of the literature's well-established empathy–helping relationship. But in drawing these theoretical interpretations and further implications from our results, we want to be upfront about three qualifications to the present study. First, although the use of a representative random sample of the U.S. adult population to generate the results is an important strength of the study, it is also important to keep in mind that the study uses self-report data, and self-reports may be subject to social presentation. Second, although the results are robust to the presence of numerous statistical controls for respondents' stable and situational characteristics, the results may have changed had the data allowed us to control for additional dispositions: for example, the tendency to use perspective-taking or to experience personal distress. Third, our results are about dispositional empathic concern, not situation-specific empathy. Further research using experimental methods and longitudinal data should be designed to check these qualifications.

Drawing on our earlier discussion of hypotheses, there are two possible interpretations of our result that empathic concern is strongly mediated by the principle of care. Recall the first theoretical argument that mediation occurred in the past during child development. In this case, adding the principle of care to an empathy–helping model will weaken the estimated empathy–helping relationship; this is what happens in Table 2. The second theoretical argument is that empathic concern continues to work through

care in the present-day. The structural equation models impose this theoretical structure—empathic concern working through care—on the data with the consequent estimates presented in Table 3. Of course, the estimates reflect that imposed structure and cannot be interpreted as establishing causal mediation. We discuss establishing causal mediation below, when we discuss our results' implications for empirical research on helping behavior.

Our results have implications for theories of helping behavior. A central question in the well-established literature on the empathy–helping relationship is: What ultimate motive does empathy evoke? The literature has considered two possible motives: altruism—concern with improving the welfare of another person—and egoism. In a well-known series of experiments, Batson and his associates conclude that situation-specific empathy evokes altruism and altruism is the motive that produces helping: the empathy–altruism hypothesis (Batson 1991, 1997; Batson et al. 1997; cf. Cialdini et al. 1997; Neuberg et al. 1997). The present result that dispositional empathic concern is mediated by the principle of care suggests that situation-specific empathy also may evoke the principle of care. This in turn suggests greater theoretical attention be paid to the principle of care.

Is the principle of care another ultimate motive to be considered in addition to altruism and egoism, or is the principle of care simply another form of altruism or possibly another form of egoism? Batson (1994:608) provides a brief introduction to these questions. If the principle of care is a concern with improving the welfare of another person then the principle of care is another form of altruism. Indeed, if the principle of care is another form of altruism then the principle of care likely is the mechanism by which concern for the welfare of family members and other people you know is extended to concern for the welfare of people not well-known to you or known only in the abstract. In contrast, if you help another person because it is your duty to follow the principle of care—you follow the principle of care because by so doing

you feel good about yourself but if you do not follow the principle you feel guilty—then the principle of care is another form of egoism.<sup>11</sup>

What difference does it make whether the principle of care is a form of altruism or a form of egoism? The difference is that help flowing from altruism is more responsive to changes in the needs of the other, whereas help flowing from egoism is more responsive to changes in the helper. Indeed, response to changes in the needs of the other is the way altruistic motivation is identified empirically in the economics literature on helping behavior and is important because it determines whether helpers respond to policy initiatives designed to increase help (e.g., see Ribar and Wilhelm 2002).

The present results also suggest a reinterpretation of the role identity model of helping behavior. The role identity model—developed for blood donation (Piliavin and Callero 1991) but subsequently applied to other forms of planned helping behavior such as volunteering and giving money (Grube and Piliavin 2000; Piliavin, Callero, and Grube 2002)—argues that once a helping behavior is started, performing the behavior becomes part of the helper's identity and the helper continues to help in order to act consistently with that identity. In the model, personal norms and role identity are constructs specific to the type of helping behavior in question (e.g., volunteering) that may explain continued specific action (e.g., continued volunteering). The present results that the principle of care is associated with many types of helping behavior suggest that the principle of care is a higher level moral value that generates

many specific personal norms, that in turn lead to the start of many types of helping behavior (e.g., volunteering, blood donation), that in turn lead to the creation of many specific role identities. In addition, those who endorse a moral principle of care are more likely to integrate their helping role into their sense of self, regardless of the type of helping behavior being considered.

Aquino and Reed (2002) also argue that a higher level “moral identity” motivates many kinds of specific moral actions, and report evidence that a subject's endorsement of nine prosocial traits is correlated with self-reported volunteering and teacher-observed giving of food to an organization that helps people in need. Similarly, Stets and Carter (2006) find that endorsement of these traits is correlated with self-reported returning change, returning a wallet, and giving money to a charity when asked just before entering a store. However, like much of the previous literature, the results cannot separately identify the principle of care–helping relationship apart from the empathic concern–helping relationship.

Our results have implications for the theoretical analysis of help given to outgroup members. The results imply that help given to outgroup members is more strongly related to the principle of care than to dispositional empathy. The strong principle of care–helping relationship across many types of helping behavior involving strangers both close and distant may arise because the principle of care taps both benevolence and universalism, and both are likely necessary to produce help directed toward people not in one's own group (Schwartz 1992). Similarly, Oliner and Oliner (1988) argue that in addition to emphasizing the value of care, a difference between rescuers of Jews and nonrescuers is that rescuers speak of care in universal terms, implying that their care encompassed people not in their own group. The weaker empathy–helping relationship—especially when the helping behavior is a form of planned helping, involving distant, more abstract contact with the stranger in need—is similar to the evidence from Stürmer et al. (2005,

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<sup>11</sup> Similarly, Eisenberg (1986:117–8) has argued that there are two types of altruism, one type based on values rather than empathy (the other type is, of course, based on empathy), and Staub (1991) has argued that valuing others can become the basis of altruism, and if so altruism need no longer be tied to empathy. Interestingly, Hoffman's (2000) definition of the principle of care includes both altruism (“the principle of considering the welfare of others,” 222) and egoism (“one should always help people in need,” 225), a distinction that also appears in Staub (1978:44).

2006) that the empathy–helping relationship is weaker when the help involves out-group members.

Obviously, the results suggest investigating how social institutions (e.g., the family, schools, religious organizations, etc.) work to produce or not produce the principle of care. For example, we know that parents can be important agents that socialize the principle of care (Oliner and Oliner 1988), and that charitable giving and volunteering are correlated between parents and their adult children (Wilhelm et al. 2008; Bekkers 2007). Moreover, stressful events (disruptions in family structure and low family income) that occur during adolescence—the life stage during which value orientations are likely to be internalized—are negatively associated with subsequent charitable giving and volunteering in young adulthood (Bandy and Wilhelm 2008). These findings, combined with our results that the principle of care has strong relationships with charitable giving and volunteering, provide circumstantial evidence that the family is an important social institution for the production of the principle of care. However, additional research is necessary to put this conjecture to the test, and to investigate the role other social institutions play in developing the principle of care.

Our results also have implications for empirical research on helping behavior. The first step to be taken is the development of items to measure the principle of care. The development of care items should consider existing items from the “care orientation” construct (Eisenberg et al. 2002; Penner et al. 1995), but should also consider the development of new items that explicitly tap universalism in care. In our ongoing work we are pursuing the development of these items.

Second, recall the above argument that the empathy mediated by care result suggests greater theoretical attention be paid to the principle of care. The empathy mediated by care result also suggests an alternative interpretation of the empathy–altruism experiments. The experimental design in the empathy–altruism experiments (dealing with situation-specific empathy) produces results

that directly rule out specific types of egoism. Because the results rule out egoism, while at the same time being consistent with the hypothesis that altruism is the ultimate motive that leads to helping, the results have been interpreted by Batson and his associates as supporting the empathy–altruism hypothesis. However, Batson (1991:198) has conjectured that the results also are consistent with a hypothesis that the principle of care, rather than altruism, is the ultimate motive that leads to helping. The present result that dispositional empathic concern is mediated by care suggests that Batson’s conjecture be taken seriously and new experimental designs be implemented that (1) extend the empathy–altruism experimental design to permit differentiation between altruism and the principle of care and (2) could potentially refute altruism as an ultimate motive that leads to helping. Of course, (1) would require experimental designs that differentiate between altruism and the principle of care and that directly evoke the principle of care.<sup>12</sup> Vesterlund, Wilhelm, and Xie (2008) are implementing (2) with a new experimental design in which it is possible to refute altruism and in which it is possible within the same experiment to refute egoism. The results from their experiment indicate that while egoism cannot be entirely ruled out, altruism is much stronger.

Third, despite the correlation between empathic concern and the principle of care,

<sup>12</sup> Manipulations that evoke the principle of care are necessary to test whether the principle of care has a causal effect on helping behavior as theorized by Hoffman and Eisenberg. An alternative theory is that the principle of care represents a cognitive *ex post* justification of helping behavior, behavior that really is caused by empathic concern. This alternative theory is along the lines of Haidt’s (2006) argument that moral behavior really is caused by emotions that are then cognitively justified (the elephant–rider metaphor) or Wilson’s (2002) argument about the adaptive unconscious. We favor Hoffman’s and Eisenberg’s theory that the principle of care causes helping behavior over the alternative theory that the principle of care is *ex post* justification. However, experimental procedures that evoke the principle of care independent of empathic concern are necessary to determine how much of the principle of care–helping relationship we document is causal.

empathic concern and the principle of care are different theoretical constructs and our results show they have different relationships with helping behavior: Therefore, empathic concern and the principle of care should not be combined into one construct when conducting empirical analyses of helping behavior. Previous empirical analyses that have combined empathy and the principle of care into a single variable have produced results from models that have a serious misspecification. Furthermore, scholars working with survey data to study empathic concern and helping behavior must include the principle of care in their analyses. If the principle of care is not included then estimates of the effect of empathic concern on helping behavior suffer from omitted variable bias. Obviously, this suggests that sociologists collecting survey data in order to study helping behavior begin including survey items to measure the principle of care.

Finally, these results may have implications for sociological analyses of the life course: The strength of a person's endorsement of the principle of care may influence important life-course decisions, such as occupational choice, marriage decisions, religiosity, civic participation, and in general placing themselves in situations in which empathy can be aroused.<sup>13</sup>

In summary, evidence from a nationally representative sample suggests that the principle of care is related to many types of helping behavior—both planned, long-term help involving abstract contact with the other in need as well as spontaneous, short-term help involving close contact—and that dispositional empathic concern is mediated by the principle of care. Commenting on the future of research on prosocial behavior, Snyder (in Dovidio et al. 2006:347) argues that “As much as we know about when and why people help others in so many ways, what is less clear is whether there is a common core that transcends these diverse phenomena, a core set of psychological processes (whether motives, dispositions,

instigators) that underlie and generate them.” The evidence from a nationally representative sample suggests that the principle of care is in that common core.

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