
TARGET ARTICLE

Evidence for Altruism: Toward a Pluralism of Prosocial Motives

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Psychologists have long assumed that the motivation for all intentional action, including all action intended to benefit others, is egoistic. People benefit others because, ultimately, to do so benefits themselves. The empathy-altruism hypothesis challenges this assumption. It claims that empathic emotion evokes truly altruistic motivation, motivation with an ultimate goal of benefiting not the self but the person for whom empathy is felt. Logical and psychological distinctions between egoism and altruism are reviewed, providing a conceptual framework for empirical tests for the existence of altruism. Results of empirical tests to date are summarized; these results provide impressive support for the empathy-altruism hypothesis. We conclude that the popular and parsimonious explanation of prosocial motivation in terms of universal egoism must give way to a pluralistic explanation that includes altruism as well as egoism. Implications of such a pluralism are briefly noted, not only for our understanding of prosocial motivation but also for our understanding of human nature and of the emotion–motivation link.

We humans devote much time and energy to helping others. We send money to rescue famine victims halfway around the world. We work to save whales. We stay up all night to comfort a friend who has just suffered a broken relationship. We stop on a busy highway to help a stranded motorist change a flat.

Why do we help? Often, of course, the answer is easy. We help because we have no choice, because it is expected, or because it is in our own best interest. We may do a friend a favor because we do not want to lose the friendship or because we expect to see the favor reciprocated. But it is not for such easy answers that we ask ourselves why we help; it is to press the limits of these answers. We want to know whether our helping is always and exclusively motivated by the prospect of some benefit for ourselves, however subtle. We want to know whether anyone ever, in any degree, transcends the bounds of self-benefit and helps out of genuine concern for the welfare of another. We want to know whether altruism is part of human nature—that is, whether motivation directed toward the ultimate goal of benefiting another is within the repertoire of normal humans living in at least some societies.

Advocates of universal egoism claim that everything we do, no matter how noble and beneficial to others, is really directed toward the ultimate goal of self-benefit. Advocates of altruism do not deny that the motivation for much of what we do, including much that we do for others, is egoistic. But they claim that there is more. They claim that at least some of us, to some degree, under some circumstances, are capable of a qualitatively different form of motivation, motivation with an ultimate goal of benefiting someone else.

Advocates of universal egoism have elegance and parsimony on their side in this debate. It is far simpler to explain all human behavior in terms of self-benefit than it is to postulate a motivational pluralism that allows both self-benefit and another's benefit to serve as ultimate goals. But, although

elegance and parsimony are important criteria in developing scientific explanations, they are neither the sole nor even the most important criteria. Most important is the ability adequately and accurately to explain the phenomena in question. If altruistic motivation exists, then we need to know it, even though this knowledge may play havoc with our assumptions about human motivation and, indeed, about human nature. For, if altruistic motivation is within the human repertoire, then both who we are as a species and what we are capable of doing are quite different than if it is not.

The question of the existence of altruism is not new. It has been central in Western thought for centuries, from Aristotle (384–322 B.C.) and St. Thomas Aquinas (1225–1274), through Thomas Hobbes (1588–1679), the Duke de la Rochefoucauld (1613–1680), and Jeremy Bentham (1748–1832), to Friedrich Nietzsche (1844–1900) and Sigmund Freud (1856–1939). The majority view among Renaissance and post-Renaissance philosophers, and more recently among biologists and psychologists, is that we are, at heart, purely egoistic, that we care for others only to the extent that their welfare affects ours.

The argument for universal egoism can certainly seem persuasive, because many forms of self-benefit can be derived from helping. Some forms are obvious, as when we get material rewards and public praise or when we escape public censure. But even when we help in the absence of obvious external rewards, we may still benefit. Seeing a person in need may cause us to feel distress, and we may act to relieve the other's distress as an instrumental means to reach the ultimate goal of relieving our own distress. Or we may benefit by feeling good about ourselves for being kind and caring or by escaping guilt and shame for not helping.

Even heroes and martyrs can benefit from their acts of apparent selflessness. Consider the soldier who saves his comrades by diving on a grenade or the man who dies after

relinquishing his place in a rescue craft. These persons may have acted to escape anticipated guilt and shame for letting others die. Or they may have acted to gain rewards, either the admiration and praise of those left behind or the benefits expected in a life to come. Or they may simply have misjudged the situation, never dreaming that their actions would cost them their lives. The suggestion that heroes' noble acts may be motivated by self-benefit can seem cynical, but it must be faced.

The Altruism Question Clarified

Whether altruism exists is an empirical question; it concerns what is. Yet attempts to answer this question have often failed because of conceptual confusion. Therefore, if we are to make any headway toward an answer to this question, then we must first clearly specify the difference between altruism and egoism, and do so in a way that takes into account the subtle forms of self-benefit just noted. We must adopt definitions that do not distort or oversimplify the egoism–altruism debate. We can best do this, it seems, by following the lead of Auguste Comte (1798–1857), who is credited with coining the term *altruism*. Before Comte, the question of altruism was discussed under a variety of headings—*benevolence*, *charity*, *compassion*, and *friendship*. Comte's differentiation between altruism and egoism brought the question into sharper focus.

Comte's Concept of Altruism

Comte (1851/1875) considered altruism and egoism to be two distinct motives within the individual. He did not deny the existence of self-serving motives, even for helping; the impulse to seek self-benefit and self-gratification he called egoism. But Comte believed that some social behavior was an expression of an unselfish desire to "live for others" (p. 556). It was this second type of motivation to benefit others that he called altruism.

One popular rejoinder to Comte's proposal of altruism made by philosophers of his day went as follows: Even if it were possible for a person to be motivated to increase another's welfare, such a person would be pleased by attaining this desired goal, so even this apparent altruism would actually be a product of egoism. This argument, based on the general principle of psychological hedonism, has been shown to be flawed by later philosophers, who have pointed out that it involves a confusion between two different forms of hedonism. The strong form of psychological hedonism asserts that attainment of personal pleasure is always the goal of human action; the weak form asserts only that goal attainment always brings pleasure. The weak form is not inconsistent with the possibility that the ultimate goal of some action is to benefit another rather than to benefit oneself; the pleasure obtained can be a consequence of reaching the goal without being the goal itself. The strong form of psychological hedonism is inconsistent with the possibility of altruism, but to affirm this form of hedonism is simply to assert universal egoism; as such, it is an affirmation about matters of fact that may or may not be true. (For further discussion of these philosophical arguments, see MacIntyre, 1967; Milo, 1973; Nagel, 1970.)

A Modern Recasting

Comte coined the term *altruism* in juxtaposition to egoism well over a century ago, and understandably, his conception is dated. It is an odd alloy of phrenology, conditioning principles, assumptions about emotional contagion, and utopian moralizing. Fortunately, his concept can be recast and expressed more usefully, without changing its basic meaning, by employing a more modern view of motives as goal-directed forces within the individual.

Employing this view of motivation, we would suggest the following definitions: *Altruism is a motivational state with the ultimate goal of increasing another's welfare. Egoism is a motivational state with the ultimate goal of increasing one's own welfare.* There are three key phrases in each of these definitions, and to avoid later confusion we need to be explicit about each.

1. ". . . a motivational state . . ." Motivation here refers to a goal-directed psychological force within an organism (Lewin, 1935). Goal-directed motivation has the following four features: (a) The organism desires some change in his or her experienced world (this is what is meant by a goal); (b) a force of some magnitude exists, drawing the organism toward the goal; (c) if a barrier prevents direct access to the goal, alternative routes will be sought; and (d) the force disappears when the goal is reached. Goal-directed motivation of this kind is not within the repertoire of many species; to set and to seek goals require high-level perceptual and cognitive processes generally associated with a developed neocortex of the sort found in higher mammals, especially humans.

2. ". . . with the ultimate goal . . ." An ultimate goal is a goal that is an end in itself and not just an intermediate means for reaching some other goal. If a goal is an intermediate means for reaching some other goal and a barrier arises, then alternative routes to the ultimate goal will be sought that bypass the intermediate goal. Moreover, if the ultimate goal is reached without the intermediate goal being reached, the motivational force will disappear. If, however, a goal is an ultimate goal, it cannot be bypassed in this way.

3. ". . . of increasing another's welfare" or ". . . of increasing one's own welfare." These phrases identify the specific ultimate goals of altruistic and egoistic motivation, respectively. Increasing another's welfare is an ultimate goal if an organism (a) perceives some desired change in another organism's world and (b) experiences a force to bring about that change as (c) an end in itself and not as a means to reach some other goal. Increasing one's own welfare is an ultimate goal if an organism (a) perceives some desired change in his or her own world and (b) experiences a force to bring about that change as (c) an end in itself.

Altruism and egoism, as defined here, have much in common. Each refers to goal-directed motivation; each is concerned with the ultimate goal of this motivation; and, for each, the ultimate goal is increasing someone's welfare. These common features provide the context for highlighting the crucial difference: Whose welfare is the ultimate goal—another person's or one's own?

Implications of Our Definitions of Altruism and Egoism

Like most definitions, these definitions of altruism and egoism have some implications that may not be apparent at first glance. Let us mention eight:

1. The distinction between altruism and egoism is qualitative, not quantitative; it is the ultimate goal, not the strength of the motive, that distinguishes altruistic from egoistic motivation.

2. A single motive cannot be both altruistic and egoistic. This is because to seek to benefit both self and other implies two ultimate goals (as long as self and other are perceived to be distinct), and each new ultimate goal defines a new motive.

3. Both altruistic and egoistic motives can exist simultaneously within a single organism. This is because an organism may have more than one ultimate goal at a time, and so more than one motive. If the altruistic and egoistic goals are of roughly equal attractiveness and lie in different directions, so that behaviors leading toward one lead away from the other, then the organism will experience motivational conflict.

4. As defined, altruism and egoism apply only to the domain of goal-directed activity. If an organism acts reflexively or automatically without any goal, then no matter how beneficial to another or to the self the act may be, it is neither altruistic nor egoistic.

5. Focusing on the human level, a person may be altruistically motivated and not know it, may be egoistically motivated and not know it, may believe his or her motivation is altruistic when it is actually egoistic, and vice versa. This is because we do not always know—or report—our true motives. We may have a goal and not be aware of it, or we may mistakenly believe that our goal is A when it is actually B.

6. Both altruistic and egoistic motives may evoke a variety of behaviors or no behavior at all. A motive is a force. Whether this force leads to action will depend on the behavioral options available in the situation, as well as on other motivational forces present at the time.

7. As defined here, altruistic motivation need not involve self-sacrifice. Pursuing the ultimate goal of increasing another's welfare may involve cost to the self, but it also may not. Indeed, it may even involve self-benefit and the motivation would still be altruistic, as long as obtaining this self-benefit is an unintended consequence of benefiting the other, and not the ultimate goal.

Some psychologists assume that altruism requires self-sacrifice, citing as examples cases in which the absolute cost of helping is very high, often involving loss of life (e.g., Campbell, 1975, 1978; Hatfield, Walster, & J. A. Piliavin, 1978, p. 127; Krebs, 1970, 1982; Midlarsky, 1968; Wispe, 1978, pp. xiv–xv, 305). These psychologists seem to believe that in such cases the costs of helping must outweigh the rewards, so the helper's goal could not be self-benefit.

There are at least two problems with including self-sacrifice in the definition of altruism. First, it shifts the focus of attention from the crucial question of motivation to a focus on consequences. What if the helper had no intention of risking death, but things got out of hand? Is the motivation

altruistic? Or what about a cost-free comforting hug for a friend? It may involve no self-sacrifice, but the ultimate goal may still have been to increase the friend's welfare.

Second, a definition based on self-sacrifice overlooks the possibility that some self-benefits for helping increase as the costs increase. The costs of being a hero or martyr may be very great, but so may the rewards. To avoid these two problems, it seems best to define altruism in terms of benefit to other, exclusive of cost to self.

8. Logically at least, there may be prosocial motives that are neither altruistic nor egoistic. For example, a person might have an ultimate goal of upholding a principle of justice (Kohlberg, 1976). This motive could lead the person to help someone perceived to be unjustly in need. This help might, in turn, benefit both the needy individual and the self, but these benefits would be unintended consequences, not the ultimate goal. And if the helper's ultimate goal is neither benefit to another nor benefit to self, the motive is neither altruistic nor egoistic.

Relating Altruism and Egoism to Helping

From the foregoing discussion, helping another person may be altruistically motivated, egoistically motivated, both, or neither. To ascertain that some act was beneficial to another and was intended (which is what is meant by helping) does not in itself say anything about the nature of the underlying motivation. As Table 1 indicates, if we are to answer the question of the existence of altruism, then we must determine whether benefit to the other is (a) an ultimate goal and any self-benefits unintended consequences or (b) an instrumental means to reach the ultimate goal of benefiting oneself.

But if helping benefits both the person in need and the helper, how are we to know which is the ultimate goal? More generally, if multiple goals are reached by the same behavior, how are we to know which goal is ultimate? This puzzle has led many researchers to give up on the altruism question, concluding that it cannot be answered empirically. Yet the surrender seems premature. We suggest that we *can* empirically ascertain people's ultimate goals, indeed, that we do it all the time. Consider the following example.

Ascertaining a person's ultimate goal. Suzie and Frank work together. One morning, music-loving Suzie is unusually attentive to homely but well-heeled Frank. Frank wonders, "Have my prayers been answered? Has Suzie fi-

Table 1. *Formal Structure of the Altruism Question*

Explanation of Why We Help	Outcome of Helping	
	We Relieve the Other's Suffering	And, as a Result, We Receive Self-Benefits
Altruistic Account	Ultimate goal	Unintended consequences
Egoistic Account	Instrumental goal	Ultimate goal

Note: From "How Social an Animal? The Human Capacity for Caring" by C. D. Batson, 1990, *American Psychologist*, 45, p. 340. Copyright 1990 by the American Psychological Association. Adapted by permission of the publisher.

nally discovered my charms? Or is she broke and wanting me to take her to the concert this weekend?" Frank is questioning Suzie's motivation, wondering about her ultimate goal. As matters stand, he lacks the information to make a clear inference—although wishful thinking may provide one. But what if Suzie, returning from lunch, finds in her mail two concert tickets sent by her father? If she coolly passes Frank on her way to invite John, then Frank can infer with considerable confidence—and chagrin—the ultimate goal of her earlier attentions.

This simple example highlights three principles that are important when drawing inferences about a person's ultimate goal: First and most obviously, we do not observe another person's goals or intentions directly; we infer them from the person's behavior. Second, if we observe only a single behavior that has different potential ultimate goals, the true ultimate goal cannot be discerned. It is like having one equation with two unknowns; a clear answer is impossible. Third, we can draw reasonable inferences about a person's ultimate goal if we can observe the person's behavior in different situations that involve a change in the relationship between the potential ultimate goals. The behavior should always be directed toward the true ultimate goal.

Everyday use of this strategy for inferring the motives underlying other people's behavior has been discussed in some detail by attribution theorists such as Heider (1958) and Jones and Davis (1965). We use it to infer when a student is really interested or only seeking a better grade (What happens to the student's interest after the grades are turned in?), why a friend chose one job over another, and whether politicians mean what they say or are only after votes. This strategy also underlies much dissonance (Festinger, 1957) and reactance (Brehm, 1966) research.

Inferring the nature of motivation: Two steps. Employing the Suzie-and-Frank example as a model, two steps are necessary to infer the nature of a person's motivation from his or her behavior. First, we must conduct a conceptual analysis of the various potential alternative goals for the person's action. Unless we have some idea that a given goal may have been the person's aim, there is little likelihood of concluding that it was. Frank realized that Suzie might be after the concert rather than after him. Second, we need to observe the person's behavior in systematically varying circumstances. Specifically, the circumstances need to vary in a way that disentangles the relationship between potential ultimate goals, making it possible for the person to obtain one without having to obtain the other—just as after lunch Suzie could get to the concert without Frank. The person's behavioral choices in these situations should prove diagnostic, telling us which of the goals is ultimate, because the behavior should always be directed toward the ultimate goal. These two steps provide an empirical basis for inferring the nature of a person's motivation. We wish now to apply this logic to the problem of inferring the nature of prosocial motivation.

Potential Egoistic and Altruistic Motives for Helping

The three-path model presented in Figure 1 provides a conceptual analysis of the various potential alternative goals for helping. The first two paths involve egoistic motivation; the third involves one form of altruistic motivation, that in-

duced by feeling empathy for the person in need (for more detailed discussion of each of these three paths, see Batson, 1987, in press).

Egoistic Motives: Paths 1 and 2

Research with humans suggests two broad classes of egoistic motives for helping (for extensive reviews, see Dovidio, 1984; Eisenberg, 1982; Krebs & Miller, 1985; J. A. Piliavin, Dovidio, Gaertner, & Clark, 1981; Rushton & Sorrentino, 1981; Staub, 1978, 1979). One class involves gaining rewards and avoiding punishments; the other, reducing aversive arousal. These two egoistic motives are summarized on Paths 1 and 2 of Figure 1. Path 1 is further subdivided to differentiate (a) reward-seeking and (b) punishment-avoiding motives. Let us consider each of the five steps on Paths 1 and 2 in sequence.

1. *Instigating situation.* Each path in Figure 1 begins with perception of another person in need. Perception of the other's need is all that is required to instigate motivation along Path 2. But before motivation can be instigated along Path 1, the potential helper must also expect to receive either rewards for helping or punishments for not, or both, in the particular situation. These expectations are the result of the potential helper's prior learning history, including rewards and punishments received in similar situations, as well as rewards and punishments others have been observed to receive (Bandura, 1977).

2. *Internal response.* On Path 1, expectation of reward and punishment, combined with perceiving the other's need, leads to anticipating rewards or punishments in the current situation. The anticipated rewards and punishments may be obvious and explicit—such as being paid (Fischer, 1963), gaining social approval (Baumann, Cialdini, & Kenrick, 1981; Gelfand, Hartmann, Cromer, Smith, & Page, 1975; Kenrick, Baumann, & Cialdini, 1979; Moss & Page, 1972), or avoiding censure (Reis & Gruen, 1976); or they may be more subtle—such as receiving esteem in exchange for helping (Hatfield et al., 1978), complying with social norms (Berkowitz, 1972; Gouldner, 1960; Leeds, 1963; Staub, 1971), complying with internalized personal norms (Lerner, 1970; Schwartz, 1975, 1977; Zuckerman, 1975), seeing oneself as a good person (Bandura, 1977; Cialdini, Darby, & Vincent, 1973; Cialdini & Kenrick, 1976; Weyant, 1978; Wilson, 1976), or avoiding guilt (Hoffman, 1976, 1982; Steele, 1975).

On Path 2, perceiving the other's need evokes an internal response of aversive arousal, including feelings of distress, anxiety, and uneasiness (Batson & Coke, 1981; Batson, O'Quin, Fultz, Vanderplas, & Isen, 1983; Hoffman, 1981a, 1981b; J. A. Piliavin & I. M. Piliavin, 1973).

Reward and punishment anticipation (Path 1) and feeling aversive arousal (Path 2) are distinct but not mutually exclusive internal responses to perceiving another in need. In many helping situations, such as emergencies, both responses are likely. In other situations, such as making a routine annual contribution to a charity, one may be very aware of the rewards for helping and punishments for not, yet feel little aversive arousal. In still other situations, such as witnessing a gory automobile accident, one may experience much aversive arousal but pay little or no attention to possible rewards and punishments.

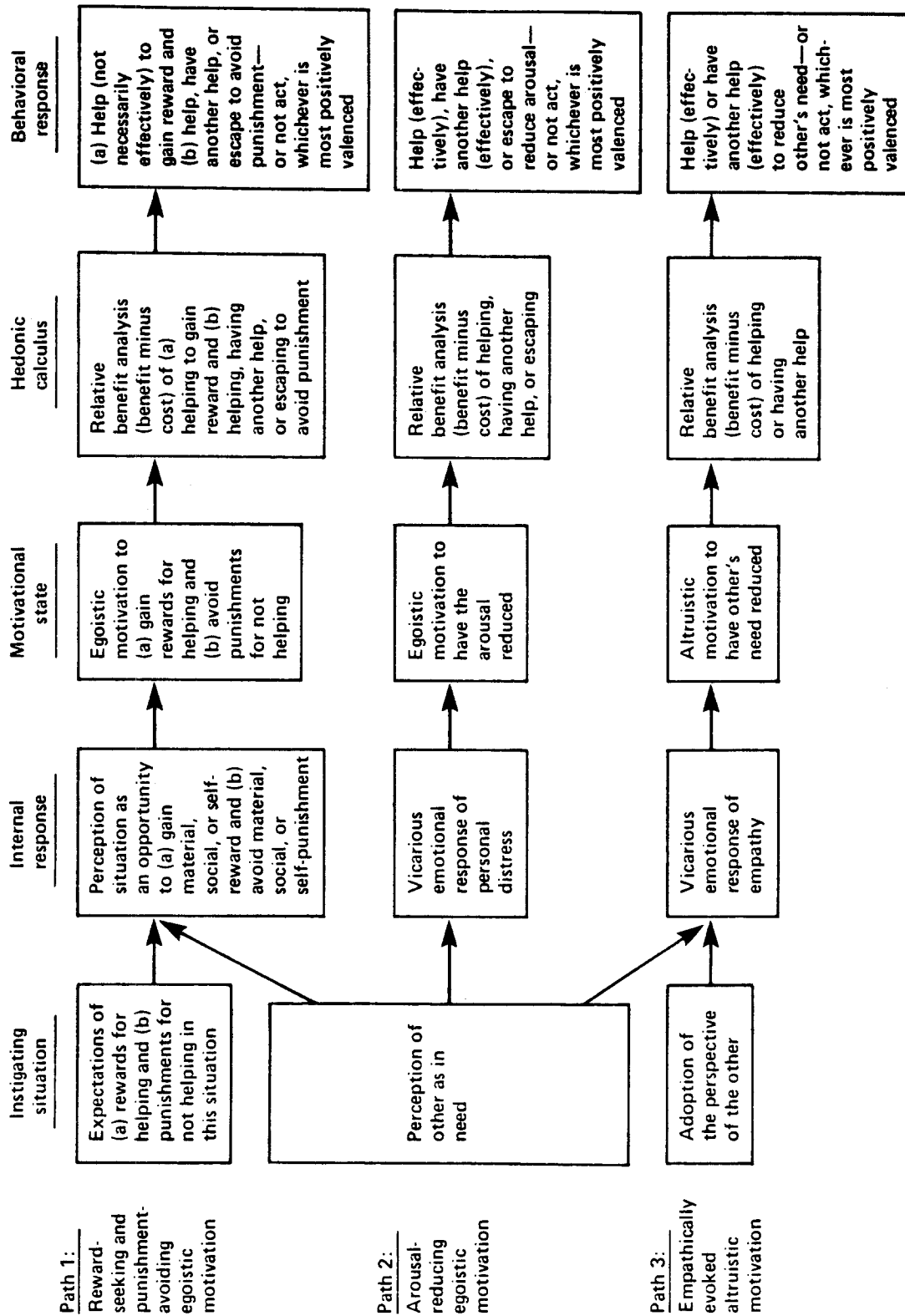


Figure 1. Flow chart of egoistic and altruistic paths to helping. From "Prosocial Motivation: Is It Ever Truly Altruistic?" by C. D. Batson, 1987, in L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 20, p. 84), New York: Academic Press. Copyright 1987 by Academic Press. Reprinted by permission.

3. *Form of motivation.* Anticipated reward, anticipated punishment, and aversive arousal each evoke their own form of egoistic motivation: motivation to gain the reward (Path 1a), avoid the punishment (Path 1b), or have the arousal reduced (Path 2). These motives are distinct but not mutually exclusive. When experienced simultaneously, their goals may be compatible or incompatible. Sometimes actions that enable us to gain rewards or avoid punishments also reduce aversive arousal, as when we return a lost child to his mother. At other times, acting to gain rewards or avoid punishments increases aversive arousal, as when we comfort a badly injured accident victim.

4. *Hedonic calculus.* Before acting on any of these motives, a hedonic calculus, or relative-benefit analysis, is performed: Benefit is weighed against cost for each potential behavioral response. The magnitude of the benefit in this analysis is a function of the strength of the motive, because the benefit is to reach the goal. The magnitude of the cost is the sum of the various costs perceived to be associated with the behavior. Perhaps the simplest way to think about these costs is in terms of conflict with other egoistic motives, such as motives to avoid pain, save time, keep one's money, and so on.

The behavioral responses for which one computes the hedonic calculus are not the same on each egoistic path. On Path 1a the desired rewards are likely to be contingent on being helpful, so the hedonic calculus focuses on a single behavioral response: helping. On Path 1b possible punishments may be avoided by three different means: helping, having someone else help, or having good justification for not helping. Similarly, on Path 2 aversive arousal may be reduced by three different means: helping, having someone else help, or escaping exposure to the need situation. On Path 1, simply trying to help is often sufficient to gain rewards or avoid punishments, even if the effort is unsuccessful. As people say, "It's the thought that counts." On Path 2, however, the helping must be effective; only if the other's suffering ends will the stimulus causing one's aversive arousal be terminated.

5. *Behavioral response.* As a result of the hedonic calculus, the egoistically motivated person will help, let someone else help, justify not helping, or escape, whichever available response will most efficiently reach the egoistic ultimate goal. If, however, the anticipated cost of each available response exceeds the benefit, then the person will pursue some unrelated goal or will do nothing.

Together, the two egoistic paths described provide a plausible general account of the motivation to help. Each path makes considerable intuitive sense; each is internally consistent; each is complex, yet permits relatively precise behavioral predictions; each is based on a classic approach to motivation (reinforcement for Path 1, arousal reduction for Path 2); and each is supported by much empirical research.

Yet, in spite of these virtues, advocates of altruism claim that these two egoistic paths do not provide a full account of why we help. They claim that an altruistic path exists as well. The most commonly suggested source of altruistic motivation is empathic emotion (see Batson, 1987, in press; Hoffman, 1976; Krebs, 1975; McDougall, 1908; A. Smith, 1759/1853).

Empathy-Induced Altruistic Motivation: Path 3

The suggestion that empathy evokes altruistic motivation has been called the empathy-altruism hypothesis (Batson, 1987, in press). This hypothesis can be made explicit and, as a result, empirically testable by outlining a third motivational path to helping, paralleling the two egoistic paths. This empathy-altruism path appears as Path 3 of Figure 1.

1. *Instigating situation.* Like Paths 1 and 2, Path 3 begins with a perception of need. But on Path 3, perceiving the other's need is claimed to lead to a unique internal response: a feeling of empathy. Following the lead of Hoffman (1975, 1976), of Krebs (1975), of Stotland (1969), and, long before, of Adam Smith (1759/1853), it is proposed that this unique emotional response to perceived need is a result of the perceiver adopting the perspective of the person in need.

Adopting another person's perspective involves more than simply focusing attention on the other. One may focus attention on another's need but maintain a relatively objective perspective, dispassionately observing the other's plight. In contrast, adopting the other's perspective involves imagining how that person is affected by his or her situation (Stotland, 1969). Recollection of one's own or others' reactions in similar situations, as well as imagining oneself in the need situation, often provides information that facilitates adoption of a needy person's perspective. But there are limits to this facilitation. One may get so wrapped up in reminiscences or in one's own possible reactions to the situation that one fails to consider the specific way the situation is affecting the person in need (Hygge, 1976; Karniol, 1982). Considering the effect on the person in need is the essence of perspective taking, and it is perspective taking—in combination with a perception of the other as in need—that Path 3 claims leads to empathic emotion.

Adam Smith (1759/1853), in *The Theory of Moral Sentiments*, presented a subtle and graphic description of what perspective taking involves, although he labeled the resulting emotional reaction *sympathy* rather than *empathy*:

Sympathy is very properly said to arise from an imaginary change of situations with the person principally concerned, yet this imaginary change is not supposed to happen to me in my own person and character, but in that of the person with whom I sympathize. When I condole with you for the loss of your only son, in order to enter into your grief I do not consider what I, a person of such a character and profession, should suffer, if I had a son, and if that son was unfortunately to die: but I consider what I should suffer if I was really you, and I not only change circumstances with you, but I change persons and characters. My grief, therefore, is entirely upon your account, and not in the least upon my own. (VII.iii.1.4)

Taking the perspective of a needy person in this way appears to be a threshold function of two factors: (a) the ability to take another's perspective (Hoffman, 1976, 1981a; Krebs & Russell, 1981) and (b) a perspective-taking set, in which we try to imagine how the person in need is affected by his or her situation (Stotland, 1969). A perspective-taking set may

be induced (a) by prior experience in similar situations, (b) by instructions, or (c) by a feeling of attachment to the other. In the psychological research laboratory, perspective taking has often been induced by instructions (e.g., Coke, Batson, & McDavis, 1978; Stotland, 1969; Toi & Batson, 1982). Also in the natural stream of behavior, perspective taking may be the result of instructions, including self-instructions (e.g., "I should walk a mile in his moccasins"). Often, however, it is the result either of prior similar experience ("I know just how you must feel") or of attachment.

Our attachment to certain other people seems quite important in social relations, yet remains poorly understood. It is not possible for us even to specify the defining features of what we mean by attachment, only to provide some general clues and examples.

First, some general clues. When attachment exists—for example, a mother's attachment to her child—there is a general feeling of heartache and sadness at separation, and a feeling of warmth and joy at reuniting (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969). Cognitive processes such as perceived similarity and attractiveness can contribute to attachment, but its basic character seems to be affective and evaluative. Some attachments—such as the parent's attachment to the child and the child's to the parent—probably have a genetic base (see Batson, Darley, & Coke, 1978; Bowlby, 1969; Hoffman, 1981b). Yet this genetic base is clearly subject to broad cognitive generalization, as in cases of adoption (Batson, 1983). Like the related but more general concepts of attitude and sentiment, attachment involves a relatively enduring predisposition or orientation toward the other person.

The prototype for what we mean by attachment is the parent's attachment to the child (not the child's attachment to the parent, as in Bowlby's, 1969, work). But attachments can also occur in a variety of other interpersonal relationships, including other family relationships, friendships, love relationships, relationships with pets, and so on. Typically, attachments are based on personal contact. They may also be based on cognitive generalization from personal contact, as seems to be the case with similarity-based attachments. Attachments tend to be reciprocated, though they need not be. They may vary in strength. Attachments based on cognitive generalization are usually weaker than those based on personal contact. Extended intimate contact and dependency relations seem to produce particularly strong attachments. Other names for the phenomenon we are calling attachment might be *love*, *caring*, *feeling close*, *we-feeling*, or *bonding*.

We are suggesting a priority of affect and sentiment over cognitive unit formation (Heider, 1958) in the experience of attachment or "we-feeling." This view stands in opposition to the view proposed by Hornstein in his discussion of promotive social relationships (1976, 1982). For Hornstein, cognitions take priority: "Dichotomizing the world into groups of 'we' and 'they' reflects a process of social categorization" (1982, p. 235); Hornstein placed "a theoretical premium on cognitive factors" (1982, p. 244). We are placing the theoretical premium on affective factors, suggesting that cognitive categorization (e.g., perceived similarity) has the power to produce we-feeling because it extends emotional and evaluative ties originally developed through personal contact.

2. *Internal response of empathic emotion.* The arousal of empathic emotion is affected by attachment in two ways.

First, the stronger the attachment to the person in need, the greater the likelihood of adopting that person's perspective. And, as already discussed, adopting the needy person's perspective seems to be a necessary precondition for arousal of empathic emotion. Second, strength of attachment can affect the magnitude of empathic emotion. If the perceiver adopts the perspective of a person in need, then the magnitude of empathic emotion is proposed to be a function of two factors: (a) magnitude of the perceived need and (b) strength of the attachment. Thus, the arrows of influence at the beginning of Path 3 represent two types of functions. Some represent threshold functions: Perception of the other as in need and perspective taking are both necessary for empathy to occur at all. Others represent continuous functions: Magnitude of the other's need and strength of attachment (not included in Figure 1) combine to determine magnitude of the empathic emotion.

At least two different types of vicarious emotion appear to be evoked by perceiving someone in need (Batson, Duncan, Ackerman, Buckley, & Birch, 1981; Batson et al., 1983; Hoffman, 1975, 1976). One, personal distress, has already been discussed. It includes feeling anxious, upset, disturbed, distressed, perturbed, and the like, and is assumed to evoke Path 2 egoistic motivation to have the distress reduced. The other, empathy, remains to be discussed. It includes feeling sympathetic, compassionate, warm, softhearted, tender, and the like, and according to the empathy-altruism hypothesis, it evokes Path 3 altruistic motivation.

Let us be explicit about how we are using the term *empathy*. This term was apparently coined by Titchener in 1909 to translate the German *Einfühlung*, which was used by Lipps in a perceptual context to refer to the process of intuiting one's way into an object or event to "see" it from the inside (see Wispé, 1968, 1986, 1987). By the 1950s, empathy had taken on a more cognitive meaning in clinical discussions: It referred to understanding accurately and dispassionately the client's point of view concerning his or her situation (Dymond, 1949; Hogan, 1969). Used in this way, empathy is often treated as synonymous with role taking or perspective taking (Borke, 1971; Krebs & Russell, 1981; Underwood & Moore, 1982).

About 1960, empathy was given a less cognitive and more emotional meaning, especially when used by developmental and social psychologists. Empathy has been defined emotionally in at least three different ways: (a) as feeling any vicarious emotion, (b) as feeling the same emotion that another person is feeling, or (c) as feeling a vicarious emotion that is congruent with but not necessarily identical to the emotion of another (Batson & Coke, 1981; Eisenberg & Strayer, 1987; Krebs, 1975; Stotland, 1969). When empathy is used in one of these ways, then adopting the needy person's point of view (i.e., perspective taking) is usually considered a prerequisite for feeling empathy, but not the same as empathy (Coke et al., 1978).

Since the late 1970s, empathy has been defined in an even more specific emotional sense. It has been used to refer to one particular set of congruent vicarious emotions, those that are more other-focused than self-focused, including feelings of sympathy, compassion, tenderness, and the like (Batson et al., 1981, 1983; Coke et al., 1978; Toi & Batson, 1982). Defined in this way, empathy is distinct from personal distress evoked by perceiving someone in need, but it is indistinguishable from what many philosophers and early psy-

chologists called sympathy (Smith, Darwin, Spencer, James), compassion (Hume, Smith), pity (Aquinas, Hume, Smith), or tenderness (McDougall).

There have been several recent attempts by psychologists to resurrect the term *sympathy* (Eisenberg & Strayer, 1987; Hoffman, 1975; Lenrow, 1965; Wispé, 1986, 1987). But it and other classic terms such as *compassion*, *pity*, and *tenderness* have largely disappeared from the vocabulary of modern research psychology. They seem to have been victims of the "flight from tenderness" described by Allport (1968). With its latest definition, empathy enables research psychologists once again to speak about our sympathetic, compassionate, tender feelings for another, especially another in distress. It is to refer to these feelings that we use the term.

3. *Altruistic motivation.* Empathy felt for someone who is suffering will likely be an unpleasant, aversive emotion (people may, however, be pleased that they are experiencing it). Even though empathy is aversive, the empathy-altruism hypothesis claims that it—unlike personal distress—does not evoke Path 2 egoistic motivation to have this aversive arousal reduced. Rather, this hypothesis claims that empathy evokes altruistic motivation directed toward the ultimate goal of reducing the needy person's suffering.

According to the empathy-altruism hypothesis, the magnitude of the altruistic motivation evoked by empathy is a direct function of magnitude of the empathic emotion. The more empathy felt for a person in need, the more motivation to have that need reduced.

Reducing the need of a person for whom one feels empathy is likely to enable the helper to gain social and self-rewards (Path 1a), avoid social and self-punishments (Path 1b), and reduce feelings of personal distress (Path 2). But the empathy-altruism hypothesis claims that feeling empathy for the person in need evokes motivation to help in which these benefits to self are not the ultimate goal of helping; they are unintended consequences.

Moreover, even though it is hypothesized that the motivation evoked by empathy is altruistic, the three-path model highlights the fact that the instigating conditions that arouse empathic emotion and, as a result, Path 3 altruistic motivation are also likely to arouse Path 1 and Path 2 egoistic motives. These egoistic and altruistic motives are assumed to be distinct, but to the extent that the goals of these motives are compatible, their magnitudes should sum.

4. *Hedonic calculus.* If the magnitude of the altruistic motivation or the summed egoistic and altruistic motivation is above some minimal threshold, then the individual will proceed to consider behavioral means of reaching the goal(s). As on the egoistic paths, the altruistically motivated individual will perform a hedonic calculus before acting, seeking the least costly means to the goal.

To suggest a hedonic calculus for altruistic motivation may seem contradictory, because the goal of this calculus is clearly egoistic: to reach the desired altruistic goal while incurring minimal costs to self. Yet, the existence of this egoistic goal does not mean that the motivation to have the other's need reduced has now become egoistic; it only means that the impulse to act on this altruistic motivation is likely to evoke an egoistic motive as well. The existence of the latter motive need not negate or contaminate the former, although it may well complicate the relationship between the altruistic motive and behavior.

The magnitude of the benefit in the hedonic calculus is, as

on the egoistic paths, a function of the magnitude of the motivational force, because the benefit is to reach the goal(s). The magnitude of the cost is the sum of the various costs associated with the behavior, including physical harm or risk, discomfort, exertion, mental strain, time, monetary expense, and so on.

The hedonic calculus on Path 3 should be restricted to consideration of helping or having someone else help; no consideration should be given to escaping, because escape is not a viable behavioral means of reaching the altruistic goal of increasing the other's welfare. Moreover, the helping must be effective if this goal is to be reached. Finally, having someone else help effectively should be as viable, but no more viable, a means of reaching the altruistic goal as is being the helper oneself.

5. *Behavioral response.* The altruistically motivated individual will help if (a) helping is possible, (b) the relative benefit of helping is perceived to be positive, and (c) the relative benefit of helping is perceived to be more positive than the relative benefit of having someone else help (assuming someone else is available to help). If the relative benefit is negative, that is, if the cost of helping exceeds the benefit, then the individual will not help. In this case, the force of the altruistic motivation should slowly dissipate. Alternatively, the individual could deny the person's need, break attachment by derogating the needy individual (Lerner, 1970), or change other factors leading to adoption of that person's perspective. These responses do not enable the individual to reach the altruistic goal; instead, they eliminate the empathic emotion and, hence, the altruistic motivation.

Testing the Empathy-Altruism Hypothesis

Testing the empathy-altruism hypothesis requires systematic variation so that some individuals can obtain one or more of the possible egoistic goals only by helping, whereas others can obtain these goals without having to endure the costs of helping. If this variation eliminates the previously observed empathy-helping relationship (Coke et al., 1978; Eisenberg & Miller, 1987; Krebs, 1975), then we have evidence that the self-benefit—not benefit to the person in need—is the ultimate goal of the prosocial motivation associated with empathy. If this variation does not eliminate the empathy-helping relationship, then we have evidence that the self-benefit is not the ultimate goal, suggesting that the motivation may be altruistic.

Using this strategy, over 20 experiments have been conducted during the past decade to test one or more proposed egoistic explanations of the empathy-helping relationship. For each experiment, the egoistic explanation(s) predicted a different pattern of results than did the empathy-altruism hypothesis. Results of these experiments have consistently patterned as predicted by the empathy-altruism hypothesis, providing support for a pluralistic model of prosocial motivation that includes altruism as well as egoism. We can only sketch the logic and results of some key experiments here; detailed presentation of procedures and results can be found in the cited research articles.

Aversive-Arousal Reduction

The most frequently proposed egoistic explanation of the empathy-helping relationship is aversive-arousal reduction.

Martin Hoffman (1981a) put it in a nutshell: "Empathic distress is unpleasant and helping the victim is usually the best way to get rid of the source" (p. 52). According to this explanation, empathically aroused individuals help in order to benefit themselves by reducing their empathic arousal; benefiting the victim is simply a means to this self-serving end.

To test this aversive-arousal reduction explanation against the empathy-altruism hypothesis, experiments have been conducted varying the ease of escaping further exposure to a suffering victim without helping. Because empathic arousal is a result of witnessing the victim's suffering, either terminating this suffering by helping or terminating exposure to it by escaping can serve to reduce the arousal. Escape is not, however, a viable means of reaching the altruistic goal of relieving the victim's distress; it does nothing to promote that end.

The difference in viability of escape as a means to these two goals produces competing predictions in an Escape (Easy-Difficult) \times Empathy (Low-High) design. Among individuals experiencing low empathy for the person in need, both the aversive-arousal reduction explanation and the empathy-altruism hypothesis predict more helping when escape is difficult than when it is easy. This is because both assume that the motivation of individuals feeling low empathy is egoistic. Among individuals feeling high empathy, the aversive-arousal reduction explanation predicts a similar (perhaps even greater) difference; it assumes that empathically induced motivation is also egoistic. The empathy-altruism hypothesis predicts high helping even when escape is easy among individuals feeling high empathy. Across the four cells of an Escape \times Empathy design, then, the aversive-arousal reduction explanation predicts less helping under easy escape in each empathy condition; the empathy-altruism hypothesis predicts a 1-versus-3 pattern: relatively low helping in the easy-escape/low-empathy cell and high helping in the other three cells.

Over a half-dozen experiments have now been run using this Escape \times Empathy design (Batson et al., 1981, 1983; Toi & Batson, 1982; for reviews, see Batson, 1987, in press). In a typical procedure, participants observe a "worker" whom they believe is reacting badly to a series of uncomfortable electric shocks; they are then given a chance to help the worker by taking the shocks themselves. To manipulate ease of escape, some participants are informed that if they do not help, they will continue observing the worker take the shocks (difficult escape); others are informed that they will observe no more (easy escape). Empathy has been both manipulated and measured.

Results of these experiments have consistently conformed to the pattern predicted by the empathy-altruism hypothesis, not to the pattern predicted by the aversive-arousal reduction explanation. Only among individuals experiencing a predominance of personal distress rather than empathy (i.e., feeling relatively anxious, upset, distressed, and the like) does the chance for easy escape reduce helping. In spite of the popularity of the aversive-arousal reduction explanation of the motivation to help evoked by empathy, a popularity that continues in many social psychology textbooks, this explanation appears to be wrong.

Empathy-Specific Punishment

The second egoistic explanation of the motivation to help evoked by empathy claims that we have learned through

socialization that an additional obligation to help, and so additional guilt and shame for failure to help, are attendant on feeling empathy for someone in need. As a result, when we feel empathy, we are faced with impending social or self-censure above and beyond any general punishment associated with not helping. We say to ourselves, "What will others think—or what will I think of myself—if I don't help when I feel like this?" and we help out of an egoistic desire to avoid these empathy-specific punishments. Eighteenth-century British social philosopher Bernard Mandeville summarized this explanation prosaically:

There is no merit in saving an innocent babe ready to drop into the fire: The action is neither good nor bad, and what benefit soever the infant received, we only obliged our selves; for to have seen it fall, and not strove to hinder it, would have caused a pain, which self-preservation compelled us to prevent. (1714/1732, p. 42)

In recent years, two versions of this empathy-specific punishment explanation have been proposed. One is based on social evaluation and anticipated social punishments; the other, on self-evaluation and self-punishment.

Socially administered empathy-specific punishments. According to the first version, empathy leads to increased helping only when empathic individuals anticipate negative social evaluation for failing to act in a manner consistent with their expressed feelings of concern (Archer, 1984; Archer, Diaz-Loving, Gollwitzer, Davis, & Foushee, 1981). To test this version, Fultz, Batson, Fortenbach, McCarthy, and Varney (1986) confronted female undergraduates with an opportunity to help a lonely young woman for whom they had been induced to feel either low or high empathy. To manipulate anticipation of negative social evaluation, the research participants were led to believe either that both the experimenter and the young woman would know if they decided not to help (high social evaluation) or that no one else would know (low social evaluation). The latter was accomplished by having information about the need and about the opportunity to help come from two independent and unrelated sources.

Fultz et al. (1986) reasoned that, if social-evaluative circumstances are a necessary condition for the empathy-helping relationship, then under low social evaluation the empathy-helping relationship should disappear. On the other hand, if empathy evokes altruistic motivation to reduce the victim's need, then even under low social evaluation the empathy-helping relationship should remain.

In each of two studies, Fultz et al. (1986) found an empathy-helping relationship even under low social evaluation. Results of these two studies cast serious doubt on the first version of the empathy-specific punishment explanation. They instead support the empathy-altruism hypothesis.

Self-administered empathy-specific punishments. The second version of the empathy-specific punishment hypothesis claims that empathically aroused individuals help not to avoid social censure but to avoid self-administered punishments and negative self-evaluation (Batson, 1987; Dovidio, 1984; Schaller & Cialdini, 1988). Testing this version is more difficult than testing the previous one, for it

requires a procedure in which potential helpers can escape anticipated self-punishment (guilt, shame) for not helping.

What might allow individuals to escape expectations of self-punishment? If these expectations have been internalized to the degree that they are automatic and invariant across all helping situations, then nothing will allow escape. But it seems unlikely that many people, if any, have internalized expectations of self-punishment to such a degree. Even those who feel guilty whenever they do wrong are likely to be sensitive to situational cues in determining when they have done wrong. And, given the discomfort produced by self-recrimination, it seems likely that most people will not automatically self-punish. They will, if possible, overlook their failures to do good, doling out self-punishments only in situations in which their failures are salient and inescapable. If there is leeway in interpreting a failure to help as unjustified and hence deserving of self-punishment, then the expectation of self-punishment can be reduced by providing individuals with information that justifies not helping. Accordingly, Batson et al. (1988) tested this version of the empathy-specific punishment hypothesis by using three different techniques to provide justification for not helping, one in each of three different studies.

First, justification was provided by information about the inaction of other potential helpers. Batson et al. (1988, Study 2) reasoned that, if most other people have said no to a request for help, then a potential helper should feel more justified in saying no as well. Employing this logic, individuals feeling either low or high empathy for a young woman in need were given an opportunity to pledge time to help her. Information on the pledge form about the responses of previously asked peers indicated that either 5 of 7 had pledged (low justification for not helping) or 2 of 7 had pledged (high justification). The young woman's plight was such that others' responses did not affect her need for help.

The empathy-specific punishment explanation predicted more helping in the low-justification condition than in the high by individuals feeling high empathy. In contrast, the empathy-altruism hypothesis predicted high helping by these individuals in both justification conditions. The latter pattern was found. Only among individuals feeling low empathy were those in the high-justification condition less likely to help than those in the low-justification condition.

Second, justification was provided by attributional ambiguity. Batson et al. (1988, Study 3) reasoned that, if individuals can attribute a decision not to help to helping-irrelevant features of the decision, then they should be less likely to anticipate social or self-punishment. Employing this logic, individuals feeling either low or high empathy for a peer whom they thought was about to receive electric shocks were given a chance to work on either or both of two task options. For each correct response on option A, they would receive one raffle ticket for a \$30 prize for themselves; for each correct response on option B, they would reduce by one the shocks the peer was to receive. Information about helping-irrelevant attributes of the two task options indicated either that the two tasks were quite similar and neither was preferred (low justification for not helping) or that one task involved numbers, the other letters, and most people preferred to work on the numbers (letters), whichever was paired with the nonhelpful option A (high justification). Results of this study once again patterned as predicted by the

empathy-altruism hypothesis, not as predicted by the empathy-specific punishment explanation.

Third, justification for not helping was provided by information about difficulty of the performance standard on a qualifying task. Batson et al. (1988, Study 4) reasoned that, if potential helpers know that even if they volunteer to help they will only be allowed to if they meet the performance standard on a qualifying task, then performance on the qualifying task can provide a behavioral measure of motivation to reduce the victim's suffering (which requires qualifying) or to avoid social and self-punishment (which does not). This should be true, however, only if poor performance can be justified, which it can if the performance standard on the qualifying task is so difficult that most people fail. If the standard is this difficult, a person cannot be blamed for not qualifying—either by self or others. In this case, individuals motivated to avoid self-punishment should either (a) decline to help because of the low probability of qualifying or (b) offer to help but not try very hard on the qualifying task, ensuring that they do not qualify. Bluntly put, they should take a dive.

Employing this logic, individuals feeling either low or high empathy for a peer whom they believed was reacting badly to a series of uncomfortable electric shocks were given a chance to help the peer by taking the remaining shocks themselves. But even if they volunteered, they had to meet the performance standard on a qualifying task to be eligible to help. Information about the difficulty of the standard indicated either that most college students qualify (low justification for not helping) or most do not (high justification).

Once again, helping responses patterned as predicted by the empathy-altruism hypothesis. The performance measure also patterned as predicted by the empathy-altruism hypothesis: Performance of low-empathy individuals was lower when the qualifying standard was difficult than when it was easy; performance of high-empathy individuals was higher when the qualifying standard was difficult. This cross-over interaction suggested that the motivation of low-empathy individuals was at least in part directed toward avoiding self-punishment; whereas, contrary to the empathy-specific punishment explanation, the motivation of high-empathy individuals was not. The motivation of high-empathy individuals appeared to be directed toward the altruistic goal of relieving the other's suffering.

In all three of these studies, then, results conformed to the pattern predicted by the empathy-altruism hypothesis, not to the pattern predicted by the empathy-specific punishment explanation. Results of these studies, as well as highly consistent results from other studies using different techniques to test the empathy-specific punishment explanation, converge to suggest that this second egoistic explanation of the empathy-helping relationship is also wrong.

Empathy-Specific Reward

The final major egoistic alternative to the empathy-altruism hypothesis, the empathy-specific reward explanation, claims we learn through socialization that special rewards in the form of praise, honor, and pride are attendant on helping a person for whom we feel empathy. As a result, when we feel empathy, we think of these rewards and help out of an egoistic desire to gain them.

Two versions of this empathy-specific reward explanation have been proposed. The first claims that we learn through prior reinforcement that, after helping those for whom we feel empathy, we can expect a special mood-enhancing pat on the back—either from others in the form of praise or from ourselves in the form of enhanced self-image. When we feel empathy, we think of this good feeling and are egoistically motivated to obtain it (see Thompson, Cowan, & Rosenhan, 1980; also see Batson, 1987; Meindl & Lerner, 1983).

In contrast to this first version, the second claims that the social or self-reward is not empathy specific, but rather the need for this reward is: Feeling empathy for a person who is suffering involves a state of temporary sadness, which can be relieved by any mood-enhancing experience, including obtaining the social or self-rewards that accompany helping. According to this second version, the egoistic desire for negative-state relief accounts for the increased helping of empathically aroused individuals (Cialdini et al., 1987; Schaller & Cialdini, 1988).

Social and self-rewards associated with empathy-induced helping. Batson et al. (1988) reported two studies designed to test the first version of the empathy-specific reward explanation. In the first, they assessed the effect on mood of depriving high-empathy individuals of the opportunity to help. Because social and self-rewards for helping are given only to the helper, the empathy-specific reward explanation predicts that empathically aroused individuals will feel worse if deprived of an anticipated opportunity to help (assuming that helping is low-cost and effective). In contrast, the empathy-altruism hypothesis predicts that empathically aroused individuals will feel as good when the victim's need is relieved by other means as when it is relieved by their own action.

The empathy-altruism hypothesis also predicts that when empathically aroused individuals are deprived of the opportunity to help, they will feel better when the victim's need is relieved by other means than when it is not relieved. The empathy-specific reward explanation predicts no difference in mood across these two conditions, because neither relief of the need nor lack of relief per se is relevant to the egoistic goal of obtaining mood-enhancing rewards for helping.

To test these predictions, Batson et al. (1988, Study 1) led individuals feeling either low or high empathy for a person about to receive electric shocks to believe that they would have a no-cost, no-risk opportunity to help the person avoid the shocks. Later, half the individuals learned that by chance they would not have the opportunity to help after all. Both among the individuals who would have the opportunity to help and those who would not, half learned that the person was still scheduled to receive the shocks, and half learned that by chance this threat had been removed. These variations produced an Empathy (Low–High) \times Prior Relief of Victim's Need (No Prior Relief–Prior Relief) \times Perform Helping Task (Perform–Not Perform) design. The major dependent measure in this study was change in self-reported mood after participants were or were not allowed to help.

Results revealed the pattern of mood change for individuals reporting high empathy that was predicted by the empathy-altruism hypothesis, not the pattern predicted by the empathy-specific reward explanation. There was more positive mood change in the three cells in which the victim's

need was relieved than in the one in which it was not; prior relief of the victim's need did not lead to the negative mood change predicted by the empathy-specific reward explanation. Moreover, the observed pattern was specific to high-empathy individuals; it did not approach statistical reliability among low-empathy individuals.

In another study, Batson et al. (1988, Study 5) examined the goal-relevant cognitions associated with empathy-induced helping. They reasoned that, if the goal of high-empathy helpers is to obtain social and self-rewards such as praise, honor, and esteem—as the empathy-specific reward explanation claims—then reward-relevant cognitions should be associated with their helping. If, however, the goal is to relieve the victim's need—as the empathy-altruism hypothesis claims—then victim-relevant cognitions should be associated with their helping. Batson et al. (1988) tested these predictions using a Stroop (1938) procedure, which detects the salience of cognitions by assessing the time taken to name the color of the ink in which words expressing these cognitions are printed. Stroop found that color-naming latency for a word increases when respondents are thinking about cognitions related to that word.

Employing a Stroop procedure, research participants were induced to feel either low or high empathy for a young woman who had lost her parents in a tragic automobile accident and was struggling to avoid having to put her younger brother and sister up for adoption. While deciding whether to volunteer to help her, participants performed a reaction-time task (ostensibly to provide a baseline control for assessing cognitive reactions to the broadcast tape that informed them of the young woman's need). On this task, they named as quickly as possible the color of the ink in which a series of words appeared. Some words were reward-relevant (*NICE, PROUD, HONOR, PRAISE*), some were victim-relevant (*LOSS, NEEDY, ADOPT, TRAGIC*), and some were neutral (*PAIR, CLEAN, EXTRA, SMOOTH*). To provide a further test of the empathy-specific punishment hypothesis, some words were also punishment-relevant (*DUTY, GUILT, SHAME, OBLIGE*).

The only positive association in the high-empathy condition was between helping and color-naming latency for the victim-relevant words. This was the association predicted by the empathy-altruism hypothesis. There was no evidence that the helping of high-empathy individuals was positively associated with thoughts of either rewards or punishments. Once again, the first version of the empathy-specific reward explanation (and the empathy-specific punishment explanation) failed to find support.

A variant on Version 1 of the empathy-specific reward explanation: Empathic joy. K. D. Smith, Keating, and Stotland (1989) recently suggested an interesting variant on the first version of the empathy-specific reward explanation. They proposed that, rather than helping to gain the rewards of being seen by others or seeing oneself as a helpful person, empathically aroused individuals help to gain the good feeling of sharing vicariously in the joy of the needy individual's relief:

It is proposed that the prospect of empathic joy, conveyed by feedback from the help recipient, is essential to the special tendency of empathic witnesses to

help. . . . The empathically concerned witness to the distress of others helps in order to be happy. (K. D. Smith et al., 1989, p. 641)

Unlike other forms of Version 1 of the empathy-specific reward explanation, the rewards at issue here are contingent on the victim's need being relieved, not on the empathically aroused individual being the agent of this relief. The agent might be another person, time (which, it is said, heals all wounds), or chance, and the empathic joy would be as sweet. Therefore, none of the evidence against the first version of the empathy-specific reward explanation reviewed thus far counts against the empathic-joy hypothesis. All the preceding evidence deals with rewards from helping, not from seeing the victim's need relieved.

To test their empathic-joy hypothesis against the empathy-altruism hypothesis, K. D. Smith et al. (1989) manipulated expectation of feedback concerning the effect of one's helping efforts. They reasoned that, if the empathic-joy hypothesis is correct, then the empathy-helping relationship should be found only when prospective helpers anticipate receiving feedback on the effect of their helping efforts: "When feedback is assured, the empathic person can expect to move from a state of empathic concern to empathic joy by helping, and we would expect the familiar positive relation between empathic concern and helping" (K. D. Smith et al., 1989, pp. 642-643). But, when prospective helpers do not anticipate receiving feedback, "helping is a goal-irrelevant response, and we would expect empathic witnesses to refuse to help as often as their nonempathic counterparts" (p. 643). If, on the other hand, the empathy-altruism hypothesis is correct, then the empathy-helping relationship should be found even under no-feedback conditions; helping can still relieve the victim's need.

In a 2 (Feedback: Yes-No) \times 2 (Empathy: Low-High) design, K. D. Smith et al. (1989) found an empathy-helping relationship in both feedback conditions. This was the pattern predicted by the empathy-altruism hypothesis, not the empathic-joy hypothesis. But a failed manipulation check led K. D. Smith et al. to disregard these results and focus instead on an internal analysis in which low- and high-empathy conditions were created by a median split on a measure of self-reported empathy minus self-reported distress. In this internal analysis, there was no relationship between relative empathy and helping in the no-feedback condition, as predicted by the empathic-joy hypothesis. There are, however, reasons to doubt the validity of a self-report difference measure in the particular research procedure used by K. D. Smith et al. (see Batson, in press). Therefore, the results of this experiment seem to support the empathy-altruism hypothesis more than the empathic-joy hypothesis, although we do not place much confidence in this conclusion. A more appropriate conclusion is that the empathic-joy hypothesis needs more testing.

Batson et al. (in press) recently completed two studies designed to test the relative merits of the empathic-joy and empathy-altruism hypotheses using a different technique. In these studies, research participants were presented with a person in need but were not given a chance to help the person. Instead, they were given a choice of whether to hear a second interview with this person or an interview with someone else. Before choosing, participants received information (ostensibly from experts) on the likelihood that the needy

person's situation would be substantially improved by the time of the second interview. Some participants were told the likelihood was only 20%, some were told it was 50%, and some were told it was 80%. Perspective-taking instructions were used to manipulate empathy, producing a 2 (Empathy: Low-High) \times 3 (Likelihood of Improvement: 20%, 50%, 80%) factorial design.

Batson et al. (in press) reasoned that, if empathically aroused individuals are egoistically motivated to gain empathic joy, then their desire to hear from the needy person again should be a function of the likelihood of obtaining empathic joy. Accordingly, in the high-empathy condition, there should be a linear relation between the likelihood that the needy person would be better and choice to hear from this person again: Few participants should make this choice in the 20% condition, more should make this choice in the 50% condition, and the most should make this choice in the 80% condition. In the low-empathy condition, there should be little incentive to choose to hear from the needy person again, regardless of the likelihood of improvement.

If, on the other hand, empathically aroused individuals are altruistically concerned for the needy person's welfare, then, overall, there should be a main effect for empathy. Participants in the high-empathy condition, because they are more concerned about the person's welfare, should have more interest in hearing about how this person is doing than participants in the low-empathy condition. In the high-empathy condition, there should not be the linear increase predicted by the empathic-joy hypothesis.

Batson et al. (in press) tested these competing predictions in two different experiments. Results of each patterned as predicted by the empathy-altruism hypothesis, not the empathic-joy hypothesis. Participants in the high-empathy condition were more likely than participants in the low-empathy condition to choose to hear from the person in need again. In neither experiment was there evidence of the linear trend in the high-empathy condition predicted by the empathic-joy hypothesis. Instead, there was marginally significant evidence of this linear trend in the low-empathy condition, suggesting that low-empathy individuals rather than high-empathy individuals may be sensitive to the vicarious pleasure of witnessing a needy individual's improvement.

Considering the results of these two experiments and the results of the K. D. Smith et al. (1989) experiment, there is now considerable evidence that empathically aroused individuals are not motivated simply to gain the pleasure of sharing vicariously in the needy person's relief. The empathic-joy hypothesis, like the earlier form of the first version of the empathy-specific reward explanation, does not appear capable of accounting for the empathy-helping relationship.

Negative-state relief and the empathy-helping relationship. Turning to the second version of the empathy-specific reward explanation, Cialdini and his colleagues (Cialdini et al., 1987; Schaller & Cialdini, 1988) have argued that it is the need for the rewards of helping, not the rewards themselves, that is empathy specific. They claim that individuals who experience empathy when witnessing another person's suffering are in a negative affective state—one of temporary sadness or sorrow—and these individuals help in order to relieve this negative state: "Because helping contains a rewarding component for most normally socialized

adults . . . , it can be used instrumentally to restore mood" (Cialdini et al., 1987, p. 750).

There has been some disagreement about the truth of this explanation of the motivation to help evoked by empathy. Cialdini and his colleagues have claimed support (Cialdini et al., 1987; Schaller & Cialdini, 1988); Schroeder and his colleagues (Schroeder, Dovidio, Sibicky, Matthews, & Allen, 1988) have not. Part of the disagreement seems to be due to the inadvertent presence of a distraction confound in the original Cialdini et al. (1987) experiments.

To avoid this confound, the technique that seems best suited to testing the negative-state relief explanation against the empathy-altruism hypothesis is to confront individuals with an opportunity to help and lead some to believe that even if they do not help, they can anticipate a cost-free mood-enhancing experience. When empathy is high, the negative-state relief explanation predicts that anticipating such an experience will eliminate the empathy-helping relationship; the empathy-altruism hypothesis predicts that it will not.

Schaller and Cialdini (1988) conducted an experiment using this design and claimed support for the negative-state relief explanation. They admitted, however, that the evidence was weak. On a scaled measure of helping (amount of help offered), their results were more consistent with the negative-state relief explanation but were not statistically reliable except using an uncorrected post hoc analysis including time of semester as a variable. On a dichotomous measure (proportion of participants helping), their results were at least as consistent with the empathy-altruism hypothesis.

In an independent effort to assess the relative merits of the negative-state relief explanation and the empathy-altruism hypothesis, Batson et al. (1989) conducted two studies using an Anticipated Mood Enhancement \times Empathy design much like the one used by Schaller and Cialdini (1988). In the first study, participants were given an opportunity to help a same-sex peer by taking electric shocks in his or her stead; in the second, participants could volunteer to spend time helping a young woman struggling to support her young brother and sister after the tragic death of her parents. Results of these two studies both conformed to the pattern predicted by the empathy-altruism hypothesis, not the pattern predicted by the negative-state relief explanation.

Some disagreement remains about the status of the negative-state relief version of the empathy-specific reward explanation as an alternative to the empathy-altruism hypothesis. Cialdini and his colleagues have claimed support for the negative-state relief version, although they have noted ambiguities and inconsistencies in their evidence. Other researchers using procedures less subject to interpretational ambiguity have found support for the empathy-altruism hypothesis, not the negative-state relief explanation. We believe that an objective assessment of the evidence to date suggests that the negative-state relief explanation of the empathy-helping relationship is probably wrong, but of course we may be the ones who are wrong.

A Tentative Conclusion

If this second version of the third major egoistic explanation is wrong, then the case for the empathy-altruism hypothesis seems very strong indeed. In the words of Sherlock Holmes, "When you have eliminated the impossible, whatever remains, *however improbable*, must be the truth." It

seems impossible for any of the three major egoistic explanations of the motivation to help evoked by empathy to account for the research evidence we have reviewed. So what remains? The empathy-altruism hypothesis. Pending new evidence or a plausible new egoistic explanation of the existing evidence, this hypothesis must, we believe, be tentatively accepted as true.

Implications

The growing evidence that empathic emotion evokes altruistic motivation has broad theoretical implications. Universal egoism—the assumption that all human behavior is ultimately directed toward self-benefit—has long dominated not only psychology but other social and behavioral sciences as well (see Bolles, 1975; Campbell, 1975; Hoffman, 1981b; Margolis, 1982; Wallach & Wallach, 1983). If under certain specifiable circumstances individuals act, at least in part, with an ultimate goal of increasing the welfare of another, then the assumption of universal egoism must be replaced by a more complex view of prosocial motivation that allows for altruism as well as egoism.

Parsimony Lost: A Pluralism of Prosocial Motives

This more complex view of prosocial motives lacks the tidy parsimony of a view that assumes all motivation is egoistic. But the empirical evidence from tests of the empathy-altruism hypothesis impels us with some wistfulness to turn our back on the Eden of simplicity provided by the monism of universal egoism. We find ourselves cast out into a more complicated and challenging world of multiple prosocial motives.

How large is the world of prosocial motives outside this Garden of egoism? At present, standing just outside the gate, we have no idea. But it is worth noting that once parsimony is lost the possibility arises that much territory previously assumed to lie within the Garden may not.

When we help others it is typically not at all clear what our motives are. A mother rushes across the playground to comfort her child, who has fallen and skinned a knee. A middle-aged man tearfully decides to acquiesce to the quiet plea of his cancer-riddled mother and have the life-supports turned off. You sit up all night comforting a friend who has lost a job, or a relationship. We contribute money to help famine victims in Africa, or to save whales. In each of these cases, and virtually any other case in which we help, we can think of possible egoistic motives to explain why we helped. There are some cases of helping where the motivation is clearly egoistic; there are a large number of cases where the motivation might be egoistic, altruistic, both, or neither.

Prior to the evidence for the empathy-altruism hypothesis, the most reasonable inference was as follows: All cases can be explained in terms of egoistic motives, and only some can be explained in terms of altruistic motives. Under these circumstances, parsimony clearly favors an exclusively egoistic explanation, and the prudent inference is to accept universal egoism.

If, however, the empirical tests of the empathy-altruism hypothesis lead us to conclude that empathic emotion evokes altruistic motivation, that there are some cases of helping in which the motivation is at least in part clearly altruistic and

not egoistic, then the situation is changed. Parsimony becomes irrelevant. There is no longer any logical reason to favor an egoistic interpretation of those cases in which the motivation might be egoistic, altruistic, both, or neither. Prudence no longer gives egoism exclusive credit for the large area of overlap of the two explanations. This area becomes disputed territory, with both egoism and altruism having legitimate claims. Clearly, we have a lot of rethinking—and researching—to do concerning the scope of egoistic and altruistic prosocial motives.

How Social Are We?

The shift to a pluralistic model of prosocial motivation also requires considerable rethinking of our underlying assumptions about human nature and human potential. For, if altruistic motivation exists, then we humans are more social than we have thought. Other people can be more to us than sources of information, stimulation, and reward—of facilitation and inhibition—as we each seek our own welfare. We have the potential to care about their welfare as well. Adam Smith (1759/1853) seems to have been right when he said long ago:

How selfish soever man may be supposed, there are evidently some principles in his nature, which interest him in the fortune of others, and render their happiness necessary to him, though he derives nothing from it except the pleasure of seeing it. Of this kind is pity or compassion, the emotion we feel for the misery of others, when we either see it, or are made to conceive it in a very lively manner. (L.i.1.1)

Our egoistic assumptions have precluded even considering the possibility that genuine concern for another's welfare is within the human repertoire, so this possibility has been ignored. The evidence supporting the empathy-altruism hypothesis suggests the presence of a valuable untapped natural resource in our efforts to build a more caring, humane society.

The Emotion–Motivation Link

Finally, the research on the empathy-altruism relationship has broad implications for the more general issue of the relationship between emotion and motivation. Psychologists have long been interested in the social perception and expression of emotion (e.g., Ekman, 1982; Izard, 1977) and in attribution and misattribution of emotion (e.g., Schachter, 1964). More recently, interest has grown in the motivational antecedents and consequences of emotion, with various theorists suggesting that many (if not all) emotions arise in the context of goal-directed action and that specific emotions can be differentiated by (a) the goal sought and (b) one's position in relation to that goal (e.g., Abelson, 1983; Batson, 1990a; Mandler, 1984; Roseman, 1984; for an earlier, similar view, see Heider, 1958, chaps. 4 & 5).

Careful study of the empathy–altruism relationship has the potential to contribute to our more general understanding of the emotion–motivation link in two ways: First, it provides a case in which the motivational consequences of emotional response are well-documented, and procedures for study are relatively well-developed. As such, it is a promis-

ing context for testing recent ideas about the nature and function of emotion and the emotion–motivation link. Second, empathy is a social or vicarious emotion; it is evoked in one person, *P*, by *P*'s perception of another person's, *O*'s, situation. Most of the recent functional analyses of emotion give little attention to social emotions of this kind (unlike the classic analyses by Darwin, 1872; McDougall, 1908). Yet, clearly, vicarious emotions are an important part of our emotional repertoire, a part that has special significance in social relations. Analysis of the empathy–altruism relationship from the perspective of contemporary functional analyses of emotion should help broaden current theorizing about emotion and the emotion–motivation relationship—or reveal limits of the current theorizing.

These issues highlight just a few of the challenges and opportunities that lie before us as we leave the Eden of egoism, driven out by the evidence for empathy-induced altruism. With wandering steps and slow, we find ourselves entering a less secure but more exciting world of a pluralism of prosocial motivation. And as was true for Milton's couple, it is causing us to rethink what it means to be human.

Notes

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