Is Gratitude a Moral Affect?

Michael E. McCullough
National Institute for Healthcare Research and
Southern Methodist University

Shelley D. Kilpatrick National Institute for Healthcare Research

Robert A. Emmons University of California, Davis David B. Larson
National Institute for Healthcare Research

Gratitude is conceptualized as a moral affect that is analogous to other moral emotions such as empathy and guilt. Gratitude has 3 functions that can be conceptualized as morally relevant: (a) a moral barometer function (i.e., it is a response to the perception that one has been the beneficiary of another person's moral actions); (b) a moral motive function (i.e., it motivates the grateful person to behave prosocially toward the benefactor and other people); and (c) a moral reinforcer function (i.e., when expressed, it encourages benefactors to behave morally in the future). The personality and social factors that are associated with gratitude are also consistent with a conceptualization of gratitude as an affect that is relevant to people's cognitions and behaviors in the moral domain.

Gratitude is not only the greatest of virtues, but the parent of all the others.

-Cicero

Ingratitude . . . is an abomination.

-Seneca

Across nearly all cultures and through most of human history, gratitude has been treated as both a normal and normative aspect of personality and social life. Gratitude is a highly prized human disposition in Christian, Jewish, Muslim, Buddhist, and Hindu thought. The quotation from Cicero above suggests that people who are grateful for benefits they have received are expected to act in ways that would be beneficial to themselves, other individuals, and perhaps society at large. Conversely, as Seneca's quote exemplifies, ingratitude has been considered a moral failure. After considering classical reflections on ingratitude such as those of Seneca, Amato (1982) concluded that "ingratitude is a universally powerful accusation" (p. 27).

During the first seven decades of the 20th century, several scholars in the social sciences dealt with gratitude in passing (Baumgarten-Tramer, 1936, 1938; Bergler, 1945, 1950; Gouldner, 1960; Heider, 1958; Schwartz, 1967; Simmel, 1950). In addition, the psychoanalytic theorizing of Melanie Klein led to several

Michael E. McCullough, National Institute for Healthcare Research, Rockville, Maryland, and Department of Psychology, Southern Methodist University; Shelley D. Kilpatrick and David B. Larson, National Institute for Healthcare Research; Robert A. Emmons, Department of Psychology, University of California, Davis.

Preparation of this article was generously supported by a grant from the John Templeton Foundation, Radnor, Pennsylvania. We thank Roy Baumeister and Ed Diener for previous comments on this article.

Correspondence regarding this article should be addressed to Michael E. McCullough, Department of Psychology, Post Office Box 750442, Southern Methodist University, Dallas, Texas 75275-0442. Electronic mail may be sent to mikem@mail.smu.edu.

articles and theoretical treatments related to gratitude, its development, and applications to the clinical setting (e.g., Klein, 1957a, 1957b, 1966; see also Heilbrunn, 1972). However, empirical social scientists (including psychologists, sociologists, and anthropologists) recently have tended to neglect gratitude as a topic worthy of intensive and sustained empirical study (Graham & Weiner, 1986; Weiner, 1985; see also Lutz & White, 1986; Shott, 1979).

Indeed, most psychologists with interests in social behavior, personality, and emotion—the very scholars into whose domain the concept of gratitude would likely reside—have been ambivalent about gratitude. Gratitude is scarcely mentioned or examined as an affective reaction to receiving help from other people (e.g., Fisher, Nadler, & Whitcher-Alagna, 1982; Shell & Eisenberg, 1992), even though gratitude would likely be a prototypical emotion elicited in such circumstances. Moreover, terms like gratitude, grateful, and thankful rarely appear in the emotion lexicon (Shaver, 1987) or as prototypical emotion words (Fehr & Russell, 1984).

Several theorists have acknowledged this oversight. For example, although Lazarus and Lazarus (1994) discussed gratitude in some detail, only 3 years earlier Lazarus (1991) wrote, "I have ignored gratitude—although with some misgiving, because in some instances, it may be a strong emotional state" (p. 265). In his structural theory of emotion, de Rivera (1977) did not address gratitude, even though he included gratitude among 80 common emotion words in a later chapter (de Rivera, 1984). Oatley (1992) also did not discuss gratitude but considered it among the social emotions in later work (Oatley & Jenkins, 1996).

In large measure, the relative neglect of gratitude could be a symptom of psychology's general tendency to neglect many positive emotions (Averill, 1980; Fredrickson, 1998). In addition, psychology might neglect gratitude because reducing gratitude to other psychological phenomena such as indebtedness (Greenberg, 1980) seems more parsimonious. Moreover, understanding gratitude as a manifestation of politeness (e.g., Brown & Levinson, 1987; Gleason, Perlmann, & Greif, 1984) might encourage schol-

ars to view gratitude as a sociological phenomenon (i.e., emerging from society and its structures) rather than as a psychological one.

Even so, gratitude probably deserves greater empirical and theoretical attention for three reasons. First, it is not an entirely uncommon emotion, even though it is experienced somewhat less frequently than are other positive emotions (Sommers & Kosmitzki, 1988). In a sample of 105 American and 40 German adults, approximately 10% and 30% respectively indicated that they experienced the emotion of gratitude "regularly and often." Furthermore, approximately 20% and 50% respectively rated gratitude as a useful and constructive emotion.

Second, although gratitude is experienced and expressed differently around the world (Appadurai, 1989; Ho, 1983; Ide, 1998; Kumatoridani, 1999; Okamoto, 1992; Siddiqi, 1989; Sommers & Kosmitzki, 1988; Streng, 1989; Unno, 1989), people in most cultures appear to experience gratitude and have developed linguistic and cultural devices for expressing gratitude. Thus, studying gratitude and its functions in individual and social contexts might help to elucidate cross-cultural similarities and differences in emotional experience and expression.

Third, gratitude might be highly adaptive (G. G. Gallup, 1998). The prototypical situation that elicits gratitude is one in which a person realizes that he or she has obtained a good outcome as a result of the actions of another person. People who regularly feel grateful to others might be more likely to feel loved and cared for by others. Furthermore, Emmons and Crumpler (2000) reported that an experimental gratitude intervention was successful in enhancing people's short-term moods and physical functioning. Thus, like many of the other positive emotions (Fredrickson, 1998; Fredrickson & Levenson, 1998), gratitude might be relevant for a more complete understanding of well-being, coping, and adjustment.

In this article, we review the existing theoretical and empirical work on gratitude to propose a conceptualization of gratitude as a moral affect. The essential message of the present review can be summarized in the following manner: Gratitude is both a response to moral behavior and a motivator of moral behavior. People ("beneficiaries") respond with gratitude when other people ("benefactors") behave in a way that promotes the beneficiaries' well-being. Beneficiaries also act in ways that promote the well-being of others when they themselves have been made grateful. Finally, expressing gratitude to one's benefactors stimulates the benefactors to behave prosocially in the future.

In developing this conceptualization, we review the existing theoretical treatments of gratitude. Then we present our conceptualization of gratitude as a moral affect by situating gratitude among the other moral affects such as empathy, sympathy, guilt, and shame (e.g., Batson, 1991; Baumeister, Stillwell, & Heatherton, 1994; Hoffman, 1982; Tangney, 1991). Finally, we review the existing empirical evidence relevant to this conceptualization and propose some potentially promising directions for future research.

Gratitude in Previous Psychological Theory

Over the past 200 years, several scholars and theorists have theorized about the psychological nature of gratitude. These various theoretical treatments merge well in a framework that conceptualizes gratitude as a moral affect.

Adam Smith and His Legacy

In The Theory of Moral Sentiments (1790/1976), Adam Smith presented one of the first in-depth psychological treatments of gratitude. Deeply influenced by Christian writers and the Roman Stoics, Smith maintained that human emotions were put in place to provide individuals with guidance for moral judgment and moral behavior. In this context, Smith proposed gratitude to be one of the most basic social emotions—on par with emotions such as resentment and affection. According to Smith, gratitude is one of the primary motivators of benevolent behavior toward a benefactor: "The sentiment which most immediately and directly prompts us to reward, is gratitude" (p. 68). When a benefactor has brought good fortune on a beneficiary, gratitude prompts the beneficiary to find ways to acknowledge the gift. Indeed, gratitude is a finely tuned affect. Until the beneficiary has been instrumental in promoting the well-being of someone whom he or she recognizes as a benefactor, the beneficiary continues to feel a sense of gratitude toward the benefactor.

Smith (1790/1976) proposed that feelings of gratitude are crucial for maintaining a society that is to be based on goodwill. (Smith was quick to observe that society can also function on purely utilitarian grounds without economies of gratitude, but he clearly seemed to believe that societies of gratitude were more attractive than societies of pure utility.) In this sense, Smith seemed to consider gratitude to be an important emotional resource for promoting social stability.

Smith (1790/1976) also posited that three psychological factors govern most experiences and expressions of gratitude. Beneficiaries are most likely to feel and express gratitude toward benefactors who (a) intend to benefit them, (b) succeed in benefiting them, and (c) are capable of sympathizing with the beneficiary's grateful feelings. In Smith's thinking, these three social-psychological factors are important but not utterly essential. People often feel grateful to someone who has tried to benefit them, even if they were unsuccessful. People can also feel grateful toward someone who has not been the author of a benefit that they received, but merely the messenger of good news. Moreover, Smith acknowledged that it is possible to feel grateful to an animal that has provided a person with companionship or service, even though the animal probably has limited powers to apprehend feelings of gratitude. Finally, Smith suggested that exceptionally warmhearted people are likely to feel grateful toward others who have intended to benefit them, simply taking comfort in the fact that their would-be benefactors cared enough to try to provide a benefit. However, feelings of gratitude would be most powerful and unambiguous when another human being intended to benefit the beneficiary and succeeded in doing so.

Refinements to Smith's Formulation

Several 20th century theorists elaborated on Smith's (1790/1976) initial formulation. Both Simmel (1950) and Gouldner (1960) conceptualized gratitude as a force for helping people maintain their reciprocity obligations. Simmel (1950) referred to gratitude as "the moral memory of mankind" (p. 388). Because formal social structures such as the law and social contracts are insufficient to regulate and insure reciprocity in all forms of human interaction, Simmel argued, people are socialized to experience

gratitude as a reminder of their reciprocity obligations. Simmel argued that gratitude is also one of the moral emotions that links people to society as a whole. People often experience gratitude for people whom they have not even met (e.g., artists, politicians, or poets) but whom they perceive to have performed some benefit for them. Simmel also enlarged the notion of "benefits" that can facilitate gratitude to include intangible goods of a psychological or emotional nature (e.g., love, support, and inspiration). Most important, Simmel noted that gratitude can also be a response to the recognition that some gifts (e.g., the gift of life) cannot be returned. In such situations, gratitude motivates permanent faithfulness and obligation.

Schwartz (1967), who drew heavily from Simmel (1950), likened gratitude to "inertia," a force that causes social relationships to maintain a prosocial orientation (just as grudges and resentments help to maintain a negative orientation in relationships that have been troubled by interpersonal transgressions). In line with the functionalist interpretations of Smith (1790/1976), Simmel (1950), Gouldner (1960), and Schwartz (1967), Trivers (1971) speculated on the evolutionary functions of gratitude. Trivers viewed gratitude as an evolutionary adaptation that regulates people's responses to altruistic acts. Furthermore, Trivers held that grateful emotions were especially sensitive to the cost–benefit ratio of the altruistic act, with relatively costly benefits eliciting relatively high levels of gratitude.

Cognitive-Emotion Theories of Gratitude

The cognitive-emotion theorists of the second half of the 20th century refined the insights of Adam Smith (1790/1976) and others by placing them in the context of theories that specified cognitions as causes of people's emotional responses to events in their social worlds. Consistent with his general theory linking cognitive processes with social behavior, Heider (1958) argued that people feel grateful when they have received a benefit from someone who (the beneficiaries believe) intended to benefit them. Like Smith, Heider posited that the perceived intentionality of the benefit was the most important factor in determining whether someone felt grateful after receiving a benefit. Heider also predicted that situations in which a benefactor calls on the beneficiary's duty to be grateful would produce the opposite effect. Moreover, Heider noted that beneficiaries prefer to have their gratitude attributed to internal motivations, rather than extrinsic ones (e.g., duty or social norm).

Other cognitive—emotion theorists such as Weiner (1985) typically have posited that emotions exist in two types: outcome-dependent and attribution-dependent. Emotions such as anger and happiness emerge almost exclusively as a function of the valence of the outcomes people experience. When people experience favorable outcomes, they feel happy; when they experience unfavorable emotions, they feel unhappy. On the other hand, attribution-dependent emotions result from specific patterns of attributions that people make about the causes of the favorable and unfavorable circumstances they encounter. Gratitude, according to Weiner, is an attribution-dependent emotion that results from attributing one's favorable circumstances to the actions or effort of another person.

Ortony, Clore, and Collins (1988) theorized that emotions are a product of a cognitive system (consisting of standards and attitudes) that shapes people's understandings of the events that occur

to them. In this framework, gratitude is conceptualized as a blend of admiration and joy that results when a beneficiary approves of a benefactor's actions (i.e., experiences admiration) and experiences the benefactor's actions to be personally favorable (i.e., experiences joy). Ortony et al. hypothesized that gratitude is determined by three aspects of how people represent an interpersonal event. First, gratitude is more likely when a benefactor's action is judged as praiseworthy. Second, gratitude is more likely when a benefactor's actions deviate from role-based expectations (i.e., the benefactor was not expected to behave in a benevolent way by virtue of his or her relationship to the beneficiary). Third, gratitude is more likely when the outcome of the benefactor's actions is judged as personally favorable.

Lazarus and Lazarus (1994) argued that gratitude is one of the "empathic emotions" whose roots lie in the capacity to empathize with others. A central aspect of their theory is the notion that each emotion is associated with a distinctive dramatic plot or "core relational theme" that helps people to interpret the events that happen to them and to assess their relevance for personal wellbeing. The core relational theme associated with gratitude is recognition or appreciation of an altruistic gift. According to Lazarus and Lazarus, people experience this core relational theme only when they empathize with the benefactor's expenditure of effort on the beneficiary's behalf.

Theoretical Integration: Gratitude as a Moral Affect

The various conceptualizations of gratitude reviewed above can be integrated in a theory of gratitude as a *moral affect*. By referring to gratitude as a moral affect, we are not proposing that emotions and expressions of gratitude themselves are moral, but rather, that gratitude typically results from and stimulates moral behavior, that is, behavior that is motivated out of concern for another person. Because of its specialized functions in the moral domain, we liken gratitude to other moral affects such as empathy, sympathy, guilt, and shame. We discuss these latter affects only briefly to provide context for our discussion of gratitude as a moral affect because excellent reviews of the research on these latter moral affects were published in recent years (e.g., Baumeister et al., 1994; Davis, 1994; Eisenberg & Miller, 1987).

Empathy and Sympathy: Emotional Responses to the Perceived Needs of Others

Empathy and sympathy are the moral affects that have been central to psychological understandings of moral behavior among developmental and social psychologists (e.g., Batson, 1991; Davis, 1994; Eisenberg & Miller, 1987; Hoffman, 1982). Empathy has been defined as the vicarious experience of another person's emotional state (e.g., Eisenberg et al., 1994) and as an emotional reaction characterized by feelings of compassion, tenderness, and sympathy (e.g., Batson, 1991). Eisenberg and colleagues (1994) are careful to distinguish *empathy* from *sympathy*, which they define as an emotional reaction involving concern and sorrow that is based on apprehending another person's emotional state or condition.

Among the many roles that empathy and sympathy appear to play in the moral domain, perhaps the most prominent is their role in promoting prosocial behavior. People who come to experience these emotions regarding a particular person in distress are (a) more likely to attempt to render aid to the person (see Batson, 1991, for review), (b) more likely to be lower in aggressive and antisocial behavior (e.g., Miller & Eisenberg, 1988), and (c) more willing to forgive individuals who have committed transgressions against them (McCullough et al., 1998; McCullough, Worthington, & Rachal, 1997).

Guilt: Emotional Response to Perceived Failures to Treat Others Morally

Guilt is an unpleasant emotional state associated with objections to one's own actions, inactions, or intentions. It is a form of psychological distress based on the possibility that one may be in the wrong, or at least, that other people might think so (Baumeister et al., 1994; Tangney, 1991).

Like empathy and sympathy, guilt is also a moral affect (Hoffman, 1990), but its functions in the moral domain differ from those of empathy and sympathy. Whereas empathy and sympathy can motivate prosocial behavior by causing people to identify with the needs of others, guilt motivates people to engage in reparative actions when they perceive that they have damaged another person's interests through their behavior (Tangney, Miller, Flicker, & Barlow, 1996). A variety of studies demonstrate that people feel guilt in response to failures to meet explicit or implied obligations to treat others fairly or morally (Baumeister, 1998; Baumeister, Stillwell, & Heatherton, 1995). Moreover, guilt seems to motivate a considerable amount of reparative action (e.g., Baumeister et al., 1994). Shame is a related but distinct moral emotion (Keltner & Buswell, 1996; Scheff, 1988; Tangney et al., 1996).

Gratitude: Emotional Response to Another Person's Moral Actions on One's Behalf

Gratitude, like empathy, sympathy, guilt, and shame, has a special place in the grammar of moral life. Whereas empathy and sympathy operate when people have the opportunity to respond to the plight of another person, and guilt and shame operate when people have not met moral standards or obligations, gratitude operates typically when people are the recipients of prosocial behavior.

Three Moral Functions of Gratitude

We posit that gratitude has three specific moral functions: a moral barometer function, a moral motive function, and (when people express their grateful emotions in words or actions) a moral reinforcer function. We describe each of these functions below.

Gratitude as Moral Barometer

A barometer is an instrument that indicates a change from a prior state. When the weather changes, for example, the readings on a barometer reflect this change. By referring to gratitude as a moral barometer, we mean that gratitude is an affective readout that is sensitive to a particular type of change in one's social relationships—the provision of a benefit by another moral agent that enhances one's well-being.

As a moral barometer, gratitude is dependent on social-cognitive input. In keeping with nearly every theorist since Smith (1790/1976), we posit that people are most likely to feel grateful when (a) they have received a particularly valuable benefit; (b) high effort and cost have been expended on their behalf; (c) the expenditure of effort on their behalf seems to have been intentional rather than accidental; and (d) the expenditure of effort on their behalf was gratuitous (i.e., was not determined by the existence of a role-based relationship between benefactor and beneficiary).

Gratitude can be elicited in many circumstances in which a person acts in a fashion that benefits another person's well-being, even if the net effects of that benefit do not comport well with perceivers' prototypes or trained ethicists' judgments of what is moral. To clarify this point, we distinguish between local and absolute perceptions of morality. For example, a merchant might be grateful for business from a new customer, which presumably would contribute to the merchant's well-being, even though shopping in a certain store would not be judged as having much moral valence in an absolute sense (e.g., by an impartial perceiver). If the merchant is selling illegal firearms to a known criminal, then an impartial perceiver might even conclude that the net effects of the transaction are patently immoral. Such judgments of absolute nonmorality or immorality, however, would not change the fact that from the merchant's local perspective, the purchaser's actions rendered a benefit to and promoted the well-being of the merchant. Moreover, depending on the supply of illegal firearms, the number of competitors, and the amount of effort the purchaser expended to purchase the gun, the transaction could possess many of the social-cognitive characteristics that would lead the merchant to feel grateful for the purchaser's business. Thus, we posit that the prototypical social events that elicit change in gratitude are at least moral in a local sense (they are perceived to augment the wellbeing of the recipient), even though they might not be moral in an absolute sense. Of course, other affects that are typically referred to as "moral" can lead to immoral consequences in an absolute sense (Batson, Klein, Highberger, & Shaw, 1995). We consider these nonmoral or immoral exceptions actually to be arguments for the robustness of the moral barometer function of gratitude.

Gratitude as Moral Motive

Not only is gratitude the prototypical affect that people experience when they perceive that someone has acted in the interest of their personal well-being, but the emotion of gratitude might also have motivational value, prompting grateful people to behave prosocially themselves. In this sense, gratitude could perhaps be one of the motivational mechanisms underlying reciprocal altruism (Trivers, 1971). In particular, we hypothesize that people made grateful by the actions of a benefactor are more likely to contribute to the welfare of the benefactor (or a third party) in the future. Moreover, we hypothesize that a person made grateful by the actions of a benefactor is also more likely to inhibit motivations to act destructively toward the benefactor.

These insights regarding gratitude are, to some extent, a restatement of Gouldner's (1960) norm of reciprocity, which he articulated in this fashion: "(1) people should help those who have helped them, and (2) people should not injure those who have helped them" (p. 171). The phenomenon of behavioral reciprocity has been analyzed in terms of many constructs, including the

motivation to reduce inequity (e.g., Walster, Berscheid, & Walster, 1973) and indebtedness (e.g., Greenberg, 1980; Greenberg & Westcott, 1983). Two other motivations that might prompt people to reciprocate benefits include utilitarian reciprocity and increased attraction (Greenberg, 1980).

However, the motivational effects of gratitude are probably distinct from those of other motivations such as indebtedness and inequity. Most people experience indebtedness as an unpleasant and aversive psychological state (Buunk, Doosje, Jans, & Hopstaken, 1993; Greenberg, Bar-Tal, Mowrey, & Steinberg, 1982). Greenberg et al. found that 92% of respondents indicated that they did not enjoy being "indebted" to other people. The focus of indebtedness is on (a) one's obligation to repay someone who has acted intentionally on one's behalf, (b) fear of being unable to repay, and (c) worries about how one might actually go about repaying. In contrast, gratitude is a pleasant emotion (Mayer, Salovey, Gomberg-Kaufman, & Blainey, 1991; Reisenzein, 1994). Gratitude is linked to positive psychological states such as contentment (Walker & Pitts, 1998), happiness, pride, and hope (Overwalle, Mervielde, & De Schuyter, 1995). In a recent survey of American teens and adults (G. H. Gallup, 1998), over 90% of respondents indicated that expressing gratitude helped them to feel "extremely happy" or "somewhat happy." Russell and Paris (1994) also found that children as young as 4 years of age recognize that gratitude is essentially a pleasant emotion. Indeed, given this important difference between gratitude and indebtedness, even Greenberg and Westcott (1983) relented from Greenberg's (1980) earlier position that gratitude and indebtedness were synonymous by stating that gratitude is one of the positive feelings emerging from indebtedness.

Thus, at least at a phenomenological level, people do not equate gratitude and indebtedness. Even so, our review demonstrates that data on the motivational aspects of gratitude still remain sparse, as are data that would allow one to determine whether gratitude is distinct from other motivations that might mediate the association between a benefactor's prosocial actions and a beneficiary's reciprocity behavior.

Expression of Gratitude as Moral Reinforcer

The final moral function of gratitude in our conceptualization is as a reinforcer of moral behavior. Expressing gratitude to someone for his or her prosocial actions produces greater effort on the part of the benefactor to behave morally in the future, thereby making gratitude a highly adaptive sentiment to express (G. G. Gallup, 1998). When a beneficiary expresses gratitude, either by saying "thank you" or providing some other acknowledgment of appreciation, the benefactor is reinforced for his or her benevolence. Thus, the benefactor becomes more likely to enact such benevolent behaviors in the future. Indeed, it is conceivable that some individuals are motivated to engage in prosocial behavior in part because they find expressions of gratitude and other types of social approval to be highly reinforcing (see Eisenberg, Miller, Shell, McNalley, & Shea, 1991). Conversely, ingratitude is hypothesized to be aversive for benefactors, leading them to experience anger, resentment, and reduced willingness to engage in prosocial behavior in future interactions.

In this context, it is worthwhile to distinguish among the affects and motivations that facilitate and inhibit behavioral displays of gratitude such as saying "thank you." We posit that such behavioral manifestations typically are motivated by feelings of gratitude, but they also can result from (a) a motivation to behave in a polite or socially desirable fashion and (b) a motivation to benefit one's own self-interest. We surmise that the motivations underlying people's expressions of gratitude are rarely pure. Instead, expressions of gratitude are probably motivated at times by feelings of genuine gratitude, at other times by the motivation to adhere to norms or self-interest, and at other times by an admixture of both types of motives. Therefore, it is prudent to exercise caution in inferring the motivations behind overt expressions of gratitude.

Personality Correlates of Gratitude

Theorists since Smith (1790/1976) have posited that some individuals—particularly those with greater personality dispositions toward prosocial behavior—would be more likely to experience and express gratitude than would others. In keeping with a conceptualization of gratitude as a moral affect, we hypothesize that people with grateful dispositions are higher in traits that fit people well for success in the interpersonal world—particularly in the moral domain.

Thus, we would expect people high in gratitude to be high in empathy and perspective taking (Lazarus & Lazarus, 1994). Invoking the Big Five taxonomy, we would also expect grateful people to be high in agreeableness and the facets thereof (including trust, straightforwardness, altruism, compliance, modesty, and tendermindedness; Costa & McCrae, 1992). Conversely, we would expect grateful people to be fairly low in traits such as narcissism that interfere with moral behavior and the maintenance of positive interpersonal relations.

Summary of the Moral Affect Theory of Gratitude

The upshot of our theorizing is that gratitude is, at its core, a moral affect on a par with other moral affects such as empathy, sympathy, guilt, and shame. As such, we predict that people experience gratitude most typically when they perceive that a benefactor has acted to promote their well-being. In this way gratitude can be likened to a moral barometer—a response to other people's generosity. Second, gratitude motivates beneficiaries to engage in prosocial behavior (thus, functioning as a moral motive). Third, when expressed to one's benefactors, gratitude motivates benefactors to behave more prosocially in the future (thereby serving as a moral reinforcer). Fourth, we posit that the capacity for gratitude is associated positively with other morally relevant traits such as empathy, perspective taking, and the facets of agreeableness; conversely, we posit that gratitude is related negatively to characteristics that deter moral behavior and positive relationships, such as narcissism.

Review of Empirical Findings

To examine how well our conceptualization of gratitude fits empirical data, we consulted four databases that cover thousands of journals in the social and medical sciences: (a) Medline (1966–99); (b) PsychInfo (1887–1999); (c) Sociofile (1970–98); and (d) Anthropological Index (1970–98). We searched for articles whose

abstracts included words that contained the roots "*grateful*," "*gratitude," "*thankful*," "*thank*," and "*appreciat*." We identified additional relevant studies from the reference sections of the retrieved articles. We also searched for unpublished studies by contacting colleagues and indicating our interests on an e-mail discussion group to which many personality and social psychologists subscribe.

Hypothesis 1: Gratitude as Moral Barometer

Below, we review the research evidence regarding our hypothesis that gratitude functions as a moral barometer. If the moral barometer hypothesis is correct, then the more one perceives that a benefactor has conferred a benefit with the goal of promoting the beneficiary's well-being, the more likely one is to feel grateful in response.

Gratitude Is a Function of the Perception of Intentional Benevolence

Research strongly supports the moral barometer hypothesis (Graham & Barker, 1990; Graham, Hudley, & Williams, 1992; Hegtvedt, 1990; Lane & Anderson, 1976; Okamoto, 1992; Okamoto & Robinson, 1997; Overwalle, Mervielde, & De Schuyter, 1995; Tesser, Gatewood, & Driver, 1968; Weiner, Russell, & Lerman, 1979; Zaleski, 1988). For example, Tesser et al. posited that three social—psychological factors determined the intensity of one's gratitude for a benefit: (a) the perceived intentionality of the benefit, (b) the relative cost of the benefit, and (c) the value of the benefit. Tesser and colleagues instructed 126 male and female participants to read three scenarios in which intentionality, cost, and value of a benefit were systematically manipulated across subjects. Respondents were asked to consider how much gratitude the beneficiary would likely experience under each combination of levels of intentionality, cost, and value.

Tesser et al. (1968) found main effects for intentionality, cost, and value. Respondents indicated that they would feel most grateful for a benefit that was (a) rendered intentionally, (b) costly to the benefactor, and (c) valuable to the recipient. Across three different scenarios, the linear combination of these three factors predicted 72–85% of the variance in respondents' expectations for the amount of gratitude that they might feel following the receipt of a benefit.

Zaleski's (1988) work also points to the association between attributing one's positive outcomes to the actions of others and gratitude. Zaleski instructed approximately 400 freshmen, sophomores, juniors, and seniors (approximately 100 in each group) to indicate (a) how much their success in graduating depended on factors outside themselves and (b) how grateful they anticipated they would feel when they actually did graduate. The correlation of external attributions for success and anticipated gratitude was r = .23 (with rs for the four student groups ranging from .14 to .34). Thus, people who expected to attribute their graduation to other agents anticipated that they would experience higher levels of gratitude upon graduating.

In another study, Weiner et al. (1979) asked 79 students to complete each of 12 tasks in which they were instructed to recall a real-life situation from their personal lives. The recall tasks conformed to a 2 (outcome: success vs. failure) \times 6 (cause: ability,

unstable effort, stable effort, personality, other people, and luck) within-subjects factorial design. After describing each real-life event in detail, respondents listed the emotions that accompanied the events. When asked to recall a success situation that was attributable to the effort of other people, 43% and 18% of respondents indicated that they had felt "gratitude" and "thankfulness" following the event. People who were asked to recall a success situation that was due to other causal factors were much less likely to indicate that they felt "gratitude" and "thankfulness" (percentages ranging from 0% to 14%). These results closely mirrored those of an earlier study that used a more controlled, but more contrived, vignette method (Weiner, Russell, & Lerman, 1978). Indeed, the results from this quasi-experiment involving real-life incidents are particularly important because many of the studies that are relevant to the moral barometer hypothesis have been based on people's responses to vignettes or hypothetical scenarios.

In a second experiment, Weiner et al. (1979) examined whether respondents could correctly identify the cause of another person's success if provided with a description of the emotions that the successful person experienced following the success. When respondents were provided with information that the successful person felt "appreciative, grateful, and modest," they tended to attribute the character's success to the effort of other people rather than to ability, effort, ease of task, or luck. Thus, it appears that people not only reliably experience gratitude when they experience a benefit that they believe to be caused by the effort of others; they also assume that grateful people's good fortune is due (at least in part) to the effort of others.

Even though behavioral expressions of gratitude do not indicate definitively that a person has experienced grateful emotions, research indicates that people also express gratitude as a function of the same basic social-psychological factors that influence the experience of grateful emotions. Okamoto (1992) conducted a questionnaire study in which he examined whether the cost of a benefit influenced the recipients' expression of gratitude. He found that the length of the gratitude expressions and the use of what he called apology-type expressions (e.g., "I'm sorry") were positively correlated with the amount of imposition that a benefit created on a benefactor. Thus, favors that required greater levels of effort on the part of the benefactor elicited more elaborate expressions of gratitude.

Okamoto and Robinson (1997) went on to examine the association between the cost of a favor and expressions of gratitude. They staged an experiment in which a confederate held the door for another student as they both passed through a doorway. In a low-imposition situation, the confederate was going in the same direction as was the participant and simply held the door open. In a moderate-imposition condition, the confederate was coming from the opposite direction from the participant and passed through the door first. In a high-imposition condition, the confederate came from the opposite direction from the participant and then allowed him or her to pass through the door first. As might be expected, people were most likely to express gratitude when the imposition on the confederate was highest. The expressions of gratitude also became substantially more formal (i.e., polite) as the level of imposition on the benefactor increased.

Okamoto and Robinson (1997) conducted a second study designed to clarify further the relationship between the cost of a benefit and expressed gratitude. They instructed a group of stu-

dents to read a set of six scenarios in which a benefactor provided a benefit to a beneficiary. In the scenarios, the researchers manipulated whether the benefit was designed to improve a situation for which (a) neither the benefactor nor the beneficiary was responsible (e.g., giving directions to a building on a university campus); (b) the benefactor was responsible (e.g., returning a borrowed item long after the agreed on repayment date); or (c) the beneficiary was responsible (e.g., picking up an item that the beneficiary had dropped on the ground). The researchers also manipulated whether conferring the benefit involved a large imposition or a small imposition on the part of the benefactor. Large-imposition benefits included favors such as bringing a bag to the bus stop that the receiver has left behind at the benefactor's home (a 5-min walk from the bus stop). Small-imposition benefits included favors such as picking up a ballpoint pen that the beneficiary had dropped.

As in Study 1, conferring benefits that involved large impositions on the part of the benefactor were substantially more likely to elicit expressions of gratitude. The main effect of imposition was qualified by an interaction of responsibility and imposition: The effect of large impositions on gratitude were weaker when the benefactor was, by conferring a benefit, ameliorating a bad situation that he or she created in the first place. Indeed, people expressed less gratitude in response to high-imposition benefactors who were improving a bad situation for which they were responsible than to high-imposition benefactors who were improving a situation for which either the beneficiary was responsible or for which neither the benefactor nor the beneficiary was responsible. Thus, although people generally are particularly grateful for receiving benefits that involve a large imposition, they are actually less grateful when the benefactor is responsible for the circumstances that created the need for the benefit.

Gratitude as Response to Benevolence From Unlikely Sources

In support of the moral barometer hypothesis, people experience greater amounts of gratitude toward benefactors from whom they would not expect benevolence. For example, people experience less gratitude for benefits rendered by someone who is close to them than by someone who is less close to them. Bar-Tal, Bar-Zohar, Greenberg, and Hermon (1977) instructed 100 participants to imagine themselves in a situation where they needed someone to drive them to an important event. They manipulated the closeness of the benefactor by indicating that the benefactor was a parent, a sibling, a friend, an acquaintance, or a stranger. People indicated that they would feel the least gratitude if the parent or sibling helped and the most gratitude if a friend, acquaintance, or stranger helped. In relationships in which people are obligated to help each other by virtue of communal ties (e.g., family relationships), receiving a benefit might be accompanied by less gratitude in part because providing benefits in such relationships is considered to be more obligatory or habitual in nature (e.g., Neuberg et al., 1997).

The relative status of the benefactor might also modify people's willingness to express gratitude. In the study of gratitude expressions discussed previously, Okamoto and Robinson (1997) manipulated the relative status of a benefactor by instructing respondents to write down what they would say in response to each scenario:

(a) if the benefactor were a close friend of the same gender (a same-status benefactor) and (b) if the benefactor were a male

professor with whom they were only slightly acquainted (an unequal-status benefactor). Okamoto and Robinson reported that people who had received a benefit from a high-status benefactor communicated their gratitude in more elaborate detail than did those who received the same benefit from an equal-status benefactor. These results mirror those of Becker and Smenner (1986), who found that preschoolers were more likely to thank an adult for a small gift than to thank another child for the same gift. Moreover, people appear to feel more grateful when they receive a benefit from a benefactor who has greater power than they do (Hegtvedt, 1990). If people typically expect greater benevolence from people of approximately equivalent social status, then benevolence from social superiors (e.g., teachers or professors) might be perceived as more deliberate, and thus, more moral, than benevolence rendered by a person of similar social status.¹

Qualifiers on the Moral Barometer Hypothesis

Although the empirical evidence tends to be strongly supportive of the moral barometer function of gratitude, studies suggest three qualifiers to the moral barometer hypothesis.

Gratitude and the perceived benevolence of nonhuman agents. People sometimes experience gratitude in response to good fortune that is not due to the action of other human beings (Moore, 1996; Veisson, 1999). In some situations, perceiving one's positive outcomes as related to factors such as luck, personality, effort, or ability (rather than the actions of another human being) can be associated with feelings of gratitude. For example, Graham and Barker (1990) conducted an experiment with 90 children between 4 and 12 years of age in which the children were instructed to infer how intensely a pupil who received a favorable evaluation on an in-class assignment would experience gratitude. One-half of the participants viewed a videotaped scenario involving a pupil who received help from the teacher on the assignment, whereas the other half viewed a scenario in which the pupil received no help. Both pupils performed equally well on the assignment. Although study participants inferred that the pupil who received help would experience significantly more gratitude (Ms = 4.0-6.4 on a 1-7 scale) than the pupil who did not receive help (Ms = 2.0-3.0 on a 1-7 scale), participants expected the pupil who did not receive help to experience at least some amount of gratitude. Similarly, Weiner et al. (1979) found that a small proportion of people who reported that their positive performance on an examination was

¹ An alternative explanation for the effects of benefactors' social status on beneficiaries' expressions of gratitude is that beneficiaries typically find it more difficult to reciprocate high-status benefactors. Because high-status individuals typically have access to greater resources and thus typically can confer benefits that are difficult for relatively low-status beneficiaries to reciprocate (e.g., adults typically have greater access to gifts than do children), expressing gratitude is particularly important as a sort of downpayment against the debt that the low-status beneficiary has incurred against the high-status benefactor. Furthermore, because people in positions of high status also tend to have greater resources for conferring benefits, expressing gratitude for benefits already received is an important device for increasing the likelihood that the high-status benefactor confers other such benefits in the future. Finally, high-status benefactors typically have more avenues for punishing the ungrateful beneficiary, making an expression of gratitude a potentially important deterrent of punishment.

due to luck or their own personality, ability, or effort experienced emotions of gratitude and thankfulness.

The realization that things could have ended up more negatively than they did also can elicit feelings of gratitude (Roseman, 1991; Teigen, 1997). Teigen conducted several studies to investigate the differences in the emotions generated by attributing favorable circumstances to luck, chance, or good fortune (e.g., "It was lucky that you were not hurt in that bicycle accident") and those generated by evaluating a favorable circumstance positively (e.g., "It was good that you were not hurt in that bicycle accident").

In one study, participants evaluated a series of statements in which a person appraised an outcome as having been either (a) good or bad (e.g., "It is good that you have a job") or (b) lucky or unlucky (e.g., "It is lucky that you have a job"). Participants were instructed to indicate the extent to which each statement implied (a) that the speaker was implicitly engaging in social comparison (e.g., comparing the "lucky" or "unlucky" person to another person). They were also instructed to indicate the extent to which each statement could be inferred as an expression of gratitude. Teigen (1997) found that statements indicating that a circumstance had been "lucky" or "unlucky" were interpreted as implicit social comparisons to a greater extent than were statements indicating that a circumstance had been personally "good" or "bad." In the case of first-person statements (i.e., when an individual was evaluating an event that had occurred to them personally, e.g., "It is lucky that I have a job"), statements indicating that a circumstance had been "lucky" were interpreted as expressing greater degrees of gratitude than did statements indicating that a circumstance had simply been "good."

Teigen (1997) also reported on an autobiographical narrative study of gratitude. Sixty participants wrote short descriptions of two occasions when they had felt grateful. For one story, they wrote about a time when they felt grateful to a specific person. For the other story, they described a time when they felt gratitude toward "fate," "existence," or "higher powers." After each story, participants completed items regarding the extent to which they (a) felt "lucky/fortunate," (b) felt "unlucky/unfortunate," (c) felt the event was pleasant, (d) had engaged in counterfactual thinking (i.e., believed that "something else could have happened"), and (e) felt that the counterfactual circumstance would have been pleasant.

Both the personal and impersonal gratitude experiences received very low "unluckiness" ratings and very high "luckiness" ratings. They were also rated as fairly pleasant, although the "pleasantness" ratings were significantly lower than the "luckiness" ratings. This was particularly true for the impersonal situations, which were rated as having been slightly less pleasant than were the personal situations. This effect appeared to be due to this: When people felt grateful toward an impersonal force, many had incurred bad circumstances (e.g., traffic accidents) that could have been considerably worse, and thus, turned out much better than expected. Moreover, the situations that elicited gratitude toward an impersonal force were "closer calls" than were the situations that elicited gratitude toward a person.

These studies show that people report feeling grateful when they believe that either an individual human being or an impersonal force has assisted them in obtaining a favorable outcome that could have been worse without that assistance. Field research with hurricane survivors suggests that feeling grateful is one of the main affective themes of people's experiences in the aftermath of the

hurricane (Coffman, 1996). Even so, it is appropriate to ask whether individuals in these cases are truly experiencing the emotion of gratitude. If the prototypical experience of gratitude indeed occurs when one has been the recipient of benevolence, how can gratitude occur when the perceived benefactor is nonhuman? To whom is one grateful in these circumstances? One possibility is that people attribute intentionality to nonhuman agents (e.g., God, luck) through anthropomorphization. If one holds even a weak belief that God, fortune, or luck might have been responsible for a positive outcome, it might be because one attributes some amount of causal power to these nonhuman agents. In such cases, the experience of gratitude would support the moral barometer hypothesis.

Another possibility is that people who claim to experience gratitude in response to the benevolence of nonmoral agents are actually experiencing relief, gladness, happiness, or some other pleasant affect but are mislabeling their affective state. What these affects have in common is that they are counterfactual emotions, determined by the ease of imagining alternative outcomes (Ortony, Clore, & Collins, 1988). One is relieved when an anticipated negative event is not realized. If one avoids the unpleasant event because of the beneficence of others, then gratitude is appropriate; otherwise it would seem to be the result of mislabeling. A third possibility is that experiences that elicit attribution-independent emotions such as happiness and relief activate other positive feelings, including attribution-dependent emotions such as gratitude or pride. Researchers to date have not plumbed this problem with sufficient depth, but may find on closer inspection that gratitude is still operative as a response to perceived moral behavior in many of these seemingly nonpersonal circumstances.

Developmental trends in the moral barometer function. Children come to understand gratitude over the course of several years of development (Baumgartner-Tramer, 1938; Gleason & Weintraub, 1976; Graham, 1988; P. L. Harris, Olthof, Meerum Terwogt, & Hardman, 1987; Preyer, 1933; Russell & Paris, 1994; Sowa, 1981). Specifically, gratitude does not appear to function reliably as a moral barometer until middle childhood. For example, Gleason and Weintraub (1976) found that few children (i.e., 21%) younger than 6 years of age expressed thanks to adults who gave them candy, whereas most children (i.e., more than 80%) age 10 years or older expressed gratitude in the same situation.

Graham's (1988) results also illustrate the developmental trend in the moral barometer function of gratitude. Graham presented three groups of children (ages 5/6, 8, and 10/11; ns = 34-46 for each group) with a scenario in which a child is chosen for a sports team by a team captain who was either (a) required or (b) not required to choose the child. Obviously, when the captain was required to choose the child, the child's favorable outcome was not, strictly speaking, due to the captain's effort.

Graham found that although children of all ages were able to discern whether the main character's favorable outcome (i.e., being selected for the team) was under the control of the captain, children in the youngest group (ages 5/6) reported that the main character would feel equally grateful toward the team captain regardless of whether the captain had chosen the main character voluntarily. In contrast, children in the older age groups (age 8 and ages 10/11) expected the main character to feel considerably more grateful to the captain when the captain's choice was voluntary rather than required. Among children in the 5/6 age group, the

correlation of beliefs about the extent to which the captain was in control of his choice and the amount of gratitude the main character would feel toward the captain was not reliably different from zero (r=.07, p>.05). For children in the 8- and 10/11-year-old groups, the link between beliefs about controllability and gratitude were much stronger (rs=.45 and .60, ps<.01 and .001, respectively). These data suggest that the link between attributions of responsibility for positive outcomes and gratitude probably solidifies between 7 and 8 years of age (see also Graham & Weiner, 1986, and Weiner & Graham, 1988, for reviews).

Sensitivity to social desirability cues. In accounting for their own triumphs and successes, people are much more likely to express gratitude or acknowledge the contributions of other people if they know that their accounts for their successes will be made public. Conversely, in accounting for successes in ways that people know will remain private, they are less likely to thank others or acknowledge the assistance of others. Baumeister and Ilko (1995) assigned students to write about an occasion in the previous 2 years when they succeeded at something important to them. Half of respondents were instructed to put their names on their written accounts and were told that a group discussion would ensue in which they would be asked to share their story aloud. In a second condition, participants were instructed not to sign their written accounts, and they were not led to expect any public discussion of their stories.

Baumeister and Ilko (1995) found that nearly twice as many participants thanked or acknowledged the help of others in accounting for their successes (i.e., 47% for acknowledging direct help; 60% for acknowledging emotional support) when they expected to share their account publicly as did those who did not expect to share their account publicly (19% for acknowledging direct help; 35% for acknowledging emotional support). Thus, public expressions of gratitude might, at least in part, be more lavish than private expressions or experiences of gratitude because people are socially expected to share credit for their successes. Giving thanks might be one means of discharging this obligation. It is also possible that people are more likely to express gratitude publicly than privately because public expressions are potentially so much better for the benefactor's standing with other people than are private expressions.

Evaluation of the Moral Barometer Hypothesis

The empirical evidence strongly supports the hypothesis that gratitude is a moral barometer—an emotional response to having received benefits from a person who rendered such benefits intentionally. Because these data come from many research teams using a variety of experimental and correlational methods, we can have some confidence in their robustness. Typically, grateful emotions and behaviors result from the perception that another human being has acted to promote one's well-being. Expressions of gratitude can be caused by other factors also (Baumeister & Ilko, 1995). Gratitude is intensified by increased value and cost of the benefit, the intentionality with which the benefit is rendered, and the extent to which the benevolence would have been expected on the basis of preexisting relational obligations (e.g., relationship closeness or status equality). The linkage between receiving a benefit rendered intentionally and gratitude appears to develop around 7 or 8 years of age. Prior to age 7, children are likely to feel gratitude simply as a result of having received some sort of positive benefit, regardless of the level of intentionality or the benefactor's motives.

In a related vein, people apparently experience gratitude in a variety of circumstances in which they received a positive outcome for which another human being was *not* responsible. In such circumstances, it appears that beneficiaries perceive nonhuman causal agents—whether God, fate, or some other force possessing intentionality—to have been responsible for conferring the benefit. The experience of gratitude absent the inference that another human being was responsible for the benefit could be the focus for interesting research in the future.

Hypothesis 2: Gratitude as Moral Motive

The second hypothesis proceeding from the moral affect theory of gratitude is that gratitude is a moral motive, capable of energizing moral (i.e., prosocial) behavior and inhibiting immoral behavior. We found three studies that were relevant to the moral motive hypothesis.

Gratitude as a Motivator of Prosocial Behavior

Two studies (Graham, 1988; Peterson & Stewart, 1996) were relevant to the first corollary of the moral motive hypothesis, that is, that people who have been made grateful by a benefit are more likely to behave prosocially toward the benefactor or other people in ensuing interactions. Peterson and Stewart examined the psychological variables associated with psychosocial generativity among older adult women from a longitudinal sample of graduates from Radcliffe College. Generativity is an Ericksonian construct (e.g., Erickson, 1950) that encompasses the motivations to nurture, care for, and contribute to the welfare of other people and society. Concerns with generativity typically become most salient in middle adulthood.

Peterson and Stewart (1996) developed a projective measure of generativity motivation by rescoring the women's responses to the Thematic Apperception Test (Murray, 1938) from 1991. During an assessment that took place 17 years earlier (during young adulthood), the Radcliffe women had completed a checklist of people who had influenced their lives. Peterson and Stewart recast responses to this item into measures of the number of (a) mentors, (b) parents, and (c) spouses or significant others who had significantly influenced participants' lives during young adulthood.

Peterson and Stewart (1996) correlated the measure of generativity motivation at midlife with the number of people whom respondents had cited as key influences in their lives during young adulthood. As predicted, generativity at midlife was positively correlated with the number of mentors reported as key life influences during young adulthood (.39) but was not significantly correlated with the number of parents (.09) or significant others (.16) reported as key life influences. In other words, women who were most cognizant of having been influenced by mentors were considerably more motivated to be generative in midlife—17 years later. These findings can be interpreted as evidence that people who are aware that they have benefited from the benevolence of other people are more likely to respond with greater motivation to care for others later in their own lives. Gratitude is one possible affective mediator of this link (and one that Peterson and Stewart mentioned in passing). Whether gratitude was in fact the affect that

mediated the observed link between the recognition of having benefited from the benevolence of mentors and generativity motivation could only be inferred and is by no means the only possible mediator of the mentoring-generativity connection.

A second study provides more direct evidence for the moral motive hypothesis. Graham (1988) studied children's expected responses to being selected for a sports team (described previously), and she found that the extent to which respondents expected a child to feel grateful toward a team captain for choosing him or her was correlated positively with the extent to which they expected the child to reciprocate by giving the captain a gift. The correlation between expected gratitude and likelihood of giving the captain a gift became stronger with age (rs = .34, .56, and .72 for 5/6-, 8-, and 10/11-year-olds, respectively).

Gratitude as an Inhibitor of Destructive Interpersonal Behavior

We found one study (Baron, 1984) that was relevant to the second corollary of the moral motive hypothesis (i.e., that feeling grateful inhibits people from engaging in destructive interpersonal behavior). In Baron's study, undergraduate students were paired with confederates in a task in which they were instructed to simulate a conflict about a work-related matter. Confederates were trained to provide persuasive arguments that allowed them to disagree cogently with participants' views regardless of their content. During a break in the experiment, the confederate engaged in one of four conditions. In the control condition, the confederate simply sat quietly during the break. In a gift condition (presumed to elicit gratitude), the confederate offered the participant a piece of candy. In the sympathy condition, the confederate attempted to explain that if he had seemed "uptight" during the first part of the simulation, it was because of school-related stress. Finally, in the humor condition, the confederate showed the participant several amusing cartoons.

Participants in the three experimental conditions (i.e., gift, sympathy, and humor) reported more positive moods following the experiment than did participants in the control condition (however, the gift condition was only marginally different from the control condition). Participants in the three experimental conditions reported liking the confederate more than did participants in the control condition and also rated the confederate as more pleasant. Finally, participants in the gift condition and the humor condition reported that they would be more likely to use collaboration to resolve conflict in the future than did participants in the control condition.

These data indicate that the three experimental conditions enhanced positive mood and seemed to facilitate positive resolutions to organizational conflict. What is *not* clear, however, is whether the gift condition's effects on enhancing participants' perceptions of the confederate (i.e., liking him and viewing him as pleasant) specifically were mediated by feelings of gratitude. The effects of all three experimental conditions could be evidence for the general effect of positive mood on helping behavior (Carlson, Charlin, & Miller, 1988). Thus, although the conclusion that inducing gratitude helps to inhibit destructive organizational conflict is consistent with the data, the assumption that the gift-giving condition elicited feelings of gratitude was not formally tested.

Evaluation of the Moral Motive Hypothesis

To date, few researchers have used rigorous empirical methods to examine empirically whether gratitude can motivate moral behavior. Instead, research on reactions to aid and reciprocity—which would seem relevant areas for addressing the motivational value of gratitude—have been dominated by the assumption that the key motive for moral behavior in such situations is inequity or indebtedness (see Greenberg & Westcott, 1983; Shapiro, 1984). Experimental manipulations and longitudinal studies that would permit researchers to examine whether the link between receiving a benefit from a benefactor and the beneficiary's reciprocal behavior is mediated by the beneficiary's gratitude would be particularly valuable. Differentiating the unique effects of gratitude as a moral motive from the general effects of positive mood on helping behavior (Carlson et al., 1988) also would be informative.

Hypothesis 3: Gratitude as Moral Reinforcer

The third hypothesis proceeding from the moral affect theory of gratitude is that expressions of gratitude are moral reinforcers. Qualitative researchers have noted that expressions of gratitude can reinforce actions as diverse as volunteering to care for people living with HIV/AIDS (Bennett, Ross, & Sunderland, 1996) and kidney donation (Bernstein & Simmons, 1974). Conversely, people evaluate ungrateful individuals unfavorably (Stein, 1989). These observational studies suggest that people might find expressions of gratitude to be reinforcing. Indeed, some people might engage in prosocial behavior partially in hopes of eliciting gratitude from the beneficiary. Moreover, it seems that benefactors typically find expressions of ingratitude to be quite aversive.

Experimental data corroborate these qualitative observations. Benefactors who are thanked for their efforts in rendering benefits to a beneficiary are willing to give more and work harder on behalf of others than are benefactors who have not been thanked for their prior efforts. R. D. Clark (1975); Goldman, Seever, and Seever (1982); and Moss and Page (1972) all found that adults who were thanked for helping a confederate by giving the confederate directions were much more likely to help another confederate in the near future (e.g., a person who dropped his or her books in the street) than were benefactors who were rebuked for giving help to the first confederate (but see M. B. Harris, 1972, for failure to replicate). Moreover, participants who were thanked for helping a confederate by accepting electric shocks for the confederate continued to receive shocks for the confederate at a higher rate than were participants who were not thanked initially (McGovern, Ditzian, & Taylor, 1975).

Applied researchers also have found that expressions of gratitude can reinforce moral behavior. Clark, Northrop, and Barkshire (1988) attempted to increase the frequency with which case managers paid visits to adolescent clients in a residential treatment program. During a 20-week baseline observation period, 43% of the adolescents were visited weekly by their case managers. After the observation period, the residential units began to send thankyou letters to case managers after they visited their clients. During the 20-week period during which the residential units sent thankyou notes, nearly 80% of clients were visited by their case managers each week. During a 10-week reversal period (during which no thank-you letters were sent following visits), the rates of weekly

visitation dropped back to roughly their initial levels (i.e., approximately 50% of clients were visited weekly).

Other field experiments indicate that the reinforcement effects of gratitude expressions extend into the economic arena also. Restaurant bills on which the server writes "thank you" produce tips that are as much as 11% higher (Rind & Bordia, 1995) than do bills without an expression of gratitude. Including thank-you notes in mail surveys typically increases response rates (Maheux, Legault, & Lambert, 1989). In another study (Carey, Clicque, Leighton, & Milton, 1976), active customers of a single jewelry store who received a telephone call to thank them for their business spent more in the store during the next month than did customers who did not receive such a call. It is interesting that the customers who were called to be thanked also spent more than customers who received a call both to thank them for their business and to announce that the store would be having a 20% off sale during the next 2 months. Although an impartial observer might question whether leaving a larger tip for a server or shopping in a certain store has any moral relevance, the recipient of such benevolent behavior would judge such actions as contributing to his or her well-being. As a result, from a local perspective such actions would have moral overtones.

Just as expressions of gratitude appear to be reinforcing for benefactors, ingratitude typically is experienced as quite aversive. Suls, Witenberg, and Gutkin (1981) instructed 151 students from Grades 1, 3, and 5, as well as college students, to read four vignettes in which a protagonist either was or was not helped by another person. In response, the protagonist either helped the other person or did not help the other person. Thus, the vignettes represented the cells in a 2×2 experimental design. Across all four age groups, protagonists who did not reciprocate after receiving help were judged more unfavorably than were the protagonists in any of the other three combinations of help received and help given.

Reactance Effects Associated With Inappropriate Expressions of Gratitude

Although expressions of gratitude typically are reinforcing (and expressions of ingratitude usually are aversive), Carey et al.'s (1976) findings suggest that expressions of gratitude that are coupled with attempts to take advantage of the benefactor's generosity (e.g., following an expression of gratitude with an attempt to entice the customer to spend more money in the store) can produce reactance. Expressions of gratitude also appear to produce reactance when used as substitutes for apologies. Mehrabian (1967) observed that in social interactions in which one person has harmed or offended another person, the transgressor might avoid offering an apology and instead express gratitude for the victim's patience or forbearance. For example, rather than apologizing for being late to a meeting, the late individual might say, "Thanks for waiting," which can be viewed as an attempt to restructure the victim's construal of the situation so that the offender is viewed as less culpable.

Mehrabian (1967) instructed participants to indicate the extent to which they would have a negative attitude toward people who committed any of a variety of interpersonal transgressions and then responded in one of three ways: (a) neglected to communicate about the offense at all, (b) apologized for the offense, and (c)

thanked the victim for his or her forbearance. Mehrabian found that when the offense was ambiguous (i.e., it was difficult to determine whether an offense had truly been committed), respondents' attitudes toward the offender were not affected by the type of communication offered by the offender. However, when the offense was unambiguous (i.e., it was clear that the offender was culpable for a transgression), respondents had negative attitudes toward an offender who did not address the offense at all, had slightly less negative attitudes toward offenders who thanked the victims for their forbearance, and had the least negative attitudes toward offenders who apologized for their offenses. Thus, although expressing gratitude for the forbearance of a person whom one has offended might yield more favorable interpersonal consequences than would not acknowledging the transgression at all, such expressions of gratitude are clearly inferior to apologizing.

Individual Differences in the Reinforcement Value of Gratitude Expressions

Other evidence (Deutsch & Lamberti, 1986) indicates that thanking a benefactor interacts with the benefactor's own need for approval to influence how the benefactor responds to expressions of gratitude. Deutsch and Lamberti instructed 46 female university students to complete a series of self-report questionnaire items that were ostensibly being validated for a new personality measure. In actuality, the items were from the Crowne-Marlowe Social Desirability Scale (Crowne & Marlowe, 1960). The experimenter assigned participants to one of two conditions. In one condition, they were thanked in a pleasant tone of voice that was accompanied by direct eye contact and a smile. In a second condition, they were not thanked, and instructions were given abruptly with no eye contact. Then the experimenter left the room. Following the completion of the scale, participants completed five additional questionnaire items designed to assess their experience with the experiment and the experimenter. Then participants were instructed to walk to a room where the experimenter was waiting. On their way, participants encountered a confederate. At that time the confederate dropped a stack of books and papers. The confederate bent down to begin picking up the books and papers. The key dependent variable was whether the participant helped to pick up the dropped books and papers.

Being thanked influenced participants' appraisals of the experiment and experimenter, as well as their willingness to help the confederate. Compared to participants who were not thanked for participating, participants who were thanked felt (a) that the experimenter had been more personally encouraging, (b) that they benefited more from participating in the experiment, (c) that the experimenter benefited more from their participation, (d) that they learned more about their own personality traits, and (e) that they were more interested in participating in future experiments. Moreover, 71% of the thanked respondents helped the confederate to pick up the dropped papers and books, whereas only 36% of the unthanked respondents did so.

The main effect of expressed gratitude was qualified by a significant interaction with need for approval (i.e., social desirability). Thanked participants who had high need for approval viewed the experimenter as more encouraging than did participants with low need for approval. Furthermore, unthanked participants with high need for approval felt less benefited by the experiment than

did unthanked participants who had low need for approval. Finally, nearly all of the thanked participants with a high need for approval (86%) helped the confederate to pick up her books and papers, whereas only 50% of the thanked participants with low need for approval helped the confederate. Participants with high and low need for approval were not so markedly different in their helping behavior when they had not been thanked for their participation earlier (27% of high need for approval and 45% of low need for approval participants helped after not being thanked).

Evaluation of the Moral Reinforcer Hypothesis

The hypothesis that expressing gratitude to a benefactor encourages the benefactor to engage in yet more prosocial behavior (i.e., the moral reinforcer hypothesis) holds up well under empirical scrutiny. People who are thanked for their prosocial behavior are more inclined to help their beneficiaries again. They are also more likely to help third parties after having been thanked by an initial beneficiary. These reinforcement effects are especially strong among people with a high need for approval (Deutsch & Lamberti, 1986). Some evidence suggests that benefactors react negatively to expressions of gratitude that are too closely linked to further attempts to elicit prosocial behavior from the benefactor (Carey et al., 1976).

Hypothesis 4: Gratitude Is Associated With Morally Relevant Personality Traits

The fourth hypothesis emerging from the moral affect theory of gratitude is that gratitude is related to personality variables that are linked with moral emotion and behavior. This hypothesis is supported by the available empirical data, although relevant data are limited.

Gratitude and Agreeableness

In a recent study, Saucier and Goldberg (1998) attempted to identify stable dimensions of personality that are largely independent of the Big Five personality factors (i.e., Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism). Saucier and Goldberg found that a personality trait consisting of the adjectives grateful and thankful was moderately independent of the Big Five. Approximately 16% of the variability in this "gratefulness" trait could be explained in terms of the Big Five (Multiple R=.40). People who rated themselves (or other people) as particularly grateful also rated themselves (or the people whom they were rating) as higher in agreeableness (r=.31). It is interesting that gratefulness ratings also were correlated negatively (r=-.24) with openness. The correlations with the other Big Five constructs (conscientiousness, extraversion, and neuroticism) were nearly zero.

Agreeable people might be more grateful because they find gratitude to be a useful mechanism for maintaining positive relationships. Agreeableness actually is a higher order personality factor that subsumes a variety of prosocial traits such as empathy, trust, and willingness to forgive. People who are rated high in agreeableness tend to do well in social relationships, and their relationships are characterized by less conflict and greater adjustment (Graziano, Jensen-Campbell, & Hair, 1996). It is also pos-

sible that people high in agreeableness are more prone to attribute their good fortune to the intentional behavior of other people—precisely the sort of attributions that would foster grateful emotions (Lane & Anderson, 1976; Tesser et al., 1968).

An additional correlate of gratitude is openness to experience (Saucier & Goldberg, 1998). People with high levels of gratitude tend to be rated (by themselves and others) as less open to experience. It is more difficult to explain this association in light of our conceptualization of gratitude as a moral emotion. However, this association points to some additional contours of gratitude that could be worthwhile to explore in future research, perhaps initially by determining the facets of openness (i.e., imagination—openness to fantasy, appreciation for art and beauty, receptivity to one's own feelings, willingness to try new activities, intellectual curiosity, and willingness to re-examine one's values; McCrae, 1993—1994) to which gratitude is related most strongly.

Narcissism and Ingratitude

Whereas agreeableness is positively associated with gratitude, other traits may inhibit gratitude. Ungrateful people regularly respond to others' beneficence with resentment, hostility, or indifference. Writing from a psychodynamic perspective, Bergler (1945) described the psychopathology of ingratitude speculating on conscious and unconscious reasons why people might refrain from expressing appreciation for the benefits they receive (such as impugning the generous motives of their benefactor).

Other psychologists have characterized conspicuously ungrateful people as possessing narcissistic personality traits. Narcissism subsumes a set of traits including excessive self-importance, arrogance, vanity, greed for admiration, and entitlement (Kernberg, 1975). Narcissists believe they are entitled to special rights and privileges, regardless of merit. They tend to be demanding and selfish. They also possess an exaggerated sense of deservingness, expecting special favors without assuming reciprocal responsibilities and expressing surprise and anger ("narcissistic rage") when others do not do what they want.

Drawing on clinical observations, McWilliams and Lependorf (1990) noted that narcissistic people are incapable of experiencing and expressing gratitude toward others. A core issue for narcissistic people is an unwillingness to admit that they are not selfsufficient. Because expressions of gratitude implicitly acknowledge that one is dependent on other people for one's well-being, gratitude would be unpleasant for highly narcissistic people. Narcissists also view themselves as superior to other people, so they might be reluctant to express gratitude because they believe that the benefactor's prosocial actions on the narcissist's behalf are simply attempts to curry favor with the clearly superior and allpowerful narcissist. McWilliams and Lependorf suggested that instead of experiencing or expressing gratitude in such situations, narcissistic people choose other means of responding to those who have helped them, such as (a) expressing approval; (b) feigning indifference or even suggesting that by receiving the benefit conferred, the narcissist was allowing the benefactor to meet the benefactor's own needs; (c) denying that he or she deserves the benefit; or (d) offering gratitude so excessive that it could not possibly seem sincere.

The empirical data, albeit limited, support the hypothesized link of narcissism to ingratitude. Farwell and Wohlwend-Lloyd (1998)

GRATTTUDE 261

examined the association of gratitude and narcissism-as measured with Raskin and Hall's (1979) Narcissistic Personality Inventory-in the context of a laboratory-based interdependence game. Participants completed a task that they believed to be a standardized assessment of creativity. Participants were told that their performance on the creativity test would be combined with the score of a randomly assigned partner and that the resulting aggregate performance would be compared with the scores of other randomly assembled pairs of participants. After completing the bogus creativity task, participants completed the Narcissistic Personality Inventory. Then, the experimenter ostensibly scored the participant's performance on the creativity task and aggregated it with data from another respondent. The experimenter then told participants that they had scored better than 85% of the other dyads and that their performance was considerably different from the performance of their partner.

Participants then completed several measures of their emotions, including three measures of their feelings regarding their own performance ("happy," "proud," and "competent") and two measures of their feelings regarding their partners ("liking" and "ġratitude"). These latter two measures were combined into a single index. Narcissism was inversely related to scores on this two-item measure of liking and gratitude toward the partner, r(54) = -.23, p < .05.

Evaluation of Hypothesis 4

The scant data indicate that individual differences in gratitude are related to individual differences in personality factors that have typically been linked to prosociality, namely, high agreeableness and low narcissism. It is noteworthy, however, that so little research has addressed the personality correlates of gratitude. The development of standardized measures of gratitude would enable more research on the personality correlates of gratitude.

General Discussion

Following the pioneering work of Adam Smith (1790/1976), we reviewed the research on gratitude to formulate a theory of gratitude as a moral affect (or, to use Smith's nomenclature, "moral sentiment"). We hypothesized that if gratitude is a moral affect, then it should have a variety of prosocial features and functions. The available data suggest that these hypotheses are generally correct.

First, we hypothesized that gratitude functions as a *moral ba*rometer—a reliable emotional reaction to perceiving that one has benefited from the actions of another moral agent. The existing research strongly supports this hypothesis. Gratitude is a typical affective response to the perception that one has been the recipient of another moral agent's benevolence.

Second, we hypothesized that gratitude functions as a *moral motive*—that is, that grateful emotions can motivate people to reciprocate prosocial behavior. Although the few relevant studies vaguely supported this hypothesis, the research methods used to adduce this evidence were not terribly rigorous. Therefore, it would seem that social scientists have yet to investigate seriously the potential functions of gratitude in maintaining positive, reciprocal human relations—Smith's (1790/1976) initial vision of the prosocial function of gratitude. Isolating the motivational value of

grateful emotions clearly is a potentially fruitful horizon for social-psychological research on positive reciprocity, just as the search for the psychological variables that foster negative reciprocity has been fruitful as well (e.g., Bushman & Baumeister, 1998).

Third, we hypothesized that gratitude functions as a moral reinforcer, motivating benefactors to persist in behaving prosocially. We found substantial support for the moral reinforcer hypothesis. People who have been the recipients of sincere expressions of gratitude are more likely to act again in a prosocial fashion toward their beneficiaries. They are also more likely to behave prosocially toward third parties after having received sincere thanks from someone on whom they have already conferred a benefit. The effects of gratitude as a moral reinforcer would not have surprised early theorists such as Smith (1790/1976) and 20th century theorists such as Simmel (1950). To such theorists, experiencing and expressing gratitude were crucial for generating and maintaining positive human relations. Conceptualizing gratitude as an emotion that strengthens people's social resources is also consistent with recent formulations of the functions of positive emotions in general (Fredrickson, 1998).

Fourth, we hypothesized that gratitude is associated with personality traits that are linked with prosociality. This hypothesis was supported by the scant amount of existing data. Grateful people are higher in agreeableness (Saucier & Goldberg, 1998) and lower in narcissism (Farwell & Wohlwend-Lloyd, 1998). Agreeableness and narcissism are higher order constructs that subsume a variety of other traits, including (in the case of agreeableness) empathy, trust, altruism, and straightforwardness, and (in the case of narcissism) grandiosity, entitlement, selfishness, and denigration of others. These initial studies characterize grateful people as individuals who probably are facile at maintaining pleasant and productive social relations.

The evidence for the four hypotheses emerging from the moral affect theory of gratitude leads us to nominate gratitude as one of the moral affects—one that has received far less attention than it merits. Indeed, although many conceptions of moral and prosocial behavior posit a role for affect, such discussions have been dominated by discussions of affects such as empathy, sympathy, guilt, and shame. It might be productive to consider gratitude along with these other moral affects in future research.

Directions for Future Research

Four particularly promising areas for future research include (a) developing better tools for assessing individual differences in gratitude, (b) examining gratitude as a response to benevolence and as a motive for reciprocity, (c) examining the connections of gratitude with well-being, and (d) exploring the connections of gratitude and religiousness—spirituality.

Assessing Individual Differences in Gratitude

To date, researchers have assessed grateful emotion using instruments consisting of no more than a handful of self-report items. Research on gratitude would benefit from the availability of instruments for assessing the extent to which people (a) feel grateful in response to individual events, (b) consider themselves to be grateful in general, and (c) are perceived by raters as being grateful in general. Scores on such measures will almost certainly be correlated with other measures of personality traits and emotions, so researchers should take care to ensure that their measures of gratitude have adequate discriminant validity.

Once robust, dependable measurements of gratitude are available, other interesting research questions become amenable to research. Do people differ in the extent to which they are grateful for the same beneficial events or circumstances? If so, what factors are related to these individual differences? What is the longitudinal stability of gratitude over extended periods of time? Do people become generally more grateful or less grateful as they age (e.g., Breemhaar, Visser, & Kleijnen, 1990)? How much daily, weekly, or monthly variability do people demonstrate in their experiences of gratitude? Such questions and others can be addressed when more intensive psychometric research on gratitude is underway.

Gratitude as Response to Benevolence and Motive for Reciprocity

Very little research on reactions to aid has addressed the emotion of gratitude explicitly (Graham & Barker, 1990; Nadler & Fisher, 1986; Shell & Eisenberg, 1992, 1996), even though being grateful is presumably one of the more basic responses to receiving aid from another person. Therefore, future research could explore the conditions in which the emotions of gratitude and ingratitude are expressed following receipt of aid from another person.

In a related vein, gratitude could be useful for framing a variety of new research questions regarding the phenomenon of reciprocity (responding to positive behavior with more positive behavior) and exchange relationships. For example, it would be worthwhile to examine the conditions in which gratitude is a unique facilitator of reciprocity and under what conditions it is most appropriately considered an epiphenomenon of indebtedness (Greenberg, 1980). Studies involving mixed-motive games such as the Prisoner's Dilemma, for instance, typically involve keeping track of behavioral responses (e.g., competitive and cooperative responses) to another person's actions without examining explicitly the emotional states of the actors. Yet if resentment and the desire to retaliate are the motivations elicited by defection and profit taking in the Prisoner's Dilemma, it seems plausible that in some environments, gratitude could be precisely the motivation that is inspired by cooperative actions by one's partner, thereby leading to the reciprocation of cooperation. In studies that might address the motivational value of gratitude directly, measuring the ostensive motivators of reciprocity would probably be necessary for untangling their effects, even if measuring these motivations unobtrusively is a difficult methodological challenge.

Gratitude and Well-Being

Like other positive emotions, gratitude might be relevant for well-being, coping, and adjustment (Fredrickson, 1998). In particular, gratitude might foster the development of social ties and coping resources that help people to maintain well-being during stressful circumstances. Several studies illustrate plausible links between gratitude and well-being.

Emmons and Crumpler (2000) described the results of an experiment in which participants were randomly assigned to write about hassles, gratitude-inducing experiences, or neutral experiences once each week for 10 consecutive weeks. At the end,

participants in the gratitude condition felt better about their lives as a whole and had more optimism regarding the upcoming week. They also reported fewer physical complaints overall than did participants in the hassles group and spent significantly more time exercising than did participants in the other two groups. Another study found that medical patients with higher levels of gratitude for their medical care report greater levels of satisfaction and fewer emotional problems, even after controlling for a variety of potential confounds including age, quality of medical information they received, and locus of control (Breemhaar et al., 1990).

Moreover, reminding oneself to maintain a grateful attitude might be a common way of coping with stressful life events (Barusch, 1997; Coffman, 1996; Ventura & Boss, 1983). Coffman (1996) conducted interviews with 13 parents who lived in south Florida at the time of Hurricane Andrew (1992). One of the key themes of parents' hurricane experiences was an overwhelming sense of gratitude for what they had not lost during the hurricane. Although five of the families' homes had been so damaged that relocation had been necessary, none of them had lost a loved one. Because they were spared the loss of what was most important to them, they experienced profound gratitude in the midst of terrible disaster. In their study of new parents, Ventura and Boss (1983) found that reminding oneself of things for which to be grateful was rated among the most helpful coping behaviors (after doing things with the child, being a parent to the baby, and trusting in one's partner). Reminding oneself to be grateful might be similar to the benefit-finding process that Affleck and Tennen (1996) have found to be adaptive in coping with chronic pain.2

Religiousness and Spirituality

Many religions and spiritualities place a high value on gratitude (Emmons & Crumpler, 2000). Gratitude is one of the most common themes of people's prayers and descriptions of their religious lives (Barusch, 1999; Pixley & Beekman, 1949). For example, in their investigations of people's naturalistic conceptions of what it means to be "moral," "religious," and "spiritual," Walker and Pitts (1998) found that being "thankful" was one of the prototypical qualities of the "spiritual" person (interestingly, being "thankful" was not particularly descriptive of the prototypical "moral" or "religious" person). Moreover, Ventura (1982; Ventura & Boss, 1983) found that people who used gratitude as a strategy for coping with the stress of a new baby also tended to use their belief in God (indeed, these two strategies loaded on a single coping factor).

Moreover, in a national survey of 482 adults and 500 teens, G. H. Gallup (1998) found that 78% of teenagers and 89% of adults express gratitude to a God or Creator "all of the time" or "some of the time." Finally, Samuels and Lester (1985) instructed a group of 12 nuns and 10 priests to indicate the frequency with which they experienced 50 different emotions toward God. These emotion words sampled the entire range of human affect from "hate" to "love" and from "apathy" to "excitement." Participants rated the emotions on a 4-point scale (where 1 = never and 4 = nev

² We are grateful to C. R. Snyder for pointing out to us the connection between gratitude and Affleck and Tennen's (1996) work on benefit finding.

often). "Gratitude" was rated as the second most frequently experienced emotion toward God (M = 3.86; "love" received a mean frequency of 4.00).

This pastiche of findings suggests that gratitude is relevant to religious and spiritual experience for many people. Given the traditional links of gratitude to religion and spirituality (Emmons & Crumpler, 2000), the initial empirical evidence, and people's frequent gratitude to nonhuman agents when they receive benefits (e.g., Teigen, 1997), the connections between gratitude, religiousness, and spirituality merit further exploration. From the perspective of the moral affect theory of gratitude, it would be most interesting to examine whether gratitude toward God or higher powers serves the same moral functions (viz., as a moral barometer and moral motive) as does gratitude toward human benefactors.

Conclusion

Psychological researchers have tended to treat gratitude as if it were either (a) epiphenomenal to or redundant with other affective or social experiences (such as indebtedness) or (b) an exclusively sociological or cultural phenomenon (e.g., a function of politeness norms). However, our review of the literature suggests that gratitude is, on its own terms, a psychologically substantive experience that is relevant to how people negotiate their moral and interpersonal lives. Gratitude is one of the most typical responses to perceived benevolence from other moral agents. It appears to foster prosocial behavior among beneficiaries and benefactors alike. It is also correlated with personality traits (e.g., higher agreeableness, less narcissism) that characterize people who live harmoniously among others. Furthermore, gratitude might have important interfaces with people's well-being and spirituality. Our evaluation of the existing literature on this topic leads us to conclude that social science could make progress in understanding how people's emotional lives influence their moral and interpersonal lives, and vice versa, if experiences and expressions of gratitude were examined more fully and on their own terms.

References

- Affleck, G., & Tennen, H. (1996). Construing benefits from adversity: Adaptational significance and dispositional underpinnings. *Journal of Personality*, 64, 899-922.
- Amato, J. A. (1982). Guilt and gratitude: A study of the origins of contemporary conscience. Westport, CT: Greenwood Press.
- Appadurai, A. (1989). Gratitude as a social mode in South India. In J. B. Carman & F. J. Streng (Eds.), Spoken and unspoken thanks: Some comparative soundings (pp. 13-22). Dallas, TX: Center for World Thanksgiving.
- Averill, J. R. (1980). On the paucity of positive emotions. In K. R. Blankstein, P. Pliner, & J. Polivy (Eds.), Advances in the study of communication and affect: Vol. 6. Assessment and modification of emotional behavior (pp. 7-45). New York: Plenum.
- Baron, R. A. (1984). Reducing organizational conflict: An incompatible response approach. *Journal of Applied Psychology*, 69, 272–279.
- Bar-Tal, D., Bar-Zohar, Y., Greenberg, M. S., & Hermon, M. (1977).
 Reciprocity behavior in the relationship between donor and recipient and between harm-doer and victim. Sociometry, 40, 293–298.
- Barusch, A. S. (1997). Self-concepts of low-income older women: Not old or poor, but fortunate and blessed. *International Journal of Aging and Human Development*, 44, 269-282.
- Barusch, A. S. (1999). Religion, adversity and age: Religious experiences

of low-income elderly women. Journal of Sociology and Social Welfare, 26, 125-142.

- Batson, C. D. (1991). The altruism question. Hillsdale, NJ: Erlbaum.
- Batson, C. D., Klein, T. R., Highberger, L., & Shaw, L. L. (1995). Immorality from empathy-induced altruism: When compassion and justice conflict. *Journal of Personality and Social Psychology*, 68, 1042–1054.
- Baumeister, R. F. (1998). Inducing guilt. In J. Bybee (Ed.), Guilt and children (pp. 127-138). San Diego, CA: Academic Press.
- Baumeister, R. F., & Ilko, S. A. (1995). Shallow gratitude: Public and private acknowledgement of external help in accounts of success. Basic and Applied Social Psychology, 16, 191–209.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, 115, 243–267.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1995). Interpersonal aspects of guilt: Evidence from narrative studies. In J. P. Tangney & K. W. Fischer (Eds.), Self-conscious emotions: The psychology of shame, guilt, embarrassment, and pride (pp. 255-273). New York: Guilford.
- Baumgartner-Tramer, F. (1936). Gratitude in children and adolescents. Ethik, 13, 1-11.
- Baumgartner-Tramer, F. (1938). "Gratefulness" in children and young people. *Journal of Genetic Psychology*, 53, 53-66.
- Becker, J. A., & Smenner, P. C. (1986). The spontaneous use of *thank you* by preschoolers as a function of sex, socioeconomic status, and listener status. *Language in Society*, 15, 537-546.
- Bennett, L., Ross, M. W., & Sunderland, R. (1996). The relationship between recognition, rewards, and burnout in AIDS caregiving. AIDS Care, 8, 145-153.
- Bergler, E. (1945). Psychopathology of ingratitude. Diseases of the Nervous System, 6, 226-229.
- Bergler, E. (1950). Debts of gratitude paid in "guilt denomination." *Journal of Clinical Psychopathology*, 11, 57-62.
- Bernstein, D. M., & Simmons, R. G. (1974). The adolescent kidney donor: The right to give. *American Journal of Psychiatry*, 131, 1338-1343.
- Breemhaar, B., Visser, A. P., & Kleijnen, J. G. V. M. (1990). Perceptions and behavior among elderly hospital patients: Description and explanation of age differences in satisfaction, knowledge, emotions and behavior. Social Science and Medicine, 31, 1377-1385.
- Brown, P., & Levinson, S. (1987). Politeness: Some universals in language usage. Cambridge, England: Cambridge University Press.
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology*, 75, 219-229.
- Buunk, B. P., Doosje, B. J., Jans, L. G. J. M., & Hopstaken, L. E. M. (1993). Perceived reciprocity, social support, and stress at work: The role of exchange and communal orientation. *Journal of Personality and Social Psychology*, 65, 801-811.
- Carey, J. R., Clicque, S. H., Leighton, B. A., & Milton, F. (1976). A test of positive reinforcement of customers. *Journal of Marketing*, 40, 98– 100.
- Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: A test of six hypotheses. *Journal of Personality and Social Psychology*, 55, 211-229.
- Clark, H. B., Northrop, J. T., & Barkshire, C. T. (1988). The effects of contingent thank-you notes on case managers' visiting residential clients. Education and Treatment of Children, 11, 45-51.
- Clark, R. D. (1975). The effects of reinforcement, punishment and dependency on helping behavior. Bulletin of Personality and Social Psychology, 1, 596-599.
- Coffman, S. (1996). Parents' struggles to rebuild family life after Hurricane Andrew. Issues in Mental Health Nursing, 17, 353-367.

- Costa, P. T., Jr., & McCrae, R. R. (1992). NEO-PI-R professional manual. Odessa, FL: Psychological Assessment Resources.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Davis, M. (1994). Empathy: A social psychological approach. Madison, WI: Brown & Benchmark.
- Deutsch, F. M., & Lamberti, D. M. (1986). Does social approval increase helping? *Personality and Social Psychology Bulletin*, 12, 149-157.
- de Rivera, J. (1977). A structural theory of the emotions. New York: International Universities Press.
- de Rivera, J. (1984). Development and the full range of emotional experience. In C. Z. Malatesta & C. E. Izard (Eds.), *Emotion in adult life* (pp. 45-63). Beverly Hills, CA: Sage.
- Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Maszk, P., Smith, M., O'Boyle, C., & Suh, K. (1994). The relations of emotionality and regulation to dispositional and situational empathy-related responding. *Journal of Personality and Social Psychology*, 66, 776-797.
- Eisenberg, N., & Miller, P. A. (1987). Empathy, sympathy, and altruism: Empirical and conceptual links. In N. Eisenberg & J. Strayer (Eds.), Empathy and its development (pp. 292–316). Cambridge, England: Cambridge University Press.
- Eisenberg, N., Miller, P. A., Shell, R., McNalley, S., & Shea, C. (1991). Prosocial development in adolescence: A longitudinal study. *Developmental Psychology*, 27, 849-857.
- Emmons, R. A., & Crumpler, C. A. (2000). Gratitude as human strength: Appraising the evidence. *Journal of Social and Clinical Psychology*, 19, 56-69.
- Erickson, E. (1950). Childhood and society. New York: Norton.
- Farwell, L., & Wohlwend-Lloyd, R. (1998). Narcissistic processes: Optimistic expectations, favorable self-evaluations, and self-enhancing attributions. *Journal of Personality*, 66, 65-83.
- Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General*, 113, 464-486.
- Fisher, J. D., Nadler, A., & Whitcher-Alagna, S. (1982). Recipient reactions to aid. Psychological Bulletin, 91, 27-54.
- Fredrickson, B. L. (1998). What good are positive emotions? Review of General Psychology, 2, 300-319.
- Fredrickson, B. L., & Levenson, R. W. (1998). Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. Cognition and Emotion, 12, 191-220.
- Gallup, G. G. (1998). Self-awareness and the evolution of social intelligence. Behavioural Processes, 42, 239-247.
- Gallup, G. H., Jr. (1998, May). Thankfulness: America's saving grace.Paper presented at the National Day of Prayer Breakfast, Thanks-Giving Square. Dallas.
- Gleason, J. B., Perlmann, R. Y., & Greif, E. B. (1984). What's the magic word? Learning language through politeness routines. *Discourse Pro*cesses, 7, 493-502.
- Gleason, J. B., & Weintraub, S. (1976). The acquisition of routines in child language. *Language in Society*, 5, 129-136.
- Goldman, M., Seever, M., & Seever, M. (1982). Social labeling and the foot-in-the-door effect. *Journal of Social Psychology*, 117, 19-23.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. American Sociological Review, 25, 161-178.
- Graham, S. (1988). Children's developing understanding of the motivational role of affect: An attributional analysis. Cognitive Development, 3, 71-88
- Graham, S., & Barker, G. P. (1990). The down side of help: An attributional-developmental analysis of helping behavior as a low-ability cue. *Journal of Educational Psychology*, 82, 7-14.
- Graham, S., Hudley, C., & Williams, E. (1992). Attributional and emo-

- tional determinants of aggression among African-American and Latino young adolescents. *Developmental Psychology*, 28, 731-740.
- Graham, S., & Weiner, B. (1986). From an attributional theory of emotion to developmental psychology: A round trip ticket? Social Cognition, 4, 152-179.
- Graziano, W. G., Jensen-Campbell, L. A., & Hair, E. C. (1996). Perceiving interpersonal conflict and reacting to it: The case for agreeableness. *Journal of Personality and Social Psychology*, 70, 820-835.
- Greenberg, M. S. (1980). A theory of indebtedness. In K. J. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), Social exchange: Advances in theory and research (pp. 3-26). New York: Plenum.
- Greenberg, M. S., Bar-Tal, D., Mowrey, J., & Steinberg, R. (1982).
 Cross-cultural comparisons in the perception of indebtedness. Unpublished manuscript, University of Pittsburgh.
- Greenberg, M. S., & Westcott, D. R. (1983). Indebtedness as a mediator of reactions to aid. In J. D. Fisher, A. Nadler, & B. M. DePaulo (Eds.), New directions in helping: Recipient reactions to aid (pp. 85-112). New York: Academic Press.
- Harris, M. B. (1972). The effects of performing one altruistic act on the likelihood of performing another. *Journal of Social Psychology*, 88, 65-73.
- Harris, P. L., Olthof, T., Meerum Terwogt, M., & Hardman, C. E. (1987). Children's knowledge of the situations that provoke emotion. *International Journal of Behavioral Development*, 10, 319-344.
- Hegtvedt, K. A. (1990). The effects of relationship structure on emotional responses to inequity. Social Psychology Quarterly, 53, 214-228.
- Heider, F. (1958). The psychology of interpersonal relations. New York: Wiley.
- Heilbrunn, G. (1972). "Thank you." Journal of the American Psychoanalytic Association, 20, 512-516.
- Ho, D. (1983). Asian concepts in behavioral science. Bulletin of the Hong Kong Psychological Society, 10, 41-49.
- Hoffman, M. L. (1982). Affect and moral development. New Directions in Child Development, 16, 83-103.
- Hoffman, M. L. (1990). Empathy and justice motivation. Motivation and Emotion, 14, 151-172.
- Ide, R. (1998). "Sorry for your kindness": Japanese interactional ritual in public discourse. *Journal of Pragmatics*, 29, 509-529.
- Keltner, D., & Buswell, B. N. (1996). Evidence for the distinctiveness of embarrassment, shame, and guilt: A study of recalled antecedents and facial expressions of emotion. *Cognition and Emotion*, 10, 155-171.
- Kernberg, O. (1975). Borderline conditions and pathological narcissism. New York: Jason Aronson.
- Klein, M. (1957a). Envy and gratitude. Psyche, 11, 241-255.
- Klein, M. (1957b). Envy and gratitude: A study of unconscious sources. New York: Basic Books.
- Klein, M. (1966). Our grown up world and its roots in infancy. Revista di Psychoanalisi, 12, 283-297.
- Kumatoridani, T. (1999). Alternation and co-occurrence in Japanese thanks. *Journal of Pragmatics*, 31, 623-642.
- Lane, J., & Anderson, N. H. (1976). Integration of intention and outcome in moral judgment. Memory and Cognition, 4, 1-5.
- Lazarus, R. S. (1991). Emotion and adaptation. New York: Oxford University Press.
- Lazarus, R. S., & Lazarus, B. N. (1994). Passion and reason: Making sense of our emotions. New York: Oxford University Press.
- Lutz, C., & White, G. M. (1986). The anthropology of emotions. Annual Review of Anthropology, 15, 405-436.
- Maheux, B., Legault, C., & Lambert, J. (1989). Increasing response rates in physicians' mail surveys: An experimental study. *American Journal* of *Public Health*, 79, 638-639.
- Mayer, J. D., Salovey, P., Gomberg-Kaufman, S., & Blainey, K. (1991). A broader conception of mood experience. *Journal of Personality and Social Psychology*, 60, 100-111.

- McCrae, R. R. (1993-1994). Openness to experience as a basic dimension of personality. *Imagination, Cognition, and Personality*, 13, 39-55.
- McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Jr., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close relationships: II. Theoretical elaboration and measurement. *Journal of Personality and Social Psychology*, 75, 1586-1603.
- McCullough, M. E., Worthington, E. L., Jr., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology*, 73, 321–336.
- McGovern, L. P., Ditzian, J. L., & Taylor, S. P. (1975). The effect of positive reinforcement on helping with cost. *Psychonomic Society Bulletin*, 5, 421-423.
- McWilliams, N., & Lependorf, S. (1990). Narcissistic pathology of everyday life: The denial of remorse and gratitude. Contemporary Psychoanalysis, 26, 430-451.
- Mehrabian, A. (1967). Substitute for apology: Manipulation of cognitions to reduce negative attitude toward self. *Psychological Reports*, 20, 687-692.
- Miller, P. A., & Eisenberg, N. (1988). The relation of empathy to aggressive and externalizing/antisocial behavior. *Psychological Bulletin*, 103, 324-344.
- Moore, D. W. (1996). Americans most thankful for family and health: Young also thankful for career/job. Princeton, NJ: Gallup Organization.
- Moss, M. K., & Page, R. A. (1972). Reinforcement and helping behavior. Journal of Applied Social Psychology, 2, 360-371.
- Murray, H. A. (1938). Explorations in personality. New York: Oxford.
- Nadler, A., & Fisher, J. D. (1986). The role of threat to self-esteem and perceived control in recipient reaction to help: Theory development and empirical validation. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 19, pp. 81–122). San Diego, CA: Academic Press.
- Neuberg, S. L., Cialdini, R. B., Brown, S. L., Luce, C., Sagarin, B. J., & Lewis, B. P. (1997). Does empathy lead to anything more than superficial helping? Comment on Batson et al. (1997). *Journal of Personality and Social Psychology*, 73, 510-516.
- Oatley, K. (1992). Best laid schemes. New York: Cambridge University Press.
- Oatley, K., & Jenkins, J. M. (1996). Understanding emotions. Cambridge, MA: Blackwell.
- Okamoto, S. (1992). Kansha-hyo~ gen no tsukaiwake ni kan'yo suru yo~in. (2): "Arigato~" taipu to "sumimasen" taipu ha dono yo~ni tukai-wakerareru ka [Linguistic expressions of gratitude (2)]. Bulletin of the Faculty of Letters of Aichi Gakuin University, 20, 35-44.
- Okamoto, S., & Robinson, W. P. (1997). Determinants of gratitude expressions in England. *Journal of Language and Social Psychology*, 16, 411-433.
- Ortony, A., Clore, G. L., & Collins, A. (1988). The cognitive structure of emotions. New York: Cambridge University Press.
- Overwalle, F. V., Mervielde, I., & De Schuyter, J. (1995). Structural modeling of the relationships between attributional dimensions, emotions, and performance of college freshmen. *Cognition and Emotion*, 9, 59-85.
- Peterson, B. E., & Stewart, A. J. (1996). Antecedents and contexts of generativity motivation at midlife. *Psychology and Aging*, 11, 21-33.
- Pixley, E., & Beekman, E. (1949). The faith of youth as shown by a survey in public schools of Los Angeles. *Religious Education*, 44, 336-342.
- Preyer, M. (1933). The linguistic evolution of the 9-year-old child and the reading books. Gyermek, 25, 19-20.
- Raskin, R. A., & Hall, C. S. (1979). A narcissistic personality inventory. Psychological Reports, 45, 159-161.
- Reisenzein, R. (1994). Pleasure-arousal theory and the intensity of emotions. *Journal of Personality and Social Psychology*, 67, 525-539.
- Rind, B., & Bordia, P. (1995). Effect of server's "thank you" and person-

alization on restaurant tipping. Journal of Applied Social Psychology, 25, 745-751.

- Roseman, I. J. (1991). Appraisal determinants of discrete emotions. Cognition and Emotion, 5, 161–200.
- Russell, J. A., & Paris, F. A. (1994). Do children acquire concepts for complex emotions abruptly? *International Journal of Behavioral Devel*opment, 17, 349–365.
- Samuels, P. A., & Lester, D. (1985). A preliminary investigation of emotions experienced toward God by Catholic nuns and priests. Psychological Reports, 56, 706.
- Saucier, G., & Goldberg, L. R. (1998). What is beyond the Big Five? Journal of Personality, 66, 495-524.
- Scheff, T. J. (1988). Shame and conformity: The deference-emotion system. American Sociological Review, 53, 395-406.
- Schwartz, B. (1967). The social psychology of the gift. American Journal of Sociology, 73, 1-11.
- Shapiro, E. G. (1984). Help seeking: Why people don't. Research in the Sociology of Organizations, 3, 213-236.
- Shaver, P. (1987). Emotion knowledge: Further exploration of a prototype approach. Journal of Personality and Social Psychology, 52, 1061– 1086
- Shell, R. M., & Eisenberg, N. (1992). A developmental model of recipients' reactions to aid. Psychological Bulletin, 111, 413-433.
- Shell, R. M., & Eisenberg, N. (1996). Children's reactions to the receipt of direct and indirect help. Child Development, 67, 1391-1405.
- Shott, S. (1979). Emotion and social life: A symbolic interactionist analysis. American Journal of Sociology, 84, 1317–1334.
- Siddiqi, M. H. (1989). Thanksgiving in Islamic thought. In J. B. Carman & F. J. Streng (Eds.), Spoken and unspoken thanks: Some comparative soundings (pp. 145-154). Dallas, TX: Center for World Thanksgiving.
- Simmel, G. (1950). The sociology of Georg Simmel. Glencoe, IL: Free Press.
- Smith, A. (1976). The theory of moral sentiments (6th ed.). Oxford, England: Clarendon Press. (Original work published 1790)
- Sommers, S., & Kosmitzki, C. (1988). Emotion and social context: An American-German comparison. *British Journal of Social Psychology*, 27, 35-49.
- Sowa, J. (1981). The ability to define moral concepts by the blind and seeing aged from 8 to 15. Roczniki Filozoficzne: Psychologia, 29, 123-139.
- Stein, M. (1989). Gratitude and attitude: A note on emotional welfare. Social Psychology Quarterly, 52, 242-248.
- Streng, F. J. (1989). Gratitude and thankful joy in Indian Buddhism. In J. B. Carman & F. J. Streng (Eds.), Spoken and unspoken thanks: Some comparative soundings (pp. 43-54). Dallas, TX: Center for World Thanksgiving.
- Suls, J., Witenberg, S., & Gutkin, D. (1981). Evaluating reciprocal and nonreciprocal prosocial behavior: Developmental trends. *Personality* and Social Psychology Bulletin, 7, 225-231.
- Tangney, J. P. (1991). Moral affect: The good, the bad, and the ugly. Journal of Personality and Social Psychology, 61, 598-607.
- Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Person*ality and Social Psychology, 70, 1256-1269.
- Teigen, K. H. (1997). Luck, envy, and gratitude: It could have been different. Scandinavian Journal of Psychology, 38, 313-323.
- Tesser, A., Gatewood, R., & Driver, M. (1968). Some determinants of gratitude. Journal of Personality and Social Psychology, 9, 233-236.
- Trivers, R. L. (1971). The evolution of reciprocal altruism. Quarterly Review of Biology, 46, 35-57.
- Unno, T. (1989). The concept of gratitude in Shin Buddhism. In J. B. Carman & F. J. Streng (Eds.), Spoken and unspoken thanks: Some comparative soundings (pp. 81-92). Dallas, TX: Center for World Thanksgiving.

- Veisson, M. (1999). Depression symptoms and emotional states in parents of disabled and nondisabled children. Social Behavior and Personality, 27, 87-97.
- Ventura, J. N. (1982). Parent coping behaviors, parent functioning, and infant temperament characteristics. Nursing Research, 31, 269-273.
- Ventura, J. N., & Boss, P. G. (1983). The Family Coping Inventory applied to parents with new babies. *Journal of Marriage and the Family*, 45, 867-875.
- Walker, L. J., & Pitts, R. C. (1998). Naturalistic conceptions of moral maturity. *Developmental Psychology*, 34, 403-419.
- Walster, E., Berscheid, E., & Walster, G. W. (1973). New directions in equity research. *Journal of Personality and Social Psychology*, 25, 151-176.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548-573.
- Weiner, B., & Graham, S. (1988). Understanding the motivational role of

- affect: Life-span research from an attributional perspective. Cognition and Emotion, 3, 401-419.
- Weiner, B., Russell, D., & Lerman, D. (1978). Affective consequences of causal ascriptions. In J. H. Harvey, W. J. Ickes, & R. F. Kidd (Eds.), New directions in attributional research (Vol. 2, pp. 59-88). Hillsdale, NJ: Erlbaum
- Weiner, B., Russell, D., & Lerman, D. (1979). The cognition-emotion process in achievement-related contexts. *Journal of Personality and Social Psychology*, 37, 1211-1220.
- Zaleski, Z. (1988). Attributions and emotions related to future goal attainment. Journal of Educational Psychology, 80, 563-568.

Received August 30, 1999
Revision received August 8, 2000
Accepted August 15, 2000