

Toward a More Pragmatic Approach to Morality: A Critical Evaluation of Kohlberg's Model

Dennis L. Krebs and Kathy Denton
Simon Fraser University

In this article, the authors evaluate L. Kohlberg's (1984) cognitive–developmental approach to morality, find it wanting, and introduce a more pragmatic approach. They review research designed to evaluate Kohlberg's model, describe how they revised the model to accommodate discrepant findings, and explain why they concluded that it is poorly equipped to account for the ways in which people make moral decisions in their everyday lives. The authors outline in 11 propositions a framework for a new approach that is more attentive to the purposes that people use morality to achieve. People make moral judgments and engage in moral behaviors to induce themselves and others to uphold systems of cooperative exchange that help them achieve their goals and advance their interests.

Keywords: moral development, cognitive development, cooperation, moral judgment

After two decades of research on Kohlberg's (1984) cognitive–developmental model of morality, we abandoned it in favor of a more pragmatic approach. In this article, we explain why. We identify problems with Kohlberg's model, describe revisions aimed at solving them, and offer reasons why a new approach is necessary. We end with a new beginning, introducing a more pragmatic approach in a set of propositions that, we argue, is better equipped than Kohlberg's model to account for the ways in which people make moral decisions in their everyday lives. This approach rests on the assumption that individuals invoke a variety of affectively and cognitively-based strategies to pursue goals and advance their interests. Some of these strategies are guided by moral rules, norms, and principles that uphold the various systems of cooperation in societies that enable members to foster their interests; others masquerade as moral. Although people may use moral reasoning to make moral decisions about what they and others ought to do, and although people may use moral judgments to communicate such decisions, they also may use them to achieve more instrumental ends, such as exerting social influence, exploiting others, and justifying immoral behaviors.

Kohlberg's Cognitive–Developmental Model of Morality

To understand Kohlberg's (1984) model of morality, it is helpful to view it in the context of its theoretical roots, as a revision of a model published by Piaget in 1932. Piaget and his colleagues used

two methods to investigate moral development: They observed children playing games such as marbles, and they interviewed children using short scenarios involving moral issues such as lying, obedience, responsibility, and punishment.

Piaget found that young children tend to conceptualize morality in terms of obedience to adults, whereas older children tend to conceptualize it in terms of cooperation with peers. Because Piaget (1932/1965) found that many children display aspects of both moral orientations, he concluded that the orientations were better viewed as phases that, "broadly speaking, follow one another without, however, constituting definite stages" (p. 195). He theorized that young children tend to view morality in terms of obedience because (a) they think in concrete, physical, egocentric ways and (b) their social worlds are dominated by seemingly omniscient and omnipotent adults. Older children tend to view morality in terms of cooperation among equals because they are cognitively able to comprehend the perspective of others and understand concepts such as reciprocity and because their social worlds consist mainly in egalitarian interactions with peers (cf. Carpendale, 2000; Youniss & Damon, 1992). With respect to relations between moral judgment and moral behavior, Piaget (1932/1965) believed that each could influence the other, though "it may be that what the child thinks about morality has no precise connection with what he does and feels in his concrete experience" (p. 113).

Kohlberg's Moral Judgment Interview

In his 1958 doctoral dissertation, Kohlberg replaced Piaget's scenarios with a set of nine hypothetical moral dilemmas. In the best-known dilemma, a husband named Heinz must decide whether to steal an overpriced drug to save his dying wife. Kohlberg read these dilemmas to a sample of 84 boys, asked them what they thought the characters should do, and then probed extensively to determine the basis of their decisions. Kohlberg did not attend to the boys' deontic choices ("should judgments") or the content of their moral judgments; his goal was to map the structures of moral reasoning from which, he assumed, the boys derived their judgments.

Dennis L. Krebs and Kathy Denton, Department of Psychology, Simon Fraser University, Burnaby, British Columbia, Canada.

Kathy Denton is now at the Psychology Department, Douglas College, New Westminster, British Columbia, Canada.

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Correspondence concerning this article should be addressed to Dennis L. Krebs, Department of Psychology, Simon Fraser University, 8888 University Drive, Burnaby, British Columbia V5A 1S6, Canada. E-mail: krebs@sfu.ca

Kohlberg's Longitudinal Study

Kohlberg and his colleagues followed up a sample of 58 of the boys he originally interviewed, reinterviewing them every several years for more than two decades (Colby & Kohlberg, 1987, pp. 79–82). During this period, Kohlberg revised his moral dilemmas, follow-up questions, and scoring criteria several times. In 1987, in collaboration with several colleagues, he published the Standard Moral Judgment Interview, which could be administered in questionnaire form, accompanied by a 900-page scoring manual (Colby & Kohlberg, 1987). Guidelines for interviewing and scoring are aimed at identifying participants' highest stage of moral reasoning. To classify moral judgments in response to Kohlberg's dilemmas, scorers match "interview judgments" with "criterion judgments" in his scoring manual. Criterion judgments are classified according to the moral norms they uphold, the reasons invoked to justify them ("elements"), and the stage structures they reflect.

Kohlberg's longitudinal study yielded two main findings (Colby & Kohlberg, 1987). First, in contrast to Piaget's finding that children often think about different moral issues in different ways, Kohlberg found that the moral judgments made by participants in his longitudinal study were structurally consistent across varying content. Second, in place of Piaget's two overlapping moral orientations, Kohlberg identified five qualitatively distinct stages of moral development¹ that, he found, developed in an invariant sequence.

Kohlberg's Model of Moral Development

On the basis of the findings from his longitudinal study and other research, Kohlberg derived a model of moral development grounded in three main assumptions: (a) The primary criterion for moral development is maturity of moral judgment (Colby & Kohlberg, 1987, pp. 1–2), (b) moral judgment is organized in "structures of the whole" (p. 8), and (c) the new structures that people acquire as they develop transform and displace their older structures (p. 7).

Determinants of Moral Development

In identifying the source of morality, Kohlberg focused almost exclusively on cognitive development or, more precisely, moral reasoning: "In the cognitive-developmental perspective, cognition is primary" (Gibbs, 1995, p. 42). There are two important implications of this focus. First, Kohlberg placed relatively little emphasis on affective determinants of morality: "The construction of moral meaning . . . generates motivating feelings such as logical necessity or sentiments of justice—but such affect is secondary in the sense that it owes its motivational properties and indeed its existence to constructive processes" (Gibbs, 1995, p. 42). And, second, Kohlberg focused more on moral judgment than on moral behavior.

With respect to social determinants of moral development, in contrast to Piaget, Kohlberg (1984, p. 74) believed that "role-taking opportunities" were more important than egalitarian peer relations. In contrast to theorists who assume that children internalize different values from different groups, Kohlberg (1984) argued that "the more the social stimulation, the faster the rate of moral development" (p. 78). Kohlberg (1984) asserted that moral stage change was fostered by "stimuli which are both sufficiently

incongruous as to stimulate conflict in the child's existing stage schemata and sufficiently congruous as to be assimilable with some accommodative effort" (p. 79).

Structures of the Whole

Kohlberg asserted that people process all of the moral information they encounter through the structure of the whole that defines their current stage of moral development or, if they are in transition, from the structure that defines their current stage and the structure that defines the stage toward which they are moving: "Under conditions that support expression of the individual's most mature moral thinking, his or her reasoning will form a coherent system best described by one of Kohlberg's five stages or a mixture of at most two adjacent stages" (Colby & Kohlberg, 1987, p. 120). This assertion has three noteworthy implications. First, people should make moral judgments about all moral issues, including those they experience in their everyday lives, in the same way as they make moral judgments about the hypothetical dilemmas on Kohlberg's test. Second, people should make moral decisions about what they should do in the same way as they make moral decisions about what other people should do. Finally, most of the variance in the structure of moral judgment should stem from within-person differences in moral development, as opposed to external variables such as the types of dilemma people experience or the contexts in which they make moral decisions.

Stages of Moral Development

Because Kohlberg believed that the new structures of moral reasoning that people acquire "transform and displace" their predecessors (Colby & Kohlberg, 1987, pp. 6–7), he believed that people move through stages of moral reasoning in the invariant sequence outlined in Table 1. Kohlberg argued that the later-developing structures of moral reasoning that define relatively advanced stages of moral development are more cognitively sophisticated—that is, more complex, differentiated, integrated, logical, and organized—than the structures they displace; they are based in superior perspective-taking abilities, and they give rise to more prescriptive, universal, and impartial moral decisions.

Kohlberg's Model of Moral Decision Making

According to Kohlberg, people interpret all of the moral information they process in terms of the structures of moral reasoning that define their current stage of moral development: "Stage of moral reasoning is a filter through which . . . situational forces are

¹ In Kohlberg's (1984) early writings, he argued that the sixth stage in his developmental progression was the pinnacle of morality. After considering the data from his longitudinal study and the complaints of philosophers, he came to decide that, after Stage 4, people may develop several equally moral structures. The structures that define Stage 5 uphold utilitarian principles that maximize good or welfare. The structures that define Stage 6 uphold the means or processes through which people should achieve the ends prescribed by Stage 5 judgments. These processes involve adopting what Colby and Kohlberg (1987) characterized as a "moral point of view," defined as "a point of view that ideally all human beings should take toward one another as free and equal autonomous persons. This means equal consideration of the claims or points of view of each person affected by the moral decision to be made" (p. 30).

Table 1
Kohlberg's Stages of Moral Development

Stage	Description
Stage 1	Morality is defined in terms of avoiding breaking rules that are backed by punishment, "obedience for its own sake," and "avoiding damage to persons and property"
Stage 2	Morality is defined in terms of instrumental exchange, "acting to meet one's own interests and needs and letting others do the same," making deals, and engaging in equal exchanges
Stage 3	Morality is defined in terms of upholding mutual relationships, fulfilling role expectations, being viewed as a good person, showing concern for others, and caring for others; trust, loyalty, respect, and gratitude are important moral values
Stage 4	Morality is defined in terms of maintaining the social systems from which one benefits
Stage 5	Morality is defined in terms of fulfilling the social obligations implicit in social contracts that are "freely agreed upon" and a "rational calculation of overall utility, 'the greatest good for the greatest number'"

Note. Quotations are from Colby and Kohlberg (1987, pp. 18–19).

perceived, interpreted, and acted upon" (Kohlberg, 1984, p. 564; see Figure 1). Building on the ideas of symbolic interactionist theorists such as Mead (1934), Kohlberg assumed that when people make moral decisions, they imaginatively take the perspective of other parties with an interest in the outcome. The higher their stage of moral development, the better able they are to make moral decisions that accommodate and balance the perspectives of others in an impartial way.

Kohlberg and Candee's Model of the Relation Between Moral Judgment and Moral Behavior

Kohlberg and Candee (1984) advanced a model linking moral judgment to moral behavior that is based in the assumption that the more mature one's understanding of why a moral choice is right, the greater the probability one will behave accordingly. In their model, moral reasoning gives rise to deontic choices that, when buttressed by follow-through judgments of responsibility and other internal factors such as ego strength and courage, lead to moral behavior. First, people figure out what is right. Next, they decide whether they are responsible for implementing the moral course of action. Finally, if they decide they are responsible, they attempt to muster the wherewithal to carry it out.

Kohlberg and Candee (1984) also distinguished between two "subtypes" of moral judgment that they labeled Type A and Type B. Type A is based on respect for rules and authority. Type B is "more prescriptive, more reversible, more universalistic and more autonomous than the A subtype. . . . A subtype B person is someone who intuitively or in his or her 'heart or conscience' perceives the central values and obligations in the dilemma articulated rationally by Stage 5 and uses these intuitions to make moral decisions" (Kohlberg, 1984, p. 535). Problems with this distinction and its implications for Kohlberg's model of moral judgment and moral behavior have been discussed by Krebs and Denton (1999).

Summary of Kohlberg's Model

In summary, Kohlberg advanced a cognitive–developmental model of morality: cognitive because morality stems primarily from structures of moral reasoning (Colby & Kohlberg, 1987, p. 2) and developmental because structures of moral reasoning change in a stagelike way (p. 5). In contrast to Piaget's model (1932/1965), which was derived in part from naturalistic observations of children, Kohlberg's model was derived primarily from people's

moral judgments in response to hypothetical dilemmas. In contrast to Piaget's consideration of alternative relations between moral judgment and moral behavior, Kohlberg and Candee adopted the Platonic assumption that knowing what is right engenders the motivation to behave accordingly.

Evaluating Kohlberg's Model of Morality

Data from Kohlberg's longitudinal study establish that the moral judgments people make in response to the dilemmas on his test tend to be organized in structures that define the same or adjacent stages in his hierarchy and that people tend to acquire these structures in an invariant sequence (Colby & Kohlberg, 1987). However, these data pertain only to moral judgments to Kohlbergian dilemmas classified according to Colby and Kohlberg's scoring rules. In the first phase of our research program, we set out to determine whether moral judgment is structurally consistent across other kinds of moral dilemmas.

Phase 1: Investigating the Structural Consistency of Moral Judgment

All studies in the first phase of our research program were designed in the same basic way. Participants were given a short form of Kohlberg's test that was scored in strict accordance with the 17-step procedure outlined by Colby and Kohlberg (1987).² In addition, participants made judgments in response to another set of

² This procedure entails matching the interview judgments made by participants with criterion judgments in Colby and Kohlberg's scoring manual. First, scorers classify moral judgments by content in terms of the interactions between the 12 moral norms (e.g., life, law, affiliation, property, and contract) and 17 elements (e.g., blaming/approving, good/bad group consequences, and serving social ideal or harmony) identified by Kohlberg and his colleagues (see Colby & Kohlberg, 1987, p. 167). "The norm represents the moral value or object of concern used by an individual to justify his or her choice. . . . The elements represent the different ways in which the significance of a norm may be construed" (p. 42). Then scorers search for structural matches among the criterion judgments in Colby and Kohlberg's scoring manual. Matched judgments are assigned stage scores, which are then weighted and summed to produce global stage scores on a 9-point scale (Stage 1, Stage 1/2, Stage 2, Stage 2/3, and so on through Stage 5), weighted average or moral maturity scores on a scale ranging from 100 (corresponding to Stage 1) to 500 (corresponding to Stage 5), or both.

Kohlberg's Structures of the Whole Model

Kohlbergian dilemmas x Academic contexts x Structures of moral reasoning → 3rd-person deontic choices about Hypothetical characters expressed to Interviewers → Reasons

Phase 1: Multiple Structure Interactional Model

Non-Kohlbergian dilemmas x Academic contexts x Multiple structures → 3rd-person deontic choices about Hypothetical characters expressed to Interviewers → Reasons

Phase 2: Expanded Multiple Structure Interactional Model

Non-Kohlbergian dilemmas x Non-academic contexts x Information-processing mechanisms; Individual differences → 1st and 3rd person deontic choices about Self & others expressed to Others → Reasons/Justifications

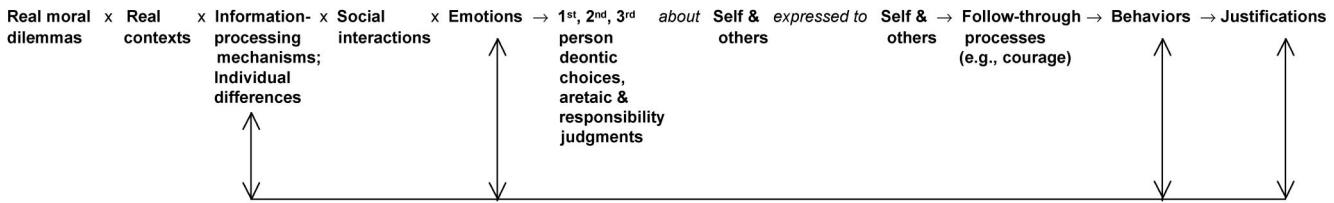
Phase 3: Real-life Moral Decision-Making Model

Figure 1. Models of moral reasoning. Boldface text is used to highlight the differences between Kohlberg's model and the revised models.

hypothetical moral dilemmas: either standard Kohlbergian dilemmas modified in some way or new “non-Kohlbergian” dilemmas. As examples, Kohlberg's dilemmas were modified by substituting for Heinz a homosexual man whose boyfriend was sick from AIDS and by asking participants to imagine themselves as the protagonists in the dilemmas. New dilemmas involved decisions about whether to help a victim in an emergency, whether to keep a promise to drive friends home after becoming intoxicated, whether to engage in prostitution, whether to disclose damning information during the sale of a business, and whether to support free trade when it went against business interests (see Krebs, Vermeulen, Carpendale, & Denton, 1991, for a more elaborate description of these dilemmas). In studies comparing stage scores on Kohlberg's test with stage scores on other dilemmas, it is imperative that the other dilemmas be scored reliably.³ High interrater reliability was achieved in all studies.

Findings: Stage Consistency and Inconsistency

As shown in Table 2, the moral judgments participants made in response to some non-Kohlbergian dilemmas matched the stages of the judgments they made in response to Kohlbergian dilemmas, but the moral judgments they made in response to other non-Kohlbergian dilemmas did not. Other investigators, including Kohlberg, have reported similar findings (Gilligan & Belenky, 1980; Haan, 1975; A. Higgins, Power, & Kohlberg, 1984; Kohlberg, Scharf, & Hickey, 1972; Leming, 1978; Linn, 1984, 1987a,

1987b; Lockwood, 1975; Smetana, 1982; Walker, de Vries, & Trevethan, 1987).

Kohlberg's Explanation of Structural Inconsistency: Competence and Performance

Colby and Kohlberg (1987) accounted for structural inconsistency in moral judgment in the following way:

³ To score moral judgments made in response to non-Kohlbergian dilemmas, we identified “should” judgments and then perused the criterion judgments in Colby and Kohlberg's manual in search of a structural match (see Krebs, Vermeulen, et al., 1991, for a detailed description of this process). To illustrate, consider the prosocial judgment “You should help other people because it makes you feel good about yourself” (Krebs, Denton, et al., 1991). Although this judgment relates to an issue (altruism) different from the criterion judgments in Colby and Kohlberg's manual, it is similar in form to Criterion Judgment 19, Form A, Dilemma I, Contract, Stage 3: “[It is important to keep a promise] because it makes a person feel good inside.” The two judgments are based on “anticipation of approval from oneself if one lives up to conventional role expectations” (Colby & Kohlberg, 1987, pp. 210–211). In scoring all dilemmas, scorers were unaware of participants' scores on other dilemmas. The judgments of 25% of the participants were scored by a second scorer. This method has become an accepted practice (see Krebs, Denton, et al., 1991; Walker et al., 1987).

Table 2
Stage Scores on Kohlberg's Dilemmas and Other Types of Hypothetical Moral Dilemmas

Content of non-Kohlberg dilemma	n	Non-Kohlberg stage score	Kohlberg stage score
Modified Kohlberg: AIDS	40	3/4	3/4
Modified Kohlberg: self	40	3/4	3/4
Prostitution	60	2/3	2/3
Free trade	40	3	3/4
Prosocial	60	2/3	3/4
Impaired driving	60	2/3	3/4
Business sale	40	2/3	3/4

The Standard Moral Judgment Interview attempts to measure the most advanced level of reasoning of which an individual is capable. In this regard, we draw the distinction between competence and performance. We assume that competence and performance in moral judgment may differ to some degree depending on the problem being addressed, the context, and other factors. That is, people do not always use their highest stage of moral reasoning. We have attempted to minimize the gap between competence and performance [on the Standard Moral Judgment Interview] by using hypothetical dilemmas, by using probe questions that attempt to elicit the upper limits of the subject's thinking, and by our scoring rules according to which only the most mature expressed version of a particular idea is scored. (p. 5)

This acknowledgment notwithstanding, Colby and Kohlberg (1987) made it clear that they expect people to perform at their level of competence in most circumstances: "Although we do distinguish between competence and performance in moral judgment, we hold that lower levels are used only in situations with a significant downward press [such as] the low-level 'moral atmosphere' of a traditional prison" (p. 8).

Problems With Colby and Kohlberg's Explanation of the Structural Inconsistency of Moral Judgment

Colby and Kohlberg's (1987) explanation of structural inconsistency is problematic empirically and theoretically. It is problematic empirically because participants in our research made structurally inconsistent moral judgments in response to hypothetical dilemmas in optimal performance conditions. It is problematic theoretically because if individuals derive moral judgments from structures that are more than an adjacent stage lower than those they invoke on Kohlberg's test, they must possess such structures, and, if they possess such structures, their old structures could not have been transformed and displaced by the newer structures they acquired.

Toward a More Interactional Model

Empirical evidence of structural inconsistency in moral judgment implies a more radical revision of Kohlberg's model of moral development than Colby and Kohlberg (1987) acknowledged. In place of Kohlberg's assumptions that new stages transform and displace older stages and that people in one stage of moral development process moral information differently from people in other stages of moral development, the data suggest that people acquire structures of moral reasoning in a "layer-cake" (Rest, 1979) or

additive way. One implication of this revision is that moral development is defined more by an expansion in the range of structures of moral reasoning available to people than by the last structure they acquire. A second implication is that the ways in which people process moral information stem from an interaction between the mental structures they have acquired (and retained) and the types of moral dilemmas they consider. As asserted by Levine (1979), "the stability or variability of moral reasoning should be understood as a case of 'best fit' between one of several equilibrated moral structures . . . and recurring patterns of stimuli" (p. 156). If, as the data suggest, moral judgments stem from an interaction between the types of moral dilemmas people encounter and the structures of moral reasoning they have acquired (see the multiple-structure interactional model in Figure 1), we need to explain why different kinds of dilemmas pull for different forms of moral judgment, why dilemmas differ in the strength of their pull, and why, as Kohlbergians have found, different people sometimes respond to the same moral dilemma in different ways.

Why do different kinds of dilemmas pull for different forms of moral judgment? Harré (1983) argued that different "moral orders" in the social environment activate different forms of moral judgment. A moral order is an organized "system of rights, obligations and duties in a society, together with the criteria by which people and their activities are valued" (Harré, 1983, p. 219). According to Harré, different aspects of our social worlds are guided by different rule systems, roles, and expectations for appropriate behavior. For example, the business world is guided by a Stage 2 moral order based on instrumental exchange; marriage is guided by a Stage 3 moral order based on the fulfillment of mutual role expectations; and the legal system is guided by a Stage 4 moral order based on maintaining the institutions of society. In Harré's terms, the reason why people make different kinds of moral judgments in response to different kinds of moral dilemmas is that the dilemmas involve different moral orders. People move in and out of moral orders, not stages of moral development. Whereas Kohlberg's model implies consistency of moral judgment across contexts, Harré's model offers an explanation for the inconsistency we observed.

Other investigators have advanced models compatible with Harré's model. Clark and Mills (1993) distinguished between exchange and communal relationships and suggested that each type of relationship is governed by different rules or norms: "In exchange relationships, benefits are given with the expectation of receiving a comparable benefit in return or as repayment for a benefit received previously. In contrast, the norm in communal relationships is to give benefits in response to needs or to demonstrate a general concern for the other person" (p. 684). In Kohlberg's terms, exchange relationships are upheld by Stage 2 moral judgments and communal relationships are upheld by Stage 3 moral judgments.

In a similar vein, Fiske (1992) identified four universal types of social relationships in societies, which he argued are supported by four cognitive "schemata" or structures that contain different standards of justice. Fiske (1992) labeled these relationships (a) "authority ranking," which, when translated into Kohlbergian terms, is upheld by Stage 1 moral judgments; (b) "equality matching" (upheld by Stage 2 judgments); (c) "communal sharing" (upheld by Stage 3 judgments); and (d) "market pricing" (upheld by Stage 4 judgments).

The models we have been discussing should not be confused with sociocultural deterministic models of morality. They do not imply that people parrot the moral judgments made by representatives of different institutions in society. Rather, they maintain that different types of relationships and different social institutions are guided by different principles of care and justice, different sets of rights and duties, and different criteria for moral evaluation, which are reflected in different kinds of moral judgments. Such models help explain the variance in moral judgment that stems from the "pull" of moral dilemmas, but we still need to explain why some dilemmas pull harder than others for particular types of moral judgment.

Why do dilemmas differ in the strength of their pull for different forms of moral judgment? A distinction made by M. Snyder and Ickes (1985) between "strong" and "weak" situations can be applied to moral dilemmas. Strong dilemmas pull primarily for one type of interpretation, or stage-typed moral judgment, and weak dilemmas lend themselves to different kinds of interpretation. The two hypothetical dilemmas in our studies that pulled most strongly for one form of moral judgment were those that involved decisions about whether to drive after drinking alcohol (Krebs, Denton, Vermeulen, Carpendale, & Bush, 1991) and whether to disclose damning information during the sale of a business (Carpendale & Krebs, 1992). Virtually everyone made Stage 2 or Stage 2/3 moral judgments in response to these dilemmas. What made these dilemmas strong was the fit between the guiding principles of the moral orders in question, which were familiar to all participants, and the Stage 2 moral judgments that upheld them.

The moral dilemmas on Kohlberg's test are weak or "open" (Colby & Kohlberg, 1987, p. 2). In Harré's (1983) terms, Kohlberg's dilemmas present conflicts among different moral orders. Within Kohlbergian dilemmas, probe questions invite or pull for judgments that uphold different moral orders. For example, the probe "If Heinz does not love his wife, should he steal the drug for her?" invites Stage 3 judgments upholding the moral order of marriage, and the probe "In general, should people do everything they can to obey the law?" pulls for Stage 4 judgments upholding the moral order of the legal system. The question is, why do different people tend to uphold different moral orders when they respond to the moral dilemmas on Kohlberg's test? Why, for example, do young children tend to make Stage 1 moral judgments and older children tend to make Stage 2 moral judgments?

Why do different people make different stage-typed moral judgments in response to the same moral dilemmas? Before addressing this issue, it is important to note that moral judgments made in response to Kohlbergian dilemmas are significantly less consistent than implied by the global stage scores assigned to respondents. As explained by Krebs, Vermeulen, and Denton (1991) and Nisan and Koriat (1989), moral judgments that do not correspond to the global stages to which people are assigned are ignored or averaged out in Colby and Kohlberg's (1987) scoring system. "Only the most mature expressed version of a particular moral idea is scored" (Colby & Kohlberg, 1987, p. 7); global stage scores are based on an average of the scores of particular judgments, and minority stage scores—*inconsistencies in moral judgment*—are eliminated at three junctures in the derivation of global stage scores.

Masked inconsistency notwithstanding, there are several reasons why different people respond in different ways to weak moral dilemmas and to open questions about moral norms and values on cognate tests of moral judgment such as the one developed by

Gibbs, Basinger, and Fuller (1992). First, as Kohlberg assumed, high stage structures are not available to all people. Young children and mentally challenged adults make predominantly Stage 1 or Stage 2 moral judgments because they are unable to engage in more sophisticated forms of moral reasoning (Perry & Krebs, 1980). Second, people whose structures of moral reasoning are highly consolidated may be more inclined than people who are in the process of acquiring new structures to process moral information in a consistent manner.

However, less consistent with Kohlberg's model, we contend that people attend to different aspects of Kohlbergian dilemmas and interpret them in different ways because they read aspects of their own social lives into them and interpret them in terms of the types of social relations and moral orders in which they are embedded. As Piaget (1932/1965) concluded, the "heteronomous" (Stage 1) moral judgments of young children are, in part, determined by their subordinate social status relative to adults, and the more cooperative (Stage 2) moral judgments of older children are, in part, determined by their participation in more egalitarian peer relations.

Extending these conclusions, we also would expect the moral orders in which adults are embedded to affect their moral judgments. Thus, we would not be surprised to learn that (a) economics students are more likely than other students to adopt Stage 2 strategies in experimental games (Frank, Gilovich, & Regan, 1993), (b) people of high socioeconomic status (SES) are more prone than people of low SES to make Stage 4 moral judgments (Kohlberg, 1984), and (c) women make more care-oriented moral judgments than men about real-life moral dilemmas (Gilligan, 1982). We also would not be surprised to learn that men are as likely as women to make care-oriented moral judgments when they are given care-oriented problems to solve (Wark & Krebs, 1997).

Conclusions From the First Phase of Our Research Program

In contrast to Kohlberg's assumption that all moral dilemmas are interpreted in one way by people at one stage of moral development and in other ways by people at other stages of moral development, evidence from our research established that the ways in which people process moral information stem from an interaction between the mental structures they have acquired and the content of the moral dilemmas they encounter. Some dilemmas exert a strong pull for particular kinds of moral judgments; other dilemmas lend themselves to different interpretations. In place of the assumption that people are more or less moral (on the basis of their stage of moral development), the evidence suggests that virtually all adults may make high- or low-stage moral judgments when faced with strong triggers, though people may have different thresholds for the activation of different forms of moral reasoning.

It follows that, with the exception of young children who consistently make Stage 1 moral judgments because they have not acquired other structures of moral reasoning, it is misguided to stage-type people, or to characterize them as "in" a stage of moral development on the basis of the moral judgments they make in response to the moral dilemmas on Kohlberg's test. It also follows that the more morally mature people become, the more structurally flexible—and inconsistent—their moral judgments will be, and the less the stage of moral judgments they make on Kohlberg's test will correspond to the stage of moral judgments they make in

response to other kinds of moral dilemmas (Krebs, Denton, et al., 1991).

Phase 2: Expanding the Multiple-Structure Interactional Model

Studies in the first phase of our research program were designed to evaluate Kohlberg's model mainly in its own terms, by focusing on variations in structures of moral judgment across hypothetical dilemmas in academic contexts. In the second phase, we investigated other "person characteristics and recurring patterns of stimuli" (Levine, 1979, p. 156) we expected to affect the structure of moral judgment.

The framework for this second phase is outlined in the expanded multiple-structure interactional model in Figure 1. People, who differ in ways other than the Kohlbergian structures of moral reasoning they have acquired, respond to moral issues other than those on Kohlberg's test in contexts other than those in which Kohlberg's test is customarily administered. They make moral judgments about a variety of people, including themselves, and they direct their judgments to a variety of recipients, including themselves. In Phase 2, we attempted to determine whether the structure of moral judgment is affected by the contexts in which people make moral judgments, internal factors other than structures of moral reasoning, the moral choices people make, and the objects and recipients of their moral judgments.

Contexts

Consistent with Colby and Kohlberg's (1987) acknowledgment that contexts such as traditional prisons contain a moral atmosphere that pulls for low-stage moral judgments, Denton and Krebs (1990) found that participants made significantly lower-stage moral judgments on Kohlberg's test in drinking contexts such as bars, nightclubs, and parties, especially when they were intoxicated, than they did in academic contexts. Contexts may affect moral judgment in three ways. First, as demonstrated in prison studies (Hickey & Scharf, 1980) and the Denton and Krebs (1990) study, the moral order of contexts may pull for particular kinds of moral judgment. More dynamically, Drury and Reicher (2000) have adduced evidence that members of crowds involved in inter-group conflicts may adopt the contextually specified "social identities" and moral standards of their in-groups.

Second, contexts may determine whether people engage in any kind of moral reasoning. When interviewers ask people questions about morality, they activate the type of moral reasoning assessed by Kohlberg. However, many of the contexts in which people experience moral conflicts are significantly less conducive to the activation of moral reasoning. As one example, engulfing social contexts such as rock concerts and lively parties spiked by alcohol may induce people to lose self-awareness, which may inhibit access to their moral standards (Diener, 1979). As another example, people who encounter emergencies in which the needs of victims are salient and compelling may engage in an "immediate, holistic, intuitive appraisal of an iconic, nonverbal sort, in which the essence of the crisis is grasped" (Piliavin, Dovidio, Gaertner, & Clark, 1981, p. 178). In such contexts, people tend to react impulsively to the most prominent cues in the situation (Zillman, 1983).

Finally, some contexts may activate different types of moral information-processing and decision-making mechanisms from

those described by Kohlberg. In contrast to academic contexts that activate the "cold," logical forms of moral reasoning classified by Kohlberg, real-life contexts may activate "hotter," more practical, and heuristic decision-making mechanisms (Gigerenzer & Todd, 1999). Neurologic research suggests that the brain may contain different "pathways" through which information is processed. For example, LeDoux (1996) adduced evidence in support of the idea that information may be processed via a "high road," which involves identifying and analyzing stimuli before emitting an appropriate emotion, and a "low road" that leads directly to an emotional reaction. Damasio (1994) found that patients with brain damage whose ability to experience emotions was disrupted showed no deficiency in their ability to make abstract ethical judgments but behaved in decidedly immoral ways in their everyday lives. Haidt (2001) adduced evidence that affectively laden mental mechanisms give rise to moral judgments, which people may then justify by engaging in more logically based moral reasoning.

Individual Differences

In Kohlberg's model, structures of moral reasoning are the sole internal source of moral judgments; however, other aspects of people may affect whether they make moral judgments and, if so, what kinds of judgments. Examples of individual differences that we and other investigators have found to affect moral judgment are moral sensitivity (Rest, 1984), internal-external orientation and field dependence (Gibbs et al., 1986), personality traits and political values (Carpendale & Krebs, 1995; Fishkin, Keniston, & MacKinnon, 1973; Hogan & Emler, 1995), coping and defensiveness (Bartek, Krebs, & Taylor, 1993; Haan, 1985), and empathy (Hoffman, 1987).

Moral Choices

After people are given the dilemmas on Kohlberg's test, the first thing they are asked to do is to make a deontic choice. Kohlberg claimed that, because the content of moral judgment is independent of the structure of moral reasoning, people at all stages of moral development can equally easily make any choice. However, a close examination of data supplied by Kohlberg (1984, p. 527) reveals systematic relations between moral choices and stages of moral judgment on some of his dilemmas. For example, there is a positive relation between the deontic choice "Heinz should steal the drug" and Stage 5 moral reasoning. Appropriately designed studies have revealed systematic relations between moral choices and the structure of moral judgment on a variety of non-Kohlbergian moral dilemmas (Carpendale & Krebs, 1995; Nisan & Kriat, 1989).

There are two quite different ways to interpret the relation between structures of moral judgment and moral choices. In the first, which requires only a minor adjustment to Kohlberg's model, people deduce different moral decisions from different structures of moral reasoning in much the same way as preoperational children deduce different solutions to conservation problems from concrete operational children. In the second interpretation, which requires a major revision of Kohlberg's model, people derive their moral decisions from cognitive and affective mechanisms other than moral reasoning, as discussed earlier, and then invoke the most appropriate forms of moral reasoning to justify them. Haidt

(2001) offered evidence supporting the conclusion that “moral reasoning is an effortful [or “controlled”] process, engaged in after a moral judgment is made, in which a person searches for arguments that will support an already-made judgment” (p. 818). Viewed in this way, the reasons people give to explain or to support their deontic choices may not reflect the mental processes from which they derived the choices, and the design of the mental structures that produce moral choices may not be reflected in the logic of the reasons people adduce in support of them as assumed by Kohlberg.

Objects of Moral Judgments

The objects of moral judgments on Kohlberg’s test are imaginary characters such as Heinz, a druggist, and Officer Brown who are meant to be judged by the roles they play in Kohlberg’s moral dilemmas. Other objects, such as characters with whom people identify or characters people dislike, may exert a stronger influence on moral judgment. More important, especially with regard to the link between moral judgment and moral behavior, Kohlberg’s model neglects arguably the most important object of moral judgment of all: the person making the judgment. Several investigators have compared the moral judgments of participants who responded to Kohlbergian and other hypothetical moral dilemmas in the standard form and in a form in which participants imagined themselves as the protagonists (see Krebs, Vermeulen, & Denton, 1991, for a review). Although the results of these studies have been mixed, there is no question that there are significant differences between the ways in which people make real moral decisions about what they should do and about what others should do, as discussed subsequently.

Recipients of Moral Judgments

Psychologists such as Johnson and Hogan (1981) have argued that Kohlberg’s test is susceptible to impression management and that people make different kinds of moral judgments to impress different audiences or recipients. In support of this idea, Carpendale and Krebs (1992) found that participants made higher-stage moral judgments on Kohlberg’s test and on a dilemma involving free trade when they believed their judgments would be read by a professor of philosophy than when they believed their judgments would be read by a professor of business administration.

Relations Between the Content and Structure of Moral Judgments

Colby and Kohlberg (1987) claimed that, “by first categorizing [moral judgments] according to content and then addressing the questions of structure or stage, standard scoring procedures involve explicit differentiation of form and content” (p. 43); however, the classified criterion judgments in Colby and Kohlberg’s scoring manual do not support this claim. The content of many of Kohlberg’s criterion judgments—that is, the norms and elements they invoke—is related to the stages to which they are assigned. As examples, moral judgments that are based on Element 7 content (seeking reward and avoiding punishment) tend to be classified at low stages, and moral judgments that are based on Element 13 content (upholding human dignity and autonomy) tend to be classified at high stages (see Wark & Krebs, 1997, for a more extended analysis).

Conclusions From Phase 2

Findings from the second phase of our research program demonstrated that people are not as cognitively constructive or structurally consistent as Kohlberg’s model implies. The moral issues people consider and the contexts in which they consider them interact with a variety of individual differences to determine whether moral reasoning is activated and, if so, which form. Deontic choices and the content of moral judgments are related to the structure of moral reasoning invoked to justify them. Objects and recipients may affect the types of moral judgments people make.

Limitations of Phase 2 Research

As fruitful as the studies in Phase 2 were in identifying performance factors that influence moral judgments, the studies suffered a significant limitation: They all involved hypothetical moral dilemmas. Our ultimate interest was in understanding how people respond to the real moral dilemmas they encounter in their everyday lives. In the third phase of our research program, we sacrificed experimental control to increase ecological validity and developed a questionnaire designed to explore real-life moral decision making.

Phase 3: Exploring Real-Life Moral Decision Making

The questionnaire opened by asking respondents to describe moral conflicts they had recently experienced and to explain how they had dealt with them. Respondents were asked to describe what led up to the conflicts; what the people involved said, did, thought, and felt; and how the conflicts were resolved. Follow-up questions asked respondents to identify the moral issues raised by the conflicts and the most moral ways of resolving them, to evaluate the behaviors of everyone involved, and to explain the basis for their judgments. Respondents also were asked to complete a written form of Kohlberg’s test.

We realized that participants’ responses would stem from the memories and interpretations they were willing to disclose, which could be incomplete, inaccurate, and biased, and we knew our methods would not enable us to manipulate determinants of moral judgment or moral behavior experimentally. Counterbalancing these limitations, the questionnaire enabled us to (a) identify the kinds of moral conflict people experience in their everyday lives and compare them with Kohlbergian dilemmas, (b) compare the moral judgments people make in response to real-life moral conflicts with the moral judgments they make in response to Kohlbergian dilemmas, (c) examine the interaction between the moral judgments exchanged by people involved in interpersonal moral conflicts, (d) explore the role of emotional reactions in moral decision making, and (e) explore the relation between moral judgment and moral behavior.

Similarities and Differences Between Real-Life Moral Conflicts and Hypothetical Moral Dilemmas

Although all real-life moral conflicts are unique in their particulars, we were able to classify those reported by our participants reliably in the categories described in Table 3. As shown in Table 3, the issues involved in real-life moral conflicts are similar to the issues involved in Kohlberg’s dilemmas. For example, like Kohl-

Table 3
Types of Real-Life Moral Conflicts

Type	Description
1. Philosophical	Abstract, philosophical dilemmas that do not directly involve the participant or his or her friends and/or relatives but that have been discussed or debated by the participant in his or her everyday life
2. Antisocial dilemmas	A. Reacting to transgressions: dilemmas involving a decision about what to do about a transgression, injustice, crime, or violation of rules that has occurred B. Reacting to temptation: dilemmas involving the temptation to meet personal needs, fulfill desires, acquire resources, or advance self-interest by behaving dishonestly, immorally, unfairly, or ungratefully
3. Social pressure	Dilemmas involving pressure, either implicit or explicit, by another person or group to engage in identity-inconsistent behaviors that violate participants' values
4. Prosocial dilemmas	A. Reacting to conflicting demands: dilemmas involving a decision about what to do when faced with the inconsistent demands of two or more people, often with implications for participants' relationships with these people B. Reacting to the needs of others: dilemmas involving a decision about whether participants are responsible for engaging in some proactive behavior on another's behalf and what their duties or responsibilities are toward the person in question

berg's "Officer Brown," people must decide how to react to the transgressions of others (Type 2A); like "Joe," they must decide how to react to social pressure (Type 3); and, like "Louise," they experience conflicting demands from their friends and relatives (Type 4A).

Similarities notwithstanding, the moral issues in Kohlbergian and real-life dilemmas differ in at least five ways. First, in real life, moral decision makers usually know the objects of their moral judgments. They usually share a relationship with them, have feelings for them, have a history of past interactions with them, expect to interact with them in the future, and anticipate reactions and repercussions from the judgments and behaviors they emit (Krebs, Denton, & Wark, 1997). Second, the people who make real-life moral judgments are usually involved in the moral conflicts. Referring to Table 3, *they* perpetrate transgressions, desire forbidden fruits, feel pressured, and so on. The process of making decisions about what one should do may be quite different from the process of making decisions about what other people should do.

Third, most real-life moral conflicts involve consequences for the parties involved, and the parties have a vested interest in the outcomes (Krebs et al., 1997). Fourth, real-life moral conflicts often evoke strong emotions, which may affect moral decision making (Frank, 2001; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Haidt, 2001; Nesse, 2001). Finally, real-life moral conflicts almost always are precipitated by behavioral acts and usually require behavioral decisions (Krebs & Denton, 1999).

Similarities and Differences Between Moral Judgments Made in Response to Real-Life Moral Conflicts and to Hypothetical Dilemmas

Participants made enough moral judgments that matched structurally the criterion judgments in Kohlberg's scoring manual to enable us to stage-type them (see Wark & Krebs, 1997, p. 176, for examples). Equipped with such judgments, we were able to determine (a) whether there was any relation between stage of moral judgment on Kohlbergian and real-life moral dilemmas and (b)

whether the structure of moral judgment varied across types of real-life moral dilemmas.

Variations in moral judgments across different types of real-life dilemmas. Consistent with the findings of other investigators (e.g., Armon, 1995; Walker et al., 1987), we found that the structure of moral judgments made in response to real-life moral dilemmas tended to be consistent across similar types of dilemmas but inconsistent across different types of dilemmas. Participants tended to make Stage 3/4 moral judgments in response to impersonal philosophical dilemmas involving such issues as euthanasia and capital punishment when they discussed them in their everyday lives, but they tended to make lower-stage judgments in response to more personal kinds of real-life dilemmas (Wark & Krebs, 1996). As can be seen in Table 4, personal dilemmas involving prosocial issues such as loyalty and helping tended to pull for Stage 3 moral judgments, and personal dilemmas involving antisocial issues such as reacting to others' transgressions and resisting temptation tended to pull for Stage 2 and Stage 2/3 moral judgments (Wark & Krebs, 1996).

The pull of moral competence. We found a weak but significant positive correlation between level of moral maturity⁴ on real-life moral dilemmas and level of moral maturity on Kohlberg's test (Wark & Krebs, 1997). However, this relation did not stem from participants' tendency to invoke the same forms of moral judgment on real-life dilemmas as they did on Kohlbergian dilemmas. Instead, moral maturity—or moral competence—as assessed by Kohlberg's test, seemed to increase people's resistance to low-stage pulling antisocial dilemmas.

Self-serving biases. In contrast to the third-person moral judgments evoked by Kohlberg's test, most real-life moral judgments

⁴ A moral maturity score is produced by assigning stage scores to interview judgments, weighting the scores differently for responses that support chosen versus nonchosen issues (e.g., upholding life vs. upholding law), averaging the weighted stage scores, and multiplying the result by 100. A score of 100 translates to Stage 1, a score of 200 translates to Stage 2, and so on (see Colby & Kohlberg, 1987, pp. 187–188).

Table 4
Percentages of Participants Classified at Kohlbergian Stages of Moral Development on Kohlbergian and Real-Life Moral Dilemmas

Dilemma	Stage of moral development						
	2	2/3	3	3/4	4	4/5	5
Kohlbergian							
Heinz	0	6	44	30	16	3	1
Officer Brown	0	5	49	30	14	3	0
Real-life prosocial							
Helping	5	19	71	5	0	0	0
Loyalty	1	23	69	3	5	0	0
Real-life antisocial							
Transgression	24	43	29	4	1	0	0
Temptation	28	55	15	0	2	0	0

are made in the first person and second person. As examples, people say such things as "I was wrong; I should never have done that" and "You should do your share." Krebs and Laird (1998) found that first-person moral judgments made by participants about transgressions they had committed were significantly more lenient than the third-person judgments they made about transgressions committed by others, especially when others' transgressions were committed against them. Consistent with findings from other research on attribution (e.g., Miller & Ross, 1975), participants tended to attribute their own misdeeds to external factors but to attribute the misdeeds of others to internal factors. Cognitive-developmental theorists have acknowledged that the types of egocentric biases postulated by Piaget to affect the moral judgments of young children also may affect the moral judgments of adults (Flavell, 1985; Gibbs et al., 1992). Even in the case of people with sophisticated role-taking abilities, their own perspective may dominate their interpretations of events.

This said, it is possible that highly developed conceptions of morality and advanced perspective-taking abilities decrease people's susceptibility to self-serving justifications. In support of this idea, Krebs and Laird (1998) found positive relations between level of moral maturity on Kohlberg's test and people's tendency to accept responsibility for their real-life moral transgressions and to judge them in the same way they judged the transgressions of others. Such relations cannot be examined in studies that investigate third-person moral judgments about hypothetical characters.

The meanings of "why" and "should." There are subtle but significant differences between the meanings people intend to convey when they use the words *why* and *should* in hypothetical and real-life contexts. When Kohlbergian interviewers ask people questions such as "Why should Heinz steal the drug?" their goal is to induce people to explicate the principles from which they derived their deontic choices. In contrast, the "why should" questions people ask in their everyday lives are more often aimed at inducing recipients to explain their attributions of responsibility ("Why Heinz and not someone else?") and to identify the goals that the prescribed behaviors are aimed at achieving. In a similar vein, when people tell others that they should behave in particular ways in their everyday lives, they are usually using the word *should* to induce recipients to behave in the ways they are prescribing. And, when people make conditional "if-then" statements such as "If you love your wife, you should steal the drug," their goal usually is more to explicate decision-making contingencies than to prescribe the most moral choice.

Aretaic judgments. Finally, participants made "aretaic" judgments—"judgments of the morally good, bad, responsible, or blameworthy" (Kohlberg, 1984, p. 518)—in response to real-life dilemmas, which, as Colby and Kohlberg (1987, p. 4) have acknowledged, are neglected in their model and scoring system.

Social Interactional Determinants of Moral Judgments

Kohlbergian interviewers are not involved in the dilemmas about which interviewees make moral judgments; they keep their opinions to themselves. In contrast, in real life, the recipients of moral judgments are often involved in the moral conflicts in question; they express their own opinions and debate the moral issues at hand. As noted by Haan (1975), interpersonal moral conflicts involve dynamic social exchanges. The parties engaged in such conflicts may alternatively serve as sources, objects, and recipients of moral judgments, each influencing the other in an exchange of first- and second-person moral judgments (e.g., "You wronged me. . . ." "No, I had a right to do what I did; you are the one who wronged me"). Krebs et al. (2002) found that victims of transgressions who were capable of making high-stage moral judgments tended to invoke Stage 2 moral judgments in response to the low-stage judgments their partners made to justify their misdeeds. Kohlberg's model is poorly equipped to account for such proximate social determinants of moral judgment.

Role of Emotion in Moral Decision Making

In contrast to the moral decisions people make on Kohlberg's test, most of the moral decisions people make in their everyday lives are accompanied by strong affective responses. Participants in our research reported experiencing different kinds of emotions in reaction to different kinds of dilemmas. For example, personal dilemmas involving transgressions committed by others tended to evoke anger and righteous indignation; dilemmas involving succumbing to temptation tended to evoke guilt, shame, and defensive reactions; dilemmas involving social pressure and threat of punishment tended to evoke anxiety, fear, resentment, and frustration; and dilemmas involving reacting to the needs of others tended to evoke sympathy.

Consistent with findings from our research (Wark & Krebs, 1996, 1997), a recent functional magnetic resonance imaging study indicates that people process information about personal moral dilemmas in different ways from how they process information

about impersonal moral dilemmas (Greene et al., 2001). People are more emotionally engaged by personal moral dilemmas than by impersonal moral dilemmas and dilemmas that do not involve moral issues. Each type of dilemma activates different areas of the brain and evokes different kinds of moral judgments. Potentially fruitful goals of future research might be to identify aspects of the brain activated by different kinds of personal moral dilemmas and to link brain activation to moral judgment and moral behavior.

When mapping the design of the mental structures that give rise to real-life moral decisions, investigators need to be attentive to their affective components. Indeed, even when people respond to Kohlberg's dilemmas, they implicitly acknowledge the role of affective reactions in the choices they attribute to characters. Consider, for example, the following judgments: [Heinz should steal the drug] "because he would feel so close to [his wife]," "out of gratitude or appreciation," "because his emotions would overpower him," and "because he would feel guilty." Although Kohlberg (1984) acknowledged that "violation of logic and violation of justice . . . arouse . . . strong affects" (p. 63), he did not pursue this idea in his research or investigate other affective influences on moral decision making. At least one of Kohlberg's colleagues has concluded that other affective reactions may influence moral behavior: "Not only justice . . . but also empathy (as well as related emotions such as empathy-based guilt) contribute to the motivation of moral behavior" (Gibbs, 1995, p. 42).

Relations Between Moral Judgment and Moral Behavior

One of the attractive features of our research on real-life moral decision making was that it enabled us to explore the relation between both Kohlbergian and real-life moral judgment and ecologically valid measures of moral behavior. Although some participants behaved in the ways we would expect from Kohlberg and Candee's (1984) model of the relation between moral judgment and moral behavior, many appeared to behave in more impulsive or emotional ways and to invoke moral reasoning to justify what they had done. We failed to find that participants who scored high on Kohlberg's test behaved in more moral ways than those who scored lower (Krebs et al., 2002; Wark & Krebs, 1996, 1997).

The closer we looked at Kohlberg and Candee's (1984) model of the relation between moral judgment and moral behavior, the more problematic it appeared. If, as Kohlberg and Candee claimed, all structures of moral reasoning can give rise to the same deontic choice, and if deontic choices give rise to behavior, then why would they expect any systematic relation between structures of moral reasoning and moral behavior? The evidence that Kohlberg and Candee (1984) adduced in support of their model stemmed from studies that showed a monotonic relation between the stage of third-person moral judgments about the hypothetical characters in Kohlberg's test in one context and the first-person probability of engaging in a moral behavior in another context (Blasi, 1980). Studies designed in this way fail to establish that participants engaged in the kind of moral reasoning they displayed on Kohlberg's test when they made their behavioral decisions or that, if they did, they derived their behavioral decisions from this kind of moral reasoning. Indeed, such studies fail to establish that participants engaged in any kind of moral reasoning at all before making behavioral decisions. It is quite possible that observed relations between scores on Kohlberg's test and measures of moral behavior are due to third factors that correlate with stage of moral reasoning,

such as intelligence, education, inferences about the experimenters' expectations, and moral values (Blasi, 1980; Krebs & Denton, 1999; Rest, 1984). Gibbs (1995) acknowledged that "although the cognitive-developmental perspective can partially account for moral motivation, the co-motivating role of empathy and the deleterious effects of cognitive distortions should be included in a more comprehensive understanding of moral behavior" (p. 27).

The End of an Era

A model that outlines relations among the main determinants of real-life moral decision making is presented in the bottom portion of Figure 1. Similar models have been derived by other psychologists to account for determinants of prosocial behavior (e.g., Eisenberg, 1986; Krebs & Miller, 1985; Piliavin et al., 1981). Although such models are helpful in mapping the relations among proximate determinants of judgments and behaviors, they are limited in several ways. First, they do not "permit an understanding of the dynamics of the processes that go on as an individual responds to [moral issues]" (Piliavin et al., 1981, p. 243). Second, as flowcharts become increasingly elaborate, with arrows outlining relations going every which way, they exhaust their heuristic value (cf. Krebs, 1982). Third, and most important, although such models have descriptive value, they lack explanatory power. In the present case, the models illustrated in Figure 1 fail to offer an overriding explanation for why people possess mental mechanisms that process moral information, why people make moral judgments, or why they emit moral behaviors. Feeling we had stretched Kohlberg's model to its limits, we set out in search of a new explanatory framework.

Toward a More Pragmatic Account of Morality

One of the most striking differences between the moral judgments people make on Kohlberg's test and the moral judgments they make in their everyday lives pertains to the purposes that drive the processes. Ordinary people sometimes use moral judgments to explicate their ideal conceptions of morality, but this purpose is one among many. People usually use moral judgments to achieve more pragmatic personal and social goals.

The overriding question that Kohlberg's model addresses is, why does the structure of people's moral judgment tend to change as they develop? A logically prior question is, why do people make any kind of moral judgment? Our observations of the ways in which people make moral judgments in their everyday lives led us to view moral judgments and moral behaviors not as end products of moral reasoning but, rather, as means to ends, as tools that people use to accomplish tasks and to achieve results. To explain why people make moral judgments and engage in moral behaviors, we set out to identify the goals people use them to achieve.

A Framework for a Pragmatic Account of Morality

As a first step toward developing a new explanatory framework, we classified the types of goals implicit in the moral judgments made by participants in our real-life research in categories such as exerting social influence, creating a good impression, justifying one's behavior, and resolving disputes (Krebs et al., 1997). However, deriving lists of proximate goals is limited in much the same way as deriving lists of performance factors. It lacks a framework

that organizes the proximate goals in terms of overriding principles.

In the following, we outline a set of propositions that, we claim, account for the goals people use moral judgments to achieve. We do not present these propositions as axioms of a formal theory of morality; rather, we present them as a first step toward a more pragmatic and functional approach derived from, and therefore equipped to account for, our empirical findings and the findings of others. The approach implicit in the framework should not be confused with classical pragmatic or functional approaches such as those expounded by James (1890), Spencer (1879), or Parsons (1975). We use the words *pragmatic* and *functional* to refer to the goals individuals use moral judgments to achieve in their everyday lives. As indicated by ensuing citations, the framework we derived is equipped to incorporate insights from a wide range of theories and models, including aspects of the models advanced by Kohlberg and Piaget.

Basic Assumption: Individuals Pursue Goals and Attempt to Advance Their Interests

The self-evident assumption that individuals pursue goals and attempt to advance their interests forms the foundation of many theories, including social exchange theories (Blau, 1964; Coleman, 1990), rational choice theories (Dawes, 1988), evolutionary theories (Alexander, 1987), coevolutionary theories (Boyd & Richerson, 1985), and psychoanalytic theories (Freud, 1925). We focus on the goals pursued by individuals because it is the real-life moral judgments made by individuals that we seek to explain; however, we also are attentive to the goals pursued by groups and the conflicts between individual and group goals.

The goals people pursue and the preferences they display may stem from many sources. According to evolutionary theorists, animals inherit mechanisms that dispose them to pursue goals that advanced the biological interests of their ancestors (Alexander, 1987; Dawkins, 1989; Trivers, 1985), though such mechanisms may not dispose them to pursue proximate goals that advance their biological interests in current environments (Crawford, 2004). Goals and preferences may be influenced by rational choices, emotions, motives, social processes, and social norms (Elser, 1999; Frank, 2001). Preferences may emerge through, and be transformed by, discussion, debate, and negotiation (Elser, 1999; Habermas, 1990).

Propositions

Proposition 1: Under certain conditions, individuals can achieve their goals and advance their interests more effectively by cooperating with others than by adopting more independent or selfish behavioral strategies.

Cooperation occurs when two or more individuals behave in ways that help them achieve their goals. All forms of cooperation involve giving and receiving, which may be intentional or unintentional. All parties to cooperative exchanges may come out ahead through gains in trade. To reap the benefits of cooperation, individuals must support the relationships, groups, and systems of cooperative exchange necessary to produce them, and they must ensure that participating members contribute enough to produce the resources that are shared or exchanged.

The adaptive value of cooperation is reflected in the evolution of systems of cooperation in a wide array of species (Dugatkin, 1997; Flack & de Waal, 2000; Sachs, Mueller, Wilcox, & Bull, 2004). Cooperation undoubtedly played a significant role in the evolution of the human species. To quote Leakey and Lewin (1977), “throughout our recent evolutionary history, particularly since the rise of a hunting way of life, there must have been extreme selective pressure in favor of our ability to cooperate as a group . . . The degree of selective pressure toward cooperation . . . was so strong, and the period over which it operated so extended, that it can hardly have failed to have become embedded to some degree in our genetic makeup” (p. 45). Although cooperative dispositions are rooted in evolved mechanisms (Sachs et al., 2004), the design and content of human systems of cooperation are influenced by cultural evolution (Boyd & Richerson, 1985; Janicki & Krebs, 1998; Krebs & Janicki, 2004).

Proposition 2: Societies contain different systems of cooperation.

Cooperation may assume many forms (Ridley, 1996). Individuals may work together to achieve mutually beneficial goals. They may exchange physical, material, social, or psychological resources simultaneously or on a delayed basis and directly or indirectly (Blau, 1964; Coleman, 1990). They may exchange items in turn or accumulate credit and debt. Individuals may render valuable assistance to others at relatively little cost to themselves in return for low-cost, high-value assistance when they are in need (Tooby & Cosmides, 1996). The moral orders, social institutions, and types of social relationships described by theorists such as Durkheim (1893/1984), Harré (1983), Fiske (1992), and Piaget (1932/1965) are governed by different forms of cooperation.

Proposition 3: All systems of cooperation are threatened by selfishness, cheating, and free-riding.

As explained by Rawls (1971) in the opening pages of *A Theory of Justice*:

Although a society is a cooperative venture for mutual advantage, it is typically marked by a conflict as well as by an identity of interests. There is an identity of interests since social cooperation makes possible a better life for all than any would have if each were to live solely by his own efforts. There is a conflict of interests since persons are not indifferent as to how the greater benefits of their collaboration are distributed, for in order to pursue their ends, each prefers a larger to a lesser share. (p. 4)

Although individuals who succeed in giving less than their share and taking more than their share may gain more than individuals who behave in cooperative or altruistic ways, selfishness and cheating threaten the systems of cooperation from which individuals benefit. If everyone failed to give, there would be nothing to share. If everyone tried to take more than his or her share, resources could be depleted and members of groups could end up in self-defeating battles.

Systems of cooperation vary in their vulnerability to cheating. In general, the larger the group involved in the system and the greater the potential of the system to produce resources, the more vulnerable the system is to free riders. For example, simple iterated tit-for-tat reciprocity, which is limited to one-on-one turn-taking exchanges, is invulnerable to ongoing cheating, because individ-

uals get even after every turn. On the other hand, long-term commitments and indirect reciprocity, which involve the potential to purvey valuable gains in trade (Alexander, 1987; Nesse, 2001; Tooby & Cosmides, 1996), may enable individuals to garner a disproportionate share of benefits on trust over relatively long periods of time and then fail to honor their commitments or even the score.

Proposition 4: All groups create codes of conduct, rules, norms, or laws that define the rights, duties, prescribed behaviors, and prohibited behaviors that they believe are necessary to uphold the systems of cooperation they sponsor.

Codes of conduct may originate and evolve in a variety of ways. They may emerge in the way described by Piaget (1932/1965) through egalitarian interactions among peers, which may involve negotiation, compromise, consensus, and the development of social contracts. Alternatively, they may be created, revised, and enforced by authorities such as leaders, elders, sages, and judicial systems (Boyd & Richerson, 1985; Durkheim, 1893/1984) and passed from one person or group to another person or group through various forms of social influence and assimilation (Richerson & Boyd, 2001; Sober & Wilson, 1998). Social norms are especially important in upholding systems of indirect exchange (Blau, 1964).

Proposition 5: The codes of conduct, rules, norms, and forms of conduct that uphold systems of cooperation define the domain of morality and the moral orders of societies.

Many theorists root morality in cooperation (e.g., Alexander, 1987; Durkheim, 1893/1984; Piaget, 1932/1965; Rawls, 1971). As stated by Rest (1983), morality consists in "standards or guidelines that govern human cooperation—in particular how rights, duties, and benefits are [to be] allocated" (p. 558). Morality involves "the equilibrium of individuals in society . . . each reciprocating with other individuals according to rules that balance the benefits and burdens of cooperation" (pp. 572–573).

Proposition 6: People are naturally disposed to behave in ways that uphold systems of cooperation.

Trivers (1985) suggested that emotional systems that dispose people to behave in ways that uphold systems of cooperation have evolved in the human species. Some mechanisms dispose people to cooperate; other mechanisms dispose people to induce others to cooperate. Some mechanisms give rise to positive affective reactions such as a sense of justice and feelings of love, friendship, sympathy, gratitude, indebtedness, approval, and admiration. Other mechanisms give rise to negative affective reactions such as righteous indignation, revenge, and guilt.

Evolutionary theorists have explained how care-oriented mechanisms that dispose individuals to cooperate can evolve through "kin selection" (e.g., see Krebs, in press). Hoffman (1987) and Krebs (1987) offered accounts of the evolution of empathy. Frank (2001) explained how a capacity for sympathy that motivates people to make "emotional commitments" to others that uphold mutually beneficial cooperative relations could have evolved. Frank (2001) suggested that if people are naturally disposed to make emotional commitments, we would "no longer [be] compelled to accept the traditional view that universal opportunism

[that is, Stage 2 tit-for-tat forms of instrumental exchange] is the only stable equilibrium" (p. 73).

Haidt and Hersh (2001) found that people often express intense emotions about the immorality of behaviors without being able to explain why. Price, Cosmides, and Tooby (2002) found that mental mechanisms that regulate people's "level of punitive sentiment" and "pro-reward motivational system" in cooperative relations are "functionally specialized for removing the fitness advantage enjoyed by free riders" (p. 203) and increasing the fitness of those who contribute their share or more than their share. Gintis, Bowles, Boyd, and Fehr (2003) adduced evidence that humans are disposed to practice "strong reciprocity," defined as "a predisposition to cooperate with others and to punish those who violate the norms of cooperation, at personal cost, even when it is implausible to expect that these costs will be repaid" (p. 153). Several theorists have explained how complex systems of cooperation can evolve in large groups when people are willing to suffer costs to reward those who behave in cooperative ways and punish those who cheat (Alexander, 1987; Boehm, 2000; Richerson & Boyd, 2001).

Evolutionary analyses of cooperation are attentive to "arms races" between mechanisms that dispose individuals to cheat and mechanisms designed to catch and punish cheaters (Alexander, 1987). Mechanisms that enable cheating individuals to prosper increase the adaptive value of cheater detection and punishment mechanisms, which in turn increase the adaptive value of better cheating mechanisms, and so on. Similarly, mechanisms that enable people to create the impression that they are more cooperative than they really are increase the adaptive value of mechanisms that enable people to see through others' false impressions, and so on.

Proposition 7: People use moral judgments to uphold systems of cooperation and to resolve conflicts of interest.

People make moral judgments to induce themselves and others to cooperate and resist the temptation to cheat. People make deontic moral judgments that directly (one person to another person) or indirectly (through third parties) verbalize prescriptions and prohibitions, clarify moral codes, and identify rights and duties. People make aretaic moral judgments that express approval of cooperative, obedient, conforming, and altruistic behaviors and people, and that express disapproval of uncooperative, disobedient, nonconforming, and selfish behaviors and people. People tend to buttress both kinds of judgment with reasons and justifications. Judgments that affect people's reputation—and gossip in general—play an important role in upholding systems of indirect reciprocity that foster the interests of repeatedly interacting people (Alexander, 1987; Blau, 1964; Dunbar, 1996; Hogan & Emler, 1995).

People also use moral judgments to recommend ways of resolving conflicts of interest and persuading interested parties to accept their recommendations. To achieve these goals, people use moral judgments to make suggestions, advance arguments, suggest compromises, negotiate, and mediate.

Proposition 8: People use different kinds of moral judgments to uphold different systems of cooperation.

In the process of upholding systems of cooperation and resolving conflicts of interest, people use moral judgments to support the groups to which they belong and to uphold the hierarchical, egal-

itarian, care-oriented, and justice-oriented relationships and institutions contained within their groups.

Proposition 9: People may use moral judgments for immoral purposes.

People may use moral judgments to induce others to take less than their share and give them more than their share and to permit them (the judgment makers) to take more than their share and give others less than their share. To accomplish such goals, authors of moral judgments may induce recipients to overestimate how much the authors deserve (the authors' rights) and underestimate how much they owe (their duties), which in turn may involve inducing recipients to (a) overvalue the authors' contributions and the costs of making them and (b) undervalue the authors' returns (for evidence supporting these assertions from research on social exchange, equity, and justice, see Chadwick-Jones, 1976; Greenberg & Cohen, 1982).

In zero-sum exchanges, individuals may foster their interests by inducing recipients to underestimate how much they (the recipients) deserve and overestimate how much they owe, which may involve inducing recipients to (a) undervalue their contributions and (b) overvalue their returns. People also may attempt to foster their interests by invoking self-serving principles of equity (Damon, 1977).

At a more general level, people may use moral judgments to induce recipients to believe that they (the judgment makers) are more cooperative and altruistic than they actually are and that others are less cooperative and altruistic than they actually are. What counts in social exchanges is not the actual value of what one gives, or one's actual worth or goodness, but one's perceived worth (see Krebs, in press; Krebs & Denton, 1997). Persuading others that you are a fair, honest, generous, responsible, and moral person who will make an attractive exchange partner may induce them to bestow benefits on you, whether you deserve them or not. As part of this process, people may use moral judgments to externalize and excuse their misdeeds, to praise themselves, and to blame others (for reviews, see Krebs & Laird, 1998; C. R. Snyder & Higgins, 1988). People also may use moral judgments to persuade themselves that they are more moral than they actually are (see Krebs & Denton, 1997, for evidence of "self-righteous biases" in moral judgment).

Proposition 10: The goals that people pursue affect the types of moral judgments they make.

Research on social cognition has demonstrated that goals affect judgments (see Kruglanski, 1996, for a review). Such research has revealed that "goals may influence which beliefs and rules we access and apply to the judgment at hand, and may also influence the amount of time and effort we devote to the judgment. As a result, people with different goals may arrive at very different judgments, and the same individuals may find themselves drawing different conclusions from the same information as their goals shift" (Kunda, 2000, p. 246). Particularly relevant to moral judgment is the distinction between "directional goals" and "accuracy goals." In everyday life, "our judgments may be biased by our motives because we selectively access those beliefs and rules that support our desired conclusions" (Kunda, 2000). In contrast, when people take Kohlberg's test, their judgments are more strongly

influenced by the goal of arriving at an accurate, or objective, conclusion. "There is considerable evidence that accuracy goals lead people to invest greater effort in the judgment task and to search harder for the best possible reasoning strategies" (Kunda, 2000, p. 236). Conversely, directional goals encourage people to "engage in more cursory, superficial, 'quick and dirty,' heuristic processing" (Kunda, 2000, p. 236). As Kunda (2000) has pointed out, the ability to draw desired conclusions is constrained by the plausibility of available justifications and by the (anticipated) reactions of others.

Proposition 11: People make moral judgments to themselves for essentially the same reasons they make moral judgments to others.

People make moral judgments to themselves, which may be about themselves or about others, for four main reasons: (a) to approve or disapprove of their own or others' behavior or character, (b) to resolve conflicts of interest (sometimes within themselves), (c) to induce themselves to behave in cooperative ways, and (d) to induce themselves to behave in ways that advance their interests at the expense of others. There has been a great deal written about the cognitive processes involved in addressing oneself. Theorists have suggested that individuals introject, internalize, or form cognitive representations of others that serve as inner voices in internal dialogues (Freud, 1925; E. T. Higgins, 1987). Some theorists have suggested that, with development, internalized images of others become increasingly generalized and autonomous (Mead, 1934). Other theorists have suggested that one part of the mind, the "I" or "knower," may address another part of the mind, the "me" or "known" (James, 1890). Recent theory and research on social cognition conceptualize the "I" in terms of procedural knowledge and the "me" in terms of declarative knowledge (Linville & Carlston, 1994).

Commonalities in goals notwithstanding, the process of making moral judgments to oneself differs in significant ways from the process of making moral judgments to others, rendering each susceptible to different kinds of biases. When people make moral judgments to themselves, there is a confluence of interest between the judgment maker and his or her audience, because they are both housed in the same individual. It may be easier to persuade oneself than to persuade others that one should behave in ways that favor oneself and to dismiss evidence that one has behaved immorally. However, inasmuch as the aspects of self with which individuals communicate contain cognitive representations or idealized images of others, they may constitute tougher "sells" and harsher judges than the individuals they represent (Freud, 1925; E. T. Higgins, 1987).

When people make moral judgments to others with whom they are experiencing conflicts of interest, recipients may respond in ways that combat the self-serving biases of actors. However, when judgment makers' interests correspond with those of recipients, recipients may encourage judgment makers to make self-deceptive and self-serving moral judgments that foster their mutual interests at the expense of others. Linking social and cognitive determinants of immoral acts, Krebs and Denton (1997) reviewed evidence that one of the most insidious agents of selfishness and self-deception is social support from friends (see also Denton & Zarbatany, 1996). Friends who have a vested interest in the goals pursued by

their partners may support their illusions and induce them to behave more selfishly than they would have behaved on their own.

Accounting for Support for Kohlberg's Model

We contend that the framework for a pragmatic approach to morality just outlined is equipped to account for the empirical findings supporting Kohlberg's model, the findings from our program of research, and the findings of many other investigators. First, consider support for Kohlberg's model.

Accounting for Kohlberg's Classification of the Content of Moral Judgment

The empirical findings that form the foundation of Kohlberg's model are contained in his classification of the content and structure of moral judgment and the evidence he and his colleagues have adduced for qualitative developmental changes in people's moral judgments in response to the dilemmas on his test. The criterion judgments that Kohlberg and his colleagues have classified fit the form expected in our pragmatic approach. These judgments exhort the characters in Kohlberg's dilemmas to uphold systems of cooperation that enable them to achieve goals, foster their interests, and resolve conflicts of interest. Consider, as examples, the following reasons from Colby and Kohlberg's (1987) scoring manual supporting the decision that Heinz should or should not steal a drug to save his dying wife: "because if you let someone die, they might put you in jail" (Stage 1); "to teach the druggist a lesson" (Stage 2); "in order to leave a good impression in the community" (Stage 3); "because if everyone breaks the law, there would be chaos" (Stage 3); "because otherwise there would be no caring, or people would just be looking out for themselves" (Stage 3/4); and "because his wife can contribute to society" (Stage 4).

Viewed from a pragmatic perspective, Kohlberg's classification of moral norms constitutes a list of ultimate goals and means of achieving them akin to Rokeach's (1973) "terminal" and "instrumental" values. The reason why the "life" norm tends to be primary is that survival is necessary to achieve other goals. Kohlberg's elements constitute the more proximate goals people must achieve to uphold systems of cooperation (e.g., good group consequences and good reputation) and more proximate means of achieving them (e.g., obeying, blaming, and reciprocating).

Accounting for Kohlberg's Structures of Moral Judgment

In terms of our framework, the structures of moral reasoning that define Kohlbergian stages of moral development (see Table 1) consist in sets of moral judgments that uphold increasingly broad systems of cooperation, or reciprocity, that benefit people in increasingly indirect ways. Kohlberg (1984) acknowledged that societies contain different systems of cooperation that are upheld by different types of moral judgment:

The most primitive form of reciprocity is that based in . . . obedience and freedom from punishment. Next (Stage 2) comes literal exchange. Then comes recognition (Stage 3) that familial and other positive social relations are systems of reciprocity based upon gratitude and the reciprocal maintenance of expectations by two social partners. At Stage 4 this develops into a notion of social order in which expectations are earned by work and conformity. . . . At Stage 5, the notion

of social order becomes a notion of flexible social contract or agreement between free and equal individuals. (p. 74)

With Kohlberg, we view people as participating in nested sets of increasingly complex cooperative systems. With Kohlberg, we view people as acquiring the ability to understand increasingly complex forms of cooperation roughly in the sequence he describes, and we agree that the resulting knowledge is reflected in the moral judgments people make on his test. However, we view people as continuing to participate in all systems of cooperation and making judgments that uphold them in appropriate contexts. Whereas Kohlberg (1984) argued that people's general level of moral development is affected by a match between their ideologies and their social worlds (e.g., "Stage 2 'fits' a slum or jail world" [p. 81]), we view adults as making moral judgments upholding all of the moral orders, or systems of cooperation, in which they participate.

Kohlberg (1984) has characterized Stage 2 moral judgments as "pragmatic" (p. 626), which he defines in terms of individualistically-oriented instrumental exchanges and tit-for-tat reciprocity. We contend that the moral judgments that define higher stages also are appropriately characterized as pragmatic and utilitarian, though in less self-centered and more indirect, inclusive, and balanced ways. If practiced by everyone, the ideal forms of reciprocity upheld by high-stage moral judgments are better equipped than more concrete forms to foster the interests of those who make them. Although Piaget (1932/1965) did not focus on the pragmatic effects of making moral judgments, his descriptions of the ideal social (and cognitive) equilibria that can arise through cooperation are consistent with our analysis.

Accounting for the Universality of Stage 1–3 Moral Judgments

Of all of the myriad moral judgments people could make, why do people from all of the cultures that have been examined make moral judgments that correspond to Kohlberg's first three or four stages of moral development (Colby & Kohlberg, 1987; Snarey, 1985)? According to Kohlberg, the reason is that all people acquire the same structures of moral reasoning in the same order. Our more pragmatic and functional answers are because (a) all societies contain Stage 1, Stage 2, Stage 3, and maybe Stage 4 systems of cooperation; (b) it is in individuals' interest to uphold the systems of cooperation that enable them to achieve their goals; and (c) the criterion judgments in Kohlberg's manual prescribe the most effective ways of upholding them. We also account for the evolution of moral norms in these terms. Members of cooperative groups serve as agents of selection, determining which moral judgments best solve the problems at hand and, therefore, which ones evolve into moral norms (Krebs & Janicki, 2004).

Accounting for Kohlberg's Invariant Sequence

The central support for Kohlberg's model stems from evidence that structures of moral reasoning, as assessed by his test, change in an invariant sequence. In part, we accept Kohlberg's explanation for such changes. Inasmuch as Kohlberg's test assesses the sophistication of moral reasoning, or moral competence, we would expect the changes Kohlberg and his colleagues have documented to be influenced by cognitive development. We also accept Kohl-

berg's idea that the competence to make increasingly sophisticated moral judgments is fostered by role-taking opportunities, though we interpret this relation in a more additive-inclusive way.

Whereas Kohlberg focused on changes in the *capacity* to make high-stage moral judgments, we focus on the effects of people's goals on the types of moral judgment they *actually* make in their everyday lives. Kohlberg's model encourages us to view people as possessing general structures of moral judgment through which they process virtually all moral information. We view people as possessing many structures of moral judgment that are activated by different social stimuli and influenced by different goals. In attending to both internal and external influences on moral judgment and moral behavior, our approach is inherently interactional.

Accounting for Real-Life Morality

We claim that the propositions included in our pragmatic approach, referenced by number in the ensuing text, offer a more valid account than Kohlberg's cognitive-developmental model of the components of moral decision making we derived from our real-life research (see the bottom section of Figure 1).

Activation of Moral Judgment

If the function of real-life moral judgment is to induce people to uphold systems of cooperation that help them achieve their goals (Propositions 1, 7, and 8), moral judgment should be activated by issues involving social exchange, giving and taking, rights and duties, conflicts of interest, and violations of the principles and rules that uphold cooperative relations. This expectation is consistent with Kohlberg's contention that moral judgment is triggered by problems of distributive justice, commutative (i.e., contract) justice, and corrective justice such as those presented in Kohlbergian dilemmas (cf. Colby & Kohlberg, 1987, p. 24). It also is consistent with Gilligan's (1982) contention that moral judgment is triggered by problems of care and responsibility and with findings from the third phase of our research program. Referring to Table 3, real-life moral judgments are triggered when people are tempted to foster their interests at the expense of others (temptation dilemmas), when people attempt to persuade others to behave in ways that help them achieve their goals and advance their interests (social pressure dilemmas), and when people must decide what they owe others and what they have a right to themselves (conflicting demands and needs of others dilemmas). To uphold systems of cooperation, people use moral judgments to implement sanctions against those who violate rules (transgression dilemmas).

Contextual Effects

In our framework, different social contexts are guided by different systems of cooperation, moral orders, or forms of sociality (Proposition 2), which are upheld by different types of moral judgment (Proposition 8).

Individual Differences in Moral Information Processing

In line with cognitive-developmental theorists, our approach is attentive to individual differences in moral reasoning, but with a more pragmatic twist. As people become more mature, they tend to acquire an increasingly sophisticated understanding of the logic underlying all of the forms of cooperation that have evolved in

their social systems. This understanding endows them with the flexibility to invoke the most appropriate kinds of moral judgment, whether from high or low stages. It enables people to decide what to do when different moral norms come into conflict and to derive effective solutions to conflicts of interest (Proposition 7). It also enables them to invoke sophisticated moral reasoning to win moral arguments and advance their interests at the expense of others (Proposition 9).

We view structures of moral reasoning as one among many sources of individual differences in moral information processing. Our framework is equipped to account for such other sources as participation in different moral orders (Proposition 8), emotional reactivity (Proposition 6), goals and values (Proposition 10), defensiveness (Propositions 9 and 11), and cognitive style. Kohlberg's Type A and Type B forms of moral reasoning could be added to this list. It is telling to note that high-stage moral reasoning has not been found to be a distinguishing characteristic of moral exemplars (Colby & Damon, 1992). Walker and Hennig (2004) have criticized current research on morality for an overemphasis on moral rationality and adduced data demonstrating that "moral excellence can be exemplified in rather divergent ways and that understanding of moral functioning would be enhanced by attention to this wider range of moral virtues" (p. 629).

Social and Emotional Influences on Moral Decision Making

In Piaget's (1932/1965) pioneering work, he emphasized the potential of egalitarian social exchanges engaged in by rational people to generate ideal forms of cooperation and ideal solutions to conflicts of interest: "There must be born of the actions and reactions of individuals upon each other the consciousness of a necessary equilibrium binding upon and limiting both 'alter' and 'ego'" (p. 34). There is nothing in our approach that is inconsistent with Piaget's, and more recently Habermas's (1990), claims about the potential of rational social interaction and moral negotiation to induce people to behave in moral ways (Propositions 1, 6, 7, and 8). However, our approach also accounts for the pragmatic goals that guide moral negotiation (Propositions 1 and 7) and the potentially limiting (and self-defeating) effects of directional goals (Proposition 10), affective reactions (Proposition 6), and self-serving biases (Propositions 9 and 11) on people's ability to derive ideal solutions to conflicts of interest.

The "Voice" of Moral Judgments

We account for the different types of moral judgments people make in their everyday lives in terms of the proximate social and personal goals they enable people to achieve (Propositions 8, 9, and 10).

First-person moral judgments. People use such first-person deontic judgments as "I should help out more" to induce recipients to accept their conceptions of what they deserve and what they owe (Proposition 9). People use first-person aretaic judgments that convey meanings such as "I am very generous" to manage the impressions they make on recipients (Proposition 9). (Note that people usually invoke more indirect ways of communicating and "metacommunicating" with others, probably because more direct forms of communication are less effective.) People use first-person judgments of responsibility to induce recipients to attribute credit

and blame to them (Proposition 7) and to excuse their misdeeds (Proposition 9). To achieve these goals, people may make first-person moral judgments to themselves as well as to others (Proposition 11).

Second-person moral judgments. People use second-person deontic judgments such as “You should pay your debts” and “You should help your friends” to persuade recipients to behave in ways that uphold systems of cooperation and relationships that advance their interests (Propositions 1 and 7). People use second-person aretaic judgments such as “You are the most moral (or immoral) person I have ever met” to reinforce cooperative and altruistic behaviors and to punish uncooperative and selfish behaviors (Propositions 6 and 7). People use second-person judgments of responsibility to induce recipients to fulfill their social obligations and contribute their share and to hold them responsible for failing to do their duties (Propositions 7 and 9).

Third-person moral judgments. In addition to the function featured in Kohlberg’s model—to explicate conceptions of morality—people make third-person moral judgments such as “She should have helped him” and “He is a manipulator” to influence recipients’ opinions of, and future behavior toward, the objects of the judgments (Propositions 7 and 9). People make such judgments to identify the good guys and the bad guys in their groups—those who behave in cooperative and uncooperative ways and those who uphold and violate the rules—and to reward or punish them indirectly by enhancing or degrading their reputations (Proposition 9). People also make third-person moral judgments to convey such implicit messages as “This is how you should or should not behave” and “If you behave like the person I am judging, you will be judged in a similar manner” (Proposition 7).

Reasons

In contrast to Kohlberg, we account for the reasons people offer in support of their moral judgments in terms of the pragmatic purpose of persuading recipients to accept the content of the judgments (Krebs & Janicki, 2004). Because of the complexity of many moral issues and the difficulty of reckoning the costs and benefits of cooperative exchanges, especially those based in long-term commitments and systems of indirect reciprocity, people have considerable latitude in persuading others that the behaviors they are prescribing are morally correct (Proposition 9) and that it is in recipients’ interest to emit them (Krebs & Janicki, 2004).

Moral Behavior

Our approach features the preeminence of moral behavior. In everyday life, people make moral judgments in response to behaviors emitted by themselves and others and to influence their own and others’ behavior (see Figure 1). For too long, the study of morality has been dominated by the investigation of structures of moral judgment, as ends in themselves. Although making moral judgments on Kohlberg’s test may be an end in itself, it is rarely an end in itself in everyday life. In everyday life, moral judgment is linked much more closely to moral behavior. It is time now to turn our eyes to the prize. What people do is more practically important than what they say, and the study of what people do is better equipped to elucidate morality than the study of what they say.

A spate of research on prohibited and prosocial behaviors suggests that the structures of moral reasoning identified by Kohlberg and other cognitive–developmental theorists play a relatively minor role in the determination of moral behavior (Eisenberg, 1986; Krebs & Miller, 1985). In a review of the literature, Blasi (1980) reported an average correlation of about .3 between scores on Kohlberg’s test and measures of moral behavior, and the relatively small portion of variance accounted for in these studies was reduced when factors such as intelligence and SES were controlled (Krebs & Denton, 1997; Rest, 1983). We account for qualities such as ego strength, willpower, delay of gratification, and courage that have been found to relate to moral behavior (Kohlberg & Candee, 1984) in terms of the roles they play in helping people achieve their goals.

Our approach is equipped to account for the bidirectional relation between judgment and behavior. People may use moral reasoning to figure out the best solutions to moral problems—often in interaction with others—and then behave in accordance with their decisions (Propositions 7 and 11), or they may use it to persuade themselves and others to behave in ways that enable them to achieve their goals (Propositions 7, 8, and 9). In addition, people may behave first and then invoke moral judgments to support and justify what they have done (Propositions 7 and 11), or they may use moral judgments to reinforce desired behaviors and punish undesired behaviors (Proposition 7).

Implications

Our pragmatic approach to morality has several notable implications. It gives rise to a more complex model of moral decision making than Kohlberg’s model. It implies that the intellectual goal implicit in Kohlberg’s model is one among many goals, that this goal is relatively rarely pursued in everyday life, and that more social and personal goals exert a significant influence on the form of moral judgment and the probability of moral behavior.

Our approach gives rise to a significantly different conception of morality from Kohlberg’s approach. According to Kohlberg’s model, people possess one or two structures of moral reasoning from which they derive their moral decisions. The higher their stage of moral development, the more morally mature their moral decisions. In contrast, we view people as possessing many moral decision-making structures, and we define moral maturity in terms of the proclivity to prescribe the type of behavior that most effectively upholds the system of cooperation guiding the social relations in question, which entails prescribing the most effective solutions to conflicts of interest that arise. If you are faced with a decision such as whether to repay a favor or whether to pay for the items you purchase at a store, simple Stage 2 tit-for-tat principles will serve just fine. There is nothing morally immature about invoking simple solutions to simple problems.

Negative forms of tit-for-tat reciprocity are problematic because they tend to give rise to blood feuds, but this does not compromise our point. If tit-for-tat revenge does not work—that is, if it does not uphold the system of cooperation in question—then it is deficient practically and morally. Game theory research has shown that “generous,” “contrite,” and “forgiving” forms of concrete reciprocity work better than rigid tit-for-tat because they enable players to correct self-defeating punitive iterations (see Ridley, 1996, for a review). Extending this point, we would evaluate ideal forms of reciprocity such as those prescribed by the golden rule accord-

ing to the same standards we use to evaluate other forms of cooperation. In some conditions—for example, if everyone practices them—they work well. However, in other conditions, such as when one person repeatedly exploits another person's generosity, we would not view it as morally immature for the victim to revert to a more effective behavioral strategy. Indeed, one might even view it as immoral for the victim to continue behaving in a way that reinforces the exploitative behavior of the perpetrator. "Turning the other cheek" is not morally mature when it induces perpetrators to continue slapping you in the face (cf. Krebs, 2000).

A pragmatic approach is equipped to resolve the apparent inconsistency between morality and self-interest: Behaving morally entails advancing one's interests in ways that advance the interests of others by upholding mutually beneficial systems of cooperation. Such an approach encourages scholars to distinguish more clearly between moral judgments about the self and moral judgments about others and to attend to self-serving biases in the ways in which people make moral decisions. Largely neglected in Kohlberg's model, selfishness and self-serving biases may well be a more formidable enemy of morality than low-stage moral reasoning, though, as Kohlberg (1984) speculated, low-stage moral reasoning may be more susceptible than high-stage moral reasoning to self-serving excuses.

To behave morally, people must resist the temptation to exploit systems of cooperation and deceive themselves and others about their selfish motives and behavior (Krebs & Denton, 1997). The hallmark of morality resides less in the ability to resolve abstract moral dilemmas or even figure out how, ideally, others should behave; the hallmark resides more in people's tendency to apply the same moral standards to themselves that they apply to others and to behave in accordance with them (Colby & Damon, 1992). The function of moral principles such as the golden rule is to induce people to constrain self-serving biases.

It follows that we do not believe that helping people acquire sophisticated structures of moral reasoning or inducing them to sacrifice their interests for the sake of others is the key to moralization. Rather, we believe that the key resides in creating the conditions that enable people to achieve their goals and advance their interests in cooperative ways. Along with Kohlberg, we believe that, in part, this entails inducing people to understand the nature of morality. However, we also believe that it entails inducing people to understand the functions of morality—why it is ultimately in everyone's interest to uphold systems of cooperation (enlightened self-interest)—and, more important, ensuring that, in fact, behaving in cooperative ways enables people to meet their needs more effectively than behaving in selfish ways.

All societies attempt to foster morality by manipulating people's beliefs about the benefits of moral lifestyles and the costs of immoral lifestyles. All societies attempt to persuade people that behaving morally will pay off in the end, because, for example, there will be a final reckoning that will determine whether they reside eternally in heaven or in hell. However, false promises tend to lose their power when they are exposed as invalid. To foster morality, we must organize societies and the social relations within them in ways that, in fact, ensure that people reap greater benefits by cooperating than by behaving immorally. This will entail developing effective means of preventing cheating, detecting transgressions, rewarding those who behave morally, and punishing those who take advantage of others (Krebs, 2004, 2005), which will assume different forms in different systems of cooperation.

Viewed from our perspective, it is not surprising that Kohlberg and his colleagues ended up concluding that cognitively-based interventions that involved exposing children to levels of moral judgment one stage above their modal stage (e.g., Turiel, 1966) and encouraging them to engage in moral discussions about hypothetical dilemmas (e.g., Blatt & Kohlberg, 1975) were ineffective relative to the creation of "just communities" (see Kohlberg, 1985).

Socializing agents can strengthen and activate cooperative dispositions in two main ways. First, parents can instill cooperative habits in their children by creating, upholding, and reinforcing systems of cooperation within the family (Krebs, 2004). Second, socializing agents can induce people to expand their conceptions of themselves—and therefore their interests—to include others, which is conducive to the activation of sympathetic and empathic responses and the development of cooperative commitments. Socializing agents can encourage people to develop social identities (Richerson & Boyd, 2001; Tajfel, 1982) and to view their social world in terms of "we" instead of "me" (Cialdini et al., 1976; Hornstein, 1978). Expanded conceptions of the self can be fostered by the development of perspective-taking abilities (Kohlberg, 1984; Mead, 1934) and by linking people's fates (Tajfel, 1982).

We must, however, be attentive to the downside of expanding social identities. When people identify with one group and promote its interests, they tend to discriminate against other groups and oppose their interests (i.e., "us" against "them"; Krebs & Denton, 1997; Tajfel, 1982). Some theorists (e.g., Singer, 1981) have suggested that we can solve this problem by inducing people to expand the circles of those with whom they identify to include all of humanity, but unfortunately there is little evidence that many, if any, people have achieved this ideal (Krebs & Van Hesteren, 1994).

Finally, people can be encouraged and taught to resolve their conflicts of interest through dialogue, negotiation, and argumentation (Elser, 1999; Habermas, 1990). Reason and cognitive consistency have a role to play in this process. People may use their intelligence to identify logical inconsistencies in their own and others' arguments and to deduce creative, fair, and effective resolutions of conflicts of interest. However, abstract statements about how people should ideally behave tend to be less effective than concrete suggestions about how to resolve conflicts of interest in mutually acceptable ways, and the latter may be derived from any of the structures of moral reasoning described by Kohlberg.

Conclusion

As implied by the title of one of Kohlberg's early (1968) articles, "The Child as Moral Philosopher," Kohlberg's model pertains to people's ability to philosophize about morality. It is a model derived from people's capacity to offer rational justifications in ideal contexts for nonconsequential choices about how fictional characters should solve hypothetical moral dilemmas. One of Kohlberg's colleagues, Gibbs (1995), departed from his model by viewing "Stage 5 . . . as an inappropriate definer of moral judgment maturity . . . because any ethical philosophical level . . . misrepresents moral judgment maturity as restricted to those who are philosophically articulate" (p. 36). Why confine this point to Stage 5? If you invite people to play the role of philosopher, they will, and some will play it better than others. However, people rarely play this role in their everyday lives because they rarely

pursue philosophical goals. Kohlberg and his colleagues have done a great job of mapping changes in people's ability to explicate ideal conceptions of morality, but the evidence suggests that these conceptions play a relatively insignificant role in determining the moral judgments and moral behaviors people emit in their everyday lives. In real life, people make moral decisions about themselves and others that matter; the consequences are real. To account for the ways in which people make such decisions, we need an approach that views them as products of social processes and cognitive and affective mechanisms that enable people to achieve their goals and foster their interests in cooperative ways.

References

- Alexander, R. D. (1987). *The biology of moral systems*. New York: Aldine de Gruyter.
- Armon, C. (1995). Moral judgment and self-reported moral events in adulthood. *Journal of Adult Development*, 1, 49–62.
- Bartek, S. E., Krebs, D. L., & Taylor, M. C. (1993). Coping, defending, and the relations between moral judgment and moral behavior in prostitutes and other female juvenile delinquents. *Journal of Abnormal Psychology*, 102, 65–73.
- Blasi, A. (1980). Bridging moral cognition and moral action: A critical review of the literature. *Psychological Bulletin*, 88, 1–45.
- Blatt, M., & Kohlberg, L. (1975). The effects of classroom discussion upon children's moral judgment. *Journal of Moral Education*, 4, 129–161.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: Wiley.
- Boehm, C. (2000). Conflict and the evolution of social control. In L. D. Katz (Ed.), *Evolutionary origins of morality* (pp. 79–101). Thorverton, England: Imprint Academic.
- Boyd, R., & Richerson, P. J. (1985). *Culture and the evolutionary process*. Chicago: University of Chicago Press.
- Carpendale, J. I. M. (2000). Kohlberg and Piaget on stages and moral reasoning. *Developmental Review*, 20, 181–205.
- Carpendale, J. I. M., & Krebs, D. L. (1992). Situational variation in moral judgment: In a stage or on a stage? *Journal of Youth and Adolescence*, 21, 203–224.
- Carpendale, J. I. M., & Krebs, D. L. (1995). Variations in moral judgment as a function of type of dilemma and moral choice. *Journal of Personality*, 63, 289–313.
- Chadwick-Jones, J. K. (1976). *Social exchange theory: Its structure and influence in social psychology*. London: Academic Press.
- Cialdini, R. B., Borden, R., Thorne, A., Walker, M., Freeman, S., & Sloane, L. T. (1976). Basking in reflected glory: Three (football) field studies. *Journal of Personality and Social Psychology*, 34, 366–375.
- Clark, M. S., & Mills, J. (1993). The difference between communal and exchange relationships: What it is and is not. *Personality and Social Psychology Bulletin*, 19, 684–691.
- Colby, A., & Damon, W. (1992). *Some do care: Contemporary lives of moral commitment*. New York: Free Press.
- Colby, A., & Kohlberg, L. (Eds.). (1987). *The measurement of moral judgment* (Vols. 1 and 2). New York: Cambridge University Press.
- Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, MA: Belknap Press.
- Crawford, C. (2004). Public policy and personal decisions: The evolutionary context. In C. Crawford & C. Salmon (Eds.), *Evolutionary psychology, public policy and personal decisions* (pp. 3–22). Mahwah, NJ: Erlbaum.
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Putnam.
- Damon, W. (1977). *The social world of the child*. San Francisco: Jossey-Bass.
- Dawes, R. M. (1988). *Rational choice in an uncertain world*. San Diego, CA: Harcourt Brace Jovanovich.
- Dawkins, R. (1989). *The selfish gene*. Oxford, England: Oxford University Press.
- Denton, K., & Krebs, D. L. (1990). From the scene to the crime: The effect of alcohol and social context on moral judgment. *Journal of Personality and Social Psychology*, 59, 242–248.
- Denton, K., & Zarbatany, L. (1996). Age differences in support processes in conversations between friends. *Child Development*, 67, 1360–1373.
- Diener, E. (1979). Deindividuation, self-awareness, and disinhibition. *Journal of Personality and Social Psychology*, 37, 1160–1171.
- Drury, J., & Reicher, S. (2000). Collective action and psychological change: The emergence of new social identities. *British Journal of Social Psychology*, 39, 579–604.
- Dugatkin, L. A. (1997). *Cooperation among animals: An evolutionary perspective*. New York: Oxford University Press.
- Dunbar, R. (1996). *Grooming, gossip, and the evolution of language*. London: Faber & Faber.
- Durkheim, E. (1984). *The division of labour in society* (W. D. Halls, Trans.). London: Macmillan. (Original work published 1893)
- Eisenberg, N. (1986). *Altruistic emotion, cognition, and behavior*. Hillsdale, NJ: Erlbaum.
- Elser, J. (1999). *Alchemies of the mind: Rationality and the emotions*. Cambridge, England: Cambridge University Press.
- Fishkin, J., Keniston, K., & MacKinnon, C. (1973). Moral reasoning and political ideology. *Journal of Personality and Social Psychology*, 27, 109–119.
- Fiske, A. P. (1992). The four elementary forms of sociality: Framework for a unified theory of social relations. *Psychological Review*, 99, 689–723.
- Flack, J. C., & de Waal, F. B. M. (2000). "Any animal whatever": Darwinian building blocks of morality in monkeys and apes. In L. D. Katz (Ed.), *Evolutionary origins of morality: Cross-disciplinary perspectives* (pp. 1–30). Thorverton, England: Imprint Academic.
- Flavell, J. H. (1985). *Cognitive development* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Frank, R. H. (2001). Cooperation through emotional commitment. In R. M. Nesse (Ed.), *Evolution and the capacity for commitment* (pp. 57–75). New York: Russell Sage Foundation.
- Frank, R. H., Gilovich, T., & Regan, D. (1993). Does studying economics inhibit cooperation? *Journal of Economic Perspectives*, 7, 159–171.
- Freud, S. (1925). *Collected papers*. London: Hogarth Press.
- Gibbs, J. C. (1995). The cognitive developmental perspective. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Moral development: An introduction* (pp. 27–48). Boston: Allyn & Bacon.
- Gibbs, J. C., Basinger, K. S., & Fuller, D. (1992). *Moral maturity: Measuring the development of sociomoral reflection*. Hillsdale, NJ: Erlbaum.
- Gibbs, J. C., Clark, P. M., Joseph, J. A., Green, J. L., Goodrick, T. S., & Makowski, D. G. (1986). Relations between moral judgment, moral courage and field independence. *Child Development*, 57, 185–193.
- Gigerenzer, G., & Todd, P. M. (1999). Fast and frugal heuristics: The adaptive toolbox. In G. Gigerenzer, P. M. Todd, & ABC Research Group (Eds.), *Simple heuristics that make us smart* (pp. 367–396). Oxford, England: Oxford University Press.
- Gilligan, C. (1982). *In a different voice*. Cambridge, MA: Harvard University Press.
- Gilligan, C., & Belenky, M. F. (1980). A naturalistic study of abortion decisions. In R. L. Selman & R. Yando (Eds.), *New directions for child development: Clinical-developmental psychology* (Vol. 7, pp. 69–90). San Francisco: Jossey-Bass.
- Gintis, H., Bowles, S., Boyd, R., & Fehr, E. (2003). Explaining altruistic behavior in humans. *Evolution and Human Behavior*, 24, 153–172.
- Greenberg, J., & Cohen, R. L. (1982). *Equity and justice in social behavior*. New York: Academic Press.
- Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001, September 14). An fMRI investigation of emotional engagement in moral judgment. *Science*, 293, 2105–2108.

- Haan, N. (1975). Hypothetical and actual moral reasoning in a situation of civil disobedience. *Journal of Personality and Social Psychology*, 30, 1271–1284.
- Haan, N. (1985). Process of moral development: Cognitive or social disequilibrium? *Developmental Psychology*, 21, 966–1006.
- Habermas, J. (1990). *Moral consciousness and communicative action* (C. Lenhardt & S. W. Nicholsen, Trans.). Cambridge, MA: MIT Press.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834.
- Haidt, J., & Hersh, M. (2001). Sexual morality: The cultures and reasons of liberals and conservatives. *Journal of Applied Social Psychology*, 31, 191–221.
- Harré, R. (1983). *Personal being: A theory for individual psychology*. Cambridge, MA: Harvard University Press.
- Hickey, J., & Scharf, P. (1980). *Toward a just correctional system*. San Francisco: Jossey-Bass.
- Higgins, A., Power, C., & Kohlberg, L. (1984). The relationship of moral atmosphere to judgments of responsibility. In W. Kurtines & J. Gewirtz (Eds.), *Morality, moral development, and moral behavior* (pp. 74–106). New York: Wiley.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319–340.
- Hoffman, M. L. (1987). The contribution of empathy to justice and moral judgment. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development* (pp. 47–80). Cambridge, England: Cambridge University Press.
- Hogan, R., & Emler, N. (1995). Personality and moral development. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Moral development: An introduction* (pp. 209–227). Boston: Allyn & Bacon.
- Hornstein, H. A. (1978). Promotive tension and prosocial behavior: A Lewinian analysis. In L. Wispé (Ed.), *Altruism, sympathy, and helping: Psychological and sociological principles* (pp. 177–208). New York: Academic Press.
- James, W. (1890). *The principles of psychology*. New York: Holt.
- Janicki, M., & Krebs, D. L. (1998). Evolutionary approaches to culture. In C. Crawford & D. L. Krebs (Eds.), *Handbook of evolutionary psychology: Ideas, issues, and applications* (pp. 163–207). Hillsdale, NJ: Erlbaum.
- Johnson, J., & Hogan, R. (1981). Moral judgment and self presentation. *Journal of Research in Personality*, 15, 57–63.
- Kohlberg, L. (1958). *The development of modes of moral thinking and choice in the years ten to sixteen*. Unpublished doctoral dissertation, University of Chicago, Chicago, IL.
- Kohlberg, L. (1968). The child as moral philosopher. *Psychology Today*, 7, 25–30.
- Kohlberg, L. (1984). *Essays in moral development: Vol. 2. The psychology of moral development*. New York: Harper & Row.
- Kohlberg, L. (1985). A just community approach to moral education in theory and practice. In M. Berkowitz & F. Oser (Eds.), *Moral education: Theory and practice* (pp. 27–82). Hillsdale, NJ: Erlbaum.
- Kohlberg, L., & Candee, D. (1984). The relationship of moral judgment to moral action. In L. Kohlberg (Ed.), *Essays in moral development: Vol. 2. The psychology of moral development* (pp. 498–581). New York: Harper & Row.
- Kohlberg, L., Scharf, P., & Hickey, N. (1972). The justice structure of the prison: A theory and intervention. *Prison Journal*, 51, 3–14.
- Krebs, D. L. (1982). Helping in emergencies: The construction and disintegration of a model. *Contemporary Psychology*, 27, 775–777.
- Krebs, D. L. (1987). The challenge of altruism in biology and psychology. In C. Crawford, M. Smith, & D. Krebs (Eds.), *Sociobiology and psychology: Ideas, issues, and applications* (pp. 81–118). Hillsdale, NJ: Erlbaum.
- Krebs, D. L. (2000). Evolutionary games and morality. In L. D. Katz (Ed.), *Evolutionary origins of morality: Cross-disciplinary approaches* (pp. 139–143). Thorverton, England: Imprint Academic.
- Krebs, D. L. (2004). How to make silk purses from sows' ears: Cultivating morality and constructing moral systems. In C. Crawford & C. Salmon (Eds.), *Evolutionary psychology, public policy and personal decisions* (pp. 3–22). Mahwah, NJ: Erlbaum.
- Krebs, D. L. (2005). An evolutionary reconceptualization of Kohlberg's model of moral development. In R. Burgess & K. MacDonald (Eds.), *Evolutionary perspectives on human development* (pp. 243–274). Thousand Oaks, CA: Sage.
- Krebs, D. L. (in press). The evolution of morality. In D. Buss (Ed.), *Evolutionary psychology handbook*. New York: Wiley.
- Krebs, D. L., & Denton, K. (1997). Social illusions and self-deception: The evolution of biases in person perception. In J. A. Simpson & D. T. Kenrick (Eds.), *Evolutionary social psychology* (pp. 21–47). Hillsdale, NJ: Erlbaum.
- Krebs, D. L., & Denton, K. (1999). On the relations between moral judgment and moral behavior. In D. Garz, F. Oser, & W. Althof (Eds.), *The context of morality* (pp. 240–263). Frankfurt: Suhrkamp.
- Krebs, D. L., Denton, K., Vermeulen, S. C., Carpendale, J. I., & Bush, A. (1991). The structural flexibility of moral judgment. *Journal of Personality and Social Psychology*, 61, 1012–1023.
- Krebs, D. L., Denton, K., & Wark, G. (1997). The forms and functions of real-life moral decision-making. *Journal of Moral Education*, 26, 131–145.
- Krebs, D. L., Denton, K., Wark, G., Couch, R., Racine, T. P., & Krebs, D. L. (2002). Interpersonal moral conflicts between couples: Effects of type of dilemma, role, and partner's judgments on level of moral reasoning and probability of resolution. *Journal of Adult Development*, 9, 307–316.
- Krebs, D. L., & Janicki, M. (2004). The biological foundations of moral norms. In M. Schaller & C. Crandall (Eds.), *Psychological foundations of culture* (pp. 125–148). Mahwah, NJ: Erlbaum.
- Krebs, D. L., & Laird, P. (1998). Judging yourself as you judge others: Perspective-taking, moral development, and exculpation. *Journal of Adult Development*, 5, 1–12.
- Krebs, D. L., & Miller, D. T. (1985). Altruism and aggression. In G. Lindzey & E. Aronson (Eds.), *Handbook of social psychology: Vol. 2. Special fields and applications* (3rd ed., pp. 1–71). New York: Random House.
- Krebs, D. L., & Van Hesteren, F. (1994). The development of altruism: Toward an integrative model. *Developmental Review*, 14, 1–56.
- Krebs, D. L., Vermeulen, S. C., Carpendale, J. I., & Denton, K. (1991). Structural and situational influences on moral judgment: The interaction between stage and dilemma. In W. Kurtines & J. Gewirtz (Eds.), *Handbook of moral behavior and development: Theory, research, and application* (pp. 139–169). Hillsdale, NJ: Erlbaum.
- Krebs, D. L., Vermeulen, S. C., & Denton, K. (1991). Competence and performance in moral judgment: From the ideal to the real. *Moral Education Forum*, 16, 7–22.
- Kruglanski, A. W. (1996). Motivated social cognition: Principles of the interface. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 493–520). New York: Guilford Press.
- Kunda, Z. (2000). *Social cognition: Making sense of people*. Cambridge, MA: MIT Press.
- Leakey, R. E., & Lewin, R. (1977). *Origins*. New York: Dutton.
- LeDoux, J. (1996). *The emotional brain: The mysterious underpinnings of emotional life*. New York: Simon & Schuster.
- Leming, J. (1978). Intrapersonal variations in stage of moral reasoning among adolescents as a function of situational context. *Journal of Youth and Adolescence*, 7, 405–416.
- Levine, C. G. (1979). Stage acquisition and stage use: An appraisal of stage displacement explanations of variation in moral reasoning. *Human Development*, 22, 145–164.
- Linn, R. (1984). Practising moral judgment within the day care center: A look at the educator's moral decision under stress. *Early Child Development and Care*, 15, 117–132.

- Linn, R. (1987a). Moral disobedience during the Lebanon war: What can the cognitive-developmental approach learn from the experience of the Israeli soldiers? *Social Cognition*, 5, 383–402.
- Linn, R. (1987b). Moral reasoning and behavior of striking physicians in Israel. *Psychological Reports*, 60, 443–453.
- Linville, P. W., & Carlson, D. E. (1994). Social cognition of the self. In P. G. Devine, D. L. Hamilton, & T. M. Ostrom (Eds.), *Social cognition: Impact on social psychology* (pp. 143–193). San Diego, CA: Academic Press.
- Lockwood, A. L. (1975). Stage of moral development and students' reasoning on public policy issues. *Journal of Moral Education*, 5, 51–61.
- Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.
- Miller, D. T., & Ross, M. (1975). Self-serving biases in attributions of causality: Fact or fiction? *Psychological Bulletin*, 82, 213–255.
- Nesse, R. M. (Ed.). (2001). *Evolution and the capacity for commitment*. New York: Russell Sage Foundation.
- Nisan, M., & Koriat, A. (1989). Moral justification of acts judged to be morally right and acts judged to be morally wrong. *British Journal of Social Psychology*, 28, 213–225.
- Parsons, R. (1975). The present status of structural-functional theory in sociology. In L. A. Coser (Ed.), *The idea of social structure: Papers in honor of Robert K. Merton* (pp. 67–83). New York: Harcourt Brace Jovanovich.
- Perry, J., & Krebs, D. L. (1980). Role-taking, moral development, and mental retardation. *Journal of Genetic Psychology*, 136, 95–108.
- Piaget, J. (1965). *The moral judgment of the child*. London: Routledge & Kegan Paul. (Original work published 1932)
- Piliavin, J. A., Dovidio, J. F., Gaertner, S. L., & Clark, R. D., III. (1981). *Emergency intervention*. New York: Academic Press.
- Price, M. E., Cosmides, L., & Tooby, J. (2002). Punitive sentiment as an anti-free rider psychological device. *Evolution and Human Behavior*, 23, 203–231.
- Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.
- Rest, J. (1979). *Development in judging moral issues*. Minneapolis: University of Minnesota Press.
- Rest, J. (1983). Morality. In J. H. Flavell & E. Markman (Eds.), *Handbook of child psychology* (Vol. 3, 4th ed., pp. 556–629). New York: Wiley.
- Rest, J. (1984). Major component processes in the production of moral behavior. In W. Kurtines & J. Gewirtz (Eds.), *Morality, moral behavior, and moral development* (pp. 24–40). New York: Wiley.
- Richerson, P. J., & Boyd, R. (2001). The evolution of subjective commitment to groups: A tribal instincts hypothesis. In R. M. Nesse (Ed.), *Evolution and the capacity for commitment* (pp. 186–220). New York: Russell Sage Foundation.
- Ridley, M. (1996). *The origins of virtue: Human instincts and the evolution of cooperation*. New York: Penguin Books.
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press.
- Sachs, J. L., Mueller, U. G., Wilcox, T. P., & Bull, J. J. (2004). The evolution of cooperation. *Quarterly Review of Biology*, 79, 135–160.
- Singer, P. (1981). *The expanding circle: Ethics and sociobiology*. New York: Farrar, Straus & Giroux.
- Smetana, J. G. (1982). *Concepts of self and morality*. New York: Praeger.
- Snarey, J. (1985). Cross-cultural universality of social-moral development: A critical review of Kohlbergian research. *Psychological Bulletin*, 97, 202–232.
- Snyder, C. R., & Higgins, R. L. (1988). Excuses: Their effective role in the negotiation of reality. *Psychological Bulletin*, 104, 23–35.
- Snyder, M., & Ickes, W. (1985). Personality and social behavior. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology* (Vol. 1, 3rd ed., pp. 883–947). New York: Random House.
- Sober, E., & Wilson, D. S. (1998). *Unto others: The evolution and psychology of unselfish behavior*. Cambridge, MA: Harvard University Press.
- Spencer, H. (1879). *The principles of ethics*. London: Williams & Norgate.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33, 1–39.
- Tooby, J., & Cosmides, L. (1996). Friendship and the banker's paradox: Other pathways to the evolution of adaptations for altruism. *Proceedings of the British Academy*, 88, 119–143.
- Trivers, R. (1985). *Social evolution*. Menlo Park, CA: Benjamin/Cummings.
- Turiel, E. (1966). An experimental test of the sequentiality of developmental stages in the child's moral development. *Journal of Personality and Social Psychology*, 3, 611–618.
- Walker, L. J., de Vries, B., & Trevethan, S. D. (1987). Moral stage and moral orientations in real-life and hypothetical dilemmas. *Child Development*, 58, 842–858.
- Walker, L. J., & Hennig, K. H. (2004). Differing conceptions of moral exemplarity: Just, brave, and caring. *Journal of Personality and Social Psychology*, 86, 629–647.
- Wark, G., & Krebs, D. L. (1996). Gender and dilemma differences in real-life moral judgment. *Developmental Psychology*, 32, 220–230.
- Wark, G., & Krebs, D. L. (1997). Sources of variation in real-life moral judgment: Toward a model of real-life morality. *Journal of Adult Development*, 4, 163–178.
- Youniss, J., & Damon, W. (1992). Social construction in Piaget's theory. In H. Beilin & P. Pufall (Eds.), *Piaget's theory: Prospects and possibilities* (pp. 267–286). Hillsdale, NJ: Erlbaum.
- Zillman, D. (1983). Transfer of excitation in emotional behavior. In T. Cacioppo & R. E. Petty (Eds.), *Social psychophysiology: A source book* (pp. 215–240). New York: Guilford Press.

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