Prototypic Moral Character

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Four studies tested whether moral character is organized as a cognitive prototype. Study 1 involved a free listing of features of virtuous persons. Study 2 required participants to rate each trait on its centrality to good character. A standard recognition memory paradigm was used in Studies 3 and 4 to test whether participants reported more false recognition of trait attributes that they have not seen but are consistent (virtue central) with the prototype. In both studies, participants reported significant false recognition of novel virtue-central traits than they did virtue-peripheral traits, supporting the claim that a conception of good character is schematically organized around a prototype. Prototype activation had weak and inconsistent effects on recall memory. Implications for understanding moral cognition and identity are discussed.

For many decades, the moral dimension of selfhood, character, and identity has been largely neglected by researchers. Although the relative neglect of these constructs has a number of sources, there is little doubt that the ascendance of the cognitive developmental tradition, particularly Kohlberg's (1983) account of moral development, has done much to push these topics to the margins of moral psychological research. For example, Kohlberg's embrace of a Kantian vision of moral rationality led him to emphasize the *deontic* (duty) aspect of morality at the expense of *aretaic* (excellence) concerns regarding the cultivation of virtues or traits of character. The emphasis was on "What ought I to do?" rather than "What sort of person should I become?" Moreover, his Piagetian commitments led Kohlberg to focus on that aspect of morality (justice reasoning) that was most amenable to stage typing, to the exclusion of other components of morality, including character psychology. Indeed, Kohlberg's rejection of character as a basis for moral psychology was construed from a number of considerations. Kohlberg argued, for example, that trait language does not provide the resources to combat ethical

relativism (because one person's integrity is another person's stubbornness), that it cannot guide moral education (because it involves sampling arbitrarily from a bag of virtues), and that the psychological reality of traits is much in doubt (because the Hartshorne and May [1928–1932] studies could not demonstrate cross-situational consistency in the application of dispositional traits).

Despite these objections, there has been a remarkable resurgence of interest in moral character in the last decade. The return of character from the margins of moral psychology can be traced to a number of factors. It can be partly traced to a growing dissatisfaction with the narrow concerns of the cognitive developmental approach to justice reasoning. It can be traced to a concomitant desire to study moral rationality within the broader context of moral personality, selfhood, and identity and, also, to expand the parameters of moral psychology more generally to accommodate the traditional Aristotelian concern with character and virtue, along with other components of moral functioning. Moreover, this desire of many psychologists to enlarge the moral domain is now matched by a movement within ethics to expand ethical theory beyond its traditional focus on strictly normative concerns. It is acknowledged that normative ethics must meet minimal psychological requirements so that its prescriptions are possible "for creatures like us" (Flanagan, 1991, p. 32). Indeed, the emerging "naturalized ethics" perspective (May, Friedman, & Clark, 1996; McKinnon, 1999) has sought to ground ethical theory by what is known about "human motivation, the nature of the self, the nature of human concepts, how our reason works, how we are socially constituted, and a host of other facts about who we are and how the mind operates" (Johnson, 1996, p. 49). Johnson argued, for example, that any comprehensive moral psychology must include an account of personal identity and must be adequately grounded by the concepts, constructs and literatures of cognitive science.

Hence, the increased attention devoted to moral selfhood, character, and identity comes from movement from two directions: It results from the desire to expand the explanatory reach of moral psychology beyond structures-of-justice reasoning, and it results from the desire to ground ethical theory to a defensible account of moral psychology. Both trends, then, from within moral psychology, and from within ethics, point toward a greater interest in virtues, character, and moral identity. We should also add that the notion of virtue and moral character has great resonance with nonspecialists and the lay public, and books on virtues and character education now claim an avid readership.

Yet, despite the recent popularity of the virtues, there appears to be no consensus about how virtues should be conceptualized as psychological constructs. The classical understanding is that personality is composed of universal, context-free traits (including, presumably, virtue traits) that produce stable, enduring consistencies in our behavior. However, the validity of the classical trait approach to personality has been long disputed (Block, 1995; Cervone & Shoda, 1999a; Mischel, 1973, 1990; but see Funder, 1991; Kendrick & Funder, 1988) and would not seem to be a promising way to conceptualize the structure of moral character, identity, or virtue.

Alternative ways of conceptualizing the moral personality have emerged in recent years. Blasi (1984, 1985, 1993) argued, for example, that the moral personality results when one's identity is constructed on moral grounds or, alternatively, when one's moral commitments are central, essential, and important for one's self-definition. Similarly, there is now a discernible interest in using the social-cognitive approach to personality as a source of insights about moral psychological functioning (Lapsley, 1998). The social-cognitive approach attempts to explain the coherence of personality, and its variability, in terms of the mechanisms, structures, and processes of social information processing (Cervone & Shoda, 1999a). It assumes, for example, that the activation of mental representations is critical for processing social information (Cervone & Shoda, 1999a). These mental representations "include knowledge of social situations; representations of self, others and prospective events; personal goals, beliefs and expectations and knowledge of behavioral alternatives and task strategies" (Cervone & Shoda, 1999b, p. 18) and are variously conceptualized as schemas, prototypes, scripts, plans, goals, and similar constructs (Hastie, 1981). Moreover, there are individual differences in the availability and accessibility of these knowledge structures for interpreting social events (Higgins, 1996; Higgins, King, & Mavin, 1982).

Using this perspective, Lapsley (1996, 1998) recently argued that the moral personality is best understood in terms of the chronic accessibility of moral schemata for construing interpersonal events. Hence, a moral person, or a person who has a moral identity, would be one for whom moral schemas are chronically available, readily primed, and easily activated for processing social information. Indeed, Lapsley and Lasky (2001) showed that the chronicity of moral schemata is an important individual differences variable for understanding variations in moral perception. They showed, for example, using a cued-recall paradigm, that individuals who had moral concepts chronically accessible were more likely to make spontaneous trait inferences of virtuous character than were individuals with nonmoral concepts chronically accessible. Similarly, Rest, Narvaez, Bebeau, and Thoma (1999) proposed a neo-Kohlbergian approach to moral cognition that emphasized the importance of schema activation for moral perception.

Finally, there have been recent attempts to explore the naturalistic conceptions of moral character that naive individuals possess to determine if moral trait attributes are schematically organized. In one study, for example, Walker and Pitts (1998, Study 2) asked participants to rate a list of trait attributes in terms of how characteristic they were of the moral, religious, and spiritual person. Clear distinctions were evident among the three person concepts. In a subsequent study, Walker and Pitts (1998, Study 3) explored the latent typology of moral excellence, using hierarchical clustering and scaling techniques. The resulting typology of a "highly moral person" included the following elements: (a) principled—idealistic, (b) dependable—loyal, (c) integrity, (d) caring—trustworthy, (e) fair, and (f) confident. Hence, moral excellence contained themes of principled morality as well as

themes generally associated with moral character and the virtues. A later study also showed an interesting association between moral (spiritual and religious) exemplars and the Big Five personality dimensions (Walker, 1999).

Hence, Walker and his colleagues (Walker & Pitts, 1998) were the first to introduce the empirical study of cognitive prototypes to moral psychology. The purpose of our studies was to further explore the schematic structure of moral character knowledge. Whereas Walker and Pitts demonstrated schematic moral knowledge using prototype ratings and certain statistical (cluster and scaling) techniques, we approached the question using standard experimental procedures for demonstrating the internal structure of concepts (Mervis & Rosch, 1981; Rosch, 1975; Rosch & Mervis, 1975). These procedures reveal prototype knowledge in certain patterns of recognition memory. If moral character is a concept that is organized around a prototype, then the priming of these prototypes should influence information processing and memory. For example, participants should report false recognition of trait attributes that they have not seen before but are nonetheless consistent with the prototype, and to show better recall of virtue-central (vs. virtue-peripheral) trait attributes.

Prototype structures have been identified in numerous domains, including personality traits (Cantor & Mischel, 1977); psychiatric diagnosis (Cantor, Smith, French, & Mezzich, 1980; Genero & Cantor, 1987; Horowitz, Wright, Lowenstein, & Parad, 1981); psychological situations (Cantor, Mischel, & Schwartz, 1982); perceptions of the elderly (Brewer, Dull, & Lui, 1981); and concepts of emotion (Fehr & Russell, 1984), love, and commitment (Fehr, 1988; Fehr & Russell, 1991). The application of the prototype perspective to moral psychology holds much promise. Prototypes may contribute to moral decision making by framing, selecting, and weighing the information that is subject to subsequent reflective judgement (Hart, 1998). However, moral prototypes may do more than simply bias social information processing in certain directions: Prototypic knowledge structures might also suggest more fundamentally what it means to have a moral identity or to possess a virtue. Indeed, as McKinnon (1999) put it:

When an agent acquires a certain virtue, this affects her perception of the world, or at least certain important aspects of it; it helps her recognize ethically problematic situations and leads her to frame them in particular ways. It shapes her character, the person that she is, and the kind of person that she thinks of herself as being. (p. 33)

Hence, the moral dimension of selfhood, identity, and character may well have a social-cognitive basis, resulting in schematic perceptions of others and of "ethically problematic situations." Being a person of good character might presuppose the availability, and accessibility, of schematic knowledge structures to guide one's moral perception of the world. Although previous studies (e.g., Walker & Pitts, 1998) showed that naturalistic conceptions of moral personality are organized around a prototype, the significance of the moral prototype for influencing

social information processing has not yet been demonstrated. In this article, four studies are presented that attempt to demonstrate prototypic conceptions of moral character, using a standard recognition memory paradigm.

STUDY 1: FREE LISTING

Method

Participants. A total of 73 participants, ranging in age from 20 to 46 (M = 24.06, SD = 6.67), participated in this study. These participants (20 men and 53 women) were enrolled at a large regional university in the American Midwest. The ethnoracial composition of the sample was predominantly White (83.5%) and African American (9.6%), which closely corresponds to the ethnoracial composition of this university. Approximately two thirds (N = 47) of the sample were undergraduates (28.8% seniors, 12.3% juniors, 22% sophomores, and 1% freshman), with the remaining participants (N = 26) enrolled in masters- or doctoral-level training.

Procedure. Participants were given the following instructions:

This study has to do with the sort of things we have in mind when we hear and use words. For example, if you heard the word "fruit" you might think of such things as apples and pears. If you heard the word "furniture," you might think of sofa, couch, or table. If you heard the word "extrovert," you might think of outgoing, friendly, and sociable. What comes to mind when you think of a person who has "good character"? Simply list as many features or attributes of "good character" that you can think of.

Participants were then given as much time as they required to write down as many attributes of good character as they could think of, with a maximum of 20 lines provided for their response. Participants were also asked to provide demographic information.

Results

The mean number of trait attributes generated by participants was 10.53 (SD = 3.68), with a range of 5 to 20. The mean number of attributes generated by men (M = 11.30, SD = 3.71) and women (M = 10.25, SD = 3.66) was highly similar. On average, graduate students generated 11.96 attributes (SD = 4.09), whereas undergraduates generated an average of 9.75 attributes (SD = 3.21), a difference that is statistically significant, t(71) = -2.56, p = .013.

The list of trait attributes generated by participants was then distilled using standard judgment rules (Fehr, 1988; Walker & Pitts, 1998). Synonyms were com-

bined, compound phrases were divided into separate descriptors, nouns were converted to adjective forms, and modifiers were dropped. This yielded a list of 175 unduplicated trait adjectives.

STUDY 2: PROTOTYPICALITY RATINGS

The purpose of this study was to determine how characteristic the previously generated trait adjectives are for one's conception of "good character." It attempts to answer the question: "How prototypic is this trait attribute for good character?" Hence, Study 2 attempts to discern the prototype structure of good character by means of a simple rating task.

Method

Participants. A total of 121 individuals (38 men and 83 women), ranging in age from 18 to 48, participated in this study. The average age of the sample was 21.48 (SD = 5.02). The sample was predominantly White (89%) and undergraduate (96%).

Procedure. Participants were given a randomized list of the trait descriptors that were generated in Study 1. They were instructed to "rate how characteristic the following descriptors are of a person who has good character" on a 7-point Likert scale, ranging from 1 (almost never true) to 7 (almost always true). Participants were also given the option of indicating that they were 4 (unsure) about what rating to assign, and also if they did not know the meaning of a trait attribute. No participant chose the latter option.

Results

Mean prototypicality ratings are reported in the Appendix, in descending order of prototype centrality. To assess the reliability of these ratings, an intraclass correlation coefficient was computed (.98). An intraclass coefficient is equivalent to the average of all possible split-half reliability coefficients.

Insofar as these ratings serve as the stimuli for subsequent recognition memory experiments, it next became necessary to determine which trait attributes would be considered prototypic (or virtue central) and nonprototypic (or virtue peripheral) of good character. We elected to regard the 20 trait attributes with the highest prototypicality ratings as central to the good character prototype, and the 20 trait attributes with the lowest mean prototypicality ratings as peripheral and noncentral to good character. These trait attributes are reported in Table 1.

independent

Character-Central and	Character-Peripheral	Trait Attributes	
Character	-Central	Character-	-Peripheral
understanding	moral	lucky	clean
kind	caring	popular	proud
supportive	respectful	shy	objective
faithful	friendly	provocative	introspective
fair	trusting	opininated	intelligent
considerate	loyal	thrifty	charismatic
sincere	loving	classy	energetic
compassionate	genuine	talkative	outgoing
responsible	trustworthy	patriotic	modest

TABLE1

Character-Central and Character-Peripheral Trait Attributes

STUDY 3: CHARACTER PROTOTYPES AND MEMORY

healthy

honest

The purpose of this study was to determine whether prototypic moral character influences social information processing. It is a standard assumption in the cognitive literature that "the prototype seems to function as a standard around which a body of input is compared and in relation to which new input is assimilated into the set of items remembered about a given experience or list of stimuli" (Cantor & Mischel, 1977, p. 39). This is typically demonstrated in a recognition memory paradigm that assesses the degree of "false recognition" of trait adjectives that have not been presented but are otherwise consistent (character central) with the prototype. Hence, this study tested participant's recognition memory of presented and nonpresented trait attributes that were either central or peripheral to good character. The key hypothesis is that participants would falsely recognize more central trait attributes than peripheral attributes if moral character is understood prototypically. In addition to recognition memory, we also attempted to determine whether participants would recall more prototypic than peripheral attributes. Thus, we attempted to demonstrate prototype effects on both recognition and recall memory within the same experiment.

Method

Participants. Participants included 80 university students with demographic characteristics similar to those reported in Studies 1 and 2 (but not otherwise recorded).

Procedure. The experiment had two phases: an acquisition phase and a memory phase. In the acquisition phase, participants were given a booklet with 20 statements that described an individual named "Pat." Ten statements contained adjectives that were central to good character (e.g., "Pat is understanding"), whereas the other 10 contained adjectives that were peripheral to good character (e.g., "Pat is talkative"). Each statement was presented on a separate page, and they were sequenced in a random order. Participants were given the following instructions:

On the following pages, you will read a series of statements that describe an individual named "Pat." There is one statement on each page. You will hear a signal that will be your cue to turn the page to read the next statement. Please do not turn the page until you hear this signal. After all the statements have been read, I will ask you some questions about Pat.

A tone sounded every 4 sec to signal when the participants should turn the page. When the last statement was read, participants were asked to write down as many statements as they could, for 1 min. This interpolated task was done to clear short-term memory.

After the acquisition phase, participants were then tested for recall and recognition memory. For the recall task, participants were asked to recall verbatim as many statements as they could. Following Fehr (1988), we anticipated no differences in recall memory for presented central and peripheral trait attributes (we did not test recall for nonpresented central or peripheral traits). A total of 3 min was allotted for this task.

On completion of the recall memory task, participants were next shown 40 statements. Twenty of the statements had been previously seen during the acquisition phase. The other 20 statements included central (10 statements) and peripheral (10 statements) trait attributes that were not presented during the acquisition phase. It was hypothesized (following Fehr, 1988) that recognition memory for presented items would be statistically equivalent regardless of whether they were central or peripheral to good character. However, for traits not presented, it was hypothesized that participants would be more likely to falsely recognize central, but not peripheral, items because of prototype activation.

Results

Recognition memory. With respect to recognition memory, the critical contrast is between recognition memory of nonpresented prototype-central traits versus nonpresented prototype-peripheral traits. A repeated-measures test of this contrast revealed a significant effect, t(78) = 9.25, p < .000. Participants (falsely) claimed to have recognized significantly more nonpresented virtue-central traits (M = 3.95, SD = 1.95) than they did nonpresented virtue-peripheral traits (M = 1.89, SD = 1.46). We next tested whether recognition memory would be equivalent for presented items, irrespective of whether the items were prototype central or prototype

peripheral. A repeated-measures test of this contrast was nonsignificant, as expected, t(78) = 1.45, ns. The mean recognition recall of central traits was 7.76 (SD = 1.49), and for peripheral traits, the mean was 7.48 (SD = 1.58). Of course, one would expect greater recognition memory for presented items than for nonpresented items.

Recall memory. Differential recall of central- versus peripheral-acquisition traits was tested by a within-subjects repeated-measures analysis of variance (ANOVA). No significant difference was observed.

STUDY 4: REPLICATION-EXTENSION

Study 3 showed that participants tended to falsely recognize trait attributes that they had not previously seen but were, nonetheless, consistent with the "good character" prototype. That is, more (false) recognition memory was evident for character-central traits but not for character-peripheral traits. Prototype activation did not appear to influence verbatim recall. Although previous research (e.g., Walker & Pitts, 1998) documented a "moral person" prototype, this is the first study to show that a character prototype influences information processing.

A fourth study was undertaken for several reasons. First, we wanted to replicate the findings of Study 3. Second, we wanted to examine gender differences in the pattern of recall and recognition memory, insofar as gender differences in moral cognition is a contested issue in moral psychology. Third, we wanted to exercise greater experimental control over the presentation of traits from the acquisition to the memory phase of the study. Although the selection of central and peripheral traits for the acquisition phase in Study 3 was random, it is conceivable that the central traits that were selected were somehow more memorable, irrespective of their prototype centrality. We addressed this issue by counterbalancing central and peripheral traits during acquisition. Hence, the acquisition items for one group of participants was the recognition items for a second group. Conversely, the second group's acquisition items served as the recognition items of the first group.

Method

Participants. Eighty undergraduates (26 men and 54 women) participated in this experiment. Of these participants, 22 (27.5%) were freshmen, 36 (45%) were sophomores, 16 (20%) were juniors, 5 (6.3%) were seniors, and 1 participant held graduate status. Participants were 90% White and 10% African American.

Procedure. The procedures were identical to those in Study 3, with the exception that we counterbalanced central and peripheral traits during the acquisition phase of this experiment. As in Study 3, one group of participants (N = 40) was

given a "statement booklet" (with the identical instructions). Each booklet contained 20 statements about a character named "Pat." Of these 20 statements, 10 were virtue central and 10 were virtue peripheral. These 20 statements were included on a list for the recognition memory phase of the study, along with 20 additional traits (10 virtue central and 10 virtue peripheral) that were not seen during the acquisition phase. A second group of participants (N=40) received the identical treatment, except that the acquisition item used in the statement booklet were the nonpresented recognition items used for the first group. Moreover, the acquisition items used for the first group were the false recognition items for the second group. Thus, the acquisition sentences for Group 1 were false recognition items for Group 2. The acquisition items for Group 2 were false recognition items for Group 1. All other procedures were identical to Study 3. As in Study 3, the recognition memory task was preceded by a recall memory task.

Results

Recognition memory. It was hypothesized that participants would report more false recognition of nonpresented character-central traits than nonpresented character-peripheral traits. This was tested in a 2 (counterbalance groups) × 2 (gender) × 2 (trait type: central or peripheral) mixed ANOVA, with repeated measures on the trait type factor. Significant effects were observed for the trait type factor, F(1,76) = 207.51, p < .00, and for the Trait Type × Group interaction, F(1, 76) = 14.09, p < .00. As expected, the trait type main effect is explained by the significantly greater recognition memory of nonpresented character-central traits (M = 5.13, SD= 2.21) than nonpresented character-peripheral traits (M = 1.00, SD = 1.14). Scheffé analysis of simple effects indicates that participants in Group 2 (falsely) recognized slightly more central traits (M = 5.45, SD = 0.44) than did participants in Group 1 (M = 4.49, SD = 0.34), but significantly fewer peripheral traits (M =0.35, SD = 0.20) than Group 1 (M = 1.61, SD = 0.15). As expected, the group main effect was not statistically significant. No significant effects were observed for gender.

We next tested differences in recognition memory for central and peripheral traits presented during the acquisition phase. A 2 (counterbalance group) × 2 (gender) × 2 (trait type: central, peripheral) ANOVA, with repeated measures on the trait type factor, was conducted. No significant effects for gender were evident, and the group main effect was also nonsignificant. Significant effects were observed, however, for trait type, F(1, 76) = 14.19, p < .00, and the Trait Type \times Group interaction, F(1, 76) = 19.17, p < .00.

The trait type main effect indicates that there was significantly greater recognition memory for character-central traits (M = 8.06, SD = 1.39) than character-peripheral traits (M = 7.32, SD = 1.79), although the practical difference is slight. Tests of simple effects (Scheffé) indicate that Group 1 showed statistically equivalent recognition memory for central and peripheral acquisition traits (M = 7.60, SD = 1.39; M = 7.75, SD = 1.53, respectively,) but that Group 2 showed significantly better recognition memory for central traits (M = 8.52, SD = 1.24) than peripheral traits (M = 6.90, SD = 1.96).

Recall memory. A 2 (counterbalance groups) \times 2 (gender) \times 2 (trait type: central, peripheral) ANOVA, with repeated measures on the trait type factor, was conducted on recall memory scores of acquisition traits. Significant effects were observed for the Trait Type \times Group interaction, F(1,76) = 24.31, p < .001, and for gender F(1,76) = 6.56, p = .012, with women (M = 3.83, SD = 0.15) showing significantly greater recall of acquisition traits than men (M = 3.12, SD = 0.23), although the practical difference is slight. Tests of simple effects indicate that Group 1 recalled peripheral traits (M = 4.33, SD = 0.33) better than central traits (M = 2.81, SD = 0.25), whereas Group 2 recalled central traits (M = 3.97, SD = 0.22) better than peripheral traits (M = 2.79, SD = 0.28). No other significant effects were evident.

GENERAL DISCUSSION

The purpose of these studies was to determine if notions of good character coalesce around a cognitive prototype and whether this prototype would influence information processing. Although the pioneering studies of Walker and Pitts (1998) demonstrated the prototype structure of conceptions of a moral person (along with spiritual person and religious person), our studies are the first to examine the influence of character prototypes on social information processing.

In these studies, we first elicited prototypicality ratings of 175 trait attributes of good character (Study 2). These attributes were generated using a free-listing procedure (Study 1). The 20 most frequently nominated traits were considered to be central to the good character prototype. It is interesting to compare the most frequently nominated attributes of good character with the most frequently nominated attributes of a moral person, identified by Walker and Pitts (1998). As can be seen in Table 2, only "honest" is clearly shared by the two lists, although perhaps other similarities are masked by linguistic preferences (e.g., "faithful to spouse" vs. "trustworthy"). Still, it would appear that individuals draw distinctions between the two person prototypes (moral person vs. good character). Hence, our tendency to refer to a moral character prototype must be considered provisional.

Prototype activation is traditionally assumed to bias recognition memory. Therefore, one way to demonstrate a prototype knowledge structure is to determine if the prototype produces this bias. For example, individuals typically will show false recognition of new items (not before seen) if the novel items are consistent with an activated cognitive prototype. This phenomena was demonstrated in these studies. In both Studies 3 and 4, for example, participants showed considerable false recognition of virtue-central traits than they did of virtue-peripheral

TABLE 2

Ten Most Prototypic Trait Attributes for "Highly Moral Person" and "Good Character"

Terrivost i fototypic frait Attributes for Trigrify	World Ferson and Good Character
"Highly Moral Person " ^a	"Good Character",b
concerned about doing right	honest
faithful to spouse	trustworthy
has clear values	genuine
law abiding	loving
has strong beliefs	dependable
honest	loyal
able to distinguish right and wrong	trusting
has a highly developed conscience	friendly
ethical	respectful
principled	caring
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^aWalker and Pitts (1998). ^bPresent results.

traits. Hence, this evident bias toward recognition of prototype-consistent information, even if novel and not before seen, strongly supports our claim that a conception of good character is organized around a cognitive prototype.

Prototype activation had weak and inconclusive effects on recall memory. In Study 3, for example, there was no significant difference in verbatim recall of character-central and character-peripheral trait attributes that were presented during the acquisition phase. In Study 4, a slight gender effect was evident, favoring women, although the mean difference was trivial. Significant recall memory effects were also seen to vary by trait type (central or peripheral) and which counterbalanced list of traits was presented. Thus, a group that received one set of peripheral and central traits showed greater recall of peripheral traits; a group that received an alternative set of peripheral and central traits showed greater recall of central traits. This suggests that recall memory is not so much a function of prototype centrality but, rather, trait selection. It should be noted that somewhat similar findings were reported by Fehr (1988). In her study of a "love and commitment" prototype, she found that participants recalled more peripheral than central features of love. When counterbalanced sets of central and peripheral traits were used (as in our study), one group recalled more peripheral features of commitment, whereas another recalled more central features. It would appear, then, that indexes of recall memory are insensitive indicators of prototype activation and are amenable to idiosyncratic effects associated with item selection.

These studies have three important, but related, implications. First, as Walker and Pitts (1998) argued, the existence of prototypic moral knowledge structures enlarges the discussion of what constitutes moral rationality. Until recently, moral rationality has been largely a matter of Piagetian structures developing through

stages or an account of how normative rules and principles are explicitly used to resolve conflict and reach decisions. Moral development, according to the standard view, yields a declarative ability to articulate sophisticated moral philosophic positions and to utilize dilemma-busting procedures to secure consensus. Yet our data, along with findings reported by Lapsley and Lasky (2001), suggest that at least some morally relevant psychological processes are implicit, spontaneous, and automatic and that the conditions and consequences of prototype knowledge activation will have to play a role in understanding moral information processing.

Second, the data presented here enlarges the discussion of what is to count as moral socialization or as moral judgment development. As Churchland (1996) noted, "one's ability to recognize instances of cruelty, patience, meanness and courage far outstrips one's capacity for verbal definitions of those notions" (p. 101), and the sort of moral learning that contributes to this discrimination "will be a matter of slowly generating a hierarchy of moral prototypes, presumably from a substantial number of relevant *examples* of the moral kinds at issue" (p. 102). Indeed, if important features of moral rationality are organized prototypically, and if these prototypes influence social information processing (as our study demonstrates), then the dynamics of prototype formation become a critical issue in moral socialization.

Lapsley (1998) argued, for example, that the formation of chronically accessible moral knowledge structures, including character prototypes, can be encouraged in two ways. He argued, first of all, that children who are the object of many prosocial and moral character attributions by parents and teachers would be more likely to have the following: moral categories chronically accessible for social information processing; the actual self ("you are a nice and helpful person") defined in terms of the ought self ("it was good that you shared"); or, alternatively, moral categories define what is essential, important, and central to their self-understanding, resulting in a moral identity. Lapsley (1998) also noted the importance of parents and teachers helping young children solidify event representations ("pushing your sister") into autobiographical memories through explicit coaching. Parental interrogatories ("What happened when you pushed your sister? Why did she cry? What should you do next?") enable children to organize events into personally relevant autobiographical memories, which provides, in the process, as part of the self-narrative, action-guiding scripts, event prototypes, and exemplars. These interrogatories might include character attributions as well, so that the ideal and the ought self are part of one's autobiographical story. In this way, adults help identify morally relevant aspects of a child's experience and encourage the formation of self-narratives that are easily primed, easily activated, and chronically accessible for (perhaps) automatic social information processing. However, the formation of self-identity through character attributions, and through direct coaching of event representations, might also underlie the formation of character prototypes as well. Indeed, moral learning, and identity formation, may have their developmental source in schematically organized self-narratives.

Third, it follows, then, that the emergence of moral schemas also implicates processes that are critical to the formation of moral selfhood and identity. Indeed, Erikson (1968) said that morality and identity stand in a mutually supportive relation. He argued that an ethical capacity is the "true criterion of identity" (p. 39), but Erikson (1964) also noted that "identity and fidelity are necessary for ethical strength" (p. 126). This suggests that the formation of a moral identity is the clear goal of both moral and identity development and that the two developmental tracks are ideally conjoined in the moral personality. Moreover, both tracks might be usefully described in terms of their respective procedural and declarative elements. For example, Erikson (1968) stated that identity formation takes place on many levels of mental functioning: "This process is, luckily and necessarily, for the most part unconscious except where inner conditions and outer circumstances combine to aggravate a painful, or elated, 'identity-consciousness' "(p. 23). Similarly, Lapsley (1998) argued that moral formation has a procedural component that includes the sort of moral information processing that is perceptual, implicit, and activated by prototypically-organized schemas with varying degrees of automaticity. It is the "unconscious" analog of Erikson's identity formation. According to Lapsley this is the province of character, moral identity, and the moral personality. However, just as circumstances can induce a heightened "identity consciousness" in a process that is otherwise implicit and unconscious, so too can events induce a heightened "moral consciousness" in a process that is otherwise implicit and automatic. This is the declarative aspect of moral rationality, and it is the province of traditional cognitive-developmental theories of justice reasoning.

Hence, moral processes, such as identity, may exist at different levels of mental functioning and include both procedural and declarative components. Indeed, our formulation accords well with neo-Kohlbergian componential approaches to moral development that carve out domains for moral sensitivity (Rest et al., 1999) and moral perception (Narvaez, 1996; Narvaez, Mitchell, Endicott, & Bock, 1999), along with other components that describe declarative reasoning, motivation, and implementation skills. Clearly, a full account of the moral personality will require an appeal to both procedural and declarative elements of social information processing, along with motivational and behavioral components.

The studies presented here, then, provide the empirical warrant to explore these theoretical possibilities. Future research needs to explore a number of topics that were not possible to address in these studies. For example, there is a dispute in the cognitive literature regarding the most appropriate way to explain category representation. We opted to describe the schematic coherence of character representation in terms of cognitive prototypes to extend previous research in this area (Walker & Pitts, 1998). There are, however, other ways to model conceptual representation (for a useful review, see Hampton, 1997). The exemplar model, for example, does not assume that individuals abstract average features of a stimulus set on the basis of typicality, similarity, or family resemblance (as does prototype theory), but argues instead that conceptual categories are represented by collections of stored instances

or examplars (Medin & Schaffer, 1978). Although it is often difficult to distinguish the two models (Barsalou, 1990) and although both models claim significant empirical support, exemplar models appear to enjoy a number of explanatory advantages over prototype abstraction models (Shanks, 1997); at least on certain kinds of concept learning and item classification tasks. Other models of conceptual coherence are also possible (Murphy & Medin, 1985). We do not take a stand on which theory of conceptual coherence is better attested by data—only that important moral concepts, such as character, have a schematic structure that is usefully described by "any of the abstract hypotheses, expectations, organizing principles, frames, implication molecules, scripts, plans or prototypes that have been proposed as abstract mental organizing systems or memory structures" (Hastie, 1981, p. 39; see also, Pryor, McDaniel, & Kott-Russo, 1986). This perspective would greatly inform our understanding of how concepts of identity, character, and morality are learned during development. Indeed, the social-cognitive approach to personality appeals to a set of constructs that may well serve to anchor the study of self, identity, and moral character to a common set of psychological processes that have not, heretofore, been utilized to account for identity formation or moral learning. Future research should attend to these possibilities.

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REFERENCES

- Barsalou, L. W. (1990). On the indistinguishability of exemplar memory and abstraction in category representation. In T. K. Srull & R. S. Wyer (Eds.), *Advances in social cognition* (Vol. 3, pp. 61–88). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Blasi, A. (1984). Moral identity: Its role in moral functioning. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Morality, moral behavior and moral development* (pp. 128–139). New York: Wiley.
- Blasi, A. (1985). The moral personality: Reflections for social science and education. In M. W. Berkowitz & F. Oser (Eds.). Moral education: Theory and application (pp. 433–444). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Blasi, A. (1993). The development of identity: Some implications for moral functioning. In G. G. Noam & T. E. Wren (Eds.), *The moral self* (pp. 99–122). Cambridge, MA: MIT Press.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, 117, 187–215.
- Brewer, M. B., Dull, V., & Lui, L. (1981). Perceptions of the elderly: Stereotypes as prototypes. *Journal of Personality and Social Psychology*, 41, 656–670.
- Cantor, N., & Mischel, W. (1977). Traits as prototypes: Effects on recognition memory. *Journal of Personality and Social Psychology*, 35, 38–48.
- Cantor, N., Mischel, W., & Schwartz, J. C. (1982). A prototype analysis of psychological situations. *Cognitive Psychology*, 14, 45–77.

- Cantor, N., Smith, E., French, R., & Mezzich, J. (1980). Psychiatric diagnosis as prototype categorization. *Journal of Abnormal Psychology*, 89, 181–193.
- Cervone, D., & Shoda, Y. (Eds.). (1999a). The coherence of personality: Social-cognitive bases of consistency, variability and organization. New York: Guilford.
- Cervone, D., & Shoda, Y. (1999b). Social cognitive theories and the coherence of personality. In D. Cervone & Y. Shoda (Eds.), *The coherence of personality: Social-cognitive bases of consistency, variability and organization* (pp. 3–36). New York: Guilford.
- Churchland, P. M. (1996). The neural representation of the social world. In L. May, M. Friedman & A. Clark (eds.), Mind and morals: Essays on cognitive science and ethics (pp. 91–108). Cambridge, MA: MIT Press.
- Erikson, E. (1964). Insight and responsibility. New York: Norton.
- Erikson, E. (1968). Identity: Youth and crisis. New York: Norton.
- Fehr, B. (1988). Prototype analysis of the concepts of love and commitment. *Journal of Personality and Social Psychology*, 55, 557–579.
- Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General*, 113, 464–486.
- Fehr, B., & Russell, J. A. (1991). The concept of love viewed from a prototype perspective. *Journal of Personality and Social Psychology*, 60, 425–438.
- Flanagan, O. (1991). Varieties of moral personality: Ethics and psychological realism. Cambridge, MA: Harvard University Press.
- Funder, D. C. (1991). Global traits: A neo-Allportian approach to personality. *Psychological Science*, 2, 31–39.
- Genero, N., & Cantor, N. (1987). Exemplar prototypes and clinical diagnosis: Toward a cognitive economy. *Journal of Social and Clinical Psychology*, 5, 59–78.
- Hampton, J. A. (1997). Psychological representation of concepts. In M. Conway (Ed.), Cognitive models of memory (pp. 81–110). Cambridge, MA: MIT Press.
- Hart, D. (1998). Can prototypes inform moral development theory? Developmental Psychology, 34, 420–423.
- Hartshorne, H. & May, M. (1928–1932). Studies in the nature of character. New York: Macmillan
- Hastie, R. (1981). Schematic principles in human memory. In E. T. Higgins, C. P. Herman, & M. P. Zanna (Eds.), Social cognition: The Ontario symposium (Vol. 1, pp. 39–88). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability and salience: In E. T. Higgins & A. E. Kruglanski (Eds.), Social psychology: Handbook of basic principles (pp. 133–168). New York: Guilford.
- Higgins, E. T., King, G. A., & Mavin, G. H. (1982). Individual construct accessibility and subjective impressions and recall. *Journal of Personality and Social Psychology*, 43, 35–47.
- Horowitz, L. M., Wright, J. C., Lowenstein, E., & Parad, H. W. (1981). The prototype as a construct in abnormal psychology: A method for deriving prototypes. *Journal of Abnormal Psychology*, 90, 568–574.
- Johnson, M. L. (1996). How moral psychology changes moral theory. In L. May, M. Friedman, & A. Clark (Eds.), Mind and morals: Essays on cognitive science and ethics (pp. 45–68). Cambridge, MA: Bradford/MIT Press.
- Kendrick, D. T., & Funder, D. C. (1988). Profiting from controversy: Lessons from the person-situation debate. American Psychologist, 43, 390–402.
- Kohlberg, L., Levine, C. & Hewer, A. (1983). Moral stages: A current formulation and a resonse to critics. In J.A. Meacham (ed.), *Contributions to human development*. (Vol. 10). Basel: Karger.
- Lapsley, D. K. (1996). Moral psychology. Boulder, CO: Westview.
- Lapsley, D. K. (1998). An outline of a social-cognitive theory of moral character. *Journal of Research in Education*, 8, 25–32.

- Lapsley, D. K., & Lasky, B. M. (2001, April). Chronic accessibility of virtue-trait inferences: A social-cognitive approach to the moral personality. Paper presented at the biennial meeting of the Society for Research on Child Development, Minneapolis, MN.
- May, L., Friedman, M., & Clark, A. (Eds.). (1996). Mind and morals: Essays on cognitive science and ethics. Cambridge, MA: Bradford/MIT Press.
- McKinnon, C. (1999). Character, virtue theories and the vices. Toronto: Broadview.
- Medin, D. L., & Schaffer, M. M. (1978). A context theory of classification learning. Psychological Review, 85, 207–238.
- Mervis, C. B., & Rosch, E. (1981). Categorization of natural objects. Annual Review of Psychology, 32, 89–115.
- Mischel, W. (1973). Toward a cognitive social-learning reconceptualization of personality. Psychological Review, 80, 250–283.
- Mischel, W. (1990). Personality dispositions revisited and revised: A view after three decades. In L. Pervin (Ed.), Handbook of personality: Theory and research (pp. 111–134). New York: Guilford.
- Murphy, G. L., & Medin, D. L. (1985). The role of theories in conceptual coherence. Psychological Review, 93, 289–316.
- Narvaez, D. (1996, April). Moral perception: A new construct. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Narvaez, D., Mitchell, C., Endicott, L., & Bock, T. (1999). *Nurturing character in the middle-school classroom: A guidebook for teachers*. St. Paul, MN: Department of Children, Families and Learning.
- Pryor, J. B., McDaniel, M. A., & Kott-Russo, T. (1986). The influence of the level of schema abstractness upon the processing of social information. *Journal of Experimental Social Psychology*, 22, 312–327.
- Rest, J., Narvaez, D., Bebeau, M. J., & Thoma, S. J. (1999). *Postconventional moral thinking: A neo-Kohlbergian approach*. Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Rosch, E. (1975). Cognitive reference points. Cognitive Psychology, 7, 532–547
- Rosch, E., & Mervis, C. B. (1975). Family resemblances: Studies in the internal structure of categories. Cognitive Psychology, 7, 573–605.
- Shanks, D. R. (1997). Representation of categories and concepts in memory. In M. Conway (Ed.), Cognitive models of memory (pp. 111–146). Cambridge, MA: MIT Press.
- Walker, L. J. (1999). The perceived personality of moral exemplars. *Journal of Moral Education*, 28, 145–162.
- Walker, L. J., & Pitts, R. C. (1998). Naturalistic conceptions of moral maturity. Developmental Psychology, 34, 403–419.

APPENDIX: Prototypicality Ratings	rototypica	lity Ratings							
I			5		3	4	1	5	
honest	6.44	sincere	6.02	thoughtful	5.83	open	5.62	pleasant	5.50
trustworthy	6.38	forgiving	00.9	courteous	5.55	cooperative	5.62	sharing	5.50

2 3 4 5	6.02 thoughtful 5.83 open 5.62 pleasant 5.50
2	6.02 tl
	4 sincere
1	6.44

.44	sincere	6.02	thoughtful	5.83	4 open	5.62	pleasant	5.50
	forgiving	6.00	courteous	5.55	cooperative	5.62	sharing	

ality Natilitys							
	2		3		4	,	2
sincere	6.02	thoughtful	5.83	oben	5.62	pleasant	5.50
	(•	1		1

5.50	5.50
pleasant	sharing
5.62	5.62
open	cooperative
5.83	5.55
thoughtful	courteous
6.02	00.9
sincere	forgiving
4	∞

	2		3	4	,	3	
ncere	6.02	thoughtful	5.83	oben	5.62	pleasant	5.50
rgiving	6.00	courteous	5.55	cooperative	5.62	sharing	5.50

5.50	5.50
pleasant	sharing
5.62	
oben	cooperative
5.83	5.55
thoughtful	courteous

5.49

value centered

5.49 5.49 5.47 5.48 5.48

attentive

interest in others

5.74 5.73 5.71 5.71 5.71 5.70

good natured

5.99 5.97 5.97

good personality

considerate

6.29 6.19

genuine

loving

determined

accept criticism

stable

5.59 5.59 5.57 5.56 5.56 5.55 5.53

enthusiastic

5.36 5.36

motivated

handle problems

sensitive

5.84 5.83

commonsense

6.02

compassionate

responsible

honorable

5.62

generous

high standards

5/50 5.50 5.50

consistent

5.63 5.63

decent

sympathetic affectionate law abiding

reasonable

5.89 5.86

5.40

communicates

5.51 5.51 5.51

5.65

5.92

5.64 5.64

patient

5.91

understanding

warm

concerned

5.46 5.45 5.44 5.43 5.40

flexible tolerant

dedicated

5.68

commitment

5.93

hardworking

6.10

caring

degree nice

6.11

respectful

heartfelt

smile

5.95 5.94

6.12

lovable

5.67

gentle humor

5.92

supportive

60.9 80.9 6.07 6.07 90.9 6.05

respectable

positive

reliable

moral

listener

humble

ethical

empathetic

optimistic

personable

approachable

5.96

good to be around

6.14

trusting friendly

loyal

faithful

6.17 6.16

dependable

devoted

helpful

confident integrity

5.35

focused

		4.31
	10	nonconfrontational
		4.80
	6	benevolent
	8	5.02
		strong
t.)	7	5.17
PPENDIX: Prototypicality Ratings (cont.)		nonviolent
rototypica	5	5.35
PPENDIX: P)	sciplined

9		7		8		6		10	
disciplined	5.35	nonviolent	5.17	strong	5.02	benevolent	4.80	nonconfrontational	4.31
complete	5.34	capable	5.16	upstanding	5.01	selfless	4.79	religious	3.32
learner	5.33	fun	5.16	organized	4.99	inventive	4.78	cool	4.31
cheerful	5.33	delightful	5.16	educated	4.97	altrusitic	4.78	meticulous	4.24
loved	5.33	sweet	5.15	independent	4.96	charismatic	4.78	healthy	4.22
mature	5.32	courageous	5.14	obedient	4.95	hearty	4.76	apologetic	4.21
rational	5.30	peacemaker	5.12	diligent	4.95	concentrates	4.75	patriotic	4.18
rounded	5.29	ambitious	5.11	modest	4.93	intelligent	4.73	Christian	4.17
admirable	5.29	knowledgeable	5.11	efficient	4.93	speaks mind	4.73	talkative	4.15
likable	5.29	interest	5.09	involved	4.90	introspective	4.73	classy	4.12
team player	5.27	leader	5.09	outgoing	4.90	has hobbies	4.73	thrifty	4.09
secure	5.26	good reputation	5.07	expressive	4.89	objective	4.73	opinionated	4.07
high self-esteem	5.26	creative	5.07	counselor	4.87	controlling	4.65	over-achieving	4.00
willful	5.25	Easy going	5.04	energetic	4.86	prond	4.63	well-noticed	3.92
sensible	5.21	punctual	5.04	self-starter	4.85	clean	4.62	provocative	3.86
calm	5.19	contented	5.05	outstanding	4.83	tenacious	4.52	shy	3.73
sociable	5.19	does not gossip	5.02	teacher	4.83	soft-spoken	4.49	popular	3.53
self-reliant	5.18	straightforward	5.02	forthright	4.81	centered	4.37	lucky	3.21

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