CHAPTER 13

The Development of Self-System Vulnerabilities: Social and Cognitive Factors in Developmental Psychopathology

MARLENE M. MORETTI
AND E. TORY HIGGINS

The development of the self has attracted the attention of clinicians for well over a century (Basch 1983; Bowlby 1971, 1975; Erikson 1950; A. Freud 1946; Horney 1950). Several changes have occurred during this time in the types of assumptions adopted by theoreticians and researchers investigating the development of the self-system. First, contemporary models tend to recognize the self as an independent psychological structure that directs and controls behavior (Bowlby 1971; Erikson 1950; Sullivan 1953) rather than simply as a mediator between primitive id impulses and reality demands (Freud 1923). Second, researchers have become increasingly sensitive to the primary importance of attachment needs and interpersonal relations in the development of the self (Aber & Allen 1987; Ainsworth 1982; Ainsworth et al. 1978; Bowlby 1971, 1975; Easterbrooks & Goldberg 1984; Main & Weston 1981; Matas, Arend, & Sroufe 1978), and the gratification of biological needs and impulses now

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tends to be viewed as secondary. Finally, contemporary theorists place greater emphasis on the importance of the relation between developing cognitive abilities and the emergence of the self-system than did early theorists (Giacchetti & Risley 1981; Harter 1983; Keegan 1982; Loevinger 1976).

We believe that an adequate model of self-development should permit researchers and clinicians to make predictions about the types of quantitative and qualitative shifts in children's self-evaluative and self-regulatory patterns at different ages (and levels of cognitive development), as well as predictions about the types of emotional and behavioral difficulties they might encounter from infancy to late adolescence. In this chapter we consider the interaction between cognitive development and parental socialization practices in the development of self-evaluative and self-regulatory processes as they relate to self-system vulnerabilities in particular.

SELF-DISCREPANCY THEORY I: A MODEL OF SELF-SYSTEM VULNERABILITY IN ADULTS

When individuals evaluate themselves or their performances, they can draw on numerous types of standards and guides during the self-evaluative process (see Higgins, Strauman, & Klein, 1986, and Higgins & Moretti, 1988, for a review of standards and issues of normative standard utilization). The basic premise of self-discrancy theory is that different self-state representations act as important guides for self-evaluation (Higgins 1987; Higgins, in press, b). Individuals may evaluate their actual selves (the attributes they believe they actually possess) in relation to either their ideal-self (the hopes or wishes they believe someone holds for them) or their ought-self (the duties and obligations they believe someone holds for them). Within each of these self-domains, individuals can view their performance either from their own perspective or from the standpoint of a significant other. Combining across two dimensions of the self (domains × standpoints) yields four potentially different self-state representations that individuals may adopt as self-evaluative standards or guides: ideal-own, ideal-other, ought-own, and ought-other.

Self-discrancy theory predicts that when the attributes of the actual-self are perceived as highly discrepant from the attributes of the ideal-self, individuals will view themselves as unable to attain their own important aspirations (ideal-own) or to fulfill the hopes and desires that others hold
for them (ideal-other). This negative psychological situation, which represents the absence of positive outcomes, is associated with feelings of disappointment, dissatisfaction (ideal-own), or embarrassment (ideal-other). In contrast, when the attributes of the actual-self are perceived as highly discrepant from the attributes of the ought-self, individuals will perceive themselves as having violated important duties and obligations prescribed by themselves (ought-own) or prescribed by others (ought-other), which is associated with punishment. This negative psychological state, which represents the (anticipated) presence of negative outcomes, is associated with feelings of guilt and worthlessness (ought-own) or fear and apprehension (ought-other). Predictions based on this model are supported by the observations of past theorists (e.g., Adler 1964; Cooley 1964[1902]; James 1948[1890]; Rogers 1961) as well as from the results of a number of empirical studies (see Higgins 1987; in press, b).

In the first empirical test of the self-discrepancy model, the unique relations of actual-ideal discrepancy to dejection-related emotions and of actual-ought discrepancy to agitation-related emotions were examined. Higgins, Klein, and Strauman (1985) had subjects record attributes that characterized their actual-self, how they ideally wished they could be (ideal-self:own perspective), and how they felt they should or ought to be (ought-self: own perspective). Subjects also recorded the attributes they believed significant others ideally wished they possessed or that significant others thought they should possess. Self-descriptive attributes were provided entirely by the subject ensuring the personal relevance of each attribute; at no point were subjects asked to consider or judge the relations between self-states for the presence of discrepancy. Hence, subjects did not need to be aware of the self-discrepancies they possessed.

As predicted, the results of the Higgins et al. (1985) study indicated that subjects characterized by higher levels of self-discrepancy were more likely to suffer from psychological distress. Partial correlational analyses also revealed that the particular type of self-discrepancy an individual possessed was related to the type of psychological discomfort he or she experienced: actual-ideal discrepancy was more closely associated with dejection-related emotions (e.g., dissatisfaction, shame, feeling blue) than with agitation-related emotions (e.g., guilt, panic, fear), and actual-ought discrepancy was more closely related to agitation-related emotions than to dejection-related emotions.

The concordant relation of self-discrepancies to psychological discomfort was also assessed by Higgins, Bond, Klein, and Strauman (1986). Subjects were asked to imagine either a positive event (received an A in a course; just spe negative event (subjects who im demonstrated r than did either ought-discrep ought-discrepan greater agitation than did either c or ideal-discrep.

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course; just spent an evening with someone they had long admired) or a negative event (received a D; a lover had just left them). Ideal-discrepant subjects who imagined a negative event experienced greater dejection and demonstrated more psychomotor retardation (reduced writing speed) than did either ideal-discrepant subjects who imagined a positive event or ought-discrepant subjects who imagined a negative event. In contrast, ought-discrepant subjects who imagined a negative-event experienced greater agitation and psychomotor excitation (increased writing speed) than did either ought-discrepant subjects who imagined a positive event or ideal-discrepant subjects who imagined a negative event.

The type of self-discrepant possessed by an individual also appears to be predictive of the extent and type of psychological discomfort the person is likely to experience in the future. Higgins, Klein, and Strauman (1987) assessed the relation between actual-ideal and actual-ought self-discrepant and depressive and anxiety symptoms at a two-month followup. As predicted, actual-ideal discrepant was a better predictor of depressive symptoms at follow-up than was actual-ought discrepant, and actual-ought discrepant was a better predictor of anxiety symptoms than was actual-ideal discrepant. Strauman and Higgins (in press) have found similar results using a latent-variable analysis to assess the relation of self-discrepant and symptoms of depression and anxiety at a one-month followup. Again, results supported the unique relation of actual-ideal discrepant to symptoms of depression and of actual-ought discrepant to symptoms of social anxiety.

Not only have self-discrepencies been found to be concurrently and predictively related to the types of psychological distress individuals experience, but when individuals possess more than one type of self-discrepant the type of emotional distress they experience at a particular time is a function of the accessibility (i.e., the readiness with which constructs are accessed during processing) of specific self-discrepencies. Higgins et al. (1986) measured subjects' self-discrepencies four to six weeks prior to "priming" discrepancies (increasing the accessibility of discrepancies) by asking them to describe either the type of person they believed their parents would ideally like them to be (ideal-priming) or the type of person they believed their parents felt they should be (ought-priming). Subjects high in both types of discrepancy experienced greater dejection-related emotions when exposed to the ideal-discrepant priming, and greater agitation-related emotions when exposed to the ought-discrepant priming.

Further studies have indicated that activating a specific self-attribute
that is a structural component of a self-discrepancy is sufficient to activate the negative psychological situation represented by the discrepancy. Strauman (1987) and his colleagues (Strauman & Higgins 1987) primed self-discrepancies by asking subjects to complete sentences about others who possessed particular personality attributes. When subjects completed sentences that included a self-discrepant attribute that they themselves possessed they experienced increased emotional distress. The type of distress was specifically related to the type of self-discrepancy made accessible by the priming procedure: subjects completing sentences that contained ideal self-discrepancies experienced increased dejection-related emotions, decreased galvanic skin response (GSR) and decreased verbal output, whereas subjects completing sentences that contained ought self-discrepancies experienced increased agitation, increased GSR, and increased verbal output (Strauman & Higgins 1987, study 1). This effect could be produced only by priming self-attributes that were discrepant with a self-guide (Strauman & Higgins, in press, study 2). Similar results have been found in a clinical sample of depressed and social phobic clinical patients (Strauman 1987).

This research suggests that the psychological importance of any actual-self attribute is clearly understood only within the context of its relation with self-evaluative guides. If this is true, self-concept measures based solely on ratings of the actual-self should not be as strongly related to the affective consequences of self-evaluation than should measures of actual-self/self-guide discrepancy. In a recent study that examined this question, Moretti and Higgins (in press) assessed the contribution of self-discrepancy in predicting self-esteem beyond actual-self ratings. As predicted, actual-ideal discrepancy was strongly related to self-esteem even when the contribution of actual-self ratings was statistically removed. In contrast, the relationship of actual-self ratings to self-esteem was not significant when the contribution of actual-ideal discrepancy was statistically removed. Moreover, the mere presence of negative actual-self attributes did not predict low self-esteem; only negative actual-self attributes that were discrepant from the ideal self-guide were associated with low self-esteem. Similarly, the mere presence of positive actual-self attributes did not predict high self-esteem; only positive actual-self attributes that were not discrepant from the ideal self-guide were so related.

The most compelling evidence for the limited importance of actual-self attributes alone in predicting psychological distress has recently been reported by Van Hook and Higgins (1988). Based on the assumption that discrepancies between self-state representations have negative psycho-

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logical consequences, regardless of whether this discrepancy occurs between the actual-self and a self-guide or between two self-guides, Van Hook and Higgins predicted that (1) conflict between two self-guides would be associated with higher levels of psychological discomfort independent of the relation of these self-guides to the actual-self, and (2) self-guide self-guide conflict would be associated with feeling confused and unsure of oneself and one's goals, and with being distractible and rebellious. As predicted, self-guide self-guide conflict was associated with feelings of confusion, uncertainty, distractibility, and rebelliousness. This finding was independent of the relation between the actual-self and self-guides and other psychological symptoms reported by the subjects (e.g., dejection-related or agitation-related emotions).

Why is it that individuals who possess self-discrepancies are highly vulnerable to experiencing psychological discomfort? One possibility has to do with the nature of individuals' outcome-contingency beliefs concerning the consequences of failing to meet the guides they hold for themselves or the guides they believe others wish they would meet or think they ought to meet. If individuals strongly believe that failing to meet others' hopes and wishes or duties and obligations for them will lead to a loss or withdrawal of love or rejection and punishment, they will be extremely vulnerable to negative emotional experiences when they perceive that they have failed to meet these standards. Preliminary research supports the prediction that outcome-contingency beliefs are important in determining the psychological consequences of self-discrepancy. In one study (Higgins, Klein, & Strauman 1987), subjects with high levels of actual-ideal discrepancy who strongly believed that their failure to live up to parental hopes and wishes was associated with negative consequences (e.g., abandonment) reported higher levels of chronic depression than did subjects with high actual-ideal discrepancy who did not endorse this belief. The presence of high actual-ideal discrepancy in combination with high ideal-outcome contingency beliefs was not related to increased levels of anxiety symptoms. In contrast, subjects with high levels of actual-ought discrepancy who strongly believed that their failure to live up to the duties and obligations prescribed by their parents was associated with negative consequences (e.g., rejection) reported higher levels of chronic anxiety and fear than did subjects with high actual-ought discrepancy who did not endorse this belief. The presence of actual-ought discrepancy in combination with high ought-outcome contingency beliefs was not related to increased levels of depressive symptoms.

The results of a follow-up study by Higgins and Tykocinsky (see Hig-
gins, in press, b) corroborated earlier findings by showing that subjects who strongly believed that failing to meet their parents' ideals would lead to the loss of positive outcomes reported greater levels of depression than did subjects who did not endorse this belief. In contrast, subjects who strongly believed that failing to meet the duties or obligations prescribed by their parents would lead to the presence of negative outcomes reported greater levels of anxiety and agitation than did subjects who did not endorse this belief.

The results of these studies underscore the importance of the self-system in determining vulnerability to psychological distress. Not only is the psychological significance of actual-self attributes determined by the relation of these attributes to the self-guides, but the relation of self-guides to each other also has important psychological implications. In addition, preliminary research on outcome-contingency beliefs suggests that the psychological importance of self-discrepancy depends on its conjunction with strong beliefs about the negative consequences of possessing the discrepancy.

Self-discrepancy theory might offer some important insights into the development of vulnerable self-systems. Research evaluating the relation of beliefs about the consequences of failing to meet parental guides is suggestive in this respect. Although the results of this research are obviously limited because of their retrospective nature, they do suggest that the study of self-system development must address not only the issue of the emerging self-concept and the development of different self-state representations but also the development of outcome-contingency beliefs.

**SELF-DISCREPANCY THEORY II: A DEVELOPMENTAL MODEL OF SELF-SYSTEM VULNERABILITY**

Two factors are important in the development of outcome-contingency beliefs and self-discrepancies. First, we must consider developmental changes in the child's ability to form complex mental representations. For a child to develop contingency beliefs about others' responses to their behaviors or attributes they must be able to represent the relation between features of their behavior and the responses of others to them. As their ability for complex mental representations increases, children become increasingly able to consider their own features in relation to standards or guides they believe others hold for them. They are also able to represent complex outcome-contingencies about others' responses to their features and to experience discrepancies within the self-system.

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The second factor we need to consider is the impact of parental socialization practices on the development of the self-system. These practices determine both the extent to which guides are available and accessible to the child and the relation of these guides to the child's self-features (whether the child's features are congruent with or discrepant from parental guides for them).

**The Development of Mental Representational Capacity**

Developmental shifts in mental representational capacity have been well documented by researchers (Case 1985; Fischer 1980; Selman 1980). Changes in the child's capacity to represent mentally the relation between events might well produce qualitative shifts in self-system development. In the following section, we outline five levels of development in mental representational capacity and the implications of these cognitive shifts for changes in the self-system (see Higgins, in press, a, for a fuller discussion of these developmental changes). The description of these levels of cognitive development draws heavily from Case's (1985) analysis of intellectual development. Each level of development represents a qualitative shift in the child's cognitive capacity to represent the relation between events with increasing complexity.

**Level 1: Early Sensorimotor Development.** The capacity of the infant to experience positive and negative affective states and to detect features of the environment that correspond to these emotional states is important for survival (Case 1985). This is not to imply that infants possess the capacity to encode and represent the relation between features of the environment and their own affective states, but rather that they are capable of differentiating positive and negative features of the environment. Their ability to differentiate environmental features in this manner and affectively respond to them has obvious implications for the communication of their needs to caretakers.

At this early level of development, infants have the capacity to experience the presence or absence of positive events as well as that of negative events. Whereas the presence of positive events such as feeding or cuddling is associated with feelings of satisfaction or happiness (Case 1988; Sroufe 1984), the absence of positive events such as the inability to find a sought-after object or a change from mother's affectionate play to her withholding communication is associated with sadness, disappointment, and frustration/anger (e.g., Campos & Barrett 1984; Kagan 1984; Sroufe 1984; Trevarthen 1984). Similarly, the presence of negative events such
as hunger, punishment, or exposure to unexpected or noxious persons is associated with feelings of distress and fear (e.g., Emde 1984; Kagan 1984), whereas the absence of negative events such as removing the child from noxious stimulation is associated with feelings of security and contentedness (Case 1988; Sroufe 1984). These four psychological events may be experienced in relation to the gratification (or lack thereof) of both interpersonal needs and biological needs (Case 1988; Sroufe 1984).

Even though infants at this level are able to anticipate positive or negative events, they have not yet represented the occurrence of these events in relation to some behavior or feature of themselves, so that experiences at this age will not necessarily affect their subsequent experiences and evaluations of themselves. This does not mean, however, that infants suffer psychological distress associated with negative events to a lesser extent than do older children or adults who relate these events to themselves. Nor does it imply that this level of development is unimportant for later self-development. To the extent that infants anticipate either the absence of positive events or the presence of negative events, they might withdraw or respond negatively to the approaches of others and hence provoke negative rather than positive responses. If this is the case, negative interpersonal events are more likely to occur in the future and will be related to the self when children have reached a level of cognitive maturity to be able to do so.

**Level 2: Late Sensorimotor and Early Interrelational Development.** At around age eighteen months to two years, the child’s ability to mentally represent events shifts dramatically with the emergence of symbolic representational abilities (Bruner 1964; Case 1985; Fischer 1980; Piaget 1951; Werner & Kaplan 1963) and the ability to consider bidirectional relations between objects. Hence, children are able schematically to represent the relation between two objects and to use this representation to direct their behavior toward a desired outcome (Case 1985). Children are now capable of representing the relation between themselves or their actions and the responses of another individual. In other words, children are now able to perceive their actions as objects or events that are separate from others (self-as-object) and elicit particular types of responses from others (other-as-object). For example, at this level young children understand that when they smile, their mother smiles and speaks. They are also able to represent the psychological impact of others’ responses to them (e.g., feelings of happiness, sadness, fear) in this representational sequence.

**Level 3: Late Interperiod of Development**

Hence, they can relate between response of another individual and their self traits (Case 1983, 1986a; Ros 1983). The development of children at this level is marked by increasing self-awareness of others' psychological events and the impact of another individual's actions on their own behavior and self-esteem. Thus, at this level and this phenomenon, they are able to consider the impact of another individual’s actions on their own behavior and self-esteem, and they are more capable of using symbolic representations to represent their own actions and the responses of another individual. This level of development is characterized by the development of symbolic representations and the ability to consider bidirectional relations between objects and actions. Hence, children are now capable of representing the relation between themselves or their actions and the responses of another individual. In other words, children are now able to perceive their actions as objects or events that are separate from others (self-as-object) and elicit particular types of responses from others (other-as-object). For example, at this level young children understand that when they smile, their mother smiles and speaks. They are also able to represent the psychological impact of others’ responses to them (e.g., feelings of happiness, sadness, fear) in this representational sequence.
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Hence, they can consider even more complex representations such as the relation between their behavior (e.g., smiling, making faces) and the response of another individual (e.g., mother’s smiling, cuddling) that then results in their experience of a particular psychological situation (e.g., happiness).

The development of the capacity to represent complex relations is important to the development of the self-system. The ability to represent the impact of a particular self-feature (attribute) on the responses of another individual permits the child to represent self-other contingencies. In children at this early level of development self-other contingencies consist of representations between the children’s behavior or actions rather than their self traits (see level 3) and the responses of other individuals (Harter 1983, 1986a; Rosenberg 1979). Since children can now represent both the relation between their behavior and the response of another person and the impact of the other person’s response on their own psychological state, they are now sensitive to monitoring their behavior and are motivated to consider self-other contingencies so as to ensure the presence of positive psychological events and avoid the presence of negative ones. Even though children’s representations of self-other contingencies are rather concrete and behavioral at this time, these representations are early precursors of self-evaluative guides and are used by children for self-regulation. Thus, at this level they become sensitive to others’ responses to themselves and this phenomenon is the precursor of the self-evaluative process. Although these two developments in the self-system are rudimentary, they are the central factors that lead to the development of the self-system and, in some cases, to the development of self-discrepancies.

**Level 3: Late Interrelational and Early Dimensional Development.** During the period of development between the ages of four and six, children undergo yet another important shift in cognitive functioning. Whereas prior to this level of development, they have difficulty viewing the world and themselves from a perspective other than their own, they are now able to adopt the inferred viewpoints of others in considering events, including their own behaviors and actions. The development of perspective-taking or role-taking ability that occurs with the shift from “egocentric” to “nongeo-centric” cognitive functioning has been well documented (see Case 1985; Feffer 1970; Fischer 1980; Higgins 1981; Piaget 1965) and has important implications for understanding the development of the self-system.

Perspective-taking ability can be defined in terms of the capacity to (1)
prevent one's own immediate reactions to a target from intruding on one's judgment about a target person (self or other), and (2) simultaneously consider several events and the impact of these events on others independent of one's own experiences (see Case 1985; Higgins 1981). Once children develop the capacity for perspective-taking, they begin to make inferences not only about the experiences of others in relation to a particular event but also about others' opinions and evaluations of their behaviors and actions. Since children are now capable of simultaneously representing their own behavior and the inferred values or preferences of others, they can compare these two perspectives and evaluate the extent to which they are discrepant. In other words, children are now capable of self-regulation and self-evaluation in terms of a standard or guide for their features that is associated with the inferred viewpoint or perspective of another individual. For example, children are now able to understand that it is the discrepancy between their behavior (e.g., playing aggressively with playmates) and the behavior desired by their mother (e.g., playing cooperatively with playmates) that underlies the association between their behavior, their mother's response (e.g., separating the child from playmates), and the negative psychological situation that is associated with her response (e.g., sadness or fear of punishment). These cognitive developments increase children's ability and motivation to monitor their behavior in terms of significant standards associated with the inferred perspectives or viewpoints of others.

At this level, children are also able to compare their behavior to other standards that are important for self-evaluation. For example, they now begin to compare their performances to the performances of others (social comparison standard) or to their performance in the past (autobiographical standard) when evaluating themselves (see Ruble & Rholes 1981; Shantz 1983). In general, children develop a greater interest and motivation in self-evaluation and in monitoring their behavior against any number of self-evaluative standards.

In addition to these changes, children also undergo a shift in the nature of their self-representations and now begin to consider patterns and consistencies in their behavior and to view themselves in more stable behavioral terms (see Harter 1983, 1986a; Rosenberg 1979). They begin to form traitlike descriptions of themselves which are concrete and behaviorally based. For example, children may begin to describe themselves as good or poor at sports, or as good or poor at school. Even though the organization of self-descriptive attributes is simple rather than complex, these self-descriptive concept (Harter 1984).

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The implications of these cognitive changes for self-regulation and self-evaluation are profound. Since children now possess the cognitive capacity to regulate and evaluate themselves with reference to the inferred viewpoints of others, and they are motivated to do so, they become vulnerable to experiencing discrepancy between their own actual behaviors or attributes and those they believe others wish they would or feel they should possess. They are likely to feel humiliated and sad if they believe they have not behaved as others wish, and they are likely to feel fear or even a form of guilt that is associated with the anticipation of punishment if they believe they have not behaved as others think they should.

Not only are children more vulnerable to a wider range of negative psychological experiences, but since they now possess more stable, organized self-descriptions, the evaluations they make of themselves are more likely to have lasting implications. In addition, children at this level of cognitive development need not engage in discrepant behaviors in order to experience the psychological distress associated with self-discrepancy since simply being exposed to a stimulus that reminds them of a discrepant self-attribute (e.g., observing another child's behavior that reminds them of one of their own attributes that is discrepant from parental standards) is sufficient to produce discomfort. Thus, the range of events that might lead a child to experience psychological distress are increased substantially at this level of development.

Level 4: Late Dimensional Development. Between the ages of nine and eleven years, children develop the ability to make relative judgments about themselves and others that take into consideration rankings on two dimensions simultaneously. For example, in evaluating the ability of other children to play baseball, children at this level are able to consider (1) the age of another child and (2) the amount of effort the child exerted in playing the game in coming to a conclusion about the relative ability of the child to play baseball (see Case 1985). The ability to represent these complex relationships allows them to make attributions of causality for themselves and others.

This shift in cognitive ability means that children are now able to compare their own performance across situations and time, and in comparison to others, and thus can make dispositional and traitlike judg-
ments about themselves and others (Rholes & Ruble 1984). As a result, children are more likely to describe themselves using abstract, dispositional attributes rather than behavioral terms. At this level of development, then, children can tell others about what type of person they are (referring to dispositional characteristics and abilities) in addition to describing the behaviors they engage in. Moreover, their inferences of how others view them are now more likely to be organized in terms of generalized traits rather than behaviors. For example, they can also describe what personality characteristics they believe their parents would ideally wish them to possess or feel they should possess.

These changes in their cognitive representation of the self are associated with changes in self-evaluation and potential difficulties in self-regulation. Since the self is now represented in more general and global terms, children are more likely to make general self-evaluations when they compare themselves to the inferred viewpoint or perspective that others hold for them. Note that children continue to feel motivated to regulate and evaluate themselves in terms of others' standards for them in order to ensure the presence of positive psychological outcomes and to avoid negative ones. If children experience discrepancy between themselves and the standards they believe others hold, the task of altering themselves to reduce the discrepancy becomes more problematic because now the discrepancies may reflect dispositional characteristics. That is, it is no longer a question of children changing only what they do but also who they are in order to meet parental standards. Hence, children at this level might be vulnerable to feelings of helplessness and hopelessness in addition to dejection and/or agitation-related feelings associated with different types of self-discrepancy.

Children at this level of development are also beginning to consider other perspectives on themselves, such as that of their peers. The ability to consider multiple perspectives on the self and to represent the self in terms of dispositional or traitlike features may also coincide with the emergence of children's own perspective on themselves, depending on their culture's emphasis on such an independent, personal perspective. Children at this level may begin to consider the relationship between their actual-self and how they would ideally like to be (ideal-self: own perspective) or feel they should be (ought-self: own perspective). Their consideration of multiple perspectives on the self might result in greater vulnerability to perceptions of discrepancy. The perception of discrepancy in

and of itself does not mean the child believes that no discrepancy exists in the viewpoint of some person or

Level 5: Vectorial Development

will consider occurs. This level of development is characterized by a shift in the way children think about the self. Instead of seeing the self as a fixed entity, children at this level begin to think about the self as a dynamic, changing entity that can be modified through effort and practice. This shift has implications for self-concept and self-regulation.

The ability to consider multiple perspectives on the self could lead to a more sophisticated understanding of self and others, as well as greater flexibility in adapting to different social contexts. It could also lead to increased resilience in the face of adversity, as children learn to cope with stress and difficulties by shifting their perspective and finding new ways to think about themselves and their circumstances. Overall, the ability to consider multiple perspectives on the self is an important development for children as they navigate the complexities of social life and grow into more competent and adaptable individuals.
and of itself does not necessarily lead to psychological distress unless the child believes that negative consequences are associated with the state of discrepancy (a negative outcome-contingency belief); however, the fact that the child can now consider multiple perspectives on the self heightens the probability that he or she will perceive the self as discrepant from some viewpoint or standard that is psychologically significant.

**Level 5: Vectorial Development.** The final shift in cognitive development we will consider occurs during early adolescence (ages thirteen to sixteen). This level of development is marked by the adolescent's ability simultaneously to consider several perspectives on the same object (Case 1985; Fischer 1980; Inhelder & Piaget 1958; Selman & Byrne 1974). At this level, information about several distinct traits can be integrated and abstractions drawn about personality types. Consequently, representations of the self from one's own perspective and the perspective of others are now likely to contain highly interconnected information about personality or identity (Harter 1983).

One potential effect of this shift is an increase in the adolescent's vulnerability to overgeneralized self-evaluations. Adolescents' perception of a discrepancy between their actual-self and a self-guide might lead them to make very global negative self-evaluations similar to the negatively distorted views of the self found in individuals suffering from depression (e.g., Beck 1967, 1976; Seligman, Abramson, et al. 1979).

This shift has further implications for the process of self-evaluation and self-regulation. At this level, adolescents can simultaneously consider the relation of the actual-self to several self-guides, and the relation of self-guides to each other. In addition, they are able to represent the relation between a target person's attributes and the responses of multiple persons to those attributes (e.g., father is not critical of himself for drinking, but mother berates him for his behavior) and to compare these relations to their own system of self-evaluation and self-regulation.

The ability to consider oneself from many perspectives simultaneously could lead to a more elaborated and differentiated view of the self and could have positive consequences (see Linville 1985), but it brings with it many risks for psychological distress. For example, an adolescent might feel agitated and apprehensive by failing to live up to the duties and obligations prescribed by his parents (e.g., getting high grades, not staying out late; abiding by rules and regulations prescribed by schools and
society), but feel happy and satisfied by being the type of person he believes his peers wish him to be (e.g., having little regard for rules, regulations, and formalities at school and in society). The conflict between these two self-guides might lead to feelings of conflict, confusion, and rebelliousness.

When individuals experience conflict between two or more self-guides, they are likely to experience difficulties in self-regulation and self-evaluation. Positive self-perceptions and feelings result from evaluating oneself in relation to one self-guide, but negative self-perceptions and feelings result from another self-guide. Thus, adolescents are likely to experience considerable fluctuations in self-perception and mood over short periods of time. They may also be confused, indecisive, and uncertain about their behavior and plans for the future because they fluctuate in deciding which self-guide they will use for self-evaluation and self-regulation. When they adopt one self-guide, they might feel rebellious because they are rejecting another. As previously noted, the findings of Van Hook and Higgins (1988) are consistent with these predictions.

The phenomenon of self-guide conflict clearly captures the struggle and challenge of adolescence as described by Blos (1961) and Erikson (1959). Adolescents are faced with a multitude of ways to evaluate and regulate their behavior, and they need to consider, compare, and work through the conflict between alternative self-guides to achieve a personal resolution. During this process, they are vulnerable to many different types of negative psychological experiences: discrepancy between actual- and ideal-self representations that may lead to feelings of dejection; discrepancy between actual- and the ought-self representations that may lead to feelings of agitation; and discrepancy between different self-guides that may lead to feelings of confusion, indecision, and rebelliousness. The psychological strain of this period may lead some individuals to avoid the crisis of personal integration and prematurely adopt a set of self-guides that has been transferred to them from their parents and other significant individuals (i.e., identity foreclosure) or to avoid the crisis and commitment to self-guides altogether (i.e., identity diffusion). Others may enter an extended period of crisis in which they experience difficulty committing themselves to personal self-guides (i.e., identity moratorium). For the adolescent who enters this period with sufficient psychological resources and support, however, it marks a period of crisis that can lead to personal commitment to self-guides and maturity (i.e., identity achievement; Erikson 1959).
PARENTAL SOCIALIZATION OF SELF-OTHER CONTINGENCY AND SELF-GUIDES

Thus far we have considered the development of the child's cognitive ability to represent complex relations and events, and the implications of these cognitive shifts for understanding changes in the representation of the self. We will now consider the effects of different socialization practices on the child's acquisition of self-guides and self-evaluative and self-regulatory processes (see also Higgins 1987, in press, a).

The Acquisition of Self-Other Contingency Knowledge and Self-Guides

The acquisition of self-guides for self-evaluation and self-regulation depends on children's understanding of the relation between their behaviors and parental responses. To the extent that children are not exposed to sufficient information about this relation, they will have difficulty evaluating and regulating their behavior. In our view, their acquisition of self-other contingency knowledge depends on the same types of factors that determine their acquisition of knowledge in general (see also Higgins, in press, a).

Children are more likely to acquire self-other contingency knowledge when (1) parents frequently expose their children to information about the relation between their behavior and the parent's response, (2) the relation between their behavior and parental responses is demonstrated consistently, (3) parents present information about the relation between the child's behavior and parental responses clearly and under conditions that draw attention to this relation, and (4) it is communicated by persons who are significant to the child (the response of this individual to the child is emotionally and motivationally important).

Strong self-guides are likely to be easily retrieved from memory (highly accessible) when they are well-integrated and clear (coherent) and emotionally and motivationally significant (relevant). (See Higgins & King, 1981, for a discussion of the factors that contribute to knowledge availability and accessibility.) For example, for children whose attempts at independence have been frequently, consistently, and clearly responded to by their parents with punishment, the parental self-guide that they should be dependent rather than independent will be easily and clearly retrieved from memory when they engage in or consider independent behavior, and this information will precipitate feelings of agitation and
apprehension that they will be motivated to avoid. In contrast, when self-other contingency information has not been communicated frequently, consistently, with clarity, or by significant individuals, children may have difficulty predicting the responses of others to their behavior and forming self-guides for self-evaluation and self-regulation. For example, a child whose demands for attention are sometimes met with acceptance and other times with rejection may have difficulty ascertaining what aspects of herself are acceptable and unacceptable and forming a clear self-guide for behavioral evaluation and regulation.

Although research to date has not directly investigated the effects of these particular socialization factors on self-regulation in children, related features have been examined that permit a comparison between our analysis and the literature. The perspective we have outlined suggests that when children are exposed to socialization practices that encourage the development of strong self-guides, they will be more likely to demonstrate prosocial, nonaggressive, obedient behavior, and high levels of behavioral regulation. Consistent with this prediction, previous research indicates that when parents demonstrate high involvement and demandingness in their socialization practices (i.e., high frequency and consistency), children are more likely to display obedient and nonaggressive behavior (Maccoby & Martin 1983). In addition, when parents adjust their communication to children's attentional level and explain policies, use induction, or explicitly teach contingencies (i.e., high level of clarity), children are more likely to demonstrate social responsibility and independence in self-regulation (Baldwin 1955; Lewin, Lippitt, & White 1939; Maccoby & Martin 1983). Finally, when parents' communications of their expectations are accompanied by strong expressions of affect (i.e., high salience/clarity and significance), children are more likely to show prosocial, obedient behavior.

In contrast, when children are exposed to socialization practices that do not encourage the development of strong self-guides, we predict that they will have difficulties in behavioral regulation. There is considerable evidence to support this view. For example, the infrequent use of control techniques by parents has been associated with low levels of compliance and behavior problems (Maccoby & Martin 1983). Parental socialization practices that fail to communicate expectations frequently and consistently are associated with increased levels of aggression, disobedience, and lack of self-control in children. In addition, the failure of parents to communicate their expectations at an appropriate level for the child has

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**TABLE 13.1**

<table>
<thead>
<tr>
<th>Parent's guide for children</th>
<th>Parent’s contingency orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological outcome for child</td>
<td>Development of self-discrepancies</td>
</tr>
</tbody>
</table>

- Emotional consequences

a. Parents' bo
b. Parents' do
been associated with poor self-control and behavioral difficulties (Patterson 1982).

The Acquisition of Types of Self-Other Contingency Knowledge and Self-Guides

Parental socialization practices can also influence the type of self-guides that children adopt. According to self-discrepancy theory (Higgins 1987, in press, b), different types of self-guides are related to different types of psychological situations. The development of self-guides and self-discrepancies rests upon (1) whether parents are oriented toward identifying and responding to the child's features that match or do not match their guides for the child, and (2) whether parents are oriented toward positive outcomes (absent or present) for their child or toward negative outcomes (absent or present) for their child (for a fuller discussion, see Higgins, in press, a). Four "pure" types of parenting orientation associated with children acquiring strong self-guides are described below (see Table 13.1).

### Table 13.1 Relation of Parents’ Guides for Children and Parents' Contingency Orientation to Children's Psychological Development under Strong Self-Guide Acquisition Conditions

<table>
<thead>
<tr>
<th>Parent's guides for children</th>
<th>Ideal(^a)</th>
<th>Ought(^b)</th>
<th>Ideal</th>
<th>Ought</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent's contingency orientation</td>
<td>Matches</td>
<td>Matches</td>
<td>Mismatches</td>
<td>Mismatches</td>
</tr>
<tr>
<td>Psychological outcome for child</td>
<td>Presence of positive</td>
<td>Absence of negative</td>
<td>Absence of positive</td>
<td>Presence of negative</td>
</tr>
<tr>
<td>Emotional consequences</td>
<td>Low emotional distress—satisfaction, happiness</td>
<td>Low emotional distress—security, relaxation</td>
<td>High emotional distress—dejection, disappointment</td>
<td>High emotional distress—agitation, apprehension</td>
</tr>
</tbody>
</table>

\(^{a}\) Parents' hopes and wishes for the child  
\(^{b}\) Parents' duties and obligations prescribed for the child
Parents' Contingency Orientations 1 and 2: Child-Parent Match. If parents are oriented toward identifying and responding to their child's features that are concordant with their hopes and wishes for the child (1) or with the duties and obligations they have prescribed for the child (2), their relationship with their child is likely to be dominated by the presence of positive outcomes and/or the absence of negative outcomes. When parents perceive that their child's features are concordant with their hopes and wishes for their child (the child is behaving in a way they had ideally wished for), they are likely to feel satisfied and to communicate this to their child. The parents' perception of a match between their child's features and their hopes and wishes for their child is associated with the presence of positive outcomes. When parents perceive that their child's behavior and attributes are concordant with the duties and obligations they have prescribed for the child (their child is behaving in the way they feel he or she should), they are likely to feel relaxed and secure about their child and to communicate these feelings. The parents' perception of a match between their child's features and the duties and obligations they have prescribed for their child is associated with the absence of negative outcomes for the child.

A socialization orientation that highlights the concordance of the child's features with parental ideal guides frequently, consistently, and with clarity and significance is likely to result in the child's acquisition of strong ideal self-guides, and one that highlights the concordance of the child's features with parental ought guides is likely to result in the child's acquisition of strong ought self-guides. Children exposed to these conditions are likely to develop a self-concept characterized by concordance rather than discrepancy between self-state representations. Nonetheless, children will be motivated to meet their parents' guides to ensure the continued presence of positive outcomes or absence of negative outcomes. It is likely that the perception of self-concordance is associated with a more positive emotional state than is the perception of self-discrepancy.

Some parents' socialization orientation is characterized by infrequent, inconsistent, and ambiguous attention to their child's behaviors and attributes that match their guides for their child (e.g., the permissive parent). Children exposed to this style of parental socialization may have difficulty establishing firm self-guides and identifying those self-attributes that are highly praised by others. They may view themselves somewhat positively and expect others to respond positively, albeit inconsistently, to them, but they may have difficulty in establishing a firm sense of self and regulating their behavior in relation to self-guides.
Parents' Contingency Orientations 3 and 4: Child-Parent Mismatch. If parents are oriented toward identifying and responding to their child's features that are discrepant from their hopes and wishes for the child (3), or from the duties and obligations they have prescribed (4), their relationship with their child is likely to be dominated by the absence of positive outcomes and/or the presence of negative outcomes. When parents perceive that their child's features are discrepant from their hopes and wishes for their child, they are likely to feel disappointed and dissatisfied, and they may communicate these feelings to the child by withdrawing their support and acceptance. The parents' perception of a mismatch may be associated with the absence of positive outcomes for the child. When parents perceive that their child's features are discrepant from the duties and obligations they have prescribed, they are likely to criticize, reprimand, or punish the child. The parent's perception of a mismatch may be associated with the presence of negative outcomes for the child.

A socialization orientation that highlights the discrepancy between the child's features and parental ideal guides frequently, consistently, and with clarity and significance is likely to result in the child's acquisition of strong ideal self-guides; a socialization orientation that highlights the discrepancy between the child's features and parental ought guides is likely to result in the child's acquisition of strong ought self-guides. Since both socialization orientations focus on the mismatch between the child's features and parental guides, children exposed to these conditions are likely to develop a self-concept characterized by discrepancy rather than concordance between self-state representations. They will be motivated to meet parental guides in order to reduce the negative psychological state associated with the perception of self-discrepancy—i.e., to reduce feelings of disappointing others and feelings of embarrassment that are associated with actual-ideal discrepancy, or to reduce feelings of agitation, apprehension, and fear that are associated with actual-ought discrepancy.

When parents' socialization orientation is characterized by infrequent, inconsistent, and vague attention to their child's features that are discrepant from their guides (e.g., the inconsistently punitive parent), children may have difficulty establishing firm self-guides and identifying those self-attributes that are unacceptable to others. They may view themselves somewhat negatively, expect others to abandon, reject, criticize, or punish them, and have difficulty in self-regulation.

It is important to recognize that these descriptions are simplified prototypes of socialization orientations. Most parents probably employ a
mixture of these characteristics in parenting and may vary in their parenting orientation across time, circumstances, and types of behavior enacted by the child.

**MENTAL REPRESENTATION CAPACITY X PARENTAL SOCIALIZATION PRACTICES: IMPLICATIONS FOR SELF-SYSTEM VULNERABILITIES**

In this final section we consider the interaction between children's developing capacity for representational thought and parental socialization practices. We approach this task by describing the predicted sequence of self-development from representational levels 1–5 for each prototype of parental socialization practices. We also consider the variation in self-development that may occur for each of these prototypes under strong and weak self-guide acquisition conditions.

**Parents' Contingency Orientations 1 and 2: Child-Parent Match**

Infants whose parents' socialization orientation focuses on the match between the infant's behaviors and their guides for the infant are likely to experience the presence of positive outcomes and the absence of negative outcomes. This orientation toward the infant seems more likely to occur when parents have realistically appraised the infant’s needs and abilities and have adjusted their expectations for the infant in accordance with this appraisal. Infants exposed to this type of socialization orientation are likely to develop trust rather than mistrust (Erikson 1963) of their caretakers and the environment, and are likely to approach rather than avoid new experiences and activities. Upon entering the second level of cognitive development (late sensorimotor and early interrelational development), young children begin to understand that many of their behaviors produce responses from their parents that in turn lead to feelings of happiness, security, and contentment. These self-other contingency representations permit the children to regulate their behavior to ensure the presence of positive outcomes or the absence of negative outcomes.

It is not until level 3 that children understand that the relation between their own behavior and their parents' responses to them is mediated by their parents' evaluation of the behavior in relation to their parents' standards for them. At this level children can adopt the perspective of their mother or father on their own behavior and understand their parents' responses to them as a function of this perspective. Children exp-
posed to a parental orientation that focuses on the match between their behavior and the parents' guides for them are likely to experience themselves positively when adopting the perspective of their parents and to feel that their parents are satisfied with them. These self-perceptions become increasingly consolidated and traitlike as children move through levels 4 and 5 of cognitive development. They come to view themselves as possessing positive stable personality characteristics which elicit positive responses from others. Such children know which self-characteristics result in either the presence of positive responses or the absence of negative responses from others, and they are able to regulate their behavior to ensure both. Upon entering adolescence, they are able to evaluate themselves from numerous perspectives without experiencing intense feelings of dejection or agitation because they already possess a stable and positive view of themselves. The evaluation of themselves that occurs in adolescence is not intensely threatening, and hence they do not avoid this process nor are they overwhelmed by it.

Although research to date has not examined the impact of parenting styles on child development as a function of the child capacity for mental representation, descriptions of parenting styles that promote self-confidence and social competence are consistent with our description of a socialization orientation that focuses on the match between parental standards and child characteristics. In general, warm, consistent, and responsive parenting is associated with greater social competence in children (Baumrind 1967, 1971; Bryant & Crockenberg 1980; Spivack, Platt, & Schure 1976). Cole and Rehm (1980) found that mothers of psychologically healthy children were twice as likely to reward their child's task performance with expressions of positive affect than were mothers of depressed children. Children experiencing low levels of depression and distress also perceive their families as more cohesive, positive, and supportive than do children experiencing depressive symptoms (Asarnow, Carlson, & Guthrie 1987; Jaenicke et al. 1987).

The picture of self-development for the child exposed to socialization practices that focus on the match between the child's behavior and parental guides, but do so infrequently, inconsistently, vaguely, and with little significance, may be quite different. As an infant, the child also experiences the presence of positive outcomes and the absence of negative outcomes, but these events seem to occur randomly. Hence, the infant is unsure of when and how to approach other individuals and new experiences. Such children may experience difficulty acquiring self-other con-
tingency knowledge during level 2 of cognitive development because it is not clear which behaviors or self-features lead to the presence of positive or the absence of negative responses from their parents, and they have difficulty regulating their behavior. During level 5, these children again experience difficulty because they do not possess sufficient information to form perspectives on how others view their behavior. The lack of adequate information about the impact of their features on others’ responses to them makes it difficult for them to consolidate a stable self-concept during levels 4 and 5 of cognitive development. Since others’ responses to them have never been strongly related to their own behavior, they may fail to understand their impact on others. They approach adolescence with an inadequate representation of themselves, and with little sensitivity to how others view them. They may feel that their behavior, and more fundamentally their “self,” is simply insignificant. Their lack of development of a firm sense of self may also lead them to experience difficulties in determining self-other boundaries. With little firm basis from which to compare their own self-view with alternative perspectives of themselves, the probability of adequate adjustments to early adulthood is compromised for these young adults.

Our description of a parental socialization orientation that is positive but bears no relation to a child’s behavioral variation is similar to descriptions of parenting styles of children and adolescents who experience difficulty in establishing a stable sense of self (Guidano 1987). In such cases, parents have been described as attempting to provide an image of a perfectly happy family environment and they appear dedicated to their child’s welfare. Guidano speculates that this parenting orientation stems from the parents’ intense need for positive confirmation of themselves and their inability to tolerate negative feelings in their relationship with their child. As a consequence, children are unable to establish clear boundaries between themselves and their parents, a characteristic often noted in the families of patients suffering from eating disorders (Minuchin, Rosman, & Baker 1978).

**Parents’ Contingency Orientations 3 and 4: Child-Parent Mismatch**

When parents’ socialization orientation to their child highlights the mismatches between their guides for the child and the child’s behavior, the child is likely to experience negative psychological consequences that include the absence of positive outcomes and/or the presence of negative outcomes. This situation is further complicated by the child’s need for praise, which may result in a mismatch between the child’s behavior and the expectations of parents. This mismatch is likely to become more pronounced as the child grows older and begins to develop a stronger sense of self. As a result, parents may begin to question their own parenting strategies and whether they are effectively meeting the needs of their child. Ultimately, this mismatch can lead to a breakdown in the parent-child relationship and can have negative consequences for the child’s social and emotional development.
outcomes. This socialization orientation may be adopted for many reasons. First, some parents might experience difficulty in realistically appraising their child's behavioral repertoire and adjusting their expectancies in accordance with this appraisal. The parents' inability realistically to appraise and adjust their expectations for their child increases the likelihood that their interactions with the child will be dominated by the mismatch between their expectancies and the child's behavior. Second, some infants might be more prone temperamentally to produce behavior that does not match parental expectations. For example, infants characterized by withdrawn or timid behavioral predispositions might be more likely than more sociable infants to elicit a socialization orientation from parents that emphasizes the mismatch between child behavior and parental guides. Kagan and his colleagues (1984) have indeed observed that mothers of behaviorally inhibited children are more likely to try to change their child's behavior than are mothers of sociable children. These two factors—parents' capacity to adjust their expectancies for their child and the child's temperament-al predisposition—interact to influence the socialization orientation adopted by parents (Rubin & Lollis, in press). Finally, the parents' own emotional problems could produce a mismatch orientation to their child. For example, a depressed mother who is preoccupied with her own concerns and suffering from general motivational deficits might withdraw from her child.

Infants exposed to a mismatch socialization orientation might have difficulty establishing trust in their caretakers because they either fail to elicit positive parental responses or elicit negative parental responses. Without a sense of trust in their environment, these children may avoid new experiences and activities (Erikson 1963). On the one hand, a lack of positive parental responses may produce a lack of positive emotional experiences for the child (e.g., dejection), or on the other, the presence of negative parental responses may produce negative emotional experiences for the child (e.g., fear, apprehension).

When children enter the second level of development, they begin to represent self-other contingencies between their behaviors and parental responses. They are likely to perceive the lack of positive parental responses and/or the presence of negative parental responses as related to their behavior and may attempt to monitor their behavior to avoid both of these negative psychological situations. Such children might appear excessively inhibited or avoidant. The lack of positive parental responses might also lead to feelings of dysphoria in the child while the
presence of negative parental responses might lead to feelings of fear, agitation, and apprehension. Hence, even though children at this early level of development might not express some features of depression found in older children or adults (negative self-referent cognitions, expressions of low self-esteem), it is possible that they could experience some affective and behavioral symptoms of depression and/or anxiety.

At level 3 of development, children begin to realize that the relation between their own behavior and parental responses is mediated by their parents' evaluations of the behavior in relation to the parents' standards for them. Children at this level also form the rudiments of a self-concept based on their observations of their own behavioral patterns and their parents' responses to them. These developmental changes may produce a shift in the types of symptoms experienced and expressed by children exposed to a mismatch socialization orientation.

First, the capacity of young children to infer the guides their parents hold for them and to compare their behavior to these guides furthers their capacity to monitor their behavior to prevent negative psychological outcomes. Hence, children exposed to a mismatch socialization orientation might exhibit even greater vigilance and inhibition than at earlier levels of development. Second, because children exposed to a mismatch socialization orientation are likely to experience discrepancy when they compare their behavior to their parents' guides for them, they are highly vulnerable to feelings of shame and humiliation when they perceive they are a disappointment to their parents, and/or to feelings of fear and, to some extent, guilt when they perceive they are failing to fulfill the duties and obligations prescribed by their parents. Finally, children exposed to a mismatch socialization orientation are likely to begin to make highly negative self-evaluations about themselves based on the discrepant relation between their behavior and parents' standards for them. These negative inferences about the self increase in stability and cohesiveness with further development. At this point, then, one would expect children exposed to a mismatch socialization orientation to express a fuller range of depression and anxiety symptoms including both new negative affective states (e.g., shame) and negative self-cognitions.

The consolidation of self-concept is a central feature of development in levels 4 and 5. Children now begin to make dispositional inferences about themselves and others. Children who have been consistently exposed to a mismatch socialization orientation are likely to view themselves as possessing stable negative personality characteristics that elicit either disappointments and/or hos self-perception is like. However, the use of negative psychological presence of negative problems that the child may express a full range includes global negative attempts to evaluate the significant individual and/or agitation. Hence, is likely to be experienced.

Our proposal that likely to produce feel children is supported by parental practices are in competence in offspring. There is also evidence of anxiety disorder in disordered parents (Bech, Turner, Beidel, & Cooney, 1984). The quality of parent-child relationships has been shown to be predictively associated with offspring's behavior (Seifer, 1982). The tendency to be more resentful and negative self-references may become more explicit as offspring develop.
feelings of fear, tension, depression, and/or anxiety. These psychological orientations are likely to appear highly elevated and/or sustained and may express a full range of depressive and/or anxiety symptoms that include global negative self-regard and feelings of hopelessness. Attempts to evaluate themselves from the perspective of peers or other significant individuals might precipitate intense feelings of dejection and/or agitation. Hence, the consolidation of identity during adolescence is likely to be experienced as painful and overwhelming.

Our proposal that a mismatch parental socialization orientation is likely to produce feelings of dejection, agitation, and low self-worth in children is supported by research indicating that harsh and rejecting parental practices are associated with feelings of low self-worth and social incompetence in offspring (Aber & Allen 1987; Jaenicke et al. 1987). There is also evidence that the higher risk for depressive illness and anxiety disorder in the offspring of depressed parents and anxiety-disordered parents (Billings & Moos 1983; Hammen, Adrian, et al. 1987; Turner, Beidel, & Costello 1987; Weissman et al. 1987) is mediated by quality of parent-child interactions. To date, researchers have found that depressed mothers are less positive in their interactions with their children (Mills et al. 1984) and make more unsuccessful attempts to restrict their child's behavior than nondepressed mothers (Sameroff, Barocas, & Seifer 1982). The tendency of depressed mothers to lack warmth and to be more resentful and hostile in their interactions with their children has been shown to be predictive of higher rates of psychiatric disorder in their offspring (Weissman, Paykel, & Klerman 1972; Weissman & Paykel 1974). Researchers have yet to examine the consequences of socialization practices associated with parental depression on self-development as a function of the child's growing capacity for mental representation. Other researchers, however, agree with our prediction that such parental practices are likely to lead to the development of a negative and vulnerable self-system representation (Cassidy 1988; Guidano 1987).

The picture of self-development for children exposed to parental socialization practices that focus on the mismatch between the children's
features and parental guides infrequently, inconsistently, and without clarity or significance may be quite different. Like children exposed to a consistent mismatch, these children also experience the absence of positive and/or the presence of negative parental responses. These responses appear to occur randomly, however. Hence, the children experience difficulty establishing a sense of predictability in their environment. The failure of parents to communicate their standards consistently results in their children's inability to establish clear self-other contingency representations during level 2 of development. This type of socialization orientation might engender feelings of apathy because the children's attempts to regulate their behavior to avoid negative psychological events are futile.

At level 3 of development, children possess the representational capacity to understand that parental responses to their behavior are mediated by the relation of their behavior to their parents' guides for them. However, children exposed to a low-consistency mismatch orientation experience difficulty identifying precisely which self-features provoke negative parental responses. These children might suffer from an extreme sense of helplessness and diffuse anxiety; they are not able to predict parental responses and cannot exert control over their environment by modifying their own behavior. They are also vulnerable to feelings of dejection and agitation associated with the absence of positive and the presence of negative parental responses, respectively.

Such children are likely to enter adolescence experiencing diffuse symptoms of depression and anxiety. Without a clear representation of the relation between their behavior and others' responses they might experience difficulty regulating their behavior which in turn could produce behavioral disorders (e.g., delinquency). Their socialization history has led them to expect that others will respond negatively to them, and consequently their negative expectancies in interpersonal relationships could cause them to withdraw from or negatively react to social situations. This interpersonal style in turn could elicit the abandonment or rejection they anticipate. For this child, adolescence is likely to be volatile and difficult.

Research to date provides some support of the relation between rejecting, harsh, and inconsistent parenting and psychopathology in children (e.g., Egeland & Sroufe 1981). Although this research has yet to examine the relation between parental practices and child psychopathology as a function of the development of capacity for mental representation, re-

results indirectly support results in general nurturance. For example of depressed parents (Biederman et al. 1988). Although risk of affective disorder the higher rates of sibility is that while have been exposed to the spring who are at risk inconsistent mismatch in the deficit disorder. This children with attention inconsistent, punitivity (1972).

CONCLUDING REA

This chapter has explored emotional vulnerability has a number of developmental changes in guides (self-regulatory development of the development—their describes the under determine children's between types of self evaluation; (5) described is related to different parent types of development of specific interactions behavior and individual di-

This chapter has valued end states th standing of the dev
and without exposed to a sense of positive responses experience differentiation. The results in agency representation orient parents' attempts to mediate events are emotional capacities are mediated by them. How children experience negative reme sense of predict parental by modifying dejection and the presence of diffuse sensation of as they might remain could pro-vate history to them, and relationships in situations. Its rejection and between rejection in children at to examine pathology as a sensation, re-sults indirectly support our proposal that this socialization orientation results in general negative experiences and difficulties in behavioral regulation. For example, the most common disorders found in the offspring of depressed parents are affective disorder and attention-deficit disorder (Biederman et al. 1987; Orvaschel et al. 1981; Orvaschel, Walsh-Allis, & Ye 1988). Although researchers have several explanations for the higher risk of affective disorders in this population, they are at a loss to explain the higher rates of attention deficit disorder that also occur. One possibility is that while children who are at risk only for affective disorder have been exposed to consistent mismatch socialization practices, the offspring who are at risk for attention deficit disorder have been exposed to inconsistent mismatch socialization practices. Such children would experience difficulty in behavioral regulation, a central feature of attention deficit disorder. This analysis is congruent with the finding that many children with attention deficit disorder have depressed mothers who are inconsistent, punitive, and rejecting (Weismann, Paykel, & Klerman 1972).

CONCLUDING REMARKS

This chapter has presented a preliminary model of the development of emotional vulnerabilities related to the development of the self-system. It has a number of distinctive features: the model (1) considers how developmental changes in cognitive capacity influence the development of self-guides (self-regulatory and self-evaluative standards) rather than just the development of the self-concept; (2) explicates the dual role of self-guides in development—their role in both self-regulation and self-evaluation; (3) describes the underlying characteristics of parent-child interaction that determine children's acquisition of strong self-guides; (4) distinguishes between types of self-guides that are used in self-regulation and self-evaluation; (5) describes how the etiology of different types of self-guides is related to different types of psychological situations produced by different types of parent-child interaction; and (6) makes predictions about the development of distinct emotional vulnerabilities as a function of specific interactions between developmental differences in cognitive capacity and individual differences in parent-child interaction.

This chapter has focused on the development of self-guides, which are valued end states that people are motivated to meet. For a fuller understanding of the development of self-system vulnerabilities, it would be
necessary to consider as well the effects of both developmental changes in cognitive capacity and individual differences in socialization on the development of means for attaining these valued end states—from social problem-solving procedures to coping strategies to defense mechanisms. Indeed, it may be that it is the complex interrelation between type of preferred end state (including emotional end state) and type of preferred means to attain it that underlies the perplexing variety of disorders from which people suffer.

Recent years have shown that human ability and control over one's behavior is not a given. The capacity to be organized and being able to contain amotions is a capability to form optimally even in the face of the different face pervasive than be substantial impacts, self-beliefs, and attainments. Thus adequately, or ext

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