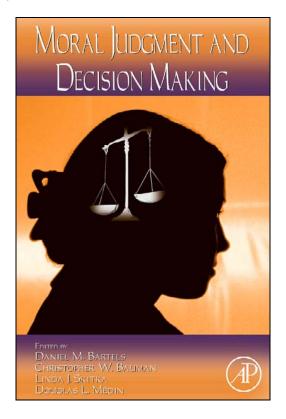
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CHAPTER EIGHT

MORAL IDENTITY, MORAL FUNCTIONING, AND THE DEVELOPMENT OF MORAL CHARACTER

Darcia Narvaez and Daniel K. Lapsley

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Abstract

We review how the construct of the moral self has arisen within moral development theory and discuss the search for integrative linkages with other domains of psychology, including personality. Next, we describe moral personality and then programs and approaches to developing moral identity in children. Moral schema development and moral information-processing research is outlined, including mapping expert-novice differences. Finally, we conclude with two emerging integrative theories, one on educational intervention for moral skill

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development and the other a neurobiological model of moral functioning which draws on evolutionary themes in the development of a moral brain.



1. Introduction

There are few more pressing problems before psychological science than to account for human moral functioning. This is because moral agency is crucial to our conception of what it means to be a person (Carr, 2001). The belief in our own moral integrity is so central to our self-understanding that often we are tempted to shield it from refutation by recourse to sanitizing euphemisms and protective belts of denial, rationalization, and special pleading (Bandura, 1999). Indeed, as Taylor (1989) put it, "being a self is inseparable from existing in a space of moral issues" (p. 112).

The alignment of moral integrity with our sense of self-identity might be one of those facts about ourselves that is so obvious that it hardly bears examination — something along the lines of fish being the last to discover water. This might go part of the way to explain the odd fact that the moral self does not have a long research tradition in psychology; but there are other explanations as well. These explanations point to paradigmatic doubts about whether the self is a legitimate construct for a behavioral science, and doubts evident in the study of moral development about how "thick" a self must be to render a rationally adequate moral judgment.

It does not help that psychological research is fragmented and that relevant fields of study, or even research programs within fields, do not easily talk with one another. The relevance of findings on, say, motivation, social cognition, or personality is not drawn easily for understanding moral motivation, moral cognition, or moral personality. The literatures on expertise, decision making, and cognitive science more generally provide few explicit guidelines for understanding moral expertise, moral decision making, and moral cognition. Although self-identity has attracted significant research attention for decades, the frameworks of developmental and social psychologists who study it have often bypassed each other. Similarly research on temperament, attachment, and other developmental processes are often silent on their implications for the moral domain. Research on moral development has availed itself rarely of the theories, constructs, and methods of other disciplines; and these other disciplines rarely speculate on the developmental trajectories that bring one to adult moral functioning. Moreover, those interested in the educational implications of the self divide on the purpose and pedagogy of moral-character education, and on the very terms of reference for understanding the moral dimensions of selfhood (see Lapsley and Narvaez, 2006). What is virtue, for example, as a psychological construct? How is character to be understood as a dimension of personality? Fortunately there are signs that the estrangement of the moral self from the main currents of contemporary psychological research is coming to an end. Although the search for integrative linkages is of longer standing (e.g., Lapsley and Power, 1988; Lapsley and Quintana, 1985), there is a discernible increase in the pace and momentum of integrative research on moral cognition and moral self-identity (Narvaez and Lapsley, in press). Indeed, the ascendance of the moral self now animates integrative research at the intersection of several provinces of psychology, and, along with increasing research into the neuroscientific (Sinnott-Armstrong, 2008) and evolutionary bases of moral behavior (Narvaez, 2008b), the appearance of handbooks on moral development (Killen and Smetana, 2005) and education (Nucci and Narvaez, 2008), it is now clear that moral psychology is enjoying a renascence of interest in many areas of research.

In this chapter, we review how the construct of the moral self has arisen within developmental studies of moral judgment, and how the search for integrative linkages with other domains of psychology, particularly with social cognition and personality, took on a certain urgency after the marginalization or collapse of the dominant stage-and-structure ("Piagetian") approaches to moral development. We examine theoretical approaches to moral self-identity and moral personality, along with their developmental accounts, including a broader integrative theory that implicates evolutionary themes in the development of a moral brain.

2. MORAL SELF-IDENTITY

In this section, we begin our exploration of moral self-identity by examining briefly how it is considered in recent ethical theory. We then trace how Augusto Blasi's view of the moral personality has evolved out of the problematic of moral development theory. Finally we describe theories of moral personality that have arisen in recent decades.

2.1. Ethical Theory and Moral Development

On Frankfurt's (1971, 1988) influential account a person (as opposed to a wanton) has a self-reflective capacity to examine his or her own desires and to form judgments with respect to them. A person cares about the desirability of his or her desires ("second-order desires") and wishes to conform the will in accordance with them ("second-order volitions"). Similarly Taylor (1989) argues that a person is one who engages in strong evaluation, that is, makes careful ethical discriminations about what is better and worse, higher and lower, worthy and unworthy; and these discriminations are made against a "horizon of significance" that frames and constitutes our

self-understanding (Taylor, 1989). Hence on this view our identity is defined by reference to things that have significance for us. Moreover, according to Taylor (1989) it is a basic human aspiration to be connected to something of crucial importance, to something considered good, worthy, and of fundamental value; and this orientation to the good "is essential to being a functional moral agent" (Taylor, 1989, p. 42).

Hence, modern ethical theory draws a tight connection between personhood, identity, and moral agency. Moreover, the core notions of second-order desires and the identity-defining commitments of strong evaluation have found their way into recent psychological accounts of moral identity (e.g., Blasi, 2005; Lapsley, 2007). How it has done so is best considered from an historical reconstruction of Kohlberg's influential theory of moral development, for the stage-and-structure approach championed by Kohlberg did not always welcome self-identity constructs into its theoretical fold, and for a number of reasons.

First, Kohlberg's theory appropriated the Piagetian understanding of stage. This entailed treating the moral stage sequence as a taxonomic classification of different kinds of sociomoral operations and not as a way of charting individual differences. Moral stages, on this account, are not "boxes for classifying and evaluating persons" (Colby et al., 1983, p.11). Instead they describe forms of thought organization of an ideal rational moral agent, an epistemic subject, and hence cannot be "reflections upon the self" (Kohlberg et al., 1983, p. 36). For this reason, it is not possible to use moral stages as a way of making "aretaic judgments" about the self (or of others), that is, of making judgments about one's moral worthiness as a person.

Second, Kohlberg thought that the behavioral manifestation of character traits could not be empirically confirmed. After all, the Hartshorne and May (1928–1930) studies appeared to show that certain dispositions ("honesty") did not exhibit the cross-situational consistency thought necessary for character traits. Third, deeply personological constructs were viewed as obstacles to mature moral deliberation, or as sources of bias and backsliding that had to be surmounted by the rational moral agent. This follows from a Kantian view of the person as one beset by contending forces — the force of reason and the force of bodily desires and passions — each slugging it out for the control of the will (Johnson, 1993). If one links moral judgment too closely to our deeper human nature — to personality, to the self and its desires, passions and inclinations, or to social particularities, relationships, and identity-defining commitments, then one risks divorcing morality from rationality. Self-identity and personality, on this view, are too adhesive to bodily passions which can only compromise the universalizing tendencies required of the "moral point of view" instantiated in the highest stages of moral development. Finally, a focus on virtues and character traits was thought to give aid and comfort to ethical relativism and was therefore a

poor guide to moral education. As Kohlberg and Mayer (1972, p. 479) famously put it:

Labeling a set of behaviors displayed by a child with positive or negative trait terms does not signify that they are of adaptive significance or ethical importance. It represents an appeal to particular community conventions, since one person's 'integrity' is another person's 'stubbornness, [one person's] 'honesty in expressing your true feelings' is another person's 'insensitivity' to the feelings of others.

Hence Kohlberg's cognitive developmental approach to moral socialization did not leave much room for dispositional factors, and required only a thin conception of the "responsible self" in order to account for how moral cognition gets translated into moral action. For Kohlberg the responsible self is aware of the prescriptive nature of moral judgments and hence acts upon them, though awareness of this link is most pronounced at the highest stages of moral reasoning.

Of course, Kohlberg's moral stage theory no longer sets the agenda in moral development research despite the strength of empirical findings supporting at least neo-Kohlbergian models of development (e.g., Rest et al., 1999). The general decline of the Piagetian paradigm is one part of the explanation for the marginalization of moral stage theory. Other explanations point to factors internal to Kohlberg's theory, such as doubts about how to understand fundamental concepts, such as stage and structure (Lapsley, 2005). Yet it also became clear that Kohlberg's theory could not help us understand the moral formation of children, nor provide guidance for parents about how to raise children of a certain kind — children whose personalities are imbued with a strong ethical compass. Although the strictures of moral stage theory forbid aretaic judgments, they come easier to most everyone else; and it was the inability of moral stage theory to engage issues of character, selfhood, and personality that contributed to its diminishing visibility in developmental science, and to increasing recognition that the field was at an important crossroads (Lapsley and Narvaez, 2005).

2.2. Blasi on Moral Identity

The relative neglect of self, identity, and personality in accounts of moral development has now come to an end. Beginning with the pioneering work of Blasi (1984, 1985), it is now evident that moral psychology is catching up with ethical theory in proposing thicker conceptions of moral personhood so that talk of moral self-identity and moral personality are now commonplace (Blasi, 2005; Lapsley, 2007; Lapsley and Narvaez, 2004a; Narvaez and Lapsley, in press; Walker and Frimer, in press).

Blasi's contributions to moral psychology can be described usefully in terms of five key themes that emerged in his writings. His early writings

focused on the Self Model of moral action and moral identity. Later he took up the intentional self, the nature of moral character, and the development of the moral will. Throughout this work Blasi is influenced clearly by the notion of second-order desires (Frankfurt) and of the identity-defining commitments of strong evaluation (Taylor).

The Self Model of moral action was developed in response to the disappointing finding that moral judgment did not predict moral action very strongly (Blasi, 1983). In contrast to Kohlberg's position, Blasi argued that moral action did not follow directly from a deontic judgment but was instead filtered through a set of calculations that implicated the very integrity of the self. According to Blasi (1983) moral structures are only indirectly related to moral action. They serve to appraise the moral landscape, but do not directly generate action. Just because an agent appraises the social situation through the lens of sophisticated moral criteria does not guarantee that the agent will also see the personal relevance of the situation, or even its relevance for morality.

The Self Model holds that action is more likely to follow moral judgment when moral considerations are deemed essential and core to one's personal identity. After one makes a moral judgment one must next filter this judgment through a second set of calculations that speaks to the issue of whether the self is responsible. Responsibility judgments attempt to sort out the extent to which the morally good action is strictly necessary for the self. Moreover, the criteria for reaching responsibility judgments are a matter of individual differences insofar as it varies in accordance with one's selfdefinition. Is acting in this way so necessary for my self-understanding that not to act is to lose the self? Are moral notions so central to my identity that failing to act, or indulging in excusing rationalizations, is to undermine what is core to my personhood? Blasi suggests that the cognitive motivation for moral action springs from this sense of fidelity to oneself-in-action. It springs from a tendency toward self-consistency, which he views as a cognitive motive for objectivity and truth. It springs from a moral identity that is deeply rooted in moral commitments — commitments so deeply rooted, in fact, that to betray these commitments is also to betray the self.

Hence moral action, and inaction, implicates the self in important ways. As McFall (1987, p. 12) put it:

We all have things we think we would never do, under any imaginable circumstances; some part of ourselves beyond which we will never retreat, some weakness however prevalent in others that we will not tolerate in ourselves. And if we do that thing, betray that weakness, we are not the persons we thought: there is nothing left that we may even in spite refer to as *I*.

Unconditional moral commitments that are core, deep, and essential to our self-understanding contributes to our sense of personal integrity-in-action. These are the "deepest most serious convictions we have; they define what

we would not do, what we regard as outrageous and horrible; they are the fundamental conditions for being ourselves, for the integrity of our characters depends upon them" (Kekes, 1989, p. 167).

But moral identity is a dimension of individual differences, that is, it is a way of talking about personality, but this time one's moral personality is grounded by reference to moral reasons. One has a moral identity to the extent that moral notions, such as being good, being just, compassionate, or fair, is judged to be central, essential, and important to one's self-understanding. One has a moral identity when one strives to keep faith with identity-defining moral commitments, and when moral claims stake out the very terms of reference for the sort of person one claims to be.

Blasi's account of the moral personality, his elevation of the subjective self-as-agent as an object of inquiry, his insistence on the rational, intentional nature of distinctly moral functioning, and his integration of self and identity with moral rationality and responsibility is a singular achievement (Lapsley and Narvaez, 2004a). His theory of moral identity also has empirical consequences. It is invoked, for example, to explain the motivation of individuals who sheltered Jews during the Nazi Holocaust (Monroe, 1994, 2001, 2003); and it underwrites a line of research on the psychological characteristics of "moral exemplars" whose lives are marked by uncommon moral commitment. For example, studies of adult (Colby and Damon, 1991) and adolescent (Hart and Fegley, 1995; Matsuba and Walker, 2004, 2005; Reimer, 2003) moral exemplars typically reveal that exemplars align their self-conceptions with ideal moral goals and personality traits, and that their moral action is undertaken as a matter of felt self-necessity.

Blasi returned long-forgotten concepts to the vocabulary of modern psychology, including desire, will, and volition, and added new concepts, such as self-appropriation and self-mastery. To date these concepts have resisted straightforward translation into empirical research. Moreover there is no consensus on how to measure moral identity, which is a centerpiece of Blasian moral theory. Alternative approaches to moral identity have emerged that while friendly toward the general Blasian framework nonetheless have starting points other than the subjective self-as-agent.

2.3. Personality Theory

There is an emerging consensus that the study of moral rationality can no longer be studied in isolation from the broader context of personality (Walker and Hennig, 1998; Lapsley and Narvaez, 2004b). For too long the study of moral judgment was pursued at the expense of studying the moral agent as a whole person (Walker, 1999). As a corrective it seems reasonable to insist that if moral self-identity (or "character") is a dimension of individual differences, and if it is the moral dimension of personality, then

our accounts of these constructs must be compatible with well-attested models of personality. But *which* model?

Modern personality theory provides a number of options. Cervone (1991) argues, for example, that personality psychology divides into two disciplines on the question of how best to conceptualize the basic units of personality. One discipline favors trait/dispositional constructs, the second discipline favors social-cognitive constructs. The traits/disposition approach (e.g., Costa and McCrae, 1992) accounts for the structure of personality in terms of between-person classification of interindividual variability. Individual differences are captured in terms of "top-down" dispositional constructs as might be found in latent variable taxonomies identified through factor analysis, such as the Big 5 taxonomy (extraversion, neuroticism, conscientiousness, agreeableness, and open-to-experience).

In contrast, the social-cognitive approach understands the structure of personality in terms of intraindividual, cognitive-affective mechanisms, and attempts to account for individual differences from the "bottom-up," that is, in terms of specific, within-person psychological systems that are in dynamic interaction with changing situational contexts (Cervone, 2005; Cervone and Tripathi, in press). Scripts, schemas, episodes, plans, prototypes, and similar constructs are the units of analysis for social-cognitive approaches to personality.

Cervone's "two disciplines" of personality has been joined by the "new Big 5" conceptualization proposed by McAdams and Pals (2006) as an integrative framework for personality science. The framework begins with the *general evolutionary design* for human nature (Level 1) as it is expressed in broadband *dispositional traits* that are organized early in development (Level 2). Later personality comes to include *characteristic adaptations* to specific contextual demands (Level 3), and then self-defining *narratives* (Level 4) that are expressed differentially in broader *social and cultural contexts* (Level 5). In this framework the personality is layered, with evolutionary biology at the bottom and sociocultural context at the top. Of most interest here are the three middle layers, dispositional traits, characteristic adaptations, and self-defining narratives.

At Level 2 are dispositional traits like the Big 5 that encode those broadband variations in human behavior that have made a difference in human evolutionary history (McAdams, in press). These dispositional traits show cross-situational consistency and developmental continuity. But personality also is responsive to exigencies of specific contextual settings, and this pattern of responsiveness is captured by Level 3 "characteristic adaptations." These include a large tool box of motivational, social-cognitive, and developmental constructs such as favored defense mechanisms, coping strategies, schemas of various kinds, personal projects, beliefs, goals, values, and ideologies. Finally, atop Level 2 dispositions and Level 3 adaptations is the construction at Level 4 of a life narrative that pulls

together the elements of one's biography into a story that yields ideally a sense of unity, coherence, and purpose.

2.3.1. Personality Theory and Moral Personality

Recent research in moral psychology has appealed to both the Big 5 taxonomy (McAdams) and to social-cognitive theory (Cervone). For example, Walker and his colleagues have attempted to understand the personality of moral exemplars in terms of McAdams' Big 5 taxonomy. In one study, the personality of moral exemplars was found to orient toward conscientiousness and agreeableness (Walker, 1999). Agreeableness also characterized young adult moral exemplars (Matsuba and Walker, 2005). In a study of brave, caring and just exemplars (as recognized by the Canadian honors system), Walker and Pitts (1998) found that brave exemplars aligned with a complex of traits associated with extraversion; caring exemplars aligned with agreeableness, and just exemplars with a mixture of conscientiousness, emotional stability, and openness to experience. This pattern was largely replicated by Walker and Hennig (2004).

In contrast to McAdams' Big 5 characterizations of moral personality are social-cognitive theories that appeal to the availability and accessibility of social-cognitive knowledge structures, such as schemas, scripts, and prototypes (Aquino and Reed, 2002; Aquino and Freeman, in press; Lapsley and Narvaez, 2004b). From this perspective schemas (rather than traits) are the cognitive carriers of dispositions (Cantor, 1990; Cantor and Kihlstrom, 1987). Schemas "demarcate regions of social life and domains of personal experience to which the person is especially tuned and about which he or she is likely to become a virtual 'expert'" (Cantor, 1990, p. 738). Schemas that are frequently activated should, over time, become chronically accessible. Moreover, there should be individual differences in the accessibility of constructs just because of each person's unique social developmental history (Bargh et al., 1988).

Hence schema accessibility shows interindividual variability but also sustains patterns of individual differences over time, and is properly considered a personality variable (Higgins, 1996). For example, if schemas are chronically accessible, then attention is directed selectively to certain features of experience at the expense of others. It disposes one to select schema-relevant life tasks, goals, or settings which, in turn, canalize and maintain dispositional tendencies (which illustrate the reciprocal relationship between persons and contexts). It encourages one to develop highly practiced behavioral routines in those areas demarcated by chronically accessible schemas, which provide "a ready, sometimes automatically available plan of action in such life contexts" (Cantor, 1990, p. 738).

Lapsley and Narvaez (2004b) and others (e.g., Aquino and Freeman, in press) have invoked the social-cognitive framework to understand moral

personality. In this view, the moral personality is to be understood in terms of the accessibility of moral schemas for social information processing. A moral person, a person who has a moral character or identity, is one for whom moral constructs are chronically accessible (moral chronicity), where construct accessibility and availability are dimensions of individual differences.

A social-cognitive model of moral personality has at least five attractive features. First, it provides an explanation for the model of moral identity favored by Blasi (1984) who argues that one has a moral identity just when moral categories are essential, central, and important to one's self-understanding. A social-cognitive interpretation would add that moral categories that are essential, central, and important for one's self-identity would also be ones that are chronically accessible for interpreting the social landscape. These categories would be online, vigilant, easily primed, easily activated, for discerning the meaning of events, for noticing the moral dimensions of experience and, once activated, to dispose one to interpret events in light of one's moral commitments.

Second, this model accounts for the felt necessity of moral commitments experienced by moral exemplars, their experience of moral clarity or felt conviction that their decisions are evidently appropriate, justified, and true. Typically moral exemplars report that they "just knew" what was required of them, automatically as it were, without the experience of working through an elaborate decision-making calculus (Colby and Damon, 1991). Yet this is precisely the outcome of preconscious activation of chronically accessible constructs — that it should induce strong feelings of certainty or conviction with respect to social judgments (Bargh, 1989; Narvaez and Lapsley, in press).

Third, the social-cognitive framework is better able to account for the implicit, tacit, and automatic features of moral functioning (Narvaez and Lapsley, 2005). There is growing recognition that much of human decision making is under nonconscious control (Bargh, 2005) and occurs with an automaticity that belies the standard notions of rational, deliberative calculation (Bargh and Chartrand, 1999). Though this possibility offends traditional accounts of moral development, there is no reason to think that automaticity is evident in every domain of decision making except the moral domain. However, unlike the social intuitionist model (Haidt, 2001) which frontloads automaticity prior to judgment and reasoning as a result of intuitions that are constitutive of human nature (and hence prior to learning and enculturation) the social-cognitive approach to moral personality locates automaticity on the backend of development as the result of repeated experience, instruction, intentional coaching, and/or socialization (Lapsley and Hill, 2008). It is the automaticity that comes from expertise in life domains where we have vast experience and well-practiced behavioral routines (Cantor, 1990).

Fourth, a social-cognitive model of the moral personality can account for situational variability in the display of a virtue (Cervone and Tripathi, in press). The accessibility of social-cognitive schemas underwrites not only the discriminative facility in the selection of situationally appropriate behavior, but also the automaticity of schema activation that contributes to the tacit, implicit qualities often associated with the "habits" of moral character (Lapsley and Narvaez, 2006).

Fifth, social-cognitive theory accords with the paradigmatic assumptions of ecological "systems" models of development (Lerner, 2006). Both developmental systems and social-cognitive theory affirm that a dispositional behavioral signature is to be found at the intersection of Person × Context interactions. Consequently, a preference for social-cognitive theory as a way to conceptualize the moral personality reflects a strategic bet that it is more likely to lead to robust integrative models of moral personality development than are approaches driven by the Big 5. Similarly, Olson and Dweck (2008) argue that the field of "social-cognitive development" (SCD) has strong integrative possibilities as it straddles the domains of social, developmental, and cognitive psychology.

Recent research has attempted to document the social-cognitive dimensions of moral cognition. For example, moral chronicity (chronic activation of moral constructs in social information processing) appears to be a dimension of individual differences that influences spontaneous trait inference and moral evaluation (Narvaez et al., 2006). In two studies Narvaez et al. (2006) showed that moral chronics and nonchronics respond differently to the dispositional and moral implications of social cues. In addition, research shows that conceptions of good character (Lapsley and Lasky, 2002) and of moral, spiritual, and religious persons (Walker and Pitts, 1998) are organized as cognitive prototypes.

Aquino and Reed (2002) proposed a model of moral identity that is compatible with the tenets of social-cognitive theory. They define moral identity as a self-schema that is organized around specific moral trait associations (e.g., caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, kind) that are closely linked in memory (in the manner of spreading activation). They argue that moral identity has both a public and private aspect. Privately, moral identity is a cognitive representation of the moral self that reflects the degree to which moral traits are central to one's self-concept. Publicly, moral identity can be projected symbolically in the forms of actions-in-the-world, or, alternatively, the degree to which the traits are reflected in one's public actions. The private aspect of moral identity is labeled Internalization; the public aspect is labeled Symbolization. These aspects are derived as subscales on an instrument that uses the nine moral traits as "salience induction stimuli." In some studies, these nine traits are used as an experimental manipulation to prime the accessibility of moral identity.

Aguino and Reed (2002) showed that both dimensions predicted selfreported good deeds such as volunteering at a homeless shelter, organizing a food drive, mentoring troubled youth, or visiting patients at a nursing home "in the past two years." The self-importance of moral identity ("Internalization") was also a strong predictor of donating behavior in this study. A strong sense of internalized moral identity predicts whether one will share resources with outgroups or come to their aid (Reed and Aquino, 2003), donate personal time for a charitable cause (Reed et al., 2007) or lie in a business negotiation (Aquino and Freeman, in press). When individuals with internalized moral identity do lie in a business negotiation, they are strongly motivated to reduce its implication for the self by attempting various strategies that serve to neutralize the sting of hypocrisy, such as denial, denigrating the target, or minimizing the lie (Aquino and Becker, 2005). That said, when the self-importance of moral identity is high, it undermines the effectiveness of moral disengagement mechanisms that rationalize doing harm to others (Aquino et al., 2007).

3. DEVELOPMENT OF MORAL SELF-IDENTITY

The literature on moral self-identity and the moral personality seems largely preoccupied with sketching out what it looks like in its mature form in adulthood. This is not inappropriate. Often it is useful, if not essential, to get a handle on the *telos* of development before one can investigate the possible developmental trajectories that can get one there (Kitchener, 1983). Still, the relative paucity of work on the development of the moral self is striking. This is due partly to the lack of interest in developmental antecedents among personality, cognitive, and social psychologists, something that an emergent field of SCD might remedy (Olson and Dweck, 2008).

But it is also due partly to a tendency among some development theorists to treat moral acquisitions as a philosophical competency that must await later stages of development. Or else to insist on such stringent and philosophized conceptions of what counts as "moral" that extant and possibly relevant developmental literatures are deemed unavailing and dismissed. The moral self is isolated from other developmental processes and is treated as some occult achievement that has a presumptive developmental history but of which little can be said. Perhaps this is the negative side-effect of starting with philosophical conceptions about what is "moral" about adult moral personality and then trying to push this conception back in developmental time in the search for antecedents. The result is a view we find untenable, namely, that development brings a child to a tipping point at which time he or she then becomes *moralized*. On this view attachment processes, for example, or the organization of temperament or the child's

expanding socio-emotional and cognitive competencies are not themselves markers of the developing moral self — nothing to see here — but rather are developmental achievements that are in need of something else ("moralization") before the moral domain takes notice.

Yet many extant literatures shed light on the foundation, emergence, and trajectory of moral self development, although often they are not unpacked to reveal their implications for moral development. Nonetheless these literatures are forcing a reconsideration of certain views about young children that have become calcified in the stage development literatures, for example, the notion that infants lack an appreciation of subjectivity (cf., Repacholi, 1998), that toddlers are egocentric (cf., Gelman, 1979; Light, 1983), incapable of discerning intentions (cf., Nunez and Harris, 1998) or of engaging in prosocial behavior (cf., Bar-Tal et al., 1982; Denham, 1986; Dunn, 2006; Warneken and Tomasello, 2007), or of describing the self in anything other than physicalistic or demographic terms (cf., Marsh et al., 2002), and so on. "It was not long ago," Thompson (2006, p. 25) remarked, "that characterizations of young children as egocentric, concrete, preconventional, and preconceptual made this developmental period seem discontinuous with the conceptual achievements of middle childhood and later." This now discredited view of early childhood seemed to discourage attempts to locate the early roots of moral self, personality and character in the infancy, toddler, and early childhood years.

Take the stance of the Kohlberg paradigm on what constitutes a moral action. A moral action, on this view, is an action undertaken for explicit moral reasons. Moral action, under this definition, is most likely when one discerns the moral norm and understands its prescriptive quality, and this is most evident to individuals who are at the postconventional stages of moral reasoning. Kohlberg's team never studied toddlers or children. The age range of their influential moral stage sequence begins much later in early adolescence and extends to adulthood. So it is silent on what early childhood contributes to moral development (other than to assume a blanket moral egocentrism), but leaves the impression that toddlers do not engage in moral action thus defined or do not feel the prescriptive weight of the moral law. The Kohlberg moral development sequence, then, is discontinuous with the early child development processes, mechanisms, and acquisitions that bring a child to its first conventional Kohlbergian stage in late childhood or early adolescence.

3.1. Early Development of Moral Personality

We now know, of course, that an intuitive morality is an early developmental achievement. Soon after 18 months of age toddlers display an awareness and responsiveness to normative standards across a wide range of situations that includes, for example, their reacting with self-conscious

emotions and mark-directed behavior to a spot of rouge on their face when looking in a mirror (Lewis and Brooks-Gunn, 1979); their expectations about daily routines and events (Fivush et al., 1992), or for how persons should act; or their negative reaction and concern to objects that are disfigured, broken or marred in some way (Kagan, 2005).

What's more toddlers have an early grasp of the different standards of obligation that obtain in moral and conventional violations (Smetana, 1985) and for how prescriptive rules apply to different situations (Harris and Nunez, 1996). They are aware of how things ought to be. They are cognizant of adult standards and the notions of responsibility and accountability (Dunn, 1988). Clearly toddlers seem to be aware of a wide range of conventional norms, and these serve as the foundation of an emerging intuitive morality that belies a greater moral capacity than has been credited to them (Thompson, in press). Indeed, the "relationships and other influences experienced in the early years set the context for the growth of an empathic humanistic conception toward others, balanced self-concept, capacities for relational intimacy, social sensitivity, and other capacities conventionally viewed as achievements of middle childhood and adolescence" (Thompson, 2006, p. 25).

The development of moral self-identity, of moral personality, and character, then, is a banal developmental achievement in the sense that it results from ordinary developmental processes and mechanisms. The moral self emerges in the dynamic transaction between the inductive capacities and other personal qualities of the child and the familial and relational interactions that provide the context for development. As a result theoretical accounts of the developing moral self must take into account various person variables, including temperament, self-regulation skills, theory of mind, and conscience, but also contextual-relational variables, including attachment security and the parental interactions that support it.

Kochanska and her colleagues (Kochanska, 2002a; Kochanska and Aksan, 2004; Kochanska et al., 2004; Kochanska et al., 1995) have shown how the moral self might emerge at the intersection of Person × Context interactions. They proposed a two-step model of emerging morality that begins with the quality of parent—child attachment. A strong, mutually responsive relationship with caregivers orients the child to be receptive to parental influence (Kochanska, 1997a, 2002b).

This "mutually responsive orientation" (MRO) is characterized by shared positive affect, mutually coordinated enjoyable routines ("good times"), and a "cooperative interpersonal set" that describes the joint willingness of parent and child to initiate and reciprocate relational overtures. It is from within the context of the MRO, and the secure attachment that it denotes, that the child is eager to comply with parental expectations and standards. There is "committed compliance" on the part of the child to the norms and values of caregivers which, in turn, motivates moral

internalization and the work of "conscience." This was documented in a recent longitudinal study. Children who had experienced a highly responsive relationship with mothers over the first 24 months of life strongly embraced maternal prohibitions and gave evidence of strong self-regulation skills at preschool age (Kochanska et al., 2008).

Kochanska's model moves, then, from security of attachment (MRO) to committed compliance to moral internalization. This movement is also expected to influence the child's emerging internal representation of the self. As Kochanska et al. (2002a) put it:

Children with a strong history of committed compliance with the parent are likely gradually to come to view themselves as embracing the parent's values and rules. Such a moral self, in turn, comes to serve as the regulator of future moral conduct and, more generally, of early morality (p. 340).

But children bring something to the interaction, too, namely, their temperament. Kochanska (1991, 1993) argues that there are multiple pathways to conscience and that one parenting style is not uniformly more effective regardless of the temperamental dispositions of the child. In particular, she suggests that children who are highly prone to fearful reactions would profit from gentle, low power-assertive discipline. This "silken glove" approach capitalizes on the child's own discomfort to produce the optimal level of anxiety that facilitates the processing and retention of parents' socialization messages. But for "fearless" children another approach is called for, not the "iron hand," which would only make the fearless child angry, highly reactive, and resistant to socialization messages (Kochanska et al., 2007), but rather one that capitalizes on positive emotions (rather than on anxiety).

Hence there are at least two pathways to the internalization of conscience. For fearful children, it leads through the soft touch of gentle discipline; for fearless children, it leads through the reciprocal positive parent–child relationship. This has now been documented in a number of studies (Kochanska, 1997b; Kochanska et al., 2005).

How does Kochanska's model of the emergent moral self relate to characterizations of adult moral self-identity reviewed earlier? Recall that Blasian moral identity requires the moralization of self-regulation ("will-power") and integrity by moral desires. The moral personality, at its highest articulation, is driven by a sense of "wholeheartedness," by which Blasi (2005) means that "a general moral desire becomes the basic concern around which the will is structured" (p. 82). Wholehearted commitment to a moral desire, to the moral good, becomes an aspect of identity to the extent that not to act in accordance with the moral will is unthinkable.

But how do children develop wholehearted commitment to moral integrity? What is the source of moral desires? How do children develop the proper moral desires as second-order volitions? What are the developmental pathways that bring us to the moral personality envisioned by Blasi's

theory? We suggest that Kochanska's model is a good place to start. The developmental source of the moral personality lies in the shared, positive affective relationship with caregivers. It emerges as a precipitate of the "cooperative interpersonal set" — the mutual responsiveness and shared "good times" — that characterize the interpersonal foundation of conscience.

This linkage is likely be resisted by Blasian moral theory because of the presumption that Kochanska's moral self only brings one to *mere* compliance or mere internalization and therefore misses the subjective, agentic qualities of the mature moral will. But the compliance of the emergent moral self is not submission but rather a perceptual bias, an act of commitment that is motivated by strongly charged, mutually shared, positive affective interpersonal relationships with caregivers. The desire to be moral, in other words, is deeply social and therefore deeply emotional. There must be a developmental source for the moral desires of the subjective self-as-agent, and these arise from interpersonal relationships of a certain kind that are sustained over time by social institutions — by families, classrooms, schools, and neighborhoods, characterized by affective bonds of attachment and community. Indeed, there is strong evidence that caring classroom environments characterized by strong bonding to teachers and school, and an abiding sense of community, is associated with prosocial behavior and many positive developmental outcomes (Lapsley and Narvaez, 2006, for a review).

3.2. Community and Context Models of Moral Identity

One limitation of Blasi's framework is that it is does not give much attention to the social dimensions of self-identity. Kochanska helps us understand that the source of self-control, integrity, and of moral desires is deeply relational; moral self-identity emerges within a history of secure attachment. If true, such a model underscores the importance of attachment to teachers (Watson, 2008), school bonding (Catalano et al., 2004; Libby, 2004), and caring school communities (e.g., Payne et al., 2003; Solomon et al., 1992) as bases for continued prosocial and moral development. For example, Payne et al. (2003) showed that when a school is organized and experienced as a caring community its students report higher levels of bonding to school and greater internalization of community goals and norms which are related to less delinquency. Elementary school children's sense of community leads them to adhere to the values that are most salient in the classroom (Solomon et al., 1996). At the same time, when high school students perceive a moral atmosphere they report more prosocial and less norms-transgressive behavior (Brugman et al., 2003). These findings show that secure attachments promote committed compliance and lead to internalization of norms and standards at every age.

3.2.1. Just Community

We examine two research programs to show the importance of community beyond the family for moral identity development. First, Power (2004) and Power and Higgins-D'Alessandro (2008) argue that the community is critical for understanding the moral dimensions of the self insofar as the self "does not experience a sense of obligation or responsibility to act in isolation but with others within a cultural setting" (p. 52). Power brings to the problem of self-identity a long interest in how classrooms and schools can be transformed into "just communities" (Power et al., 1989). In a just community there is a commitment to participatory, deliberative democracy but in the service of becoming a moral community. Members of a community — a classroom or school — commit to a common life that is regulated by norms that reflect moral ideals. These shared norms emerge as a product of democratic deliberation in community meetings. Here, the benefits and burdens of shared lived experience are sorted out in a way that encourages group solidarity and identification. One's identification with the group and its communal norms generate a moral atmosphere that conduces to moral formation. Hence moral self-identity is a matter of group identification and shared commitment to its value-laden norms. The moral self identifies with the community by speaking on behalf of its shared norms and by taking on its obligations as binding on the self.

Group identification is not simply awareness that one is a member of a group, but rather that one is responsible for the group. The responsible self is a communal self that takes on obligations and duties as result of shared commitment to group norms. In order to illustrate a possible trajectory in the development of the moral communal self, Power (2004) adapted Blasi's (1988) typology of identity (identity as observed, managed, and constructed) as understood from the perspective of the subjective self-as-agent. In an early phase, one simply acknowledges that one is a member of a group and is bound thereby to group norms (identity observed). Then, one speaks up more actively in defense of a group norm, and urges the community to abide by its commitments (identity managed). Finally, one takes "legislative responsibility for constructing group norms" (p. 55; identity constructed). Power (2004) argues that the democratic process challenges members to appropriate community group membership into one's personal identity. He writes:

This appropriation is rational and critical and is not a passive internalization of group norms and values. Moreover, the appropriation of membership in the community is to be based on the ideals of the community. In this sense the identification with the community not only allows for but encourages a critical stance toward its practices and commitment to change it (p. 55).

Class meetings are now a well-entrenched element of instructional best practice, particularly at the elementary school level. Giving students

"voice-and-choice" about classroom practices, giving them an opportunity to share, to cooperate, to discuss, to take joint responsibility, are recognized as important elements of character education (Lapsley and Narvaez, 2006). But these salutary practices are still some distance from the goal of participatory democratic decision making. Indeed most schools and classrooms who endorse caring classroom communities as a moral educational goal could not fairly be called "just communities" in the sense envisioned by Power and his colleagues.

One problem is that the demands of academic accountability and the pressure to make adequate yearly progress on mandated state examinations tends to squeeze intentional, deliberate approaches to moral character education out of the curriculum. Teachers find it difficult even to reserve the "homeroom period" for building moral community. For this reason, Power and his colleagues have targeted youth sports programs as an alternative location for moral character intervention. Here children and adolescents might experience teams as a moral community, and coaching as a form of moral education. Their program, called "Play Like a Champion" (2008), teaches coaches to build an engaging team climate that emphasizes moral principles (justice, tolerance, respect, and cooperation) using child-centered strategies to advance the full personal development of the child.

3.2.2. Moral Development in Poor Neighborhoods

We turn to a second research program that underscores the importance of community for moral identity development. Hart and Matsuba (in press) are concerned mostly with how the larger contextual settings, such as poor urban neighborhoods, influence enduring personality characteristics, and the suite of mediating factors. The influence is not encouraging. Poor urban neighborhoods generally provide a context that works against the formation of moral identity or the commitment to moral projects. For example, living in high-poverty neighborhoods tends to undermine moral attitudes and values such as tolerance for divergent viewpoints (Hart et al., 2006). It undermines personality resilience, and is associated with family dysfunction, stress, and increases in problem behavior (Hart et al., 2003).

Moreover, very poor neighborhoods — particularly those marked by high levels of child saturation — are less able to provide opportunities for productive engagement in the community. This is because poor neighborhoods are relatively lacking in the rich network of organizations that support projects with moral goals. Indeed, adolescents in poor communities form fewer connections with these institutions than do children in affluent communities. They report fewer affiliations with clubs, teams, and youth organizations (Hart and Matsuba, in press), and fewer opportunities for volunteering. Institutional density, then, is a critical factor that influences the availability of identity-defining options for adolescents. Opportunities to engage in projects that facilitate the formation of moral identity are not

evenly distributed across communities, neighborhoods, and social strata, which suggests that when it comes to the possibilities for structuring moral identity there is an element of *moral luck* (Nagel, 1979; Williams, 1971) in the way one's moral life goes (Hart, 2005).

3.2.3. Community Service and Social Capital

Of course the association between thin networks of community organizations and depressed rates of volunteering in very poor, child saturated neighborhoods does suggest a possible intervention strategy. There is mounting interest, for example, in providing service learning and community service opportunities for youngsters in poor urban neighborhoods as a way of changing moral and civic attitudes and the sense of self-identity. These forms of community service are associated with positive developmental outcomes (Hart et al., 2008). In one study, social opportunities to interact frequently with others in the community through social institutional structures (church, community meetings) predicted voluntary community service in a nationally representative sample of adults (Matsuba et al., 2007).

Community service may be both a catalyst for moral development but also a signal of moral identity. In a longitudinal study, Pratt et al. (2003) constructed a moral self-ideal index that was based on participants' endorsement of a set of six personal qualities (trustworthy, honest, fair, just, shows integrity, and good citizen). At age 19 participants who had endorsed a high moral self-ideal were more likely to participate in community activities. But it was the community involvement that led to subsequent endorsement of moral self-ideals. A strong moral self-ideal did not lead to community involvement but was its result. This suggests that the best way to influence attitudes and values is to first change behavior — in this case in the direction of greater community involvement (Pancer and Pratt, 1999). As Pratt et al. (2003) put it, "community involvement by adolescents leads to the development of some sort of sense of identity that is characterized by a greater prominence of moral, prosocial values" (p. 579). And it does not seem to matter whether youth involvement is one of service learning or simple volunteering, or whether the service is voluntary or mandated (Hart et al., 2008). In sum, service learning and volunteering increases social capital and community participation, thereby deepening the connection of adolescents to social institutions that provide a context for the construction of prosocial commitments and moral self-identity. And this implicates institutional density as a critical mediating variable.

Power's work with youth sports underscores the importance of community and neighborhood effects on moral identity. This theme is pronounced in Hart's (2005) and Hart and Matsuba (in press) model of moral identity. Hart's model is the closest thing we have to a developmental systems theory, one that articulates the multiple layers of influence on

moral identity that includes the endogenous, dispositional factors of the developing child, the family dynamics in which he or she is raised, and the neighborhood in which the family resides. For Hart (2005) the constituents of moral identity fall under two broad headings. Under the heading of "enduring characteristics" are personality and family constituents that are relatively stable and hard to change. Under the heading of "characteristic adaptations" are factors that mediate the relationship between enduring characteristics and moral identity. One such factor, "moral orientation," includes attitudes, values, and the capacity for moral deliberative competence and reflection, particularly the tendency to appreciate the prescriptive quality of moral judgments.

We have seen that in Blasi's theory moral identity requires that self-regulation and integrity be infused with moral desires. How moral desires are structured depends importantly on experience with caregivers (Kochanska), the practice of community (Power), and on neighborhood characteristics that influence the resources required for identity exploration (Hart). What is clear from these research programs is that a moral self takes time and experience to develop, and requires cultivation from those with more social experience.

Particular experiences appear to make the difference in the development of a child's moral identity and moral understanding. What is the mechanism for change? How does experience influence moral decisions and choices? Schema theory provides an answer.

4. SCHEMAS AND MORAL INFORMATION PROCESSING

According to schema theories of development and understanding, schemas are the key structures that reflect ongoing changes in understanding. Schemas (generalized knowledge structures) develop first from sensorimotor experience, forming embodied knowledge that underlies thought and language (Lakoff and Johnson, 1999). The individual interprets subsequent experience according to existing schemas (assimilation) and modifies them in kind and number in response to new information (accommodation) in a continuous process of growth, change, and equilibration (Piaget, 1970). For example, children with warm responsive parents build positive, prosocial schemas about relating to others that they apply to future relationships; children with community service experience build schemas of self-efficacy in helping others, leading them to continue the practice as adults.

Essentially, a schema is a cognitive mechanism that operates in one or more brain systems (Neisser, 1976), including memory systems, such as procedural or declarative knowledge (Hogarth, 2001; Kesner, 1986), and

types of reasoning, such as analogical and/or intuitive reasoning (Ericsson and Smith, 1991; Hogarth, 2001). Schemas organize an individual's operational activities, processing current experience according to concurrent goals (Piaget, 1970; Rummelhart, 1980; Taylor and Crocker, 1981), influencing perception, as well as decision making and reasoning (Girgenrize et al., 1999).

Schemas develop from experience, and different types of experience cultivate different types of schemas. This holds true for moral schemas as well.

4.1. Moral Schemas

Life experiences transform moral schemas of all kinds, including schemas for moral perspective taking, moral self-efficacy, and schemas for moral action (Narvaez, 2006). Moral judgment development involves transformations in how an individual construes obligations to others, reorganizing moral schemas about how it is possible to organize cooperation (Rest et al., 1999). With greater social experience (especially experiences that increase perspective taking), an individual's sense of moral obligation expands, moving from concern for self, to concern for known others, to concern for the welfare of strangers. Research with the Defining Issues Test (DIT) (Rest, 1979; requires a 12-year-old reading level) has compiled results from tens of thousands of respondents showing that there is progression from a preference for the Personal Interest Schema in junior high (Kohlberg's stages 2 and 3), to a preference for the Maintaining Norms Schema in high school (similar to Kohlberg stage 4), to a preference for Postconventional Schema in graduate school (similar to Kohlberg's stages 5 and 6; Rest et al., 1999). (For more on schemas and moral judgment see Narvaez and Bock, 2002.) Moral judgment development is stimulated by particular experiences, such as intense diverse social experience (Rest, 1986) and interventions that use moral dilemma discussion (Rest and Narvaez, 1994). Some experiences can depress scores on moral judgment measures, such as fundamentalist ideology (Narvaez et al., 1999a).

4.1.1. Measuring Effects of Moral Schemas on Information Processing: Development and Expertise

Everyday discourse processing requires domain-specific schema activation for comprehension to take place (e.g., Alexander et al., 1989). For example, lack of appropriate background knowledge when processing information in texts leads to poor understanding (Bransford and Johnson, 1972), misrecall and even distortion to fit with preexisting schemas (Bartlett, 1932; Reynolds et al., 1982; Steffensen et al., 1979). Low-knowledge readers form inadequate mental models of events, which leads to erroneous elaborations and inferences during recall (Moravcsik and Kintsch, 1993).

Moral discourse processing is also influenced by differences in schema development. In research examining the influence of moral judgment schemas on moral information processing, Narvaez (1998) found that moral judgment sophistication among adolescents over and above age influenced what was accurately and inaccurately recalled when remembering narratives about moral situations. Similarly, when tested for theme comprehension in children's moral stories, children did not grasp messages as intended by the author or understood by adult readers, taking away more simplistic, concrete messages based on limited schema development; even at age 11 less than half of participants understood the intended theme (Narvaez et al., 1998; Narvaez et al., 1999b). Before adulthood, life experience as measured by age, plays a large role in moral discourse comprehension.

Among adults, life experience also matters. Extensive, coached immersion in a domain increases the sophistication and organization of schemas, usually termed "expertise" (Sternberg, 1998). Experts and novices have been compared using reading tasks, distinguishing novices from experts in multiple domains (e.g., Singer et al., 1997; Spilich et al., 1979). Schema effects can be studied between novices and experts in moral judgment using discourse-processing tasks, distinguishing the effects of general development from studied expertise (Narvaez and Gleason, 2007). As an ill-structured domain¹ (King and Kitchener, 1994), the complexity of moral functioning may be better studied with discourse processing because of the variety of schemas that can be brought to the task.

Knowledge in virtually every domain can be characterized as that in which expertise can be developed, including domains of study in school (Bransford et al., 1999). In the domain of morality, there are many subdomains beyond moral judgment; these can also be viewed as domains in which expertise can be fostered.



5. MORAL DEVELOPMENT AS ETHICAL EXPERTISE DEVELOPMENT

Taking the view of the mind sciences today and looking back, one can see that the ancients (e.g., Aristotle, 1988; Mencius, 1970) considered virtue as a form of expertise. The virtuous person is like an expert who has a set of highly cultivated skills, perceptual sensibilities, chronically accessible schemas for moral interpretation, and rehearsed sequences for moral action. Moral exemplars display moral wisdom (knowing the good) and practical

Domains can be parsed as "ill-structured" domains, characterized by uncertainty about the problem, feasibility of actions and goodness of solution, or "well-structured" domains, like baseball, which are completely specified in terms of possible actions and outcomes (Chase and Simon, 1973).

wisdom (knowing how to carry it out in the situation). In contemporary terms, the expert has sets of procedural, declarative, and conditional knowledge that are applied in the right way at the right time. Expertise is being used to characterize knowledge in every domain, including the moral domain (see Narvaez, 2005, 2006, for more details and references).

Experts and novices differ from one another in several fundamental ways. Experts have more and better organized knowledge (Sternberg, 1998) that consists of declarative (explicit), procedural (implicit) and conditional knowledge, much of which operates automatically. In brief, experts know what knowledge to access, which procedures to apply, how to apply them, and when. Expert perception picks up underlying patterns novices miss, including affordances for action (Neisser, 1976). Adaptive experts use intuition as well as explicit knowledge to come up with innovative solutions to problems in their domain (Hatano and Inagaki, 1986).

In the realm of morality, expertise can take different forms. Using Rest's four-component model of moral behavior, we can map expert behavior in the four processes required for moral action to take place: ethical sensitivity, ethical judgment, ethical focus, and ethical action or implementation (Narvaez and Rest, 1995; Rest, 1983). Experts in Ethical Sensitivity can speedily and precisely discern the elements of a moral situation, take the perspectives of others and determine what role they might play. Experts in Ethical Judgment access multiple tools for solving complex moral problems. They can reason about duty and consequences, and draw up rationale for one course of action or another. Experts in Ethical Focus cultivate ethical identity that leads them to prioritize ethical goals. Experts in Ethical Action know how to maintain focus and take the steps to complete the ethical action. Experts in a particular virtue have highly tuned perceptual skills for it, more complex and multiply organized knowledge about it, have highly automatized responses. Expertise is a set of capacities that can be put into effective action as skilled coping in the situation.

Expertise in moral reasoning and virtue can be cultivated like other skills. Experts have explicit, conscious understanding of the domain as well as intuitive, implicit knowledge. Experts in training receive instruction that builds skills and theoretical understanding simultaneously. They are immersed in situated practice while being coached by someone with more expertise. They are immersed in well-functioning environments that provide corrective feedback so that appropriate intuitions are formed. In other words, expert-education in a particular domain cultivates deliberative understanding and intuitions simultaneously (Abernathy and Hamm, 1995). During expert training, interpretive and action frameworks are learned to automaticity, perception is honed to chronically accessed constructs (Hogarth, 2001).

Children are virtual novices in nearly every domain (Bransford et al., 1999). In many aspects of morality, children are novices too. Novice-to-expert

instruction for ethical development brings together virtue development, reasoning and emotion, intuition, and deliberation.

5.1. An Integrative Framework for Moral Character Education

A framework that attempts to bring together all the elements of ethical character development for educators, parents, and community members is the Integrative Ethical Education model (full references and explanation in Narvaez, 2006, 2008a).² It proposes five empirically derived steps for ethical character development. These have been applied in school settings (Narvaez et al., 2004) but may be applied in any setting and with any age.

First, adults establish caring relationships with the child. Human brains are wired for emotional signaling and emotional motivation (Greenspan and Shanker 2004; Lewis et al., 2000; Panksepp, 1998). Caring relationships drive school and life success (Masten, 2003; Watson, 2008). Moral exemplars indicate an early history with supportive caregivers (Walker and Frimer, in press).

Second, adults establish a climate supportive of excellence in achievement and in ethical character. Social climates and cultures influence perceptions and behavior (Power et al., 1989). Caring schools and classrooms are associated with multiple positive outcomes for students related to achievement and prosocial development (e.g., Catalano et al., 2004; Solomon et al., 2002).

Third, adults foster ethical skills across activities (e.g., curriculum and extracurriculum) based on skills in ethical sensitivity, judgment, focus, and action, as mentioned above (see Narvaez, 2006 or Narvaez et al., 2004, for skills lists). Educators use a novice-to-expert pedagogy in which intuitions are developed through imitation of role models and timely and appropriate feedback, immersion in activity with mentor guidance, and the practice of skills and procedures across multiple contexts (Narvaez et al., 2003). Through theoretical explanation and dialogue, adults coach the child (the deliberative mind) in selecting activities and environments that foster good intuitions (the intuitive mind). Adults guide the child in developing a prosocial self-narrative of positive purpose and community responsibility (Stipek et al., 1992).

Fourth, adults encourage student self-authorship and self-regulation, the type of self-monitoring skills experts demonstrate (Zimmerman, 1998).

² The expertise development approach was initially developed in the Minnesota Community Voices and Character Education project, 1998–2002, a collaboration between the Minnesota Department of Education (formerly the Department of Children, Families, and Learning) and the University of Minnesota with funds from the U.S. Department of Education (USDE OERI Grant #R215V980001). Using materials provided by the project designers and teacher-designed lessons, the skills approach had a significant effect on students in schools that implemented broadly over 1 year time in contrast to a comparison group and to low implementing schools (see Narvaez et al., 2004). Project materials may be obtained from the first author.

Adults help children understand that they themselves have to answer the central life question, who should I be? The final responsibility for character development lies with them. In an enriched moral environment, students are provided with tools for self-regulation in character formation. When solving problems, successful students learn to monitor the effectiveness of their strategies and when necessary to alter their strategies to meet their goals (Anderson, 1989). Aristotle believed that mentors are required for character cultivation until the individual is able to self monitor, subsequently maintaining virtue through the wise selection of friends and activities.

Fifth, adults work together to build communities that coordinate support and relationships across institutions to foster resiliency. Truly democratic ethical education empowers all involved — educators, community members, and students — as they ally to learn and live together. It is in community living that persons develop ethical skills and self-regulation for both individual and community actualization (Rogoff et al., 2001). It is a community who establishes and nourishes the individual's moral voice, providing a moral anchor, and offering moral guidance as virtues are cultivated. When the connections among children's life spaces of home, school, and community are strengthened, children are adaptationally advantaged (Benson et al., 1998).

An increasing number of scientists are realizing that adaptational advantage arise early in life, at least from birth if not from conception (Gluckman and Hanson, 2004). There appear to be epigenetically sensitive periods for particular brain system development in which environments switch genes on or off for life (e.g., Champagne and Meaney, 2006). The wiring of neurobiological systems appears to matter for moral functioning as well.

6. New Directions: Neuroscience and Moral Personality

As knowledge about human development increases, so too has interest in the *neurobiology* of human behavior. For example, the neurobiology of infant attachment is far more important than previously realized for lifetime brain development and emotion regulation (Gross, 2007). There appear to be critical periods for fostering the systems that lead to sociality (Karr-Morse and Wiley, 1997). Developmental psychology finds that emotion regulation development begins neonatally and crucially depends on the caregiver to coregulate the infant's emotions while the brain establishes its systems (Lewis et al., 2000; Schore, 1994). The caregiver acts as an "external psychobiological regulator" (Schore, 2001, p. 202) socially constructing the brain (Eisenberg, 1995). The mammalian brain and nervous system depend for their neurophysiologic stability "on a system of interactive

coordination, wherein steadiness comes from synchronization with nearby attachment figures" (Lewis et al., 2000, p. 84). Otherwise mammals can develop erratic systems that are easily thrown off kilter in reaction to everyday stressors (Hofer, 1994).

The field of affective neuroscience is demonstrating the centrality of well-wired emotions for optimal brain functioning. "Emotive circuits change sensory, perceptual, and cognitive processing, and initiate a host of physiological changes that are naturally synchronized with the aroused behavioral tendencies characteristic of emotional experience" (Panksepp, 1998, p. 49). Evidence for the importance of infancy and early childhood to establish a mammalian brain's emotional circuitry has been accumulating since Harlow's (1986) experiments. In fact, recent research documents the critical importance of early caregiving on cognition (Greenspan and Shanker, 2004), personality formation (Schore, 2003a,b), as well as gene expression in emotional circuitry (e.g., Weaver et al., 2002).

6.1. Triune Ethics Theory: A Neurobiological Theory of Moral Development

Indications are that early experience has a bearing on moral development as well, in particular, the propensities for compassion and appreciation of others. Fundamental to the shaping of emotion for a moral life is the caregiving received in early life. Triune Ethics Theory (TET; Narvaez, 2008b) draws on evidence from neuroscience, anthropology, and other human sciences to postulate that three general ethical motivations arise from the neurobiological substrates of human evolution and influenced by early experience: Security, Engagement, and Imagination. The "environment of evolutionary adaptedness" (EEA) (Bowlby, 1988), as anthropologists have recently spelled out (Hewlett and Lamb, 2005), plays a large role in framing the emerging evidence on the effects of early experience on lifelong propensities, including moral functioning.

The Security Ethic is rooted in the oldest parts of the brain, involving the R-complex or the extrapyramidal action nervous system (Panksepp, 1998), structures of the brain that focus on survival through safety, dominance, and status (MacLean, 1990). These systems are mostly hardwired and become the default when systems underlying the other ethics are underdeveloped or damaged. Situationally, when a person is threatened this ethic is likely to be activated, marshaling defense and offense (fight or flight), suppressing capacity for empathy (Mikulincer and Shaver, 2005), and exhibiting less flexible thinking (Stout, 2007). Long-term dispositional effects on personality occur as well; extensive stress, abuse or neglect in the early years can bring about a personality dominated by the Security Ethic (Henry and Wang, 1998; Karr-Morse and Wiley, 1997). On the positive side, the

Security Ethic, worthwhile for occasional crises, engenders the values of loyalty, hierarchy, self-control of softer emotions, and following precedent.

The second ethic, the Engagement Ethic, is rooted in the neurobiological systems that Darwin (1871/1981) identified as the source for humans' "moral sense" — the visceral-emotional nervous system on the hypothalamic-limbic axis which underlie mammalian parental care and social bonding (Panksepp, 1998). These systems rely on warm, responsive caregiving for their development (e.g., Schore, 1994). Involving multiple limbic and subcortical structures and neurotransmitters (see Moll et al., in press), these structures underlie values of compassion, social harmony, and togetherness. Children develop a sense of security through intersubjectively safe and close nurturing (Field and Reite, 1985; Schore, 1994) that allows the systems related to the Engagement Ethic to develop properly. For example, the oxytocin that accompanies breastfeeding and snuggling is a pacifying and bonding agent (Carter, 1998; Perry et al., 1995; Young et al., 2001). Through a secure attachment and from extensive experiences of reciprocity and social exchange (Kochanska and Thompson, 1997; Laible and Thompson, 2000), children develop a sense of engaged enactive participation in social life, rooted in sensorimotor sensibilities for justice (Lerner, 2002). Physiologically, the Security Ethic and the Engagement Ethic are incompatible; the former is related to increased stress hormones (norepinephrine/adrenaline) while the latter is related to calming hormones (e.g., oxytocin).

The Imagination Ethic, controlled primarily by the more recent components of the brain (neocortex, especially prefrontal cortex) collaborates with and coordinates the other two ethics. It has the capacity (when cultivated appropriately with responsive caregiving) for valuing universality, concern for outsiders, and conceptualizing alternative sophisticated resolutions of moral problems. Although more detached from the basic emotional drives of the other ethics, the Imagination ethic generally is motivated implicitly by one of the other ethics. Whereas the open-heartedness of the Engagement ethic feeds an imagination of helpfulness and altruism, the self-protective rigidity of the Security Ethic fosters an imagination toward defense and perhaps offense. Children develop an ethical imagination when caregivers provide *in situ* modeled and guided training of prosocial perception and action (*enactive* learning) in their actions and words.

In brief, Triune Ethics Theory (TET) points to what is fundamental for optimal moral development: neonatal and early childhood experiences, similar to those of the environment of evolutionary adaptedness (Bowlby, 1988; Hewlett and Lamb, 2005), that shape brain structures and brain wiring for general and for moral functioning. Moral learning involves developing unconscious "somatic markers" (Damasio, 1994) for what are good and not-so-good actions: "embodied (sensorimotor) structures are the *substance of experience*" which "motivate conceptual understanding and rational thought" (Varela, 1992/1999, p. 16). From recurrent patterns of

sensory motor activity, general cognitive structures, including moral cognitive structures, emerge. In emphasizing the importance of early experience, TET advocates social policies and practices that support children, families and communities, and which build moral brains.



7. CONCLUSIONS

The field of moral development has traveled beyond a narrow focus on moral judgment to include the moral self across the lifespan. No longer relegated to an individual's conscious moral reasoning, the scope has moved beyond the individual and her decision making or virtue. Moral development and moral action are embedded in community contexts. Moral functioning is assumed to involve the whole brain and multiple systems inside and outside the individual. As moral psychology and the study of moral persons expands across domains of psychology and human sciences, the field will generate more intricate theories that offer more specific guideposts for fostering moral persons and communities. We draw three conclusions that bear on research into moral functioning generally.

7.1. Experience Shapes Brain Biases

First, brains are differentially, functionally and structurally, shaped by experience. The processing of any type of morally relevant information is mediated by the schemas that individuals have developed through social experience from early life and onward. When individuals have been immersed in social environments that promote self-concern, especially during sensitive periods, it is likely that their schemas for processing moral information differ from those in loving, responsive environments. The latter build personalities that are agreeable and conscientious. So, for example, Amish cultures who emphasize submission, solidarity and kindness (Kraybill, 1989) will also foster brains that view the world differently from cultures that emphasize competition, dominance, and individuality. Particular environments promote particular brain functioning and biases. It is likely that most psychological studies in the United States examine biases cultivated by the particular individualistic society in which the participants were raised and that therefore do not represent the full evolved palette of moral capabilities.

7.2. Moral Functioning is Multivariate

Second, moral judgments comprise only one element of moral functioning (which also includes moral perception, sensitivity, motivation/focus, and implementation), an element that weakly predicts moral action (and what is

morality if it is not evident in action?). Studying moral judgments in the laboratory tap into an aspect of moral functioning that represents declarative or semantic knowledge that is not necessarily tied to self-concept, self-responsibility or behavior. Moral identity may provide the greatest predictive power to moral behavior because it has its roots in lived relationships. Studying moral functioning in more ecologically valid ways, such as relating moral identity to moral discourse processing (Narvaez, 1999; Narvaez et al., 2006), may allow for a greater understanding of the range of moral performance.

7.3. Moral Experts are Different from Novices

Third, examining differences in expertise offers a promising area of research. From long immersion in the domain (10 years or 10,000 h; Simon and Chase, 1973), experts build schemas that become automatically accessed and applied. Chronic schema use is linked to automatic or chronic accessibility of a construct, as true for morality as for any domain. Community-nominated moral exemplars demonstrate a consistent merging of personal and moral goals (Colby and Damon, 1991). Building chronicity through immersion and guided experience such as democratic participation (Power) or community service (Hart) are promising paths to building moral personality and improved moral functioning (see Narvaez, 2005). Interventions should include the full range of moral skill development, from moral perception and sensitivity to moral action skills.

On a precautionary note, it appears that most laboratory research of moral functioning is conducted on college students. It is not clear that people under the age of 30 or so have fully developed capacities in the prefrontal cortex, a key player in moral functioning (Luna et al., 2001), so researchers of moral functioning in college students should keep in mind that mature adults with intact brain function likely behave differently. Novices are easily dumbfounded and college students are fairly inexperienced about life. Studying adults would provide a better look at mature moral functioning (Blasi, in press). However, adults may have sophisticated capacities in a specific type of moral expertise (e.g., action) and not another (e.g., judgment), and so research should examine what brings about these differences and what implications they have for moral functioning generally.

REFERENCES

Abernathy, C. M. and Hamm, R. M. (1995). Surgical Intuition. Hanley & Belfus, Philadelphia.

Alexander, P. A., Pate, P. E. and Kulikowich, J. M. (1989). Domain-Specific and Strategic Knowledge: Effects of Training on Students of Differing Ages or Competence Levels. *Learning and Individual Differences*, 1, 283–325.

- Anderson, L. M. (1989). Learners and Learning, in edited by Reynolds, M. C. (Ed.), Knowledge Base for the Beginning Teacher (pp. 85–99). Pergamon Press, Oxford.
- Aquino, K. and Becker, T. E. (2005). Lying in Negotiations: How Individual and Situational Factors Influence the Use of Neutralization Strategies. *Journal of Organizational Behavior*, 26, 661–679.
- Aquino, K. and Freeman, D. (in press). Moral Identity in Business Situations: A Social-Cognitive Framework for Understanding Moral Functioning, in edited by Narvaez, D. and Lapsley, D. K. (Eds.), *Moral Personality, Identity and Character: An Interdisciplinary Future*. Cambridge University Press, Cambridge, UK.
- Aquino, K. and Reed, A., II (2002). The Self-Importance of Moral Identity. Journal of Personality and Social Psychology, 83, 1423–1440.
- Aquino, K., Reed, A., Thau, S. and Freeman, D. (2007). A Grotesque and Dark Beauty: How Moral Identity and Mechanisms of Moral Disengagement Influence Cognitive and Emotional Reactions to War. *Journal of Experimental Social Psychology*, 43, 385–392.
- Aristotle (1988). Nicomachean Ethics in Ross, W.D. (trans.) Oxford, London.
- Bandura, A. (1999). Moral Disengagement in the Perpetration of Inhumanities. *Personality and Social Psychology Review*, 3(3), 269–275.
- Bargh, J. A. (1989). Conditional Automaticity: Varieties of Automatic Influence in Social Perception and Cognition, in edited by Uleman, J. S. and Bargh, J. A. (Eds.), *Unintended Thought* (pp. 3–51). Guilford, New York.
- Bargh, J. A. (2005). Bypassing the Will: Toward Demystifying the Nonconscious Control of Social Behaviour, in edited by Hassin, R. R. Uleman, J. S. and Bargh, J. A. (Eds.), The New Unconscious (pp. 37–60). Oxford University Press, Oxford, UK.
- Bargh, J. A. and Chartrand, T. L. (1999). The Unbearable Automaticity of Being. American Psychologist, 54(7), 462–479.
- Bar-Tal, D., Raviv, A. and Goldberg, M. (1982). Helping Behaviour among Pre-School Children. *Child Development*, 16, 516–524.
- Bartlett, F. C. (1932). Remembering. Cambridge University Press, Cambridge, England.
- Benson, P., Leffert, N., Scales, P. and Blyth, D. (1998). Beyond the "Village" Rhetoric: Creating Healthy Communities for Children and Adolescents. *Applied Developmental Science*, 2(3), 138–159.
- Blasi, A. (1983). Moral Cognition and Moral Action: A Theoretical Perspective. Developmental Review, 3, 178–210.
- Blasi, A. (1984). Moral Identity: Its Role in Moral Functioning, in edited by Kurtines, W. M. and Gewirtz, J. J. (Eds.), Morality, Moral Behavior and Moral Development (pp. 128–139). John Wiley & Sons, New York.
- Blasi, A. (1985). The Moral Personality: Reflections for Social Science and Education, in edited by Berkowitz, M.W. and Oser, F. (Eds.), Moral Education: Theory and Application (pp. 433–443) Wiley, New York.
- Blasi, A. (1988). Identity and the Development of the Self, in edited by Lapsley, D.K. and Power, F.C. (Eds.), Self, Ego and Identity: Integrative Approaches, (pp. 226–242). Springer-Verlag, New York.
- Blasi, A. (2005). Moral Character: A Psychological Approach. In edited by Lapsley, D.K. and Power, F.C (Eds.), Character Psychology and Character Education (pp. 18–35). University of Notre Dame Press, Notre Dame, IN.
- Blasi, A. (in press) Moral Reasoning and the Moral Functioning of Mature Adults, in Narvaez, D. and Lapsley, D. K. (Eds.), *Moral Personality, Identity and Character: An Interdisciplinary Future.* Cambridge University Press, Cambridge, UK.
- Bowlby, J. (1988). A Secure Base: Parent-Child Attachment and Healthy Human Development. Basic Books, New York.
- Bransford, J. D. and Johnson, M. K. (1972). Contextual Prerequisites for Understanding: Some Investigations of Comprehension and Recall. *Journal of Verbal Learning and Verbal Behavior*, 11, 717–726.

- Bransford, J. D., Brown, A. L. and Cocking, R. R. (Eds.) (1999). How People Learn: Brain, Mind, Experience, and School. National Academy Press, Washington, DC.
- Brugman, D., Podolskij, A. J., Heymans, P. G., Boom, J., Karabanova, O. and Idobaeva, O. (2003). Perception of Moral Atmosphere in School and Norm Transgressive Behavior in Adolescents: An Intervention Study. *International Journal of Behavioral Development*, 27(4), 289–300.
- Cantor, N. (1990). From Thought to Behavior: "Having" and "Doing" in the Study of Personality and Cognition. American Psychologist, 45, 735–750.
- Cantor, N. and Kihlstrom, J. (1987). Personality and Social Intelligence. Prentice-Hall, Englewood Cliffs, NJ.
- Carr, D. (2001). Moral and Personal Identity. International Journal of Education and Religion, II (1), 79–97.
- Carter, C. S. (1998). Neuroendocrine Perspectives on Social Attachment and Love. Psychoneuroendocrinology, 23(8), 779–818.
- Catalano, R. F., Haggerty, K. P., Oesterle, S., Fleming, C. B. and Hawkins, J. D. (2004). The Importance of Bonding to School for Healthy Development: Findings From the Social Development Research Group. *Journal of School Health*, 74, 252–261.
- Cervone, D. (1991). The Two Disciplines of Personality Psychology. *Psychological Science*, 2, 371–377.
- Cervone, D. (2005). Personality Architecture: Within-Person Structures and Processes. Annual Review of Psychology, 56, 423–452.
- Cervone, D. and Tripathi, R. (in press). The Moral Functioning of the Person as a Whole: On Moral Psychology and Personality Science, in edited by Narvaez, D. and Lapsley, D. K. (Eds.), Moral Personality, Identity and Character: An Interdisciplinary Future. Cambridge University Press, New York.
- Champagne, F. A. and Meaney, M. J. (2006). Stress during Gestation Alters Maternal Care and the Development of Offspring in a Rodent Model. *Biological Psychology*, 59, 1227–1235.
- Chase, W. and Simon, H. (1973). Perception in Chess. Cognitive Psychology, 4, 55-81.
- Colby, A. and Damon, W. (1991). Some Do Care. Free Press, New York.
- Colby, A., Kohlberg, L., Gibbs, J. and Lieberman, M. (1983). A Longitudinal Study of Moral Judgment. Monographs of the Society for Research in Child Development, 48(1-2, Serial No. 200), University of Chicago Press, Chicago.
- Costa, P. T. and McCrae, R. R. (1992). NEO PI-R Professional Manual. Psychological Assessment, Odessa, FL.
- Damasio, A. (1994). Descartes' Error: Emotion, Reason and the Human Brain. Avon, New York. Darwin, C. (1871/1981). The Descent of Man. Princeton University Press, Princeton, NJ.
- Denham, S. A. (1986). Social Cognition, Prosocial Behavior and Emotion in Preschoolers: Contextual Validation. *Child Development*, 57, 194–201.
- Dunn, J. (1988). The Beginnings of Social Understanding. Harvard University Press, Cambridge, MA.
- Dunn, J., Brown, J. and Maguire, M. (1995). The Development of Children's Moral Sensibility: Individual Differences and Emotion Understanding. *Developmental Psychology*, 31, 649–659.
- Eisenberg, L. (1995). The Social Construction of the Human Brain. *American Journal of Psychiatry*, 152, 1563–1575.
- Ericsson, K. A. and Smith, J. (1991). Toward a General Theory of Expertise. Cambridge University Press, New York.
- Field, T. and Reite, M. (1985). The Psychobiology of Attachment and Separation. Academic Press, New York.
- Fivush, R., Kuebli, J. and Chubb, P. A. (1992). The Structure of Event Representations: A Developmental Analysis. *Child Development*, 64, 188–201.

- Frankfurt, H. (1971). Freedom of the Will and the Concept of a Person. *Journal of Philosophy*, 68, 5–20.
- Frankfurt, H. (1988). The Importance of What We Care About. Cambridge University Press, New York.
- Gelman, R. (1979). Preschool Thought. American Psychologist, 34, 900-905.
- Girgenrizer, G. and Todd, P. M. and ABC Research Group. (1999). Simple Heuristics That Make Us Smart. Oxford University Press, New York.
- Gluckman, P. and Hanson, M. (2004). The Fetal Matrix: Evolution, Development and Disease. Cambridge University Press, New York.
- Greenspan, S. I. and Shanker, S. I. (2004). *The First Idea*. Da Capo Press, Cambridge, MA. Gross, J. J. (Ed.) (2007). *Handbook of Emotion Regulation*. Guilford Press, New York.
- Haidt, J. (2001). The Emotional Dog and Its Rational Tail: A Social Intuitionist Approach to Moral Judgment. Psychological Review, 108(4), 814–834.
- Harlow, H. (1986). From Learning to Love. Praeger Press, New York.
- Harris, P. and Nunez, M. (1996). Understanding of Permission Rules by Preschool Children. Child Development, 67, 1572–1591.
- Hart, D. (2005). The Development of Moral Identity, in edited by Carlo, G. and Edwards, C.P. (Eds.), Nebraska Symposium on Motivation, Vol. 51, Moral Motivation Through the Lifespan (pp. 165–196). University of Nebraska Press, Lincoln.
- Hart, D., Atkins, R. and Fegley, S. (2003). Personality and Development in Childhood: A Person-centered Approach. Monographs of the Society for Research in Child Development, 68(1, Serial No. 272).
- Hart, D. and Fegley, S. (1995). Altruism and Caring in Adolescence: Relations to Moral Judgment and Self-Understanding. Child Development, 66, 1346–1359.
- Hart, D. and Matsuba, K. (in press). Urban Neighborhoods as Contexts for Moral Identity Development, in edited by Narvaez, D. and Lapsley, D. K. (Eds.), Moral Personality, Identity and Character: An Interdisciplinary Future. Cambridge University Press, Cambridge, UK.
- Hart, D., Atkins, R. and Donnelly, T. M. (2006). Community Service and Moral Development. in edited by Killen, M. and Smetana, J. (Eds.), Handbook of Moral Development (pp. 633–656). Lawrence Erlbaum Associates, Mahwah, NJ.
- Hart, D., Matsuba, K. and Atkins, R. (2008). The Moral and Civic Effects of Learning to Serve, in edited by Nucci, L. and Narvaez, D. (Eds.), Handbook on Moral and Character Education (pp. 484–499). Lawrence Erlbaum Associates, New York.
- Hartshorne, H. and May, M. A. (1928–1930). Studies in the Nature of Character, Vol. 1. Studies in Deceit, Vol. 2 (with J. B. Maller, 1929), Studies in Service and Self-Control, Vol. 3 (with F. K. Shuttleworth, 1930), Studies in the Organization of Character. Macmillan, New York.
- Hatano, G. and Inagaki, K. (1986). Two Courses of Expertise. Child Development and Education in Japan, 262–272.
- Henry, J. P. and Wang, S. (1998). Effects of Early Stress on Adult Affiliative Behavior. Psychoneuroendocrinology, 23(8), 863–875.
- Hewlett, B. S. and Lamb, M. E. (2005). Hunter-Gatherer Childhoods: Evolutionary, Developmental and Cultural Perspectives. Aldine, New Brunswick, NJ.
- Higgins, E. T. (1996). Knowledge Activation: Availability, Applicability and Salience. In Higgins, E. T. and Kruglanski, A. E. (Eds.), Social Psychology: Handbook of Basic Principles (pp. 133–168). Guilford, New York.
- Hofer, M. A. (1994). Hidden Regulators in Attachment, Separation, and Loss, in edited by Fox, N. A. Emotion Regulation: Behavioral and Biological Considerations. Monographs of the Society for Research in Child Development, 59, 192–207.
- Hogarth, R. M. (2001). Educating Intuition. University of Chicago Press, Chicago.
- Johnson, M. (1993). Moral Imagination: Implications of Cognitive Science for Ethics. University of Chicago Press, Chicago.

- Kagan, J. (2005). Human Morality and Temperament, in edited by Carlo, G. and Pope-Edwards, C. (Eds.), Moral Motivation through the Lifespan. Nebraska Symposium on Motivation, Vol. 51 (pp. 1–32). University of Nebraska Press, Lincoln, NE.
- Karr-Morse, R. and Wiley, M. S. (1997). Ghosts From the Nursery: Tracing the Roots of Violence. Atlantic Monthly Press, New York.
- Kekes, J. (1989). Moral Tradition and Individuality. Princeton University Press, Princeton, NJ.
 Kesner, R. (1986). Neurobiological Views of Memory, in edited by Martinez, J. and Kesner, R. (Eds.), Learning and Memory: A Biological View (pp. 399–438). Academic Press, New York.
- Killen, M. R. and Smetana, J. R. (Eds.) (2005). *Handbook of Moral Development*. Lawrence Erlbaum Associates, Mahwah, NJ.
- King, P. M. and Kitchener, K. S. (1994). Developing Reflective Judgment: Understanding and Promoting Intellectual Growth and Critical Thinking in Adolescents and Adults. Jossey-Bass Publishers, San Francisco.
- Kitchener, R. (1983). Developmental Explanations. Review of Metaphysics, 36, 791-818.
- Kochanska, G. (1991). Socialization and Temperament in the Development of Guilt and Conscience. Child Development, 62, 1379–1392.
- Kochanska, G. (1993). Toward a Synthesis of Parental Socialization and Child Temperament in Early Development of Conscience. Child Development, 64, 325–347.
- Kochanska, G. (1997a). Mutually-Responsive Orientation between Mothers and Their Children: Implications for Socialization. *Child Development*, 68, 94–112.
- Kochanska, G. (1997b). Multiple Pathways to Conscience for Children Who Have Different Temperaments: From Toddlerhood to Age 5. Developmental Psychology, 33, 228–240.
- Kochanska, G. (2002a). Committed Compliance, Moral Self and Internalization: A Mediated Model. Developmental Psychology, 38, 339–351.
- Kochanska, G. (2002b). Mutually-Responsive Orientation between Mothers and Their Children: A Context for the Early Development of Conscience. Current Directions in Psychological Science, 11, 191–195.
- Kochanska, G. and Aksan, N. (2004). Conscience in Childhood: Past, Present and Future. Merrill-Palmer Quarterly, 50, 299–310.
- Kochanska, G., Aksan, N. and Joy, M. E. (2007). Children's Fearfulness as a Moderator of Parenting in Early Socialization: Two Longitudinal Studies. *Developmental Psychology*, 43, 222–237.
- Kochanska, G., Aksan, N., Knaack, A. and Rhines, H. (2004). Maternal Parenting and Children's Conscience: Early Security as a Moderator. *Child Development*, 75, 1229–1242.
- Kochanska, G., Aksan, N. and Koenig, A. L. (1995). A Longitudinal Study of the Roots of Preschoolers' Conscience: Committed Compliance and Emerging Internalization. Child Development, 66(6), 1752–1769.
- Kochanska, G., Aksan, N., Prisco, T. R. and Adams, E. E. (2008). Mother–Child and Father–Child Mutually Responsive Orientation in the First Two Years and Children's Outcomes at Preschool Age: Mechanisms of Influence. *Child Development*, 79, 30–44.
- Kochanska, G., Forman, D. R., Aksan, N. and Dunbar, S. B. (2005). Pathways to Conscience: Early Mother-Child Mutually-Responsive Orientation and Children's Moral Emotion, Conduct and Conduct. *Journal of Child Psychology and Psychiatry*, 46, 19–34.
- Kochanska, G. and Thompson, R. A. (1997). The Emergence and Development of Conscience in Toddlerhood and Early Childhood, in edited by Grusec, J. E. and Kuczynski, L. (Eds.), *Parenting and Children's Internalization of Values* (pp. 53–77). Wiley, New York.
- Kohlberg, L., Levine, C. and Hewer, A. (1983). Moral Stages: A Current Formulation and a Response to Critics. Meacham, J. A. (Ed.). Contributions to Human Development (Vol. 10). Karger, Basel.

- Kohlberg, L., and Mayer, R. (1972). Development as the Aim of Education. Harvard Educational Review, 42(4), 449-496.
- Kraybill, D. B. (1989). The Riddle of Amish Culture. Johns Hopkins Press, Baltimore.
- Laible, D. J. and Thompson, R. A. (2000). Mother–Child Discourse, Attachment Security, Shared Positive Affect, and Early Conscience Development. Child Development, 71, 1424–1440.
- Lakoff, G. and Johnson, M. (1999). Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought. Basic Books, New York.
- Lapsley, D. K. (2005). Moral Stage Theory, in edited by Killen, M. and Smetana, J. (Eds.), Handbook of Moral Development (pp. 37–66). Lawrence Erlbaum Associates, Mahwah, NJ.
- Lapsley, D. K. (2007). Moral Self-Identity as the Aim of Education, in edited by Nucci, L. and Narvaez, D. (Eds.), Handbook of Moral and Character Education (pp. 30–52). Lawrence Erlbaum Associates, Mahwah, NJ.
- Lapsley, D. K. and Hill, P. L. (2008). On Dual Processing and Heuristic Approaches to Moral Cognition. *Journal of Moral Education*, 37(3), 313–332.
- Lapsley, D. K. and Lasky, B. (2002). Prototypic Moral Character. *Identity*, 1, 345–363.
- Lapsley, D. K. and Narvaez, D. (Eds.) (2004a). Moral Development, Self and Identity. Lawrence Erlbaum Associates, Mahwah, NJ.
- Lapsley, D. K. and Narvaez, D. (2004b). A Social-Cognitive Approach to the Moral Personality. in edited by Lapsley, D. K. and Narvaez, D. (Eds.), Moral Development, Self and Identity (pp. 189–212). Lawrence Erlbaum Associates, Mahwah, NJ.
- Lapsley, D. K. and Narvaez, D. (2005). Moral Psychology at the Crossroads, in edited by Lapsley, D. and Power, C. (Eds.), Character Psychology and Character Education (pp. 18–35). University of Notre Dame Press, Notre Dame, IN.
- Lapsley, D. K. and Narvaez, D. (2006). Character Education, Vol. 4, in edited by Renninger, A. and Siegel, I. (Volume Eds.), *Handbook of child psychology*, in edited by Damon, W. and Lerner, R. (Series Eds.) (pp. 248–296). Wiley, New York.
- Lapsley, D. K. and Power, F. C. (Eds.) (1988). Self, Ego, *Identity: Integrative Approaches*. Springer-Verlag, New York.
- Lapsley, D. K. and Quintana, S. (1985). Integrative Themes in Social and Developmental Theories of the Self. in edited by Pryor, J. and Day, J. (Eds.), *The Development of Social Cognition* (pp. 153–178). Springer-Verlag, New York.
- Lerner, M. (2002). Pursuing the Justice Motive, in edited by Ross, M. and Miller, D. T. (Eds.), The Justice Motive in Everyday Life. Cambridge University Press, Cambridge, MA.
- Lerner, R. M. (2006). Developmental Science, Developmental Systems and Contemporary Theories of Human Development. In Damon, W. and Lerner, R. M. (Eds.), Handbook of Child Psychology. 6th Ed. Vol 1 (Lerner, R. M. Vol. Ed.), Theoretical Models of Human Development (pp. 1-17). Wiley, New York.
- Lewis, T., Amini, F. and Lannon, R. (2000). A General Theory of Love. Vintage, New York. Lewis, M. and Brooks-Gunn, J. (1979). Social Cognition and the Acquisition of Self. Plenum Press, New York.
- Libby, H. P. (2004). Measuring Student Relationships to School: Attachment Bonding, Connectedness and Engagement. *Journal of School Health*, 74(7), 274–283.
- Light, P. (1983). Piaget and Egocentrism: A Perspective on Recent Developmental Research. Early Child Development and Care, 12, 7–18.
- Luna, B., Thulborn, K. R., Munoz, D. P., Merriam, E. P., Garver, K. E. Minshew, N. J., et al. (2001). Maturation of Widely Distributed Brain Function Subserves Cognitive Development. *NeuroImage*, 13(5), 786–793.
- MacLean, P. D. (1990). The Triune Brain in Evolution: Role in Paleocerebral Functions. Plenum, New York.
- Marsh, H. W., Ellis, L. A. and Craven, R. G. (2002). How do Preschool Children Feel About Themselves? Unraveling Measurement and Multidimensional Self-concept Structure. Developmental Psychology, 38, 376–393.

- Masten, A. S. (2003). Commentary: Developmental Psychopathology as a Unifying Context for Mental Health and Education Models, Research and Practice in Schools. School Psychology Review, 32, 169–173.
- Matsuba, M. K. and Walker, L. J. (2004). Extraordinary Moral Commitment: Young Adults Working for Social Organizations. *Journal of Personality*, 72, 413–436.
- Matsuba, M. K. and Walker, L. J. (2005). Young Adult Moral Exemplars: The Making of Self Through Stories. Journal of Research on Adolescence, 15, 275–297.
- Matsuba, K., Hart, D., Atkins, R. and Donnelly, T. (2007). Psychological and Social-Structural Influences on Involvement in Volunteering. *Journal of Research on Personality*, 41, 889–907.
- McAdams, D. (in press). The Moral Personality, in edited by Narvaez, D. and Lapsley, D. K. (Eds.), *Moral Personality, Identity and Character: An Interdisciplinary Future*. Cambridge University Press, Cambridge, UK.
- McAdams, D. and Pals, J. L. (2006). The New Big 5: Fundamental Principles for an Integrative Science of Personality. *American Psychologist*, 61, 204–217.
- McFall, L. (1987). Integrity. Ethics, 98, 5-20.
- Mencius, L. (1970). Mencius in Lau, D. (trans.). Penguin, London.
- Mikulincer, M. and Shaver, P. R. (2005). Attachment Security, Compassion, and Altruism. *Current Directions in Psychological Science*, 14, 34–38.
- Moll, J., de Oliveira-Souza, R. and Zahn, R. (in press). Neuroscience and Morality: Moral Judgments, Sentiments and Values, in edited by Narvaez, D. and Lapsley, D. K. (Eds.), Moral Personality, Identity and Character: An Interdisciplinary Future. Cambridge University Press, New York.
- Monroe, L. (2003). How Identity and Perspective Constrain Moral Choice. *International Political Science Review*, 24, 405–424.
- Monroe, L. (2001). Morality and the Sense of Self: The Importance of Identity and Categorization for Moral Action. *American Journal of Political Science*, 45, 491–507.
- Monroe, L. (1994). But What Else Could I do? Choice, Identity and a Cognitive-perceptual Theory of Ethical Political Behavior. *Political Psychology*, 15, 201–226.
- Moravcsik, J. E. and Kintsch, W. (1993). Writing Quality, Reading Skills, and Domain Knowledge as Factors in Text Comprehension. Canadian Journal of Experimental Psychology, 47, 360–374.
- Nagel, T. (1979). Mortal Questions. Cambridge University Press, Cambridge.
- Narvaez, D. (1998). The Effects of Moral Schemas on the Reconstruction of Moral Narratives in 8th Grade and College Students. *Journal of Educational Psychology*, 90, 13–24.
- Narvaez, D. (1999). Using Discourse Processing Methods to Study Moral Thinking. Educational Psychology Review, 11(4), 377–394.
- Narvaez, D. (2005). The Neo-Kohlbergian Tradition and Beyond: Schemas, Expertise and Character, in edited by Carlo, G. and Pope-Edwards, C. (Eds.), Nebraska Symposium on Motivation, Vol. 51, Moral Motivation through the Lifespan (pp. 119–163). University of Nebraska Press, Lincoln, NE.
- Narvaez, D. (2006). Integrative Ethical Education, in edited by Killen, M. and Smetana, J. (Eds.), Handbook of Moral Development (pp. 703–733). Erlbaum, Mahwah, NJ.
- Narvaez, D. (2008a). Human Flourishing and Moral Development: Cognitive Science and Neurobiological Perspectives on Virtue Development, in edited by Nucci, L. and Narvaez, D. (Eds.), Handbook of Moral and Character Education (pp. 310–327). Erlbaum, Mahwah, NJ.
- Narvaez, D. (2008b). Triune Ethics: The Neurobiological Roots of Our Multiple Moralities. *New Ideas in Psychology*, 26, 95–119.
- Narvaez, D., Bentley, J., Gleason, T. and Samuels, J. (1998). Moral Theme Comprehension in Third Grade, Fifth Grade and College Students. *Reading Psychology*, 19(2), 217–241.
- Narvaez, D. and Bock, T. (2002). Moral Schemas and Tacit Judgement or How the Defining Issues Test is Supported by Cognitive Science. *Journal of Moral Education*, 31(3), 297–314.

- Narvaez, D., Bock, T. and Endicott, L. (2003). Who Should I Become? Citizenship, Goodness, Human Flourishing, and Ethical Expertise, in edited by Veugelers, W. and Oser, F. K. (Eds.), *Teaching in Moral and Democratic Education* (pp. 43–63). Peter Lang Publishers, Bern, Switzerland.
- Narvaez, D., Bock, T., Endicott, L. and Lies, J. (2004). Minnesota's Community Voices and Character Education Project. *Journal of Research in Character Education*, 2, 89–112.
- Narvaez, D., Getz, I., Rest, J. R. and Thoma, S. (1999a). Individual Moral Judgment and Cultural Ideologies. *Developmental Psychology*, 35, 478–488.
- Narvaez, D. and Gleason, T. (2007). The Influence of Moral Judgment Development and Moral Experience on Comprehension of Moral Narratives and Expository Texts. The Journal of Genetic Psychology, special issue (Nancy Eisenberg, Ed.), 168(3), 251–276.
- Narvaez, D., Gleason, T., Mitchell, C. and Bentley, J. (1999b). Moral Theme Comprehension in Children. Journal of Educational Psychology, 91(3), 477–487.
- Narvaez, D. and Lapsley, D. (2005). The Psychological Foundations of Everyday Morality and Moral Expertise, in edited by Lapsley, D. K. and Power, F. C. (Eds.), Character Psychology and Character Education (pp. 140–165). University of Notre Dame Press, Notre Dame: IN.
- Narvaez, D. and Lapsley, D. K. (Eds.) (in press). Moral Personality, Identity and Character: An Interdisciplinary Future. Cambridge University Press, Cambridge, UK.
- Narvaez, D., Lapsley, D. K., Hagele, S. and Lasky, B. (2006). Moral Chronicity and Social Information Processing: Tests of a Social Cognitive Approach to the Moral Personality. *Journal of Research in Personality*, 40, 966–985.
- Narvaez, D. and Rest, J. (1995). The Four Components of Acting Morally. in edited by Kurtines, W. and Gewirtz, J. (Eds.), Moral Behavior and Moral Development: An Introduction (pp. 385–400). McGraw-Hill, New York.
- Neisser, U. (1976). Cognition and Reality: Principles and Implications of Cognitive Psychology. WH Freeman, New York.
- Nucci, L. P. and Narvaez, D. (Eds.) (2008). Handbook of Moral and Character Education. Routledge, New York.
- Nunez, M. and Harris, P. L. (1998). Psychological and Deontic Concepts: Separate Domains or Intimate Connections? *Mind and Language*, 13, 153–170.
- Olson, K. R. and Dweck, C. S. (2008). A Blueprint for Social Cognitive Development. *Perspectives on Psychological Science*, 3(3), 193–202.
- Pancer, S. M. and Pratt, M. (1999). Social and Family Determinants of Community Service Involvement in Canadian Youth, in edited by Yates, M. and Youniss, J. (Eds.), Community Service and Civic Engagement in Youth: International Perspectives (pp. 32–35). Cambridge University Press, Cambridge.
- Panksepp, J. (1998). Affective Neuroscience: The Foundations of Human and Animal Emotions. Oxford University Press, New York.
- Payne, A. A., Gottfredson, D. C. and Gottfredson, G. D. (2003). Schools as Communities: The Relationships Among Communal School Organization, Student Bonding, and School Disorder. Criminology, 41(3), 749–773.
- Perry, B. D., Pollard, R. A., Blakely, T. L., Baker, W. L. and Vigilante, D. (1995). Childhood Trauma, the Neurobiology of Adaptation, and "Use-Dependent" Development of the Brain: How "States" Become "Traits.". Infant Mental Health Journal, 16, 271–291.
- Piaget, J. (1970). Genetic Epistemology, in Duckworth, E. (trans.). Columbia University Press, New York.
- Play Like a Champion (2008). Retrieved July 17, 2008 from http://www.playlikeachampion.org/.
- Pratt, M. W., Hunsberger, B., Pancer, M. S. and Alisat, S. (2003). A Longitudinal Analysis of Personal Value Socialization: Correlates of a Moral Self-Ideal in Late Adolescence. *Social Development*, 12, 563–585.
- Power, F. C. (2004). Moral Self in Community, in edited by Lapsley, D. K. and Narvaez, D. (Eds.), Moral Development, Self and Identity (pp. 47–64). Lawrence Erlbaum Associates, Mahwah, NJ.

- Power, F. C. and Higgins-D'Alessandro, A. (2008). The Just Community Approach to Moral Education and the Moral Atmosphere of the School, in edited by Nucci, L. and Narvaez, D. (Eds.), Handbook of Moral and Character Education (pp. 230–248). Lawrence Erlbaum Associates, Mahwah, NJ.
- Power, F. C., Higgins, A. and Kohlberg, L. (1989b). Lawrence Kohlberg's Approach to Moral Education. Columbia University Press, New York.
- Reed, A., II and Aquino, K. (2003). Moral Identity and the Expanding Circles of Moral Regard Toward Out-Groups. Journal of Personality and Social Psychology, 84(6), 1270–1286.
- Reed, A., II, Aquino, K. and Levy, E. (2007). Moral Identity and Judgments of Charitable Behaviors. *Journal of Marketing*, 71, 178–193.
- Reimer, K. and Wade-Stein, D. (2004). Moral Identity in Adolescence: Self and Other in Semantic Space. *Identity*, 4, 229–249.
- Repacholi, B. (1998). Infants' Use of Attentional Cues to Identify the Referent of Another Person's Emotional Expression. *Developmental Psychology*, 34, 1017–1025.
- Rest, J. R. (1979). Developing in Judging Moral Issues. University of Minnesota Press, Minneapolis, MN.
- Rest, J. (1983). Morality, in edited by Flavell, J. and Markham, E. (Eds.), Cognitive Development, from Mussen, P. (Ed.), Manual of Child Psychology, Vol. 3 (pp. 556–629). Wiley, New York.
- Rest, J. R. (1986). Moral Development: Advances in Research and Theory. Praeger, New York. Rest, J. R. and Narvaez, D. (1994). Moral Development in the Professions: Psychology and Applied
- Rest, J. R. and Narvaez, D. (1994). Moral Development in the Professions: Psychology and Applied Ethics. Ethaum, Hillsdale, NJ.
- Rest, J. R., Narvaez, D., Bebeau, M. and Thoma, S. (1999). Postconventional Moral Thinking: A Neo-Kohlbergian Approach. Erlbaum, Mahwah, NJ.
- Reynolds, R., Taylor, M., Steffensen, M., Shirey, L. and Anderson, R. (1982). Cultural Schemata and Reading Comprehension. *Reading Research Quarterly*, 17, 353–366.
- Rogoff, B., Turkanis, C. G. and Bartlett, L. (2001). Learning Together: Children and Adults in a School Community. Oxford University Press, New York.
- Rummelhart, D. E. (1980). Schemata: The Building Blocks of Cognition, in edited by Spiro, R. Bruce, B. and Brewer, W. (Eds.), Theoretical Issues in Reading Comprehension (pp. 33–58). Erlbaum, Hillsdale, NI.
- Schore, A. (1994). Affect Regulation. Erlbaum, Hillsdale, NJ.
- Schore, A. (2003a). Affect Regulation and the Repair of the Self. Norton, New York.
- Schore, A. (2003b). Affect Dysregulation and Disorders of the Self. Norton, New York.
- Schore, A. N. (2001). The Effects of Early Relational Trauma on Right Brain Development, Affect Regulation, and Infant Mental Health. Infant Mental Health Journal, 22, 201–269.
- Simon, H. A. and Chase, W. G. (1973). Skill in Chess. American Scientist, 61, 394-403.
- Singer, M., Harkness, D. and Stewart, S. T. (1997). Constructing Inferences in Expository Text Comprehension. *Discourse Processes*, 24, 199–228.
- Sinnott-Armstrong, W. A. (ed.) (2008). *Moral Psychology*, Vols. 1–3. MIT Press, Cambridge, MA.
- Smetana, J. G. (1985). Preschool Children's Conceptions of Transgressions: The Effects of Varying Moral and Conventional Domain–Related Attributes. *Developmental Psychology*, 21, 18–29.
- Solomon, D., Watson, M., Battistich, V., Schaps, E. and Delucchi, K. (1992). Creating a Caring Community: Educational Practices that Promote Children's Prosocial Development, in edited by Oser, F. K. Dick, A. and Patry, J.-L. (Eds.), *Effective and Responsible Teaching: The New Synthesis* (pp. 383–396). Jossey-Bass, San Francisco.
- Solomon, D., Watson, M. S. and Battistich, V. A. (2002). Teaching and School Effects on Moral/Prosocial Development, in Richardson, V. (ed.), Handbook for Research on Teaching. American Educational Research Association, Washington, DC.
- Solomon, D., Watson, M., Battistich, V., Schaps, E. and Delucchi, K. (1996). Creating Classrooms that Students Experience as Communities. American Journal of Community Psychology, 24(6), 719–748.

- Spilich, G., Vesonder, G., Chiesi, H. and Voss, J. (1979). Text Processing of Domain-Related Information for Individuals with High and Low Domain Knowledge. *Journal of Verbal Learning and Verbal Behavior*, 18, 275–290.
- Steffensen, M., Joag-Dev, C. and Anderson, R. (1979). A Cross-Cultural Perspective on Reading Comprehension. Reading Research Quarterly, 15, 10–29.
- Sternberg, R. (1998). Abilities are Forms of Developing Expertise. *Educational Researcher*, 3, 22–35.
- Stipek, D., Recchia, S. and McClintic, S. (1992). Self-Evaluation in Young Children. Monographs of the Society for Research in Child Development, 57 (Serial No. 226).
- Stout, M. (2007). The Paranoia Switch. Sarah Crichton Books, New York.
- Taylor, C. (1989). Sources of the Self: The Making of Modern Identity. Harvard University Press, Cambridge, MA.
- Taylor, S. E. and Crocker, J. (1981). Schematic Bases of Social Information Processing, in edited by Higgins, E. T., Herman, C. P. and Zanna, M. P. (Eds.), Social Cognition: The Ontario Symposium, Vol. 1 (pp. 89–134). Erlbaum, Hillsdale, NJ.
- Thompson, R. A. (2006). The Development of the Person: Social Understanding, Relationships, Self, Conscience, in edited by Damon, W. and Lerner, R. M. (Eds.), Handbook of Child Psychology (6th edn.), Vol. 3, Social, Emotional and Personality Development, in Eisenberg, N. (Volume Ed.) (pp. 24–98). Wiley, New York.
- Thompson, R. (in press). Early Foundations: Conscience and the Development of Moral Character, in edited by Narvaez, D. and Lapsley, D. K. (Eds.), *Moral Personality, Identity and Character: An Interdisciplinary Future.* Cambridge University Press, New York.
- Thompson, R. A., Meyer, S. and McGinley, M. (2006). Understanding Values in Relationship: The Development of Conscience, in edited by Killen, M. and Smetana, J. (Eds.), Handbook of Moral Development (pp. 267–297). Lawrence Erlbaum Associates, Mahwah, NJ.
- Varela, F. (1999). Ethical Know-How: Action, Wisdom, and Cognition. Stanford University Press, Stanford, CA.
- Walker, L. J. (1999). The Perceived Personality of Moral Exemplars. Journal of Moral Education, 28, 145–162.
- Walker, L. J. and Frimer, J. (in press). Moral Personality Exemplified, in edited by Narvaez, D. and Lapsley, D. K. (Eds.), Moral Personality, Identity and Character: An Interdisciplinary Future. Cambridge University Press, Cambridge, UK.
- Walker, L. J., and Hennig, K. H. (1997). Moral Development in the Broader Context of Personality. In Hala, S. (Ed.), The Development of Social Cognition (pp. 297–327). Psychology Press, East Sussex, England.
- Walker, L. J. and Hennig, K. H. (2004). Differing Conceptions of Moral Exemplarity: Just, Brave and Caring. *Journal of Personality and Social Psychology*, 86, 629–647.
- Walker, L. J. and Pitts, R. C. (1998). Naturalistic conceptions of moral maturity. Developmental Psychology, 34, 403–419.
- Warneken, F., and Tomasello, M. (2007). Helping and Cooperation at 14 Months of Age. Infancy, 11, 271-294.
- Watson, M. (2008). Developmental Discipline and Moral Education, in edited by Nucci, L. and Narvaez, D. (Eds.), Handbook of Moral and Character Education (pp. 175–203). Erlbaum, Mahwah, NJ.
- Weaver, I. C., Szyf, M. and Meaney, M. J. (2002). From Maternal Care to Gene Expression: DNA Methylation and the Maternal Programming of Stress Responses. *Endocrine Research*, 28, 699.
- Williams, B. (1971). Moral Luck. Cambridge University Press, Cambridge.
- Young, L. J., Lim, M. M., Gingrich, B. and Insel, T. R. (2001). Cellular Mechanisms of Social Attachment. Hormones and Behavior, 40, 133–138.
- Zimmerman, B. J. (1998). Academic Studying and the Development of Personal Skill: A Self-Regulatory Perspective. Educational Psychologist, 33, 73–86.