ATTACHMENT THEORY: IMPLICATIONS FOR SCHOOL PSYCHOLOGY

JANICE H. KENNEDY

Georgia Southern University

CHARLES E. KENNEDY

Burke County Schools

The effective practice of school psychology requires a strong research and theoretical base, a framework that encompasses developmental processes and outcomes, both adaptive and maladaptive, which facilitates assessment and intervention and offers insight into classroom and family dynamics. Attachment theory provides the school psychologist with just such a framework. In the present article we provide a brief overview of attachment theory and describe risk factors for development of insecure attachment. Behavioral trajectories of children and adolescents according to attachment classification are discussed. Finally, student–teacher interactions within an attachment perspective and implications for interventions are presented. © 2004 Wiley Periodicals, Inc.

School psychologists have traditionally focused on assessment, prevention, and intervention strategies for a myriad of factors that influence school performance. Skills that enhance the performance of these tasks include a thorough knowledge of developmental processes—both adaptive and maladaptive. Moreover, the effective practice of school psychology requires a strong theory and research-based perspective (Merrell, 2002). One such theory that can add to the school psychologist's toolbox is Bowlby's ethological attachment theory (1969/1982), which provides an essential framework for understanding the impact of early social/emotional relationships on cognitive-affective structures used by the child to construct views of the world, self, and others. Attachment theory addresses social–emotional development from the perspective of both process and outcome and has identified a variety of markers predictive of later academic performance, social competence, and psychopathology. Subsequently, the theory offers school psychologists a theoretically and empirically based framework from which to approach hypothesis generation relevant to assessment and individualized intervention planning. Attachment theory provides an awareness of and new meanings derived from the child's history and the subtleties of observed child, parent, and teacher behaviors in the current context. In the current article, we present an overview of attachment theory, classifications of attachment status, risk factors for development of insecure attachment and behavioral outcomes associated with each attachment classification. Finally, student–teacher relationships from an attachment perspective and implications for assessment and intervention are described.

OVERVIEW OF BOWLBY'S ETHOLOGICAL THEORY OF ATTACHMENT

Attachment is an affectional bond between child and primary caregiver (Ainsworth, Blehar, Waters, & Wall, 1978). Since Bowlby (1969/1982) generated an ethological theory of mother–child attachment relations over 30 years ago, attachment theory has been instrumental in guiding both research in emotional development and clinical intervention through the lifespan.

Attachment to the primary caregiver develops over the course of the first 18 months or so (Bowlby, 1969/1982). Infants are born with a propensity to direct precursory attachment behaviors to human figures (e.g., crying, looking, clinging) to which caregivers are particularly likely to respond. These behaviors elicit caregiving and bring the caregiver into close proximity with the

Correspondence to: Janice H. Kennedy, Department of Psychology, Georgia State University, Statesboro, GA 30460-8041. E-mail: jkennedy@gasou.edu

infant, ensuring protection from environmental dangers and a sense of security. Over time, infants begin to direct these responses primarily to one or a few caregivers. Around 7 to 8 months of age, infants show attachment to caregivers by protesting their leaving and grieving for them during their absence. As toddlers, children form a goal-corrected partnership in that they can begin to perceive events during interactions with mother from her perspective (Bowlby, 1969/1982). For example, toddlers may be less insistent than infants in demanding that their needs be met immediately if they have developed confidence in the caregiver's dependability in meeting their needs. During this time, toddlers are forming an internal working model (IWM) of the attachment relationship which informs them about their own self-worth and the dependability of others to provide needed attention and care.

The IWM provides mental representations of self and others and is the mechanism by which early experiences influence the quality of later attachment relationships. With development of language and cognitive abilities these representations become more elaborate, stable, and symbolic (Bretherton & Munholland, 1999). They form the basis for expectations of dependability and responsiveness of others and affective tone within interpersonal relationships (Cicchetti, Toth, & Lynch, 1995; Main, Kaplan, & Cassidy, 1985), both within and beyond the family. These representations are viewed as guiding and structuring cognition, language, affect, and behavior through the development of strategies, both adaptive and maladaptive, for coping with stress and seeking social support (Cicchetti et al., 1995). For example, if one expects the world to be cold and rejecting based on prior experiences, the individual may project an unfriendly demeanor to new acquaintances' neutral behavior. The acquaintance may respond in kind (in a manner consistent with expectations), shaping the kinds of experiences a child has through development.

Ainsworth and her colleagues (e.g., Ainsworth & Bell, 1970) were first to provide empirical evidence for Bowlby's attachment theory. Using the strange situation procedure, Ainsworth and Bell classified infants into one of three categories: (1) secure, in which infants use the mother as a secure base for exploration and seek contact with her after separation; (2) anxious–ambivalent (later called "resistant"), in which infants are unable to use the mother as a secure base and are often angry and push her away upon reunion; (3) anxious–avoidant, in which infants fail to use the mother as a secure base for exploration and avoid the mother upon reunion or approach her only indirectly. In more recent work (Main & Solomon, 1990) a fourth category was devised (disorganized–disoriented) in which there is no predictable or effective pattern of eliciting caregiving behaviors by infants when stressed.

Each of these attachment classifications, across the lifespan, may be considered on a continuum of emotional regulation for managing affect, events, and relationships (Dozier, Stovall, & Albus, 1999). This conceptualization places the anxious–avoidant style, with its overly organized strategies for controlling and minimizing affect at one end of the continuum, and the relatively uncontrolled, poorly managed affect of anxious–resistant styles at the opposite end. Secure attachment, falling along the midpoint of the emotional continuum, reflects a balance of the two extremes of emotional regulation. Those with disorganized–disoriented attachment classifications may present a range of behaviors involving undercontrolled emotional reactions such as impulsive verbal and/or physical aggression or overcontrolled responses in which emotions are difficult to express and behavior may reflect withdrawal and difficulty handling conflict (Jacobite & Hazen, 1999). Thus, their emotional reactions are unpredictable and typically maladaptive.

Risk Factors for Development of Insecure and Disorganized Attachment Patterns

Early experiences with the caregiver are important in developing secure attachment relationships. Although under stress the drive to achieve proximity to caregivers is universal, the method

used by infants to express their desire for proximity to the caregiver is dependent on caregivers' responses to them in the past. Certain parental factors are predictive of attachment security throughout development. Of particular importance are sensitivity and responsiveness (e.g., DeWolff & van IJzendoorn, 1997). Ainsworth and Bell (1970) reported that caregivers of anxious–resistant infants were unreliably responsive to infant needs, had poor timing in response to infant distress, and often obtrusively interrupted infant play. Caregivers of anxious–avoidant infants were unresponsive to infant needs and often rejected infant attempts to achieve proximity.

More recent work (e.g., Main & Hesse, 1990; Main & Solomon, 1990) has reported that caregivers of infants with a disorganized–disoriented attachment style are often psychiatrically distressed and/or are dealing with unresolved personal loss. These mothers appear to be either frightened and/or are seen as frightening by their infants (Main & Solomon, 1990). This pattern is typically associated with a high-risk home environment, including such factors as abuse, stress, and poverty (Main & Solomon, 1990). These infants have the greatest risk for later psychopathology. Main et al. (1985) reported that in preschool children, the disorganized pattern of attachment is demonstrated by either punitive-controlling or caregiving-controlling behaviors. The first type is characterized by aggressive, hostile, and punitive behaviors; the second type by manipulative, overly affectionate, bright, or coy behaviors in dealing with attachment figures.

During development attachment classifications remain relatively stable across time, especially if the environment remains stable (Waters, Merrick, Treboux, Crowell, & Abersheim, 2000). Attachment researchers overall agree that early experiences with the primary caregiver are particularly important in forming one's later attachment style (e.g., Ainsworth, 1989) as the primary caregiver is assumed to serve as the prototype for future relationships. It is imperative to examine attachment relations beyond infancy as well, especially in high-risk samples. For example, maternal depression during the child's first five years was associated with insecure attachment and both internalizing and externalizing behavior at age 7 (Lyons-Ruth, Easterbrooks, & Cibelli, 1997).

Children's Attachment Styles and Associated Behavioral Outcomes

Not surprisingly, insecure attachment (especially when combined with other developmental risk factors such as low SES, chaotic home environment, and inconsistent/hostile/rejecting maternal behavior) is associated with higher risk for both internalizing and externalizing behavior problems, presumably via the IWM. Although insecure attachments are not necessarily pathological states in themselves (Goldberg, 1997), current research does suggest a strong relation between one's early attachment classification and later social, emotional, behavioral, and academic outcomes (Jacobsen & Hofmann, 1997).

Children with secure attachment histories are more likely to develop internal representations of others as supportive, helpful, and positive and to view themselves as competent and worthy of respect (Jacobsen & Hofmann, 1997). Securely attached children relate more positively to both peers and adults, demonstrate greater ego-resiliency, engage in more complex play, and receive higher sociometric ratings than children classified as insecure (e.g., Howes, Matheson, & Hamilton, 1994). They also have been found to exhibit more flexible and socially appropriate emotional expression and control (Cassidy, 1994), show more focused attention and participation in class, and earn higher grades (Jacobsen & Hofmann, 1997). Securely attached children also demonstrate better functioning goal-corrected partnerships, characterized by more mature perspective-taking, mutual communication of affect, and joint planning (Crittenden, 1992) than insecure or disorganized–disoriented peers. In similar fashion secure adolescents report more satisfying interpersonal relationships and greater trust in others (Larose & Bernier, 2001). They also exhibit a more positive, integrated view of self, are more prone to positive self-disclosure, and cope more adaptively with stressful situations (Mikulincer & Nachshon, 1991).

The anxious–avoidant child uses less effective strategies in stressful situations (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993) to self-regulate negative affect. They may resist seeking help from others and demonstrate less dependence upon their social network (Kobak & Sceery, 1988; Larose & Bernier, 2001). In this process they limit access to their own feelings and view others as undependable or rejecting. Anxious–avoidant children thus fail to develop trusting relationships with others, seeing others as unable to provide emotional closeness and comfort, and thus feeling socially and emotionally isolated. These children show more externalizing (Cassidy & Kobak, 1988; Rosenstein & Horowitz, 1996) and aggressive, antisocial behavior (Renken, Egeland, Marvinney, Mangelsdorf, & Sroufe, 1989; Sroufe, Fox, & Pancake, 1983), reflected by lying, bullying, and interpersonal insensitivity. Adolescents with an anxious–avoidant attachment style also demonstrate distancing strategies to minimize emotional stress (Dozier, Lomax, Tyrrell, & Lee, 2001). In clinical settings, their distrust of others, lack of comfort with interpersonal issues, and tendencies toward nondisclosure contribute to their being less responsive to therapy (Dozier et al., 2001).

Children with an anxious–resistant attachment style typically exhibit hyperactivation of the attachment system when under stress (Kobak et al., 1993) as reflected in exaggerated emotional reactions and/or behaviors. Even under conditions of minimal distress, exploration of both social and learning environments is sacrificed for maintenance of proximity to and attention of the caregiver. These children may lack self-confidence, become reticent in unfamiliar settings and may become more socially isolated from peers (Jacobsen & Hofmann, 1997). Yet they tend to orient more frequently toward adults (Sroufe, Carlson, Levy, & Egeland, 1999) than securely attached children. Anxious–resistant children may be easily overstimulated and present as reactive, impulsive, restless, and easily frustrated (Sroufe et al., 1983). They show higher frequencies of internalizing problems (Warren, Houston, Egeland, & Sroufe, 1997) and are more likely to exhibit passive withdrawal behavior (Renkin et al., 1989). Adolescents with this classification demonstrate a greater frequency of anxiety disorders, dysthymic traits, and borderline personality disorder than secure or other insecure categories (Cassidy, 1994; Rosenstein & Horowitz, 1996).

Disorganized attachment predicts the poorest outcome in infancy and beyond. Infants classified as disorganized–disoriented typically fail to develop an organized strategy for successfully coping with separation distress (Main & Hesse, 1990). Studies have demonstrated a link, especially for high-risk samples, between disorganized-controlling attachment and later behavior problems in preschool and school-aged children (Lyons-Ruth, Alpern, & Repacholi, 1993; Speltz, Greenberg, & DeKlyen, 1990). These problems orient primarily around aggressive and disruptive behaviors and social isolation (Carlson, 1998; Lyons-Ruth et al., 1993). Jacobite and Hazen (1999) suggest that under stress the disorganized child sees others as potential threats and might shift between social withdrawal and defensively aggressive behavior, thus exhibiting difficulties in responding appropriately and contingently to others. Over time these individuals are at risk for borderline personality (Rosenstein & Horowitz, 1996) and dissociative disorders (Carlson, 1998).

Retrospective studies of childhood psychopathologies and attachment history corroborate these findings. Among students with externalizing, disruptive behavior problems Lyons-Ruth and colleagues (1993; 1997) reported that 71 to 87% had histories of disorganized–disoriented attachment. In other samples (Greenberg, Speltz, DeKlyen, & Endivia, 1991) a large proportion (80–84%) of clinic-referred children between ages 3 to 6 years have been classified as insecure, with 32 to 40% exhibiting the disorganized–disoriented attachment pattern. Estimates of disorganized–disoriented attachment among maltreated children may be as high as 77% (van IJzendoorn, 1999).

Both disruptive, externalizing disorders (e.g., oppositional defiant disorder, conduct disorder, and attention deficit hyperactive disorder), and internalizing disorders (e.g., depression) show higher incidence levels in those with disorganized status (Graham & Easterbrooks, 2000; Greenberg

& Hickman, 1991; Lyons-Ruth et al., 1993). Victims of physical and sexual abuse, as well as individuals with suicidal ideation, are also more likely to have a disorganized status whereas those experiencing neglect are more frequently associated with anxious–resistant status (Adam, Sheldon-Keller, & West, 1996; Finzi, Ram, Har-Even, Shnit & Weizman, 2001). Anxious-resistant individuals also may demonstrate high levels of self-focused disclosure, disposing them to greater risk of rejection and social isolation (Mikulincer & Nachshon, 1991). An anxious-avoidant attachment history is related to greater levels of social isolation, limited self-disclosure and less social support seeking behavior (Jacobsen & Hofmann, 1997; Larose & Bernier, 2001).

Close Emotional Relationships Beyond Child-Parent Attachment

Others have explained the development of relationships beyond the family environment that provide emotional support and protection using an attachment model. Howes (1999) identified three criteria for identifying attachment figures outside the parent–child relationship: (1) provision of physical and emotional care, (2) a consistent presence in one's life, and (3) an emotional investment in the individual. Thus, relationships with day care providers (e.g., Howes, 1999), psychotherapists (Dozier, Cue, & Barnett, 1994), and school teachers (Pianta & Steinberg, 1992) may be qualitatively similar to those with the primary attachment figure. Through the opportunity for emotional and physical proximity, the student–teacher relationship may provide for exploration from a secure base and a safe haven under stress.

Development of Student–Teacher Relationships

The child's IWM, defined by earlier experiences with primary caregivers, structure expectations concerning relationships outside the family. Pianta and Steinberg (1992) suggest that the quality of the teacher–child relationship is linked to the quality of the parent–child relationship. Further, children who experience positive, supportive relationships with their teachers (Howes & Smith, 1995) demonstrate greater social competence with both peers and adults in school, are more frequently ensconced in supportive social networks, have fewer behavior problems and demonstrate higher achievement orientation and academic performance (Howes et al., 1994; Pianta, Steinberg, & Rollins, 1995) when compared to peers with insecure relationships. Moreover, Pianta and Steinberg reported that teachers' mental representations of their own relationships with students predicted students' academic performance and adjustment in school.

The Classroom as a Dynamic System

Learning is most efficient within the context of exploration of the environment from a secure base (Bowlby, 1969/1982). A secure base depends on the child's IWM of caregivers as sensitive, accessible, and responsive to their needs, allowing anxiety-free cognitive and social learning.

Like the relationship with the primary caregiver, the student–teacher relationship is a dynamic, multifaceted, interactive system as well, evolving over time and across multiple situations (Pianta, 1999). Teachers bring to the classroom behavioral patterns that reflect feelings and expectations concerning their interactions with children and their motivational goals/behaviors associated with their own attachment style. For example, individuals with a dismissing (avoidant) status typically distance themselves emotionally and may appear less sensitive and responsive to the overtures and needs of others. A teacher with this attachment style may subsequently be perceived by students as less accessible and supportive.

Interaction of Teachers' and Students' Internal Working Models

Previous research has found that adults differ in their ability to act as a secure base for children in their care according to their own attachment style. Secure adults are typically more

able to evaluate realistically their own relationship histories and respond sensitively and appropriately to a child's attachment needs (Crowell & Feldman, 1988) than adults with an insecure attachment history. Dozier et al. (1994) found that clinicians with secure status responded more appropriately to their client's underlying needs regardless of the client's attachment status. Insecure clinicians were more likely to respond to the more obvious surface-level problems, to feed into the client's expectations of others, and to reinforce their models of relationships. It may be useful to look for similar patterns of behavior in secure and insecure teachers in their relationships with students.

Teachers with a dismissing (avoidant) attachment style may experience difficulty recognizing their own lack of warmth, trust, and sensitivity in their relationships with their students. They may have unrealistic expectations for their students' maturity and independence as they themselves may have learned to be overly self-reliant and distant in their own interpersonal relationships. Teachers with a dismissing status may respond to students generally by distancing themselves, demonstrating a lack of warmth and understanding. The teacher with a preoccupied (resistant) style may be intermittently attuned to students' needs and become easily involved in dealing with specific observable behaviors without addressing underlying problems.

Teachers, regardless of their attachment status, may perceive the anxious-avoidant student as passively aggressive, angry, withdrawn, and uncooperative and the anxious-resistant students as overly dependent and reactive, demanding of attention, and prone to impulsivity and acting out behavior. The disorganized student may be viewed as aggressive, reactive, unpredictable, and difficult to manage. Because of their own relationship needs teachers may be more accepting of students with one attachment style as compared to another. Teachers with preoccupied status, because of their own dependency needs, may be more supportive of the anxious-resistant student and rejecting of anxious-avoidant and disorganized students, bolstering the negative IWMs of relationships for these children. Teachers with a dismissing attachment style (with the need to maintain an emotional distance from others) would be expected to show less acceptance of anxious-resistant and disorganized students (who need too much help or supervision), but also fail to support avoidant children (who are reluctant to ask for assistance). Both dismissing and preoccupied teachers would be expected to work best with children secure in attachment style. The secure teacher, on the other hand, may recognize in the anxious-avoidant students' withdrawal and aloofness, the anxious-resistant students' dependency and the disorganized students' acting out behavior, the need to foster positive supportive interaction, trust, and relatedness in their relationship (a process which may contribute to the development of a more positive IWM and foster a more cooperative relationship).

Working With Children With Insecure Attachment

Insecure attachment styles in themselves are not pathological states and do not show a one-to-one correspondence to specific diagnostic classification as reflected in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994). Individuals with identical DSM-IV classifications, such as depression, may vary in their attachment styles, presumably as a result of different IWMs of self and others. For example, Barber and Muenz (1996) reported that depression involving internalizing self-blame is associated with a preoccupied, anxious-resistant classification, while depression characterized by externalizing behavior with interpersonal hostility is related to an anxious-avoidant style. They found that individuals with these two attachment styles respond positively to different treatment strategies, supporting the contention that each attachment style reflects different needs and represents different mechanisms for emotional regulation, thus requiring different intervention strategies (Dozier et al., 1994).

School-based attachment-oriented interventions have rarely been addressed in the literature. Effective clinic-based treatment strategies for use with parent–child pairs have been frequently reported (e.g., Leiberman, 1992; Leiberman & Pawl, 1990; Speltz, 1990) and have implications for school-based intervention. Specifically, strategies used by Leiberman (1992) in the treatment of insecure infant–mother dyads are relevant to intervention within the school setting. Her primary points may be restated for application to teacher–student relationships as follows: teachers must understand their own internal working models as well as those of their students, and the students' observable behaviors must be recognized as a reflection of their inner experiences and relationship history.

The school psychologist may address these points using contextually based, insight-oriented consultative strategies designed to facilitate teachers' understanding of their own styles of relating, feelings, and attitudes toward students and their interactional goals as well as the behaviors, feelings, and needs of the students themselves (Pianta, 1999). Helping teachers recognize the impact of negative emotions on classroom behavior, the benefits of positive student–teacher interactions and the need to view children's behavior as the cumulative result of their relationship histories may enhance teachers' sensitivity to student needs as well as increase the understanding of contextually based behavior.

The school psychologist's use of traditional behavioral interventions with students combined with attachment-oriented strategies may provide the best long-term outcomes. For example, Speltz (1990) used traditional behavior modification strategies to eliminate high frequency disruptive behavior in the classroom while simultaneously addressing attachment issues with the parents, child, and teachers. Common problems such as social skills deficits and a range of internalizing and externalizing behaviors affect academic performance, as well as factors such as child neglect, abuse, and the presence of an alcoholic or mentally ill parent. Interventions found to be effective with these problems may be significantly enhanced by inclusion of attachment-specific strategies.

Within an attachment perspective effective intervention requires assessment of the IWMs of the student and teacher as well as the current context. Knowledge of relationship histories and risk factors enhances understanding of the interplay between these three elements within the classroom. Attachment-oriented strategies thus are individualized to address identified needs. The school psychologist guides teachers through this process, helping them to define and understand attachment-relevant variables and tailor strategies that are compatible with student needs and their own capabilities and settings (see Figure 1).

RELATION OF ATTACHMENT TO SCHOOL-PROBLEM PREVENTION AND INTERVENTION

Three central themes related to prevention and intervention are apparent, each of which contains separate yet overlapping threads relevant to school success and secure relationships. First, researchers and clinicians have consistently cited the need for effective early assessment of and intervention for home-based risk factors and child-specific patterns of behavior that signal risk for later school-related difficulties (Birch & Ladd, 1998). Treatments that reduce home-based risks and enhance the quality of the infant/child–mother attachment relationship are associated with the child's later adjustment to school and quality of the teacher-student relationship.

Second, the quality of the teacher–student relationship may be the single most important factor for positive adaptation to school. Especially for at-risk students, teachers may be their only positive, supportive adult model and thus they have a unique opportunity to help students foster positive representations of themselves, others, and relationships. Inherent in this process is the need for teachers to recognize and understand: (1) the impact of a positive teacher–student relationship on students, especially problem students (Howes, Phillipsen, & Peisner-Feinberg, 2000);
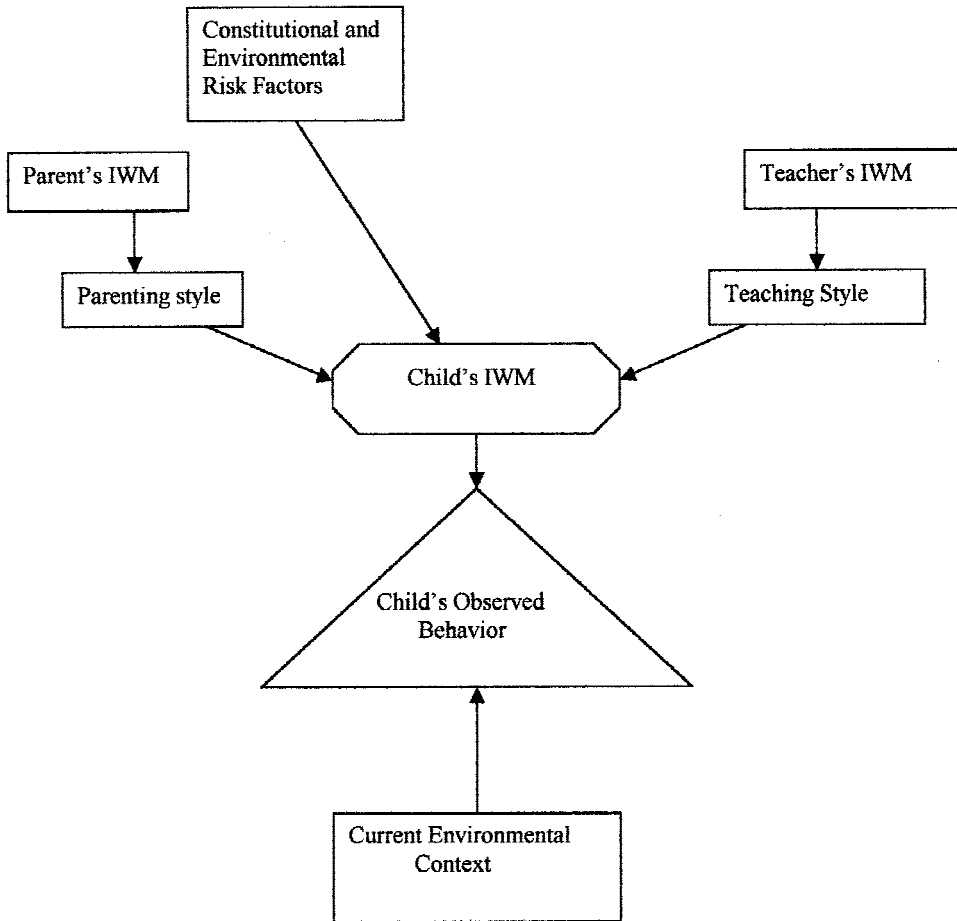
FIGURE 1.   Conceptualization of parental, school, and contextual factors influencing the child's internal working model (IWM) and behavior.

(2) that interactions of IWM of the student and the teacher impact their relationship and classroom behavior (Pianta, 1999); (3) that students' behavior reflects their relationship history and strategies for coping with stress and relatedness (Howes & Ritchie, 1999). Correspondingly, strategies which enhance the family's and student's investment and connectedness to the school (Marcus & Sanders-Reio, 2001) along with positive teacher–family relationships have been found to be positively related to increased student achievement, positive student attitudes, and self-concept, and positive parental and student attitudes toward the school (Greenberg & Hickman, 1991).

Third, researchers (Crittenden, 1992; Leiberman & Pawl, 1990; Speltz, 1990) suggest specific points of emphasis for direct interventions with students. These include helping the student learn to: (1) accurately identify their internal feeling states such that they may more accurately communicate them; (2) make appropriate attributions as to the intent of behaviors by others, (3) communicate clearly their needs to others; (4) develop more balanced emotional regulation, avoiding more rigid, overly controlled or impulsive, undercontrolled reactions to events and individuals; and (5) enhance their capacity for cooperation and collaborative problem solving in more adaptive goal-corrected partnerships. Inherent within each of these threads is the emphasis on

development of more adaptive representations of self, others, and relationships (to see social relationships as rewarding, feel capable of handling the demands of social relationships, and have the relevant skills for successful interpersonal interaction and effective emotional regulation). Toward these objectives the task of the school psychologist goes beyond assessment to include provision of information and guidance and the facilitation of skill building in parents, teachers, and students.

Assessment Considerations

Most current measures of attachment security alone have limited use in diagnostic determinations for individual children in that they may be overly time-consuming and lack norms for clinical application. One exception is the Students, Teachers, and Relationship Scale (Pianta et al., 1995) that assesses teacher–student relationship dimensions paralleling child–parent attachment relationships, and thus provides some indication of the child's relationship with the teacher.

The attachment paradigm may be most useful in providing school psychologists with a comprehensive framework for gathering information that would be evaluated clinically and integrated with other sources of information. A comprehensive attachment-oriented developmental history and observations within multiple contexts/relationships, with consideration of the quality of the students' relationships with parents, teachers, and peers could provide more well-defined hypotheses from which to derive more effective assessment and intervention strategies. Exploration of current and past family dynamics, parental marital interactions and discord, changes in relationships, parental psychopathology, early infant–mother interactions and separation or losses from death, divorce, or other factors can provide information concerning disruptions in the attachment process and the structure of the child's IWM. While there is value derived from parental reports, direct observations of parent–child interactions, possibly within a joint interview, can provide invaluable information concerning the attachment relationship. Observations can provide information concerning openness of communication, degree of conflict within the child's family and/or classroom, the child's perspective-taking skills, and goal-corrected partnership behavior. Within the classroom setting observations also provide clues to levels of reciprocal child–teacher and child–peer cooperation, empathy and sensitivity, promoting an understanding of the child's IWM, context-based behavior, and relationship history. The school psychologist who is aware of attachment-related behavior patterns, when obtaining only a few discrete samples of student behavior and/or history may rapidly generate hypotheses for examination concerning the child's IWM, classroom behavior, and family dynamics. For example, Lyons-Ruth et al. (1993) have suggested that an early school-age child with clinically significant hostile, aggressive behavior would be predicted to have experienced disorganized infant attachment in concert with a hostile, intrusive mother–infant relationship in which the mother had experienced significant psychosocial problems. Concomitant child deficits in emotional regulation, peer relations, and social competence would be expected. Similarly, a child with suppressed, overregulated emotions, demonstrating social and/or emotional isolation and disturbed interpersonal relationships may be predicted to have had an anxious-avoidant infant classification.

Conclusions

Bowlby (1969/1982) envisioned attachment and its related adaptive strategies (Sroufe et al., 1999) as having implications for one's social and emotional experiences across the lifespan. Continuity from infancy through adulthood of behavioral patterns or coping strategies associated with one's IWM of relationships has been supported by both longitudinal studies of children (Bohlin, Hagekull, & Rydell, 2000; Jacobsen, Edelstein, & Hofmann, 1994) and adult clinical studies

(Dozier et al., 1999). Any attempt to work with others from an attachment perspective must operate from certain basic assumptions that are either explicitly stated or implied by Bowlby. As a social being the propensity to form an attachment bond is inherent within the individual and the quality of those attachments depends initially upon the quality of the infant–caregiver relationship. Secure attachment has been associated with early caregiving characterized by sensitive, contingently responsive, warm, and appropriately supportive parenting which fosters in the child the capacity for open communication, balanced emotional regulation, trust, and reciprocal goal-corrected partnerships. These initial attachments frame the underpinnings of the individual's IWM and influence relationships across the lifespan.

Attachment theory emphasizes the meaning of behavior rather than the form it may take (Bowlby, 1969/1982; Crittenden, 1992), recognizing also that adaptations to each new context are influenced by/and influence the individual's IWM (Sroufe et al., 1999). The anxious-ambivalent infant may exaggerate expression of distress to gain caregiver proximity; proximity to and attention of the teacher may be attained via constant questions and help-seeking behavior. In assessment, the school psychologist must consider the context within which behavior is embedded (Sroufe et al., 1999). Attachment insecurity may not lead to behavioral anomalies and dysfunction. However, optimal development could be attained more seamlessly if sensitive and responsive social support is provided from an early age (Waters, Posada, Crowell, & Lay, 1993).

The child's, teacher's, and school psychologist's behavior is a reflection of their internal representations within the current context. Attachment styles identified by Ainsworth et al. (1978) and Main and Solomon (1990), along with associated coping behaviors, represent the individuals' ongoing adjustments to relational/situational stressors (Sroufe et al., 1999). Both secure and insecure teachers may profit from an awareness and deeper understanding of their own representations of student–teacher relationships and the interactional goals they hold for themselves and their students. The school psychologist is in a unique position to offer teachers needed support and guidance in this learning process, although the degree to which school psychologists may be effective also depends on their own attachment style. An understanding of the nature and dynamics of the attachment system provides the school psychologist and teacher a richer view of the individual's functioning within various contexts. The secure teacher, for example, would be expected to offer the child sensitive, responsive, and emotionally supportive care, qualitatively similar to that of the secure parent, such that exploration/learning from a secure base may be anticipated. Moreover, the evidence clearly suggests that early recognition of an individual's attachment style and related behavioral disposition may facilitate prevention of and/or intervention for maladaptive behavior patterns. Attachment provides school psychologists an added dimension of assessment, relevant to treatment, with emphasis on the quality of relationships and risk for psychopathology. Attachment-based assessment facilitates the generation of hypotheses concerning children's social/emotional history, providing insights into their current behavior within the current context and aiding the development of effective, individualized intervention strategies.

Leiberman and Zeanah (1999) emphasize the need for interventions that are sensitive to the unique requirements of the individual, developmentally appropriate, and that do not rely on emotional pressure. Interventions that fail to meet these criteria reinforce and perpetuate the insecure child's mental representations and any associated maladaptive behaviors. The avoidant adolescent who anticipates rejection and thus presents as aloof and uninvolved may be defending against the teacher's anticipated rebuffs. The teacher who responds with frustration and insensitive intervention simply fulfills the adolescent's expectations. Teachers who view children's and adolescents' behavior as a reflection of their relationship history in concert with the current context respond in a manner that addresses underlying issues of trust, self-worth, and competency.

REFERENCES

Adam, K.S., Sheldon-Keller, A.E., & West, M. (1996). Attachment organization and history of suicidal behavior in clinical adolescents. Journal of Consulting and Clinical Psychology, 64, 264–272.

Ainsworth, M.D.S. (1989). Attachments beyond infancy. American Psychologist, 44, 709–716.

Ainsworth, M.D.S., & Bell, S. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. Child Development, 41, 49–67

Ainsworth, M.D.S., Blehar, M.C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.

American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, DC: Author.

Barber, J.P., & Muenz, L.R. (1996). The role of avoidance and obsessiveness in matching patients to cognitive and interpersonal therapy: Empirical findings from the Treatment for Depression Collaborative Research Program. Journal of Consulting and Clinical Psychology, 64, 951–958.

Birch, S.H., & Ladd, G.W. (1998). Children's interpersonal behaviors and teacher-child relationships. Developmental Psychology, 34, 934–946.

Bohlin, G., Hagekull, B., & Rydell, A. (2000). Attachment and social functioning: A longitudinal study from infancy to middle childhood. Social Development, 9, 24–39.

Bowlby, J. (1969/1982). Attachment and loss: Vol. 1. Loss. New York: Basic Books.

Bretherton, I., & Munholland, K. (1999). IWMs in attachment relationships. In J. Cassidy & P.R. Shaver (Eds.), Handbook of attachment (pp. 89–114). New York: Milford Press.

Carlson, E. (1998). A prospective longitudinal study of attachment disorganization/disorientation. Child Development, 69, 1107–1128.

Cassidy, J. (1994). Emotional regulation: Influence of attachment relationships. In N.A. Fox (Ed.), The development of emotional regulation: Biological and behavioral considerations. Monographs of the Society for Research in Child Development, 59(2–3), 228–249.

Cassidy, J., & Kobak, R.R. (1988). Avoidance and its relationship to other defensive processes. In J. Belsky & T. Nezworski (Eds.), Clinical implications of attachment (pp. 300–326). Hillsdale, NJ: Erlbaum.

Cicchetti, D., Toth, S.L., & Lynch, M. (1995). Bowlby's dream come full circle: The application of attachment theory to risk and psychopathology. In T.H. Ollendick & R.J. Prinze (Eds.), Advances in clinical and child psychology (pp. 1–75). New York: Plenum Press.

Crittenden, P.M. (1992). Treatment of anxious attachment in infancy and early childhood. Development and Psychopathology, 4, 575–602.

Crowell, J.A., & Feldman, S.S. (1988). Mothers' internal models of relationships and children's behavioral and developmental status: A study of mother-child interaction. Child Development, 59, 1273–1285.

DeWolff, M.S., & van IJzendoorn, M.H. (1997). Sensitivity and attachment: A meta-analysis on parental antecedents of infant attachment. Child Development, 68, 571–91.

Dozier, M., Cue, K., & Barnett, L. (1994). Clinicians as caregivers: The role of attachment organization in treatment. Journal of Consulting and Clinical Psychology, 62, 793–800.

Dozier, M., Lomax, L., Tyrrell, C.L., & Lee, S.W. (2001). The challenge of treatment for clients with dismissing states of mind. Attachment and Human Development, 3, 62–76.

Dozier, M., Stovall, K.C., & Albus, K.E. (1999). Attachment and psychopathology in adulthood. In J. Cassidy & P.R. Shaver (Eds.), Handbook of attachment (pp. 497–519). New York: Milford Press.

Finzi, R., Ram, A., Har-Even, D., Shnit, D., & Weizman, A. (2001). Attachment styles and aggression in physically abused and neglected children. Journal of Youth and Adolescence, 30, 769–786.

Goldberg, S. (1997). Attachment and childhood behavior problems in normal, at-risk and clinical samples. In L. Atkinson & K.J. Pucker (Eds.). Attachment and psychopathology (pp. 171–195). New York: Milford Press.

Graham, C.A., & Easterbrooks, M.A. (2000). School-aged children's vulnerability to depressive symptomatology: The role of attachment security, maternal depressive symptomology, and economic risk. Development and Psychopathology, 12, 201–213.

Greenberg, G.E., & Hickman, C.W. (1991). Research and practice in parent involvement: Implications for teacher education. Elementary School Journal, 91, 279–288.

Greenberg, M.T., Speltz, M.L., DeKlyen, M., & Endivia, M.C. (1991). Attachment security in preschoolers with and without externalizing behavior problems: A replication. Development and Psychopathology, 3, 413–430.

Howes, C. (1999). Attachment relationships in the context of multiple caregivers. In J. Cassidy & P.R. Shaver (Eds.). Handbook of attachment (pp. 671–687). New York: Milford Press.

Howes, C., Matheson, C.C., & Hamilton, C.E. (1994). Maternal, teacher, and child care history correlates of children's relationships with peers. Child Development, 65, 264–273.

Howes, C., Phillipsen, L.C., & Peisner-Feinberg, E. (2000). The consistency of perceived teacher-child relationships between preschool and kindergarten. Journal of School Psychology, 38, 113–132.

Howes, C., & Ritchie, S. (1999). Attachment organization in children with difficult life circumstances. Development and Psychopathology, 11, 251–268.

Howes, C., & Smith, E.W. (1995). Relations between child-care quality, teacher behavior, children's play activities, emotional security, and cognitive activity in child care. Early Childhood Research Quarterly, 10, 381–404.

Jacobite, D., & Hazen, N. (1999). Developmental pathways from infant disorganization to childhood peer relationships. In J. Cassidy & P.R. Shaver (Eds.), Handbook of attachment (pp. 671–687). New York: Milford Press

Jacobsen, T., Edelstein, W., & Hofmann, V. (1994). A longitudinal study of the relation between representations of attachment in childhood and cognitive functioning in childhood and adolescence. Developmental Psychology, 30, 112–124.

Jacobsen, T., & Hofmann, V. (1997). Children's attachment representations: Longitudinal relations to school behavior and academic competency in middle childhood and adolescence. Developmental Psychology, 33, 703–710.

Kobak, R.R., Cole, H.E., Ferenz-Gillies, R., Fleming, W.S., & Gamble, W. (1993). Attachment and emotional regulation during mother-teen problem-solving: A control theory analysis. Child Development, 64, 231–245.

Kobak, R.R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. Child Development, 59, 135–146.

Larose, S., & Bernier, A. (2001). Social support processes: Mediators of attachment state of mind and adjustment in late adolescence. Attachment and Human Development, 3, 96–120.

Leiberman, A. (1992). Infant-parent psychotherapy with toddlers. Development and Psychopathology, 4, 559–574.

Leiberman, A.F., & Pawl, J.H. (1990). Disorders of attachment and secure base behavior in the second year of life: Conceptual issues and clinical intervention. In M.T. Greenberg & E.M. Cummings (Eds.), Attachment in the pre-school years (pp. 375–398). Chicago: University of Chicago Press.

Lieberman, A.F., & Zeanah, C.H. (1999). Contributions of attachment theory to infant-parent psychotherapy and other interventions with infants and young children. In J. Cassidy & P.B. Shaver (Eds.), Handbook of attachment (pp. 555–574). New York: Guilford Press.

Lyons-Ruth, K., Alpern, L., & Repacholi, B. (1993). Disorganized infant attachment classification and maternal psycho-social problems as predictors of hostile-aggressive behavior in the preschool classroom. Child Development, 64, 572–585.

Lyons-Ruth, K., Easterbrooks, M.A., & Cibelli, C.D. (1997). Infant attachment strategies, infant mental lag, and maternal depressive symptoms: Predictors of internalizing and externalizing problems at age 7. Developmental Psychology, 33, 681–692.

Main, M., & Hesse, E. (1990). Parent's unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. Greenberg, D. Cicchetti, & E.M. Cummings (Eds.), Attachment in the preschool years: Theory, research and intervention (pp. 161–182). Chicago: University of Chicago Press.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), Growing points in attachment theory and research. Monographs of the Society for Research in Child Development, 50, (1–2, serial no. 209), 66–106.

Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized-disoriented during the Ainsworth Strange Situation. In M. Greenberg, D. Cicchetti, & E.M. Cummings (Eds.), Attachment in the preschool years: Theory, research and intervention (pp. 121–160). Chicago: University of Chicago Press.

Marcus, R.F., & Sanders-Reio, J. (2001). The influence of attachment on school completion. School Psychology Quarterly, 16, 427–444.

Merrell, K.W. (2002). Social-emotional interventions in schools: Current status, progress, and promise. School Psychology Review, 31, 143–147.

Mikulincer, M., & Nachshon, O. (1991). Attachment style and self-disclosure. Journal of Personality and Social Psychology, 61, 321–331.

Pianta, R.C. (1999). Enhancing relationships between children and teachers. Washington, DC: American Psychological Association.

Pianta, R.C., & Steinberg, M.S. (1992). Teacher-child relationships and adjusting to school. In R.C. Pianta (Ed.), New directions in child development (Vol. 57). Beyond the parent: The role of other adults in children's lives (pp. 61–79). San Francisco: Jossey-Bass.

Pianta, R.C., Steinberg, M.S., & Rollins, K.B. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. Development and Psychopathology, 7, 295–312.

Renken, B., Egeland, B., Marvinney, D., Mangelsdorf, S., & Sroufe, L.A. (1989). Early childhood antecedents of aggression and passive-withdrawal in early elementary school. Journal of Personality, 57, 257–281.

Rosenstein, D.S., & Horowitz, H.A. (1996). Adolescent attachment and psychopathology. Journal of Consulting and Clinical Psychology, 64, 244–253.

Speltz, M.L. (1990). The treatment of preschool conduct problems: An integration of behavioral and attachment concepts. In M.T. Greenberg & E.M. Cummings (Eds.), Attachment in the preschool years (pp. 399–426). Chicago: University of Chicago Press.

Speltz, M.L., Greenberg, M.T., & DeKlyen, M. (1990). Attachment in preschoolers with disruptive behavior: A comparison of clinic-referred and nonproblem children. Development and Psychopathology, 2, 31–46.

Sroufe, L.A., Carlson, E.A., Levy, A.K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. Development and Psychopathology, 11, 1–13.

Sroufe, L.A., Fox, N.E., & Pancake, V.R. (1983). Attachment and dependency in developmental perspective. Child Development, 54, 1615–1627.

van IJzendoorn, M.H. (1999). Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants, and sequelae. Development and Psychopathology, 11, 225–249.

Warren, S.L., Houston, L., Egeland, B., & Sroufe, L.A. (1997). Child and adolescent anxiety disorders and early attachment. Journal of the American Academy of Child and Adolescent Psychiatry, 36, 637–644.

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. Child Development, 71, 684–689.

Waters, E., Posada, G., Crowell, J., & Lay, K.L. (1993). Is attachment theory ready to contribute to our understanding of disruptive behavior problems? Development and Psychopathology, 5, 215–224.