

THE EMPATHY-ALTRUISM ASSOCIATION AND ITS RELEVANCE TO HEALTH CARE PROFESSIONS

DEREK J. BURKS AND LORRAINE K. YOULL

University of Central Oklahoma

JAYSON P. DURTSCHI

Portland Community College

It is posited in the empathy-altruism hypothesis that altruistic motivation evoked by empathy is directed toward the ultimate goal of improving another person's welfare. In this study the empathy-altruism hypothesis was examined. Measures of altruism, empathy, and social desirability were completed by 112 individuals in a university setting. A positive and significant association was found between altruism and empathy ($r_s = .24, p = .01, 95\% \text{ CI } [.06-.41]$). No significant associations were found between social desirability and altruism or between social desirability and empathy. Because the loss of capacity to feel empathy may lead to burnout, disillusionment, and reduced altruistic helping efforts, the clinical applicability and implications of these findings are particularly important to health care and other helping professions.

Keywords: altruism, empathy, prosocial behavior, helping.

As defined in social psychology, *altruism* refers to an "other-oriented" motivational state or behavior with the primary goal of increasing or benefiting another's well-being (Batson, Ahmad, & Lishner, 2009). As a motivational state, altruism sometimes propagates prosocial, helping, or altruistic behaviors, that focus on the welfare of other people. While altruism itself may act as a

Derek J. Burks, University of Central Oklahoma; Lorraine K. Youll, Department of Psychology, University of Central Oklahoma; Jayson P. Durtshi, Department of Biology, Portland Community College.

Derek J. Burks is now at the Department of Veterans Affairs (VA), Northwest Mental Illness Research, Education and Clinical Center (MIRECC), Oregon, USA.

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Correspondence concerning this article should be addressed to: Derek Burks, Portland VA Medical Center (P3MIRECC), P.O. Box 1034, Portland, OR 97207, USA. Email: derekjburks@gmail.com

motivation, a broader range of motivations (e.g., empathy, distress, personal and social rewards) intertwine to influence altruistic motivation and ensuing behaviors.

Although the concept of altruism has a lengthy and controversial history in the philosophical, literary, and social science fields, there is still much knowledge to be gained from continued research on the topic, particularly as it applies to the helping and health care professions (Penner, Dovidio, Piliavin, & Schroeder, 2005). For example, in the not-for-profit sector, understanding the motivations of volunteers may help address difficult issues associated with recruitment and retention inherent to agencies that rely on volunteers for person-power (see Allison, Okun, & Dutridge, 2002). In health care settings, it is crucial, but also difficult, to evaluate and understand fully the motivations of trainees, physicians, and other health care providers. Such individuals are also at risk of experiencing reduced empathy, emotional burnout, and disengagement, which may result in objectification of patients, reduced altruistic motivation, and less effective care (Batson, 2002; Henderson, 2001). Moreover, both empathy and altruism in health care students and trainees tend to decrease as they progress through the education process (e.g., Hojat et al., 2004).

The Empathy-Altruism Hypothesis

Empathy is defined as “the capacity to (a) be affected by, and share, the emotional state of another, (b) assess the reasons for the other’s state, and (c) identify with the other, adopting his or her perspective” (De Waal, 2008, p. 281). The claim in the empathy-altruism hypothesis is that prosocial motivation evoked by empathy is directed toward the ultimate goal of improving the welfare of a person in need (Batson, 1991). In divergent hypotheses it has been suggested that altruism (other-oriented behavior) is not possible if the behavior is inspired by egoistic (self-oriented) motivations or needs. The suggested egoistic motives for altruism include social-reward seeking, punishment avoidance, and aversive-arousal reduction. However, in several experimental studies, these hypotheses have failed to receive the same level of empirical support as found for the empathy-altruism hypothesis, indicating that empathy accounts for more variance in altruistic behaviors than do the egoistic motives (see Dovidio, Piliavin, Schroeder, & Penner, 2006).

The Present Study

The purpose of this study was to examine the association between altruism and empathy, especially as related to the empathy-altruism hypothesis. In this study we replicated earlier research by Rushton, Chrisjohn, and Fekken (1981) because we reasoned that it is particularly important to replicate research conducted some time ago in contemporary context, in order to increase empirical confidence in the research literature (Connelly, 1986; Johnson, Haigh, & Yates-Bolton, 2007).

While the hypothesis of the empathy-altruism association has received support in several experimental studies (Batson et al., 2009), only a few other studies have been conducted in which the association has been examined via self-report measures. We have discussed these self-report based associations further below because they have been found to vary in strength, and this indicated the need for additional empirical testing.

Among the studies in which self-report measures have been used, Rushton and colleagues (1981) found a significant positive correlation ($n = 192, r = 0.17$) between altruism and empathy, as well as a small correlation ($r = 0.05$) between altruism and a measure of social desirability. Lee, Lee, and Kang (2003) also found a positive correlation between self-reported altruism and empathy ($n = 53, r = 0.40$), but a negative correlation between altruism and social desirability ($n = 134, r = -0.48$). In the present study, we hypothesized that a statistically significant relationship would emerge between altruism and empathy, as well as between social desirability and altruism. Based on the varying correlations found in the two previous studies, we sought a minimum effect size of 0.3 and also utilized nondirectional hypothesis testing.

Method

Participants

To achieve 90% power within the study's statistical analyses ($\alpha = .05$) and the projected effect of 0.3, we required a sample size of at least 111 participants (Kraemer & Thiemann, 1987). Our final sample consisted of 112 undergraduate university psychology students (76 females, 36 males), who received academic credit toward a course requirement for their participation in this study. The age range of participants was between 18 and 39 years ($M = 20, SD = 3.37$).

Materials

Altruism was measured using the Self-Report Altruism Scale (SRAS; Rushton et al., 1981). The SRAS contains 20 items that reflect helping acts (e.g., "I have done volunteer work for a charity" and "I have given directions to a stranger"). Respondents rate the frequency with which they have performed in the helping acts using a 5-point scale that ranges from 0 = *never* to 4 = *very often*, with score limits of 0 and 80. Rushton and colleagues (1981) reported the SRAS coefficient alphas as ranging from .78 to .87 among five study samples. We used the Balanced Emotional Empathy Scale (BEES) to measure empathy in participants. Developed by Mehrabian (1996), the BEES is used to measure an individual's vicarious emotional response to perceived emotional experiences of others (e.g., "It upsets me to see someone being mistreated" and "Another's happiness can be very uplifting for me"). Participants report the degree of their agreement or disagreement with each of the 30 items in the BEES using a 9-point scale that

ranges from $-4 = \textit{very strong disagreement}$ to $+4 = \textit{very strong agreement}$ (scale limits are -120 and $+120$). Coefficient alpha internal consistency of the BEES is $.87$. To evaluate socially desirable responding among participants, we used the Social Desirability Scale (SDS; Crowne & Marlowe, 1964). The SDS consists of 33 items (e.g., “I have never intensely disliked anyone” and “I like to gossip at times”), in which responses indicate a participant’s degree of answering not only in a way that is consistent with social desirability, but also in a way that indicates a direct need of approval.

Results

In consideration of this study’s modest sample size ($n = 112$), nonnormal distributions, and two outliers, we computed nonparametric Spearman’s rho (r_s) correlations. Findings indicated a significant positive association between empathy and altruism and a small-to-medium effect of empathy ($M = 47.18$, $SD = 27.18$) on altruism ($M = 30.64$, $SD = 10.18$) among participants, $n = 112$, $r_s = .24$, $p = .01$, 95% CI [.06, .41]. We found no significant associations between social desirability ($M = 13.58$, $SD = 4.60$) and altruism, $r_s = .18$, $p = .065$, 95% CI [-0.01, .35] or between social desirability and empathy, $r_s = .11$, $p = .266$, 95% CI [-0.08, .29]. Because the association between social desirability and altruism approached significance, interpretation and clinical significance of that particular finding should be made with caution. In addition, we also conducted a partial correlation analysis, controlling for any possible effects that social desirability might have had on the association between empathy and altruism. When controlling for the factor of social desirability, the significant positive association between empathy and altruism remained, $r_s = .23$, $p = .016$, 95% CI [.04, .40].

Discussion

Given the statistically significant associations recorded, the findings in the present study lend additional support to the empathy-altruism hypothesis. The small-to-medium association of empathy with altruism underscores the applicability of the role of empathy in a clinical setting and in helping behaviors (at least as measured using the SRAS). The confidence interval of this association of empathy with altruism also approached the range of the correlations found by Rushton et al. (1981) and Lee et al. (2003). Social norms proved less influential in our study in regard to how participants responded. This mirrors the finding by Lee et al. (2003) that self-reported altruism was negatively correlated with socially desirable responses and both our own finding and that of Lee and colleagues suggest that the SRAS “is not merely measuring the tendency to answer in a socially desirable fashion” (Rushton et al., 1981, p. 269).

An implication of our findings that is relevant to health care professions is the need to ensure that providers, trainees, and other health care staff achieve and maintain sufficient empathy to motivate continued helping efforts. This relates particularly to individuals who are less predisposed to empathy, who have trouble accessing empathy and other emotions, and/or who have experienced a reduction in empathy. Developers of the content of health care training programs should take into account how much empathy is considered adequate or necessary to meet minimum standards in health care and ethics boards should consider this issue as well. In addition, some health care providers may experience burnout if they feel a high degree of empathy but simultaneously feel unable to help their patients effectively. A related implication of the empathy-altruism hypothesis is that individuals may avoid feeling empathy in order to avoid corresponding altruistic motivation and behaviors (Batson, 2002). Other individuals who feel less empathy in general, may also be less altruistically motivated to engage in helping behavior, resulting in less effective care (e.g., dissatisfied patients, inadequate medical treatment, emotional and career burnout among providers). Finally, given the importance of the relationship between empathy and altruism, in future research ways for helping individuals in the health care field to maintain and increase their ability to feel empathy should be addressed.

A limitation in this study was the use of self-report instruments. However, although such instruments do have a limited value in experimental research, they may have particular value in clinical settings. For example, there may be benefit in health care and counselor training programs in the administration of self-report instruments with students who are just beginning their course. To do so would provide a means for assessing the students' current level of empathy and their tendencies for helping behavior, as well as how the curriculum may be planned to meet individual and/or group needs. Moreover, health care organizations may utilize self-report instruments with medical providers as a tool to evaluate current effectiveness. If self-report instruments are used for purposes such as these, it is critical that the instrument items be well formulated and applicable to the current situation so that they measure empathy, altruism, and other related constructs adequately (Underwood, 2002). In this study, we used an updated measure of empathy, but the measures of altruism and social desirability had been developed some time ago. Thus, such instruments should be expanded, updated, and gain additional validation to ensure they reflect current scientific knowledge.

Another limitation in this study relates to the undergraduate psychology student sample population and its relationship to other populations, such as individuals working in health care. In many of the experimental studies on altruism that have not been based on self-report university student populations have also been used as research participants. This may result in reduced validity and narrower generalizations to the overall population. Moreover, the association between empathy

and altruism is likely to vary by individual and group characteristics, as well as by specific contexts. On the other hand, Batson (2002) argues that it would be misguided to assume empathy induces altruism only among undergraduate university psychology students. Nonetheless, future empathy and altruism research should be replicated among health care populations (e.g., medical physicians, nurses, psychologists, physical therapists) to achieve increased validity and clinical applicability.

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