

Attachment in the Preschool Years

Theory, Research, and Intervention

EDITED BY

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3 · Theoretical and Methodological Considerations in the Study of Attachment and the Self in Young Children

Jude Cassidy

THE NOTION that the self develops not in a vacuum but rather in relation to social interaction has been widely held by psychologists for nearly a century (Baldwin 1897; Cooley 1902; Mead 1934). Despite convergent theoretical predictions, however, the investigation of connections between the self and any of a number of familial factors has been notoriously difficult. Wylie (discouragingly) stated at the end of her extensive review: "The most impressive thing which emerges from an overview of this book is that null or weak findings have been obtained many times in each of a number of areas in which theory and conventional wisdom very confidently predicted strong trends" (1979, p. 690).

One aspect of social interaction that has been considered particularly relevant to the formation of the self is early interaction with principal caregivers, that is, with attachment figures (Bowlby [1969] 1982, 1973, 1980; Sroufe, in press; Stern 1985; Sullivan 1953). This chapter explores a number of both theoretical and methodological considerations relevant when investigating the connection between attachment and the self in early childhood. The work presented in this chapter reflects previous theoretical and empirical emphasis on the child's relationship with the mother only; the self within the family context is addressed briefly at the end of this chapter.

TERMS RELATED TO THE SELF

For many years, psychologists have examined aspects of the self from a variety of perspectives. This extensive interest in the self stems from the idea that self-related beliefs and feelings play a key role in development. For instance, several theorists have emphasized the notion that the child uses what he already knows and feels (part of which are beliefs and feelings about himself) in constructing his own reality and in contributing to his own experience

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(e.g., Bowlby 1980; Piaget 1955). Other theorists have viewed the self as important to development because of its close tie to affect. For instance, a close intertwining of self-love and love of others has been proposed: unless one loves himself, he will feel a basic hostility toward others (e.g., Horney 1950; Rogers 1951). In addition, there are both theoretical and empirical connections between low self-esteem and depression (Bibring 1953; Harter 1986).

A wide array of terms is connected with research related to the self. These concepts are often used vaguely, inconsistently, and interchangeably. Wylie (1974, 1979) has suggested that this vagueness of vocabulary reflects fragmented theoretical conceptualization, which, in turn, contributes to difficulty in operationalization. Therefore, it may be helpful to review the distinctions among several terms related to the self.

Many of these terms can be divided into one of two major groupings: one related to self-cognition, and the other related to self-affect. Terms related to self-cognition include self-concept, self-image, self-schema, and self-understanding. Terms such as these (referred to here as self-concept) suggest a descriptive reference to the self: a definition of the nature and qualities of the self, without necessarily being evaluative.¹ Aspects of one's self-concept might include the statements that one is female, a biologist, a bridge player, a moviegoer, a hard worker. These are beliefs about the self thought of as undisputable facts.

Terms related to self-affect include self-esteem, self-worth, self-evaluation, and self-feeling. These terms are used to describe the *value* a person places on himself: the extent to which he views himself as valuable, worthwhile, and meaningful. Thus, for example, self-esteem as defined here is a global judgment of the person's overall sense of worth. It is viewed as a relatively stable underlying component of personality, not subject to wide daily fluctuations. Coopersmith (1967) described self-esteem as "a personal judgment of worthiness that is expressed in the attitudes the individual holds toward himself." Harter described feelings of "general self-worth" as including those of "being happy with the way one is, feeling good about the way one acts, and thinking that one is a good person" (1982, p. 88).

"Perceived competence," a term used by Harter (1982) to describe a person's perception of his abilities in specific areas, can be viewed as a self-cognition, but as a self-cognition with close ties to self-esteem. Cooley (1902) first described the connection between competence and self-esteem by saying that self-esteem

appears to be associated chiefly with ideas of the exercise of power, of being a cause . . . The first definite thoughts that a child associates with

1. In both common usage (e.g., "He has a poor self-concept") and elsewhere (e.g., The Piers-Harris Children's Self-Concept Scale), the term "self-concept" is used to suggest an evaluative component. Here a distinction is made between self-concept as descriptive of the self, and self-affect as evaluative of the self.

self-feeling are probably those of his earliest endeavors to control visible objects—his limbs, his playthings, his bottle, and the like. Then he attempts to control the actions of the persons about him, and so his circle of power and self-feeling widens without interruption to the most complex of mature ambition. (Pp. 145–146)

In more recent years, the connection between competence and self-esteem has been explored by White (1963) as well as by Seligman (learned helplessness) (1975), Bandura (self-efficacy) (1977), and Harter (1982). Bowlby referred to both competence and self-esteem, and related them to a variety of theoretical viewpoints:

Typically these [securely attached] children grow up to be secure and self-reliant, and to be trusting, cooperative, and helpful toward others. In the psychoanalytic literature such a person is said to have a strong ego; and he may be described as having “basic trust” (Erickson 1950), “mature dependence” (Fairbairn 1952) or as having “introjected a good object” (Klein 1948). In terms of attachment theory, he is described as having built up a representational model of himself, as being both *able* to help himself and as *worthy* of being helped should difficulties arise. (Italics added; 1979, p. 136)

Harter (1982, 1986) has extensively described perceived competence and its connections with self-esteem. She has suggested (a) that perceived competence in one area can be independent from that in another area, (b) that there is great variation in the extent to which the child's perceived competence matches either actual competence or the perceptions of the child's competence by others, and (c) that there is great variation in the extent to which perceived competence in a particular area relates to self-esteem. One factor frequently considered to influence the impact that competence in a particular area has on a person's self-esteem is the importance of that particular area to that particular person (e.g., Harter 1982; James [1890] 1963; Rogers 1959). James gave an eloquent personal illustration of this point:

I, who for the time have staked my all on being a psychologist, am mortified if others know much more psychology than I. But I am contented to wallow in the grossest ignorance of Greek. My deficiencies there give me no sense of personal humiliation at all. Had I “pretensions” to be a linguist, it would have been just the reverse. (P. 310)

In addition to the importance of an area of performance, a person's aspirations are relevant, a point central to James's ([1890] 1963) definition of self-esteem: “self-esteem=success/pretensions.” Both the extent to which an area is important to the person and, more specifically, how much he expects and desires to achieve success in it, play a direct role in his evaluation of himself. Coopersmith (1967) identified both importance and aspiration (“pretensions”) along with performance and defenses as important elements:

The process of self-judgment derives from a subjective judgment of success, with that appraisal weighted according to the value placed upon different areas of capacity and performance, measured against a person's personal goals and standards and filtered through his capacity to defend himself against presumed or actual occurrences of failure. (P. 242)

A person can use aspects of his self-concept in forming his self-esteem: "I am a good bridge player and a hard worker, therefore I am a good person"; "I am only a mediocre biologist and therefore a worthless person." Self-esteem can also be independent of specific aspects of the self-concept: that is, "I am a good bridge player, yet nonetheless worthless." Yet, self-esteem is, above all, a subjective perception, a perception that may or may not relate to reality. The extent to which self-esteem reflects reality is subject to great individual variation. James ([1890] 1963) stated that although "self-feeling" is usually "the good or bad actual position one holds in the world," it is not necessarily so:

. . . there is a certain average tone of self-feeling which each one of us carries about with him, and which is independent of the objective reasons we may have for satisfaction or discontent. That is, a very meanly-conditioned man may abound in unfaltering conceit, and one who's success in life is secure and who is esteemed by all may remain diffident of his powers to the end. (P. 306)

James's reference to "self-feeling" emphasizes the affective, "felt" component of self-esteem, an aspect emphasized by a number of other theorists (e.g., Cooley 1902). James discussed the difference between what a person *knows* about himself and what he *feels* about himself. A person may know objectively that he is successful, competent, and important to society but may nonetheless *feel* worthless.

Thus, the relations between cognitions and affects related to the self are complex. Many theorists have suggested a hierarchical structure, with self-concept including all self-descriptive statements, and self-esteem as the evaluative component (Epstein 1973; Harter 1983; Rosenberg 1979). Cicchetti (Cicchetti & Hesse 1983; Cicchetti & Schneider-Rosen 1984; Hesse & Cicchetti 1982) has written extensively about the importance of clear distinctions between cognitions and affects, and about the important implications (both theoretical and methodological) of the nature of their interconnections. Cicchetti proposed an interactionist view of the relation between self-affect and self-cognition. He suggested, for instance, that

it may be expected that certain self-cognitions cause specific feelings of self-esteem to arise and that these feelings will have a positive or negative polarity depending upon the content of the cognition. In a reciprocal manner, an intense or enduring affect of self-esteem may be expected to lead to congruent self-cognitions. (Cicchetti & Schneider-Rosen 1986, p. 98)

Most important, clear distinctions between cognitions and affects permit exploration of many questions which can lead to a richer understanding of the complex processes involved in both aspects of the self: What is the nature of the interaction? What is the developmental progress of this interaction? In what cases does self-cognition lead to or affect self-feeling and vice versa?

Not all concepts fall neatly into the two categories of self-cognition and self-affect; there are terms that cut across the distinction between self-cognition and self-affect. "Self-confidence," for example, is such a term. As defined here, self-confidence describes the extent to which the individual believes in his abilities to succeed, to make the appropriate decisions, and/or to act effectively. Self-confidence is considered subject to large and sudden fluctuations dependent on immediate feedback, and it is thus considered less stable than self-concept or self-esteem.

BOWLBY'S "WORKING MODELS"

A concept that also incorporates components of both self-cognition and self-affect is Bowlby's notion of "working models" ([1969] 1982) (Bowlby later referred to these as "representational models" [1980]). Bretherton (1985, in press) and Main (Main, Kaplan, & Cassidy 1985) have extensively discussed working models; they will not be discussed in detail here. Briefly, Bowlby states that the individual creates mental representations which provide him with models of the workings, properties, characteristics, and behavior of attachment figures, the self, others, the world. These models are similar to cognitive maps that permit successful navigation of an organism's environment. Unlike maps, however, working models are not static images but are flexible and adaptable representations. Thus, the concept of these models is similar to Piaget's object concept, in that both are active constructions rather than static representations.

For Bowlby, the foundations of working models are laid during the infant's first year. Bowlby relates working models to the ability to plan, and asserts that it is within the framework of these working models that the child can assess the situation and plan his behavior. Main has suggested that in addition to influencing behavior, working models can also influence feelings, attention, memory, and cognition (Main et al. 1985).

Working models become so deeply ingrained in the individual that the ways in which they influence feelings and behavior may become automatic. This situation carries with it both advantages and disadvantages. Working models can serve a useful purpose for the child, making unnecessary the construction of a new set of expectations for each new situation. For example, a baby who has a working model of his mother as available when needed may spend less time monitoring her movements than a baby unsure of his mother's availability. This use of existing models to appraise and guide behavior in new situations increases efficiency. When models become inaccurate or outdated,

however, their automatic nature may be a disadvantage. Bowlby views working models as remaining to a certain extent open to new input. Nonetheless, he believes that with development working models, particularly working models that are unconscious, become increasingly resistant to change. Thus, when working models are no longer accurate, they may remain to guide an individual's behavior in repetitive and even pathological ways. (See Cicchetti 1988 for further discussion of the role of working models in psychopathology.)

The working models of the self differ from other working models only in that their object is the self. In other ways, they are similar to working models in general: they are active constructions which, because they guide behavior, perception, and feelings, can serve a useful purpose; yet their automatic and unconscious nature renders them resistant to change, and thus potentially pathological when the model becomes outdated or inaccurate.

In connection with his notion of "working models of the self," Bowlby does not make the distinction between self-cognition and self-affect that other theorists have made (e.g., Cicchetti & Schneider-Rosen 1986). For Bowlby, working models have both cognitive and affective components. In fact, Bowlby stated that "the concept of a working model of the self comprehends data at present conceived in terms of self-image, self-esteem, etc." (1979, p. 117), thereby incorporating the terms of both self-cognition (self-image) and self-affect (self-esteem). Bowlby deals with the self *in relation to attachment*, which is, of necessity, the self in an affective context. Bowlby does not deal with neutral concepts such as "I am a piano player" and "a tax-paying citizen," but rather with highly affectively charged cognitions such as "I am lovable," and "I am worthy of being helped in times of trouble." It is logically tenable that, if cognition and affect are separate, it is *possible* that a person could connect the cognition of "I am unworthy of help in times of trouble" with positive self-affect. It is undoubtedly true that some cognitions and affects are independent. However, Bowlby believes that this is not the case for affectively charged cognitions about the lovable and worthiness of the self. For Bowlby, an apparent discrepancy between self-cognition and self-affect—for example, a person who *thinks* he is lovable but *feels* unlovable with an accompanying negative self-affect—does not reflect a discrepancy at all. Rather, the individual is operating with multiple models: in this example, with one model of being lovable and another of being unlovable. Consequently, it is this latter model of being unlovable that meshes with feelings of negative self-affect. Bowlby's notion of multiple working models will be discussed in greater detail in the final section of this chapter.

THE SELF AND THE ROLE OF SOCIAL INTERACTION

The notion that the self arises from the context of social interaction has been common since the last century. Baldwin (1897) was perhaps the first psychologist to describe the importance of social interaction in the formation of

the self. He saw the self and the "alter" (the other person) as two poles of one entity. Baldwin's central idea can be summarized as follows: "My sense of self grows by imitation of you, and my sense of yourself grows in terms of my sense of myself. Both ego and alter are thus essentially social; each is a socius, and each is an imitative creation" (1897, p. 7). Cooley (1902) was the next major theorist to deal with the importance of social interaction for the development of self-esteem. For Cooley, sense of self is always intimately connected with a sense of other people. Cooley introduced the concept of the "looking-glass self," which suggested that an individual's sense of self reflects his perception of what others think of him.

Mead (1934) believed that the child is born without a sense of self and that this gradually develops through experiences with parents, siblings, and others. The role of social interaction is central: "The self, as that which can be an object to itself, is essentially a social structure, and it arises in social experience . . . it is impossible to conceive of a self arising outside social experience" (p. 40). Mead introduced the idea that over time the child extends his view of others to form a "generalized other" (i.e., others in general, society at large) and comes to view the self as seen by this "generalized other." He stated, "We are more or less consciously seeing ourselves as others see us" (p. 272). Mead introduced the idea of the "generalized other." Mead believed that although the self acts differently in different settings, there is an underlying unified self. This notion is necessary if we believe in the construct of *global* self-esteem.

Sullivan (1953), although working in a psychoanalytic perspective, had an interpersonal emphasis rather than an intrapsychic one. In the social interactionist tradition of Baldwin, Cooley, and Mead, he believed that the self is learned through "reflected appraisals." Unlike Mead, however, his emphasis was on interaction with significant others rather than the generalized other. He felt that these appraisals are set in motion long before the acquisition of language, and was the first theorist to emphasize the mother-infant relationship in relation to the development of the self.

Like Sullivan, Bowlby (1969, 1973, 1980) emphasized the infant-mother (principal caregiver) relationship as central to the development of the self. For Bowlby, there is an inextricable intertwining of the working model of the attachment figure and the working model of the self. Over time, the child comes to believe that his mother will behave in certain predictable ways. Based on these experiences, the child simultaneously develops a complementary view of himself. For example, if the child is loved and valued, he comes to feel lovable, valuable, and special. If, however, the child is neglected or rejected, he comes to feel worthless and of little value. Bowlby stated that this intertwining exists despite the fact that this may not necessarily be so:

An unwanted child is likely not only to feel unwanted by his parents but to believe that he is essentially unwantable, namely unwanted by anyone. Conversely, a much-loved child may grow up to be not only confident of

his parents' affection but confident that everyone else will find him lovable too. Though logically indefensible, these crude overgeneralizations are none the less the rule. Once adapted, moreover, and woven into the fabric of working models, they are apt henceforward never to be seriously questioned. (1973, p. 204-205)

For Bowlby, working models are strongly influenced by the child's repeated daily experiences, "in fact far more strongly determined by a child's actual experience throughout childhood than was formerly supposed" (1979, p. 117). Bowlby viewed the ultimate determinant of working models of both the attachment figure and the self as related to the question:

To what extent and in what ways has a [child] had his attachment behavior met, not only during infancy, about which information is uncertain and often entirely speculative, but throughout all the later years of childhood also? (1973, p. 207)

ISSUES IN THE MEASUREMENT OF QUALITY OF ATTACHMENT IN YOUNG CHILDREN

It is proposed here (as it is, in depth, in Main et al. 1985) that the patterns of the child's behavior on reunion with the parent reflect his working model of the relationship with that parent, and that it is for this reason that the study of reunion behavior has yielded important information about relationships. It is important to note here that what is meant by "reunion behavior" is not the specific discrete behaviors but rather the underlying organization of the *patterns* of behavior.

The study of patterns of reunion behavior following brief laboratory separations through the use of Ainsworth's Strange Situation has played a central role in the study of infant social-emotional development. The Strange Situation is a twenty-minute assessment during which the mother and a female "stranger" alternately leave and return to the baby who remains in the toy-filled laboratory room. Patterns of attachment in the Strange Situation in infancy have proven a powerful measure: they have repeatedly been shown to be stable, and have been related both to prior aspects of the infant-mother relationship as well as to a wide variety of later aspects of infant and child functioning (Ainsworth, Blehar, Waters, & Wall 1978; Belsky, Rovine, & Taylor 1984; Cassidy 1986b; Main & Weston 1981; Matas, Arend, & Sroufe 1978; Waters 1978; Waters, Wippman, & Sroufe 1979). (See Bretherton 1985 and Belsky & Isabella 1988 for comprehensive reviews of this literature.)

Of particular relevance to the investigation of self-esteem is the well-replicated finding that the patterning of Strange Situation reunion behavior is related to the qualities of parental sensitive responsiveness which, within attachment theory, theoretically predict self-esteem. This relationship has been

found in at least ten different samples (Ainsworth et al. 1978; Belsky et al. 1984; Egeland & Farber 1984; Frodi, Grolnick, & Bridges 1985; Grossman, Grossman, Spangler, Suess, & Unzer 1985; Main, Tomasini, & Tolan 1979; Maslin & Bates 1983; Matas et al. 1978; Smith & Pedersen 1988; and Sroufe & Rosenberg 1982). One would expect, therefore, that reunion behavior within the Strange Situation would be related to the child's later self-esteem. Support for this expectation has, in fact, been provided by Sroufe and Egeland's longitudinal project (Sroufe 1983). Teachers rated the self-esteem of preschool children using three measures, and found that children who had been securely attached to mother in infancy had higher self-esteem than children who had been insecurely attached.

Until recently, examination of the connection between attachment and the self invariably necessitated a longitudinal study. Thus, if a connection between attachment and the self were to exist, it would be evident only if (a) there were long-term stability in attachment, or (b) there were a sensitive period in infancy whereby early quality of attachment affected later functioning irrespective of changes in attachment. Yet these issues are quite separate from the issue of a connection between attachment and the self. In order to examine the concurrent, rather than the predictive connection between attachment and self-esteem, age-appropriate measures of attachment at later ages are needed.

Few studies have examined child-parent reunion behavior in children after infancy. Marvin (1972, 1977) examined normative trends in the attachment behavior of 2-, 3-, and 4-year-olds in the Strange Situation. He found that 2-year-olds behaved in much the same manner as 1-year-olds: most cried during separation, and those who did were not comforted by the stranger and actively sought mother's proximity on reunion. The 3- and 4-year-olds, however, behaved differently from younger children: those who cried at separation could be comforted by the stranger. Most of the 3-year-olds approached the mother on reunion, whereas the 4-year-olds fell into two groups: one group separated easily and did not seek proximity on reunion; the other group greatly protested separation and engaged in manipulative, controlling behavior on reunion. Marvin used two converging assessments—a delay task, and a series of perspective-taking tasks—as the basis for an ethological-cognitive model for the attenuation of child-mother attachment behavior. Marvin's study has shown that reunion behavior continues to reflect important aspects of the nature of the relationship beyond infancy. This study also revealed that it is with the development of the child's underlying cognitive skills that the organization of attachment behaviors undergoes developmental change as well. Similarly, a study of deaf children indicated that communication skill/competence related to developmental change in the organization of attachment behaviors when measured independently of age and nonverbal IQ (Greenberg & Marvin 1979).

More recently, there is evidence to suggest that reunion behavior of children ages 5–7 reflects the quality of the child-parent attachment. Main and Cassidy (1987) have devised a procedure for scoring the behavior of children this age on reunion with the parent following a laboratory separation. The most striking evidence that patterns of reunion behavior at this age reflect quality of attachment comes from the finding that patterns of attachment in infancy predicted patterns of reunion at age 6 (Cassidy & Main 1984; Main & Cassidy 1988; Main et al. 1985). Although the specific behaviors were naturally different at the two ages, there was stability of the underlying patterns. In Main's longitudinal Berkeley sample of children seen in the Strange Situation at 12 months with mother and at 18 months with father, 84% of the children (twenty-eight of thirty-three) were placed in the same category with mother as they had been in infancy; the corresponding number with father was 60%.² Additional evidence comes from the findings that patterns of attachment at age 6 relate to the child's concurrent functioning in a number of theoretically predicted areas: general social-emotional functioning, responses to questions about what a child might do in situations related to separation, responses to presentation of a photograph of the child's family, and responses to a brief period of aloneness in the playroom (Cassidy & Main 1985; Kaplan 1984; Kaplan & Main 1985; Main et al. 1985). As expected, the functioning of children insecurely attached to mother in infancy was substantially below that of children who had been classified securely attached to mother. Similarly, patterns of reunion behavior at age 6 were found *not* to relate to several variables (i.e., family income, maternal and paternal education) not theoretically related to attachment (Cassidy 1986a). Finally, behavior on reunion with mother at age 6 is independent of that on reunion with father (as it is in infancy), suggesting that this behavior reflects a particular dyadic relationship rather than a trait of the child (Cassidy & Main 1984; Main et al. 1985).

The sixth-year reunion procedure is described in detail in Main and Cassidy (1988) and will be described here only briefly. The procedure is such that the child, parent, and experimenter are together in the toy-filled playroom for approximately twenty minutes. The parent then leaves the room while the child remains in the playroom with the experimenter for approximately one hour. During that time, the child may participate in a variety of assessments, but the fifteen-minute period prior to reunion is spent in free play.³ When the parent returns to the room, reunion is not emphasized, and the parent is given no instructions for reunion. The experimenter is responsive but does not initi-

2. The striking stability of attachment from infancy to age 6 found in Main's Berkeley sample (Main & Cassidy 1988) has recently been replicated with the Grossmanns' German sample. Wartner (1986) found that, from infancy to age 6, 78% of the children showed the same pattern of attachment when classified into one of the three basic groups of Ainsworth's original system.

3. The validity of our system for coding reunion behavior when this procedure is altered has not been demonstrated.

ate interaction. The child's behavior during the three–five minutes following reunion is used for two forms of assessment: ratings and classifications. The security versus insecurity of attachment reflected by reunion behavior is rated on a nine-point scale devised by Main and Cassidy (1987). Ratings at the secure end of the scale are given to the child who initiates (or at least participates in) a warm, intimate relationship with the parent. This is manifested by either physical proximity and/or contact of an affectionate nature, or through eager, responsive, continuing conversation. Ratings at the insecure end of the scale are given for a variety of patterns of behavior: (a) avoidance of the parent; (b) rejecting or punitive treatment of the parent; (c) nervousness and expressed feelings of inadequacy; (d) excessively bright, subtly disorganized responses to reunion; or (e) caregiving and subtly parental responses to the parent.

Each child's behavior on reunion is also rated on a nine-point scale of avoidance devised by Main and Cassidy (1987). This scale, not intended to be independent from the security versus insecurity scale, deals with the intensity and persistence of the child's avoidance of physical or emotional interaction, proximity, or contact. Avoidant behaviors are defined as any behaviors that function to maintain or increase the physical or affective-emotional distance between child and parent, through a shift of attention away from the parent, or through preserving attention to other occupations, conversations, or objects. The tone of avoidance is neutral. Both affection and anger are hidden.

Reunion behavior is also classified as indicating one of four patterns of child-parent attachment: secure, insecure/avoidant, insecure/ambivalent, or insecure/controlling (Main & Cassidy 1987). Children classified as securely attached show some genuine pleasure in the parent and are either initiating or readily responsive to the parent in a relaxed manner. The relationship is personal, warm, and intimate. Children classified as insecurely attached/avoidant avoid the parent in a neutral and nonconfrontational manner. Children classified as insecurely attached/ambivalent show elements of avoidance, sadness, fear, and/or hostility, and are clearly ambivalent about proximity to the parent. Children classified as insecurely attached/controlling have taken control of the child-parent interaction. This role reversal takes one of two forms: (a) the child may take confrontational control of the parent and overtly reject the parent; or (b) the child may subtly attempt to care for or comfort the parent through overly bright greetings or attempts to helpfully orient and guide the parent. Children given the insecurely attached/controlling classification are also given an alternative classification equivalent to one of the three basic patterns of Ainsworth's original system: secure, insecure/avoidant, or insecure/ambivalent. There is also the option of classifying a child who is judged to be insecure but who does not fit into one of the other existing insecure categories as "insecurely attached/other." One child from the Berkeley sample was given this classification.

A more recent study with a separate Charlottesville sample (Cassidy

1986a, 1988) provided data that suggested stability of attachment across two sessions of the sixth-year procedure itself. Over a one-month period, 84% of the children showed the same pattern of reunion behavior when given a classification equivalent to one of the three basic groups of Ainsworth's original system, and 62% showed the same pattern when the fourth group (insecure/controlling) was included. (It was not uncommon for reunion behavior to vary across sessions in the extent of controllingness, yet to show the same *underlying* organization across sessions; in such cases, the child would be considered not stable when the controlling pattern was included and stable when it was not.) This stability across different sessions in which the immediate context may vary supports the notion that the child carries with him an underlying organization related to attachment.

This underlying organization means that, despite situational variation, a child with an avoidant organization in relation to the parent will find a way to be avoidant of her, a child with a secure organization in relation to the parent will find a way to show this security with her, etc. For example, when the mother ignores the child or talks to the stranger, a mother-avoidant 6-year-old can avoid the mother and remain preoccupied with the toys. But if the mother presses for interaction, the child, knowing the rules of social interaction, cannot remain preoccupied with the toys. In order to maintain neutrality and not call attention to the relationship, he must respond. Responses, however, are minimal, and true interest, warmth, and intimacy are lacking—as indeed they are in the relationship itself. This stability is an example of what Kagan (1971) has referred to as “heterotypic continuity.” The particular behavioral manifestation varies (in this case, due to changes in the room, toys, and/or maternal behavior), but an underlying organization in the child remains. Nonetheless, this stability of pattern of behavior on reunion at age 6 across a one-month period does not *in itself* tell us much more than that, following a one-hour separation in an unfamiliar playroom, children behave to their parents in much the same way on different days. This is, however, a necessary step if we are to be able to say that patterns of reunion behavior reflect the quality of the underlying child-parent attachment.

Main and Cassidy (1988) have outlined a number of reasons why the sixth-year reunion procedure is more difficult to code than Ainsworth's strange situation. These reasons relate to both the child (the greater social skills of the 6-year-old; the acquisition of language) and the procedure (the lack of constraints on parental behavior; the use of only one reunion). For these reasons, Main and Cassidy have suggested that classifications based on reunion at age 6 be accompanied with either a second-reunion classification or with a measure tapping the child's representation of attachment (e.g., assessment of the child's family drawing [Kaplan & Main 1985]).

Although the sixth-year reunion procedure has been successful in differentiating children in a number of theoretically predicted ways, there remains

much work to be done in relation to this procedure. In infancy, Ainsworth had extensive home observations to support her claim that the pattern of reunion behavior in the Strange Situation reflected the quality of attachment. Similar empirical support from home observations is essential at age 6 to further substantiate the validity of reunion patterns.

This sixth-year procedure may prove useful when examining the connection between child-parent attachment and the self for several reasons. First of all, it avoids many of the problems characteristic of many previous measures. Wylie critically stated that

the parental or other familial measures variables were most frequently assessed by instruments of unknown reliability and validity. Often children's retrospective reports were used. Or parental interviews, which are notoriously subject to bias and distortion, were often depended upon . . . *No studies used independent observations of parental behaviors and characteristics.* (Italics added; 1979, p. 336)

It is suggested here that the child's behavior on reunion with the parent provides an observational measure of a family variable, that is, child-parent attachment. In addition, it is suggested that attachment may be a more sensitive measure of the components of the child-parent relationship likely to be related to self-esteem than many commonly used measures (e.g., parenting beliefs, punishment practices, family size, birth order, marital status of the parents, parent's reported level of regard for the child, intrafamilial tension, and the parent's own level of self-esteem). Finally, the finding in Main's Berkeley study that specific *patterns* of reunion behavior were related to consistent, coherent, and specific *patterns* of working models suggests that the six-year reunion procedure may prove particularly useful in understanding development.

Although the great majority of research investigating attachment has involved observations of infant/child reunion behavior (see also Cassidy & Marvin's [1988] system for coding reunions of 3- and 4-year-olds), the important work of devising additional attachment measures is well underway, most importantly by Waters and his colleagues (Waters & Deane 1985). These researchers devised a *Q-sort* set of 100 items containing a variety of behaviors theoretically linked to quality of child-parent attachment. Following naturalistic observations in any of a number of settings, observers (or parents or teachers) sort these items into a fixed distribution ranging from "most characteristic of this child" to "least characteristic of this child." A measure of attachment security is derived by comparing the child's *Q-sort* with a criterion sort of a securely attached child. Scores consist of Pearson correlations ranging from +1.0 to -1.0. This technique permits the researcher to treat normatively the ipsative *Q-sort* data. Advantages of the *Q-sort* method include the following: (a) a number of constructs can be scored from the same sort, and observers can be kept blind about the constructs of interest; (b) detailed

knowledge of norms is unnecessary; (c) response biases are reduced; and (d) a distinction can be made between a behavior's significance and its frequency. Item content can be varied to be age appropriate; Waters *Q*-sort was originally used with a sample of children ages 3–4, and a study with infants age 1 year is currently underway. Work with this method is new, and the extent to which the behaviors described by the items in this *Q*-sort reflect the prior quality of the infant/child-parent relationship in the home has yet to be demonstrated. This procedure has a number of strengths; its particular advantages and limitations should be examined with reference to particular populations and particular data collection constraints.

DEVELOPMENTAL LEVEL AND MEASUREMENT OF SELF-ESTEEM

A central issue of self-esteem measurement in young children is the question of whether or not children younger than 8 think in terms of global self-esteem. It may be the case that young children can make judgments about specific abilities ("I can run faster than any other kid on the block"; "I make great popcorn") but cannot make integrated judgments of the type comprising global self-esteem (e.g., "I am a worthwhile person"). Several researchers and theorists (e.g., Bannister & Agnew 1976; Harter 1983; Peevers & Secord 1973; Shantz 1983) have suggested that young children think of themselves in concrete, specific ways and that they develop more global integrated views only later. Harter (1983, 1986), for instance, has repeatedly cited Piaget's developmental theory as strong support for the notion that young children do not perform the complex mental operations needed for global judgments of self. For instance, she said,

It had been our conviction, derived from general developmental theory, that children would not be able to make meaningful judgements about their worth as a person until approximately the age of 8. The very concept of "personness," as a generalization about the self, is not yet firmly established among younger children. As a result, we reasoned, young children cannot make judgements of global self-worth, although they can evaluate their performance in the particular domains of their lives. (1986, p. 143)

Harter has stated that, although children below the age of 8 may *possess* underlying self-esteem, they do not *conceptualize* it in terms similar to older children (Harter 1986, March 28, personal communication). Empirical support for Harter's position came from her findings that young children's responses to the global self-esteem component of her scale did not consistently load on a particular factor as they did with older children. In addition, her studies with mentally retard children whose mental ages were similar to those of young children revealed that "the self-worth subscale did not emerge as a

separate factor as it did for the normal sample, nor did the self-worth items systematically or meaningfully load on any factor" (1986, p. 145).

This issue of overall developmental level has been addressed also by Damon and Hart (1982) who have attributed problems in self-esteem measurement with young children to the fact that "there is no measure of self-esteem that includes in its determination of scores a recognition that the conceptual bases of a subject's self-evaluation may be differently construed and differently weighted at different periods in the subject's development" (p. 842). The authors pointed out that it is possible that the preoperational child is unable to examine the self from as many perspectives as is necessary to produce a global sense of self-worth. A continually growing body of literature, however, suggests that the young child does indeed have perspective-taking and other skills said by Piaget not to occur until age 7 or 8 (Abrahams 1979; Flavell 1974; Flavell, Botkin, Fry, Wright, & Jarvis 1968; Gelman 1978; Marvin, Greenberg, & Mossler 1976; Mossler, Marvin, & Greenberg 1976; Shantz 1983).

In contrast with these theories which suggest a developmental progression in which global self-esteem does not emerge until the age of 8 is Bowlby's attachment theory. Bowlby ([1969] 1982) suggested that a global sense of one's worth develops much earlier, in conjunction with one's relationship with the attachment figure. Bowlby proposed that the infant develops a working model of the attachment figure based on his daily experiences of her availability and responsiveness; the infant then develops a complementary working model of the self as one worthy of the treatment he receives. More recently, attachment theorists have proposed that it is a working model of the attachment *relationship* that first develops:

Together with Sroufe and Fleeson (in press) we presume instead that even a young infant will have a working model of relationships. Knowledge of self and of other will then be embedded in event-based relationships from the outset (cf. Piaget, 1954). In sum, *because a concept of "the attachment figure" apart from the event-relevant relationship between the attachment figure and the young infant does not exist, different relationships will be represented differently from the beginnings of representation.* (Main et al. 1985, p. 75)

In a similar vein, Main has proposed that from infancy onward there exist "individual differences in the mental representation of the self in relation to attachment" (italics added; Main et al. 1985). The model of "the self in relation to attachment" refers to such representations as the extent to which the child feels that he is participating in a relationship in which (when appropriate) he is accepted and valued, the relationship is acknowledged as relevant and important, the child feels safe and protected, and conflict or stressful situations are acknowledged and resolved successfully through the relationship.

Yet even if these representations (of the attachment relationship; of the self in relation to attachment, are present from infancy onward as attachment theorists have proposed, can these be considered equivalent to global self-esteem? What is the nature of the link between the working model of the self *within the relationship with the attachment figure*, and the working model of the self *separate from this relationship*? As Harter pointed out (1983), it is not necessarily the case that, when the relationship with the attachment figure is insecure, the child makes the assumption that there is something wrong with himself. The child's self-esteem may be high, and he may decide that his parent is treating him poorly. Main has found, through use of the Berkeley Adult Attachment Interview, that there are cases in which the adult recalls feelings of this sort: "I was abused, but I knew even then that I did not deserve it" (Main, personal communication, July 1985). Clinical experience, however, has led Bowlby to believe, in general, otherwise:

Logically these variables are independent. In practice they are likely to be confounded. As a result, the model of the attachment figure and the model of the self are likely to develop so as to be complementary and mutually confirming. (1973, p. 204).

Thus, with young children, it may be important to explore both the model of the self within the relationship with the attachment figure as well as the model of the self separate from this relationship.

Support for the notion that young children do make global judgments comes from recent research on children's memory. Eder, Gerlach, and Perlmutter (1987) postulated that previous *research on the self* (including Harter's) led to an expectation that young children would respond to both specific and global questions about themselves (e.g., "What did you do in school today" and "What do you do at school?") with *specific* responses ("I painted pictures today"). They also postulated that, in contrast, previous *research on children's memory* led to an expectation that young children would respond to both kinds of questions about themselves with *general* responses ("I usually play"). In a study designed to examine the responses of young children to these questions, the authors found that children as young as 3½ years provided general responses to general questions and almost never provided specific responses to general questions. Thus, these children did *not* use specific information about the self to make global summations of themselves. On the other hand, although children usually provided specific responses to specific questions, they also provided general responses to specific questions approximately 25% of the time. The authors interpret the predominance of general statements/memories of the self as indicating that these young children have global, context-free conceptions of themselves.

Clearly, the issue of whether global self-esteem in early childhood exists (as attachment theory suggests), or does not (as Harter suggests), is an impor-

tant one. Although Harter's data (1986) suggest an important conceptual change at age 8, a recent study with 6-year-olds revealed that the responses to Harter's global self-esteem subscale of children at this somewhat younger age were consistent (Cronbach's $\alpha = .74$) with a theoretically predicted correlate (security of attachment, $r = .40$, $p = .002$; Cassidy 1988). It is possible that the developmental pathway follows a course that can best be understood by examination of both theoretical perspectives. The infant's earliest sense of self-worth may be in large part global, a function of his early relationships with attachment figures. During the preschool years, the child's greater cognitive, physical, and peer skills may be paralleled by a capacity to evaluate competence in each of these specific domains. And finally, in the early school years, there may be a shift in conceptualization (perhaps related to connections between domain specific and global judgments) or in articulation skills (the younger child may be unable to articulate his global feelings of self-worth). It is not, however, the intent of this portion of this chapter to integrate these two theoretical perspectives but rather to present them for the consideration of researchers. It is not clear that such an integration is possible. Yet it is also not clear that both positions cannot provide a contribution to understanding the self in young children. Continued empirical exploration and further refinement and precision of models will be necessary to fully understand the contributions of each perspective.

MEASUREMENT OF THE SELF IN YOUNG CHILDREN

The history of self-esteem measurement is filled with problems. Many of these problems are common to all research dealing with internal cognitive and affective structures. Historically, self-esteem measures have fallen into three categories: (a) self-report measures, (b) projective measures, and (c) behavioral observations. Each category of measures, with its own set of advantages and disadvantages, is discussed below.

Self-Report Measures

Self-report self-esteem measures share problems common to all self-report measures. Their usual reliance on verbal skills can be viewed as an important limitation. Because both statements and responses usually involve verbal processes, these measures can be particularly problematic when used with young children. In addition, the responses may require a level of reflectivity of which the young child is not capable. Another characteristic feature of these measures is that they overtly and directly ask about the child himself. There is no need to infer, as there is with projective measures, that when the child speaks of "a boy" he is thinking of himself. Yet there is much debate over whether this overt focus on the self is an advantage or a disadvantage (Harter 1983; Wylie 1974). Combs and Soper (1957) described several addi-

tional factors that interfere with the interpretability of self-report measures: the extent to which the individual is consciously aware of his self-perceptions, the individual's level of necessary expressive abilities, the individual's level of motivation and his desire to cooperate, and the level of social desirability in the measurement interaction combined with personal ability of the individual to admit unfavorable attributes. Wells has stated that, "as these factors become salient, the connection between self-conception and self-report becomes vague and indeterminant" (1976, p. 124).

The problem of socially desirable answers is (if possible) even more problematic in self-esteem research than it is in other areas of research. It is reasonable to assume that most people have a natural tendency to want to be seen in a positive, socially desirable light. Yet this tendency may be tied to self-esteem, and when it is self-esteem that is being measured, the difficulties multiply. A child's need to appear perfect may mask low self-esteem. For such a child, the admission of *any* imperfection may be excessively threatening. The ability to openly admit weaknesses, faults, and room for improvement may require a strong self-esteem. Chodorkoff (1954) reported that "relatively well-adjusted people" were less defensive. Thus, the interpretation of very high scores is problematic. Do they reflect truly high self-esteem, or do they reflect a self-esteem so poor and fragile that the individual cannot tolerate discovery of the slightest imperfection? (Specifically in relation to attachment, there is a growing body of literature suggestive of a connection between the avoidant pattern of attachment and a variety of forms of defensiveness. See Cassidy and Kobak 1988 for a review.)

There are three types of self-report self-esteem measures most commonly used: one type uses direct assessment of global self-esteem, one type asks questions about capabilities in a variety of areas and derives a summed score of overall self-esteem, and a third type uses any of a number of rationally derived equations that relate component parts of self-esteem.

Measures that directly assess global self-esteem use global questions such as, "Do you like yourself?" "Do you think you are a worthwhile person?" Rosenberg's (1965) ten-item self-esteem scale for adolescents and adults is a representative measure. Rosenberg described the reasoning behind his choice:

The subject himself may be as ignorant as the investigator about how this complex synthesis of elements has been achieved, but he is in a unique position to recognize, as a matter of immediate experience, the final results. He alone can experience whether he has a generally favorable or unfavorable, positive or negative, pro or con feeling toward himself as a whole. (1979, p. 21)

Harter's (1982) global self-esteem subscale for children age 8 and older, with questions tapping feelings of being a "good" child and "doing the right thing," is also such a measure.

Another type of self-report measure asks specific questions in a variety of areas ("Do you do well in school?" "Are you good at sports?") and lumps them together to come up with a summed overall score (e.g., Coopersmith's Self-Esteem Inventory [1967]; and the Piers-Harris Children's Self-Concept Scale [1969]). Wylie (1974) has argued that claims that these summed scores represent a true global and content-free measure of self-esteem cannot be considered valid. Similarly, Rosenberg (1979) pointed out that "the assessment of [e.g.,] one's academic ability and the view of one's general self-worth are two separate attitudes whose relationship must be investigated, not assumed" (p. 21).

An additional commonly used type of self-report measure involves attempts to break down self-esteem into component parts, measure each component, and devise an equation describing the relations among the component parts (e.g., Dickstein 1977; Harter 1986). James's equation of "self-esteem = success/prentensions" is such an attempt. Equations of this sort involve complex, juggling, weighing of component parts of the equation, and appropriate identification (and weighing) of the relevant performance domains. Researchers are left with a complex array of elements to be identified, weighed, and integrated, and there is, as a result, considerable room for error. Assessment of the validity of these equations is problematic: Researchers can operationalize a theoretically based equation, but they cannot directly test whether it reflects self-esteem. Rather, researchers generally *assume* that their particular equation equals self-esteem and then use it to relate to other variables.

It is possible that even if the proper components of a self-esteem equation could be identified, and even if the proper weighting could be determined, there would be a significant portion of self-esteem unaccounted for through equations of this sort. In James's discussion ([1890] 1963) of his equation, he assumed a unilateral direction of effect: that it is the individual's perception of his success, albeit related to his desires, that yields self-esteem. According to this thinking, if a child has pretensions of being team captain and isn't, his resulting low self-esteem is attributed to the fact of his failure. It is entirely possible, however, that the reverse process is also in operation, that is, that self-esteem influences pretensions. Thus, if the child becomes captain he may raise his pretensions to being class president and may maintain his low self-esteem. No matter how successful he is, he is never satisfied, it is never enough, and he continually feels of little value. In such a case, self-esteem is not determined by the equation of success divided by pretensions, but rather the low self-esteem leads to a continual reshuffling of what constitutes success divided by pretensions. In the case of the aspiring class president, pretensions keep getting higher so that self-esteem is never high. Thus, a child with low self-esteem might think that whatever he is capable of doing must not be worth very much. Groucho Marx expressed feelings of this sort when he said, "Any club that would have me as a member, I wouldn't want to join."

Self-esteem might also determine the level of pretensions in another way. For example, a child with low self-esteem might set his pretensions at a minimal level; a child with high self-esteem, confident that he has resources to succeed and knowledgeable that he will be supported and accepted if he fails, might set his pretensions at a high level. On the other hand, there are, of course, plenty of people with low self-esteem who set their sights high, at times excessively high. It may be that they think they need to excel in order to compensate for being such a worthless person.

There are thus several reasons why an approach to self-esteem measurement through the use of equations of this sort may be subject to methodological problems: it is difficult to identify the appropriate equation, the equation may change, and there are likely to be significant elements related to self-esteem that fall outside the equation. Harter (1983) described an experience with a 10-year-old subject who had participated in a series of measures designed to tap various components of global self-esteem. In a statement acknowledging the fact that certain components of self-esteem fall outside any possible equation, the child said (helpfully), "Are you trying to find out how I feel about myself *in general*?"

It would, however, certainly be premature to imply that measures involving what Harter (1983) has referred to as "delicate equations" are without merit. Certainly they have several advantages: the component parts and their psychometric properties are relatively easy to obtain; there is no difficulty with interrater reliability; the source of the information comes directly from the subject, and he is overtly describing himself; the relationship between the components can be explicitly and precisely (i.e., mathematically) laid out. These advantages suggest that continued exploration of measures of this type is very much worthwhile. Harter (1986) has reported the widely used formula "self-esteem = ideal-self minus real-self" to be useful. Block (1985) assessed the self-esteem of adolescents by comparing real-self and ideal-self *Q*-sorts and found correlates with theoretically predicted constructs (see, however, Hoge & McCarthy 1983 and Wylie 1974 for critiques of that particular formula).

Projective Techniques

The advantages and disadvantages of projective measures have been discussed extensively (e.g., Sigel & Hoffman 1955) and are nearly the reverse of those related to self-report measures. Because the child is not the direct focus of the questions he is less likely to give socially desirable answers. Because he is unaware of what the researcher is interested in there is less censorship. The material received may be quite rich in quality because these measures tap unconscious material, permit a multiplicity of responses, and have no rules of right or wrong. However, there is the possibility that the child's answers do not truly refer to himself but rather to his brother, his friend, a storybook hero,

etc. It is difficult to tell whether the child is fantasizing about the way he'd like to be or describing himself as he truly believes he is. Other problems may arise because of the fact that interpretations are based on external factors rather than being taken at face value. Thus, interpretation may be subjective, and adequate interrater reliability may be difficult to obtain. In addition, it may be difficult to convert interpretations into quantitative scores. Nonetheless, if these difficulties can be dealt with, these techniques can yield rich data. In any case, these are expensive assessments in terms of time spent training, administering, and scoring.

Direct Observation

A third category of measures, consisting of measures derived from direct observation, involves the notion that particular behaviors reflect particular underlying beliefs about the self. Although this assumption seems highly reasonable, unless observations are made over a considerable period, the role of situation specificity can be large. There are clearly cases in which what is being measured is self-confidence rather than self-esteem (e.g., Coopersmith 1967).

Long-term repeated systematic observations of child behavior in natural settings seem more likely to reflect true self-esteem. Waters and his associates (Waters, Noyes, Vaughn, & Ricks 1985) have developed a measure that uses such long-term observation of children as a basis. Observers watch the child repeatedly in one or more naturalistic settings and then complete the California Child *Q*-set (Block & Block 1969). A measure of self-esteem is derived by comparing the description of the child with this *Q*-sort to a *Q*-sort defined by Waters as indicative of the "most highly self-esteeming preschool child." Scores are Pearson correlations. This measure is helpful when a behavioral assessment is particularly desirable, or when the behavior of particularly young children is of interest. (It has been used with children as young as age 3.) Another important factor is that this measure permits investigation of the extent to which a connection exists between "self-esteeming" behavior and the child's own internal representations of his self-worth.

SPECIFIC MEASURES OF THE SELF IN YOUNG CHILDREN

There are two self-esteem measures most widely used with older children, both self-report measures: Coopersmith's Self-Esteem Inventory (1967) and the Piers-Harris Children's Self-Concept Scale (1969). Both measures are somewhat problematic. Coopersmith's Inventory (developed for adolescents) is a fifty-item self-report paper and pencil test that uses items drawn from an adult scale that fall into the domains of parents, peers, school, and global statements about the self. Coopersmith found no evidence that children differentiate across domains of competence, and scores across all domains are

summed to form a single global self-esteem score. This summing is an extremely problematic practice because there is *no* evidence to suggest that an unweighted summing of responses related to specific domains, uniform across individuals, bears any resemblance to global self-esteem (Harter 1986; Rosenberg 1979; Wylie 1974). The Piers-Harris Scale is a similar eighty-item paper and pencil test. The fact that its items were drawn from questions asked to children makes it an improvement over the Coopersmith Inventory, and, in general, it is considered to be less problematic (Wylie 1974, 1979; Robinson & Shaver 1973). Neither scale, however, considers the value the child places on the particular domain considered, and neither guards against responses that excessively reflect social desirability. A third self-esteem measure, Rosenberg's scale (originally designed for use with adolescents and adults) has more recently been used with school-age children, although this use is not widespread (Rosenberg 1979).

Another self-report measure used with increasing frequency (for children age 8 and older) is Harter's Self-Perception Profile for Children (1985). This scale addresses several of the problems found in other measures. The format of the scale, with the presentation of two different types of children, was designed to reduce the possibility of socially desirable answers. In addition, the scale was designed to separately assess the child's feelings of worth in different domains important to children: the domains of scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct. The scale has been used on a number of samples of children, and results support the use of separate domains. Factor analyses reveal high loadings on the four relevant factors across samples, with "no systematic cross-loadings" (Harter 1982). The scale also contains a measure of global self-esteem (as separate from the specific domains). It is this subscale that can be used as a self-esteem measure.

Harter has designed two versions of her scale for younger children called the Pictorial Scales of Perceived Competence and Social Acceptance for Young Children—one for children ages 3–5, and one for children ages 6–7 (Harter & Pike 1984). During scale construction, careful attention was paid to what is particularly relevant to children of particular ages. The pictorial format minimizes the influence of the child's verbal skills. In both versions, the subscale of global self-esteem is replaced with a subscale of maternal acceptance, and a two-factor solution emerges. The first, called "general competence," is defined by the physical and cognitive subscales. The second, called "social acceptance," is defined by the mother and peer acceptance subscales. Although this scale can be used reliably to examine a variety of research questions related to self-esteem (see Harter 1983), it is not in itself a self-esteem measure. And Harter makes it clear that it was not so intended: "[We] have urged that the scale be treated as a measure of what the title indicates, perceived competence and perceived social acceptance, rather than

treating it as a singular measure of 'self-concept' or 'self-esteem'" (1986, p. 143). Part of what necessitates this limitation is the fact that there is no way of assessing the relative importance to the child of the various domains, a component of self-esteem assessment Harter clearly agrees is essential. And the self-esteem subscale, useful for assessing self-esteem in older children, is not present.

Thus, at this time, there is no widely used self-esteem measure for children under ages 7-8. Coopersmith's Inventory and the Piers-Harris Scale were both designed for use with somewhat older children, and their usefulness with younger children is not known. Harter designed a version of her scale for younger children, but, as discussed above, it has no component of self-esteem. Construction of new assessments that consider the many methodological pitfalls thus appears necessary.

With our Charlottesville sample, we have developed and are currently refining an assessment measure for 5-7-year-olds of the child's perception of the way an "unspecified other" views him. This measure is an interview of a large hand puppet, a green frog named Bix. The interview questions are about the child. The voice of the puppet belongs to the child. The assumption is that the child answers questions about himself through the puppet as he imagines this "unspecified other" would answer. It is expected that this interview will reveal the way in which the child imagines that others view him. The way the child imagines that others view him is important in itself. And, if one accepts the widely held notion that the child views himself as he imagines others view him, then his answers to the interview can be interpreted as a reflection of his self-esteem. Whether or not this interpretation is valid, however, particularly with children this young, is an empirical question.

In the puppet interview procedure, the experimenter introduces Bix to the child and demonstrates how Bix works. Following a brief familiarization period, the experimenter looks directly at Bix rather than at the child and interviews Bix. Sample questions to Bix include: (3) Do you like (child) the way he is, or do you want to make him better? How? (16) Do you think (child) is important or not important? (17) Do you care what happens to (child)? The interview lasts approximately ten minutes.

The interview is coded in two ways: on a five-point scale, and by placement into one of three classificatory groups—(a) responses perfect in every way, even after repeated pressing; (b) responses globally and excessively negative; and (c) responses generally positive but with the realistic admission of room for improvement.

After pilot testing, the interview was administered to our sample of fifty-two white, middle-class 6-year-olds. Because a high correlation between the responses of different puppets on different days would strengthen the case that the puppet's responses reflect the child's view of how the "unspecified other" perceives him, the interview was administered one month later with a

yellow duck puppet, Quax. Interrater reliability in both sessions exceeded .85. The interviews of 71% of the children were placed in the same classification group across sessions. Both interviews related (modestly, but significantly) to attachment as assessed in the sixth-year reunion procedure, and particular patterns of responses were related to particular patterns of attachment. The avoidant pattern was associated with "perfect" responses, the controlling pattern was associated with "negative" responses, the ambivalent pattern was associated with both "perfect" and "negative" responses, and the secure pattern (more than any other pattern) was associated with positive but open responses. Although the perfect response was more characteristic of the insecure/avoidant child than of the securely attached child, there were a substantial number of the latter whose responses were in this category. Like other self-report measures, this measure has difficulty distinguishing children who accurately perceive optimal functioning from those who are defensive. In a replication with a smaller German sample consisting of avoidant, controlling, and secure children only, a priori contrasts between securely attached and avoidant children as well as between securely attached and controlling children revealed significantly more optimal functioning for the securely attached children. *Patterns* of response, however, did not distinguish groups, although there was a trend for more securely attached children than avoidant and controlling children to fall into the open category (35% vs. 18% and 15%, respectively; see Cassidy [1986a, 1988] for additional details).

A second assessment on which we are currently working examines the self *within the relationship with the attachment figure* (in this case, the mother). The child is asked to complete a series of incomplete doll stories using a doll house and family. Each story is designed to last approximately two–three minutes. The stories explore what Main has referred to as "the mental representation of the self in relation to attachment" (Main et al. 1985). They explore the extent to which the child views himself as participating in a secure relationship with mother—one in which (when applicable) the child is accepted and valued, the relationship is acknowledged as relevant and important, the child feels safe and protected, and conflict or stressful situations are acknowledged and resolved successfully through the relationship.

Two stories deal with potentially emotionally charged mother-child interactions. In one, the child gives a present he made to his mother. In the other, the child approaches his mother and says, "I'm sorry, mom." Two stories (taken from Walsh 1956) deal with conflict within the family, principally with the mother. In one story, the child does not like what is served for dinner. In the other, the child has to do the one thing he most hates doing. The final two stories deal with conflict or a threat from outside the family. In one, the child discovers his bicycle has been stolen and sees an unfamiliar child riding it away down the street. In the other, the child is awakened by a loud noise in the middle of the night.

Stories are assessed in two ways. First, each of the six stories is rated from verbatim transcripts separately (i.e., with the rater blind to remaining stories) on a different five-point scale. These scales varied to fit the particulars of the story, but, in general, scores were given at the high end of the scale for stories in which, as described earlier, the child feels accepted and valued, the relationship is acknowledged as relevant and important, the child feels safe and protected, and conflict or stressful situations are acknowledged and resolved successfully through the relationship. Second, stories are placed into one of three classifications: secure/confident, avoidant, or hostile/negative. The doll story procedure was administered to our Charlottesville sample of fifty-two 6-year-olds. Mean interrater agreement for classification group was 86%; stability of story classification across one month for the one story that was repeated was 73%. There were significant connections between responses to the stories and attachment as assessed in the six-year reunion procedure, and particular patterns of some stories related to particular patterns of attachment. When there were connections, there were tendencies for the stories of children securely attached to their mothers to be secure/confident, for stories of children avoidant on reunion to be avoidant, and for stories of children controlling on reunion with mother to be hostile/negative. Stories of children ambivalent on reunion fell evenly across categories (see Cassidy [1986a, 1988] for additional details).

A third assessment consists of a twenty-item question interview in which the child is asked directly to talk about himself. This interview is direct in that the child (rather than a puppet) describes himself (rather than a doll protagonist). Sample questions include: (1) Can you tell me something you like about yourself? (3) What do you think is not so good about yourself? (5) Do you think you're special? (7) Is there any way you could be a better kid? (15) Is there any way you would change yourself so you'd be happier? (19) Can you tell me five words about you? (20) If I was going to tell somebody just one thing about you, what would it be? Responses to the interviews fell into four categories: (a) open/flexible—the child described the self in a positive way, yet was able to recognize and admit less than perfect aspects of the self; (b) avoidant/perfect—the child described the self as perfect, and relationships were neither acknowledged nor used as relevant descriptors of the self; (c) negative—the child made excessive negative and few positive statements about the self; and (d) body preoccupied—the child made pervasive references to his body to the extent that references to additional components of the self were excluded. This fourth category was not anticipated prior to review of the transcripts. Interrater reliability for group placement of the interview was 90%. Stability of responses has not yet been established.

Patterns of interview responses were significantly related to patterns of attachment assessed both in the same session and one month later. There was a tendency for responses of children classified securely attached to fall in

the open category, for responses of children classified insecurely attached/avoidant to fall into the avoidant/perfect category, and for responses of children classified insecurely attached/controlling to fall into the negative category. The responses of children classified insecurely attached/ambivalent fell evenly across categories; all three interviews in which there was an emphasis on the child's body were interviews of children classified insecurely attached/ambivalent.

The development of self-esteem assessments for young children must be continued with great care, given the uncertainty related to the young child's representational and cognitive capacities. There is some evidence that the doll stories procedure, the puppet interview, and the interview of the child may be moderately successful in assessing aspects of the self in young children. Yet there is clearly much work to be done in relation to these assessments. It may be helpful here to provide for other researchers a summary of some of the major problems with existing self-esteem measures that should be carefully considered when exploring the connection between self-esteem and attachment. These problems include the following:

1. There is confusion over whether children below age 8 can make global judgements relevant to self-esteem.
2. Developmental level is not always sufficiently considered when designing both form and content.
3. The difficulty that young children may have with verbal expression or with understanding abstract concepts is not always considered.
4. There is difficulty differentiating between conscious and unconscious models of the self.
5. Scores in various domains are often combined to yield summary scores; questions about global self-esteem are often combined with questions about other domains.
6. The importance the child places on the domain is often overlooked.
7. Problems with social desirability are large, and the interpretation of very high scores is difficult.
8. Behavioral measures often reflect self-confidence, persistence, and frustration tolerance rather than the child's underlying sense of self-esteem.

ADDITIONAL ISSUES

Direction of Effects

It is important here to mention the issue the direction of effects. In studies with correlational designs, the issue of causation cannot be addressed. Although historically many theoreticians have believed that it is the child-parent relationship that leads to the quality of self-esteem (Bowlby prominently among them), it is possible that the reverse is the case. For instance, a

child with low self-esteem may make it difficult for the parent to establish a good relationship, in which case the poor self-esteem would be causing the poor child-parent relationship. Another possibility is that both the child-parent relationship and the child's self-esteem are both mediated by other variables. For instance, a child's poor performance in sports and/or school may lead both to poor self-esteem and a poor child-parent relationship. None of these simple formulae is likely to be entirely valid. Of course, even if it is the child-parent relationship that primarily influences self-esteem, characteristics of both the child and the parent are likely to play a role in the quality of that relationship. Thus, once there is support for the existence of a connection between self-esteem and the child-parent relationship, examination of precisely what leads to this connection will be important as well.

Further Components of Self-Esteem

Wylie (1974) has proposed, and it has been proposed here, that much of the difficulty in illustrating a connection between social relationships and the self stems from methodological failings. However, Bretherton (1985) has pointed out two important reasons why the issue of the relationship between social interaction and self-esteem is a complex one, and why it may prove difficult to discover a strong relationship between the two. First, there may be two or more models of the self and of the attachment figure. For example, a child may have a large global model of the parent based on what he has been told by his parents and others (Bowlby refers to this as being based on semantic memory). Examples of this type of model might be: "My mother adores me," and "We're one big happy family which comes together on holidays for really nice times." Conflicting with this model may be a model based on concrete, specific instances of behavior and interaction that the individual experiences (Bowlby refers to this as being based on episodic memory). Examples of this type of model might be: "My mother told me to go away when I fought with my best friend and really needed her," and "Everybody fought a lot during preparations for Easter dinner last year, and we were all relieved when the holiday was over." In dysfunctional families, it is common for children to have two (or even more) such competing models. One model is dominant and readily accessible and the other less readily accessible. The less accessible model can influence feelings and behavior more or less outside of awareness. Bowlby described this as follows:

When multiple models of a single figure are operative they are likely to differ in regard to their origin, their dominance and the extent to which the subject is aware of them. In a person suffering from emotional disturbance it is common to find that the model that has the greatest influence on his perceptions and forecasts, and therefore on his feeling and behavior is one that developed during his early years and is constructed along

fairly primitive lines, but that the person may be relatively, or completely, unaware of; while, simultaneously, there is operating within him a second, and perhaps radically incompatible, model, that developed later, that is much more sophisticated, and that the person is more nearly aware of and that he may mistakenly assume to be dominant. (1973, p. 205)

Thus, when examining connections between the child's working models of the self and of the attachment figure, the existence of multiple conflicting models of the attachment figure complicates the issue.

A second factor discussed by Bretherton (1985) is that there is usually more than one attachment figure. The role of additional attachment figures must be considered. Are they as influential? Do they influence the child in different ways? What happens when one attachment figure suggests that the child is lovable and valuable and another suggests that the child is of little value? Do these conflicted views become integrated into the formation of one representational model of the self? If so, through what process does this occur? Can secure attachment to one parent serve as a buffer (i.e., contribute to positive self-esteem) in light of an insecure attachment to the other parent? Are same-sex linkages (i.e., father-son, mother-daughter) particularly important in relation to self-esteem? Can sibling relationships play a role? Use of a family systems approach to attachment may be helpful (Marvin & Stewart, this vol.) In addition to these factors discussed by Bretherton, other variables that may contribute to self-esteem include quality of the marital relationship, the child's physical attractiveness, and support from the social network of both child and family. The impact of external events impinging upon the family must be considered. What is the role of such factors as race, socioeconomic status, and family composition? What is the role of temperament? What are the roles of the child's basic capacities and limitations (e.g., his cognitive ability, athletic skill, etc.)? Are particular aspects of self-esteem more sensitive to the child-parent relationship than are others? The extent to which these factors relate to self-esteem is an empirical question important for researchers to continue to explore.

SUMMARY

Several theories converge to suggest a connection between social interaction, particularly interaction with principal caregivers, and the child's self-esteem. Despite this convergence, empirical support for this connection has been difficult to find. Part of this difficulty may stem from the inherent complexity of this connection, and part may stem from methodological problems with measures of both social interaction and self-esteem. Bowlby's attachment theory emphasizes the attachment component of the parent-child relationship as being of particular importance, yet there has been little work specifically assessing the connection between attachment and self-esteem.

When attachment is assessed in infancy, investigation of this connection necessitates a longitudinal study, a design that raises a host of additional questions and contingencies. More recently, assessments of attachment beyond infancy permit simultaneous investigation of the connection between attachment and self-esteem.

The developmental level of the child is important in any investigation involving a complex mental representation such as self-esteem. There remains a great deal of uncertainty about the specific representational abilities of young children. Careful attention to definitions and to the specific delineation of precisely what is being assessed (i.e., perceived competence in particular areas vs. the self within the relationship with the attachment figure vs. the self as the child imagines others view him vs. global self-esteem, etc.). These various components of the self in young children may not be integrated in the way theory predicts or as they may be in older children and adults.

This chapter has emphasized a number of theoretical and methodological issues to be considered when investigating the connection between attachment and self-esteem in young children. This connection is complex, and it may never be possible to account for a great deal of the variance. Nonetheless, given the central role of the self throughout the life span, continued attempts to understand its correlates are crucial.

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