

CHAPTER

5

Relationships Across
the Lifespan

*The Benefits of a Theoretically Based
Longitudinal-Developmental Perspective*

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Asking *how* a developmental perspective influences the study of relationships requires one to look historically at significant points of connection between typical social development research conducted before the 1960s in relation to social development research conducted today. In this chapter, we present a retrospective review of the issues and findings that dominated the field of social development before the rich conceptual and methodological innovations introduced by attachment theory and the programs of research it generated, many of which were launched in the late 1960s and early 1970s. While doing so, we also highlight the remarkable impact of the three decades of research conducted by Alan Sroufe, Byron Egeland, and their collaborators at the University of Minnesota. As will become apparent, the long-standing program of research conducted by the Sroufe/Egeland research group did more to

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reveal the many benefits of adopting a theoretically based longitudinal-development perspective than perhaps any other research group in the history of developmental psychology.

We begin by reviewing important points of connection between social development research conducted before 1965 and social development research being conducted today. While doing so, we address questions such as: *What* did attachment theory and research offer the emerging field of social development research? *Why* and *how* did the lifespan developmental perspective inherent in attachment theory provide such fertile ground for this nascent field?

ATTACHMENT THEORY AND SOCIAL DEVELOPMENT RESEARCH

Attachment theory (Bowlby, 1973, 1980) provided many new opportunities for research on change and adaptation across the lifespan. Before 1965, social development researchers focused on distinct and isolated social behaviors (e.g., the frequency of certain acts), often independent of the social context in which they occurred. The developmental/attachment perspective, in contrast, examined the behavior of individuals *within* relationships, focusing primarily on the pattern, organization, and functional meaning of certain clusters of behaviors. The majority of research conducted before 1965 also emphasized experimental manipulations of proximal environments (or, more often, analogs of environments). Attachment theory, by comparison, focused on the sampling of different social contexts and tasks that typified the specific developmental challenges of a given developmental period. As a result, the attachment perspective generated new questions about *process*—the *how*, rather than merely the *what* and *how much*, of developmental change. Another closely related historical shift was an emerging interest in the ability of individuals to understand the significance of other people and relationships based on their own interpersonal histories and salient social experiences.

In the late 1970s and 1980s, research on the boundary between the relationships of parents and children and childhood friendships and

adult relationships began to flourish, eventually resulting in the wider field of close relationships. Among social psychologists, the typical focus has been on nonfamilial close relationships (e.g., romantic relationships). Among developmental psychologists, the emphasis has centered on familial relationships and close friendships. In recent years, these two major research traditions have both begun to investigate other types of relationships (e.g., with co-workers, members of one's wider social network).

THE ATTACHMENT ERA

The study of mother-infant attachment came of age during the 1970s. Bowlby's (1973, 1980) tremendous theoretical synthesis was complemented by important methodological and empirical advances made by luminaries such as Mary Ainsworth, Alan Sroufe, Byron Egeland, Mary Main, Everett Waters, and several others. In this section, we briefly review research based on Ainsworth's Strange Situation paradigm and describe longitudinal studies that have examined the developmental significance of early attachment across the lifespan.

The First Attachment Relationship

Bowlby theorized that the interactive history between infants and their caregivers largely determines the quality of the attachment bond that exists during infancy and early childhood. According to Bowlby (1973), infants develop stable expectations about the availability and responsiveness of their caregivers based on how the caregivers respond when the infants are distressed. Bowlby called the cognitive representations that infants construct from such interactions *internal working models*. Mary Ainsworth, who was the first investigator to marshal strong empirical support for some of Bowlby's fundamental attachment hypotheses, created the Strange Situation to study these transactional patterns within a stressful setting when infants were typically 9 to 12 months old. She reasoned that infants who avoid their caregivers when distressed, or who display a mixture of approach and resistant behaviors when distressed, should not be able to benefit from the contact comfort that most effective

caregivers provide. These ultimately dysfunctional behaviors were presumed to reflect a history of either rejecting or inconsistent/chaotic care provided by caregivers. Indeed, one central premise of attachment theory is that the history and quality of a relationship can be discerned from a careful analysis of infants' behavior in relation to changes in the current social context, particularly during separation and reunion episodes with their caregivers.

Home ratings of maternal sensitivity conveyed by mothers to their infants during the first year of life indicated that, when caregivers were rated as higher on sensitivity, their attachment relationships with their infants were more likely to be secure in the Strange Situation. In contrast, caregivers who rejected their infants' bids for contact and comfort were more likely to have insecurely attached infants in the Strange Situation (Ainsworth, Blehar, Waters, & Wall, 1978; Blehar, Lieberman, & Ainsworth, 1977). These seminal findings were first replicated in early studies that emanated from the Minnesota Parent-Child Longitudinal Study (MPCLS; Egeland & Farber, 1984), and then by other research teams (e.g., Bates, Maslin, & Frankel, 1985; Belsky & Isabella, 1988; Isabella & Belsky, 1991). The specific link between caregiver rejection and avoidant attachment has also been replicated in several studies (e.g., K. Grossman, E. E. Grossman, Spranger, Suess, & Unzer, 1985; Isabella, 1993).

Other research from the MPCLS confirmed that the emotional availability and quality of communication displayed by caregivers is meaningfully related to attachment security in the Strange Situation. Egeland and Sroufe (1981), for example, found that infants whose mothers were depressed tended to be insecurely attached. Not all infants of depressed parents, however, developed insecure attachments. Egeland and Sroufe (1981) documented that the *quality* of caregiving, not depression per se, best predicts attachment classification. For example, when caregiving is very insensitive, as in the case of child abuse or severe neglect, disruptions of infant-caregiver security occur at disproportionately higher rates. Moreover, among maltreated infants, higher rates of all insecure attachment classifications are witnessed, with nearly 90% of maltreated infants developing insecure attachments (Crittenden, 1992), especially the disorganized pattern (Carlson, Cicchetti, Barnett, & Braunwald, 1989).

Temperament and Attachment

Attachment researchers generally agree that an infant's temperamental traits are also visible in the Strange Situation. For example, babies who have more difficult temperaments are more upset by repeated separations from their caregivers. However, using parental reports and measures of cortisol reactivity to stress, research has found that temperament predicts the amount of crying during separation, but not during reunion, episodes (Gunnar, Mangelsdorf, Larson, & Herstgaard, 1989; Vaughn, Lefebvre, Seifer, & Barglow, 1989). Temperament appears to dictate what infants "require" from their caregivers when they reunite with them (Thompson, 1990), similar to infants who recently have been ill or stressed requiring more contact upon reunion before they can fully settle down. However, being upset by separations from caregivers is not the same as being insecurely attached.

Attachment scholars believe that attachment status and temperament are largely independent constructs (see also Vaughn & Shin, 2011, this volume). Sroufe (1996) suggests two main reasons for this. First, attachment status and temperament represent different levels of analysis. Assessments of attachment focus on the overall organization of behavior. Thus, it is not how much an infant cries and squirms that counts but the *context and sequencing* with specific behaviors that is critical. Infants who cry a great deal during separations and who squirm mightily with a stranger are still classified as securely attached if they are comforted by their caregivers during reunions and then quickly return to play. Second, securely attached infants tend to show considerable differences of behavioral style, from being slow to arouse and noncuddly (B1) to being slow to warm-up and easily aroused (B4).

These conceptual distinctions are also supported by recent behavioral genetics findings, which show considerable heritability for temperament traits but negligible heritability for attachment classifications (e.g., Bokhorst et al., 2000; O'Connor & Croft, 2001; Roisman & Fraley, 2008). Although temperament traits are related to certain behaviors observed in the Strange Situation, they are not systematically related to attachment quality unless difficult temperament is combined with unresponsive caregiving. Longitudinal studies that have included repeated

measurements of infant temperament, maternal caregiving, and infant attachment status across time are perhaps most relevant to this debate. This research has confirmed that the quality of maternal caregiving, not the infant's inborn temperament, best predicts the quality of infant-mother attachment (e.g., Ainsworth et al., 1978; Bates et al., 1985; Blehar et al., 1977; Egeland & Farber, 1984; Vaughn et al., 1989).

Although temperament is not directly related to attachment security, infant characteristics can have an indirect impact if they affect the quality of caregiving the infant receives. For example, newborns who have neurological problems are *not* more likely to be insecurely attached, except when they experience lower levels of social and emotional support from their caregivers (Crockenberg, 1981). Similarly, infant proneness to distress does not forecast anxious attachment, except in combination with higher levels of maternal controllingness (Mangelsdorf, Gunnar, Kestenbaum, Lang, & Andreas, 1990).

In their longitudinal study, van den Boom (1991, 1994) investigated the emotional development of infants at risk for developing insecure attachments (i.e., highly irritable infants who are born to low socioeconomic status [SES] mothers; see van den Boom & Hoeksma, 1994). Newborns classified as highly irritable at 10 and 15 days using Brazelton's Neonatal Behavioral Assessment Scale were more likely to be insecurely attached (especially avoidant) at one year compared to nonirritable infants from the same low-SES sample. These irritable infants were also judged by their mothers to be more difficult at 6 and 12 months according to parental ratings of temperament, and these mothers were minimally responsive to the relatively few positive expressions of their irritable infants. Mothers of future anxious-resistant children were inconsistent in their responses to them, displaying a mixture of effective soothing and ineffective attempts at distraction, which often increased their infants' distress. Mothers of future avoidant children tended to ignore their child's crying for longer periods, and they were more distant in their soothing attempts. These findings, which are consistent with Ainsworth and colleagues' earlier work, can be viewed in terms of child effects on maternal behavior (e.g., prolonged infant irritability suppresses maternal sensitivity) and maternal caregiving effects on attachment classification.

Consistent with the general view that attachment security is not fixed by biology but rather is shaped by the caregiving environment, research by Egeland/Sroufe and others has also confirmed that (1) attachment security can change during infancy, with changes being meaningfully related to corresponding changes in the caregiving environment (Vaughn, Waters, Egeland, & Sroufe, 1979); (2) interventions that improve caregiver sensitivity and responsiveness also increase infant-caregiver attachment security (van IJzendoorn, Juffer, & Duyvesteyn, 1995); (3) quality of attachment can vary, depending on whether the infant is assessed with his or her mother or father (Fox, Kimmerly, & Shafer, 1991; Main & Weston, 1982); and (4) infants who have identical attachment classifications can have different temperaments (Sroufe, 1996).

Attachment and Social Competence

As we have seen, attachment theorists propose that patterns of coregulation established in earlier attachment relationships generate internal working models that guide thoughts, feelings, and behavior in later relationships (Bowlby, 1980; Sroufe, 1983, 1996). Most developmental psychologists view an infant's early attachment relationship(s) as laying the foundation for subsequent relationships, because the attitudes, expectations, and interpersonal skills that a child acquires are carried forward and reintegrated into new social and developmental contexts. Accordingly, competence during one developmental period promotes adaptation within that period, but it also paves the way for the formation of competence during the next developmental period (see Sroufe & Rutter, 1984).

According to attachment theory, children's representational models are closely interwoven with their emerging self-concept and broader representation of relationships. If children perceive their attachment figures as trustworthy, loving, and sensitive, then they are likely to view themselves as lovable and worthy of comfort and support from others. On the other hand, if attachment figures reject or rebuff children's bids for comfort, particularly when they are distressed, then the children should not only view attachment figures as rejecting, but the children should also view themselves as not worthy of comfort or support (Bretherton, 1985). Once

formed, these representations ought to guide the processing of social information, especially the child's beliefs, attitudes, and feelings about the self in the context of future close relationships. Although internal working models usually remain open to new input as children meet new people, they tend to be relatively stable, because children actively select partners and form new relationships that fit with their existing working models. According to Bowlby (1973, 1980), working models should be fairly resistant to change once they develop, partly because they tend to operate outside of conscious awareness and partly because new information tends to be assimilated into them.

Toddler Period

Developmental theorists such as Ainsworth (Ainsworth, Bell, & Slayton, 1974), Erikson (1963), Kopp (1989), and Sroufe (1996) view the toddler period as critical for the development of an autonomous self-system, one capable of achieving independence and initiative as well as responsiveness and conformity to the rules and expectations of others. Human evolution is rooted in the basic primate patterns of group living, which involve elements of both cooperation and competition. In all known cultures, the socialization of children changes dramatically during toddlerhood, in that they are exposed to a wider variety of social partners than they were during infancy. Fathers also become more central to the socialization of toddlers, and they typically provide a different mode of interaction, often engaging children in vigorous physical play while providing emotional support. In many societies, siblings take on added responsibilities in caring for their younger brothers or sisters and serving as challenging playmates. Rudimentary peer interaction also begins to occur during this period, with most interaction centering on interesting objects that attract the attention of toddlers. In addition, other adults besides parents become more involved with the children, especially grandparents, relatives, and other members of the community. Despite this increased diversity of social partners, the central developmental tasks of the toddler period still revolve around changes in the ongoing relationship with the primary caregivers (usually parents).

Attachment theorists believe that children's capacity for emotion regulation is shaped in their closest relationships. Sroufe (1996) used the

term *guided self-regulation* to reflect the intermediate position of toddlers. Guided self-regulation falls between an earlier stage when *dyadic-regulation* is provided mostly by the caregivers and a later stage when the preschoolers achieve *true self-regulation*. During the guided self-regulation stage, toddlers learn how to regulate their own emotions and behavior within the limits and guidelines provided by their caregivers. Two major influences on this learning process have been identified: (1) the *overall quality* of the parents' approach to disciplining their toddlers during this period is more important than any specific child-rearing practices; and (2) *attachment history* affects the transition toward autonomous functioning. In this research, variables are created to index qualitative dimensions of parenting that operate across different social contexts.

Sroufe and colleagues claim that emotional support and quality of assistance are central features of parental competence (Matas, Arend, & Sroufe, 1978). In their approach, which has now been widely adopted within the field of developmental psychology, toddlers and their parents are presented with a series of problem-solving situations, each of which presents the parent-toddler dyad with a novel challenge. The first situation (free play) is minimally challenging, particularly with respect to the issue of autonomy. The next situation, in which the parent is instructed to interrupt the child's play at a prearranged signal and then to get the child to put away the toys, tests how smoothly the dyad can accommodate a potential conflict of wills. The third situation involves a graded series of physical problems that start simple and become more difficult, assuring that the child will be taxed beyond his or her capabilities when trying to solve the latter problems. This procedure assesses the flexibility of the parent-child dyad, including parental support and guidance, along with the child's emotion regulation and motivation capacities.

Toddlers who are securely attached to their mothers tend to be more enthusiastic when performing these tasks, expressing greater positive affect and less frustration. They also are more successful by virtue of their greater persistence, flexibility, and cooperation. Toddlers who have an anxious attachment history with their mothers display different behavioral patterns. Early anxious-resistant attachment is associated with poorer emotional regulation during the tasks. These toddlers tend to be clingy

and prone to emotional dysregulation, becoming frustrated or oppositional during cleanup and problem-solving situations. Toddlers who have an anxious-avoidant history tend to be more disengaged during the tasks, showing less pleasure and little enthusiasm while doing them. Moreover, they typically ignore their mothers' attempts to involve them more in the tasks. This research was important because it demonstrates continuity in the pattern of the child's emotional competence and maternal sensitivity across different developmental phases, at a time when some researchers questioned whether such continuities even existed.

Several other studies provide convergent evidence for these results plus further connections between attachment in infancy and the quality of the later parent-toddler relationship. Maslin and Bates (1983), for example, documented that securely attached infants have less conflict with their mothers at age two than do toddlers with a history of insecure attachment. Specifically, toddlers assessed as anxious-avoidant earlier in life are more likely to engage in conflicts with their mothers. Reciprocally, their mothers are also more restrictive and controlling. Similar to attachment assessment research, these studies reveal disturbances in the parent-child relationship rather than problems that reside exclusively within the child. During the toddler years, however, the tensions and problems experienced with primary attachment figures may be carried forward into other adult-child relationships (e.g., Londerville & Main, 1981). In sum, the capacity for regulating arousing stimulation is critical to positive adaptation in both the family system and the peer system.

The Preschool Period

During the preschool years, attachment behaviors are transformed, reflecting advances in language, cognition, and shifting issues in psychosocial adjustment. For most children, a new partnership with the primary caregivers (i.e., parents) emerges, one that reflects these advances and allows for increased autonomy and initiative within and beyond the dyad (Erikson, 1963; Sroufe, 1983). Within the parent-child relationship, secure children incorporate more perspective-taking, mutual communication of affect and desires, and joint planning. However, several deviations from

this pattern are possible (Crittenden, 1992; Sroufe, 1989). According to transactional models, the child becomes a more active agent rather than a passive recipient of environmental input. New social milieus, such as preschool, may be constructed very differently by different children based on their attachment history. Children seek out or avoid various resources and opportunities within these new niches based on expectations associated with genetic propensities, past experiences, and former relationships.

Considerable research has established a clear link between infants' primary attachment relationships and the quality of their later peer relations. Compared to insecurely attached preschoolers, securely attached preschoolers tend to behave more positively toward their peers and receive more positive behavior from peers, they are better liked by peers, they enjoy more positive and synchronous friendships, and they are more highly regarded by their teachers as being helpful, cooperative, empathic, and socially competent (e.g., Erickson, Egeland, & Sroufe, 1985; Jacobson & Willie, 1986; LaFreniere & Sroufe, 1985; Sroufe, 1983; Sroufe, Schork, Motti, Lawroski, & LaFreniere, 1984; Youngblade & Belsky, 1992).

A recent paper based on the NICHD Study of Early Child Care and Youth Development (SECCYD; NICHD Early Child Care Research Network, 2006) suggests that there are continuing positive effects of early attachment security, even after parental conditions change. For example, declining parenting quality does not predict increased classroom externalizing problems among children who have early secure attachments with their mothers, whereas it does for children who were insecurely attached at 15 months. Securely attached children seem to be protected against declining maternal parenting, suggesting that early attachment could be a protective factor by enabling securely attached children to approach social situations with more confidence and more positive expectations of others.

Attachment history is also related to behavioral problems in preschoolers. In the MPCLS, for example, attachment assessments at 12 and 18 months predicted behavior in the preschool classroom (Erickson et al., 1985). In this high-risk, inner-city sample, behavioral problems (assessed by teacher ratings) were evident in 85% of infants who had stable

insecure attachments, 60% who had unstable attachments (being secure at one time but insecure at the other), and 29% who had stable secure attachments. Other risk factors within the home indicate why some securely attached infants display later behavioral problems in preschool whereas some insecurely attached infants do not. Compared to securely attached infants who did not display later problems, those that did had mothers who were less emotionally supportive and not as clear or consistent in their guidance and limit-setting during the toddler and early preschool years. These mothers also experienced more confusion and disorganized mood states during this period, and they were less involved with their children than mothers of secure infants who did not experience later behavior problems.

Comparisons between insecure infants with and without behavior problems also indicates that those without problems had mothers who were warmer, more supportive, and more appropriate in their limit-setting when children were 42 months old. Reciprocally, these children were also more affectionate and compliant with their mothers during this later assessment. These findings are important because they demonstrate continuity of child adaptation in stable environments and coherence in child adaptation in unstable ones. That is, when children with an earlier history of secure attachment are subsequently exposed to less-than-adequate maternal care, they are more likely to exhibit behavior problems than are secure infants in stable caregiving environments. Similarly, anxiously attached infants can become well-functioning preschoolers if their caregivers respond adequately to their needs during later developmental stages (see Sroufe, Egeland, Carlson, & Collins, 2005).

Anxious-resistant attachment during infancy is also a risk factor for internalizing behavior problems, including anxiety, excessive dependency on adults, social withdrawal, passivity, and submissiveness with peers (e.g., Erikson et al., 1985; LaFreniere & Sroufe, 1985; Sroufe, Fox, & Pancake, 1983). As infants and toddlers, these children tend to be wary, easily upset, and difficult to soothe. They also engage in less exploration and occasionally display angry, tantrum-like behavior, all presumably in response to having received inconsistent or chaotic care in the past (Ainsworth et al., 1978). In the MPCLS, infants classified as anxious-resistant at

12 and 18 months tended to become lower-status, peripheral members of their preschool peer groups three years later (LaFreniere & Sroufe, 1985; Sroufe, 1983). Some of these children also exhibited passivity and an infantile dependence on adults, whereas others were more forward with their peers but became easily overaroused and disorganized when faced with minor frustrations.

Children who have anxious-avoidant attachments have a different set of strengths and liabilities in their social adaptation and emotional adjustment to the preschool classroom in the MPCLS. Their adoption of an avoidant behavioral style to cope with chronic insensitivity and rejection from their past caregivers lays the foundation for a defensive personality characterized by hostility and negative expectations of others. In a naturalistic observational study that compared the emotional expressions of preschoolers who had different attachment histories, anxious-avoidant children expressed greater hostility and negative affect toward their peers, and they were more rejected by their peers than were securely attached children (LaFreniere & Sroufe, 1985).

Recent studies have replicated and extended these findings. For example, McElwain, Cox, Burchinal, and Macfie (2003) found that a history of avoidant attachment predicted greater instrumental aggression during child-friend interactions; a history of anxious-resistant attachment, on the other hand, predicted less self-assertion among friends. Following children of adolescent mothers from 12 months to 9 years of age, Munson, McMahon, and Spieker (2001) found that children who had histories of avoidant or disorganized attachment showed higher levels of externalizing problems at age 9 compared to children who had secure attachment histories. Lyons-Ruth, Easterbrooks, and Cibelli (1997) found that infants who had avoidant or disorganized histories were rated higher on both internalizing and externalizing symptoms at age 7 compared to children who had secure attachment histories.

Finally, in the NICHD SECCYD, involving more than 1,000 U.S. children, infants who had avoidant classifications were most vulnerable to parenting risks, demographic risks, and problematic outcomes several years later (NICHD Early Child Care Research Network, 2006). Relations between early attachment and child outcomes during the first

three years of life have also been examined in the NICHD SECCYD data, often replicating results originally found in the MPCLS. For example, McElwain et al. (2003) found that an avoidant attachment history is associated with more instrumental aggression during child-friend interactions, whereas an anxious-resistant attachment history is associated with less self-control and less assertion among friends, even when maternal sensitivity and current attachment status are statistically controlled.

One consistent finding across many studies is that avoidantly attached preschoolers are at risk for externalizing problems expressed via relational aggression. Troy and Sroufe (1987), for instance, observed pairs of preschoolers during a series of dyadic play sessions across time. They found that a higher percentage of children who had avoidant histories took advantage of and mistreated their play partners. In all cases of victimization, the "exploiter" had an avoidant history, whereas the "victim" tended to be a child who had an anxious-resistant history. Preschool teachers also had distinct emotional reactions to children who had different attachment histories. They often nurtured and protected children who have anxious-resistant histories, but sometimes reacted with anger to the open defiance and bullying of children who have avoidant histories. These emotional responses from new caregivers (i.e., preschool teachers) underscore the transactional nature of these different developmental trajectories.

Finally, infants who are disorganized show no coherent attachment strategy during infancy and respond to their mothers in the Strange Situation with a variety of contradictory behaviors, odd or mistimed movements, and disoriented responses. Some research has linked the disorganized attachment pattern to specific forms of behavioral and emotional problems in preschoolers. Main and Solomon (1990), for instance, believe that these children respond to internal conflict by displaying contradictory or incomplete behavior patterns that were originally formed in response to chronic abusive or frightening parental behaviors. As preschoolers, these children are inflexible and controlling, possibly to bring some order to an otherwise chaotic network of close relationships. The disorganized pattern may also entail some degree of role reversal between the parent and the child with regard to caregiving or punishment.

In fact, such behaviors are mediated by deviant patterns of emotional regulation and communication in the parent-child relationship (Lyons-Ruth, Repacholi, McLeod, & Silva, 1991). Consistent with their poor emotion-regulation skills, there is a greater incidence of aggression, externalizing disorders, and oppositional defiant disorder among most disorganized children (see Lyons-Ruth & Jacobvitz, 1999; van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999).

ATTACHMENT AND RELATIONSHIPS OUTSIDE THE FAMILY

Despite the significance of parent-child relationships in predicting individual competence for initiating, maintaining, and managing relationships outside of the family (Collins & Van Dulmen, 2006), other relationships and social influences are also important. For example, early peer-group competence is a critical forerunner of affiliating well with peers in social groups, in forming and maintaining friendships, and in the emergence and maintenance of romantic relationships. Measures of peer competence collected as part of the MPCLS show impressive continuity between early childhood and late adolescence, with correlations ranging from .40 to .89. Moreover, these measures are reliably related to composite measures of the quality of early caregiving experience (Sroufe et al., 2005). These relations reflect important interpersonal and intrapersonal processes in social development.

One striking example is the discovery that adhering to the normative expectation of gender segregation in middle-childhood peer groups strongly predicts successful functioning in mixed-gender adolescent peer groups and in romantic relationships in early adulthood (Englund, Levy, Hyson, & Sroufe, 2000; Simon, Aikins, & Prinstein, 2008). This connection is likely to be a transactional one. Many adolescents believe that being involved in a romantic relationship is central to belonging and status within their peer groups, and the extensiveness of peer networks further facilitates involvement in dating. Participation in mixed-gender peer groups may particularly encourage and support involvement in romantic relationships. More specifically, the timing and extent of *involvement* in

romantic relationships may be further facilitated by opportunities and social support for romantic experiences in established mixed-gender peer groups. Indeed, the selection of dating partners during early adolescence is influenced by group norms and values regarding the importance of social status and physical appearance.

There is little direct evidence, however, that peer group contexts contribute substantially to the actual *quality* of romantic relationships or to their cognitive and emotional features (see Collins & Van Dulmen, 2006). These findings are important because they suggest that these indicators of peer competence—relationship involvement and relationship quality—are differentially related to distinct features of romantic relationships in the same individuals. Specifying the contributions of each indicator to adult relationship competence is an especially promising direction for future research (Haydon, Collins, & Van Dulmen, 2005).

Although an attachment perspective is frequently presumed to imply a strong emphasis on early life experience, we do not view development as principally a product of early caregiver-child relationships. Rather, current behavior reflects the continuous interplay of early experience in *combination with* current experiences. This hypothesis was recently tested by Carlson, Sroufe, and Egeland (2004), who demonstrated that early experiences with primary caregivers are carried forward in mental representations (i.e., working models), but they also impact social behavior directly. Across time, representations of prior relationship experiences and current relationship experiences interact to produce adaptations in later relationships. Late-adolescent social functioning, including functioning in relationships, is the outcome of this dynamic, interactive process.

EXTENSIONS TO ADULT RELATIONSHIPS

The impact and legacy of Egeland and Sroufe's research extends far beyond developmental psychology. Indeed, their work has influenced thinking and research in several areas of psychology, including social, personality, and clinical psychology. Within each of these areas, their research and perspective have advanced our understanding of adult

relationship functioning. There are several reasons for this pervasive legacy. For example, Sroufe and Egeland's collaboration brought the full implications of attachment theory directly into mainstream thought and debate in psychology during the late 1970s and 1980s. Bowlby (1973, 1980) claimed that attachment theory was a lifespan theory of personality and social development, but Sroufe and Egeland confirmed how different attachment patterns assessed early in life predict distinct types of social behavior in early and middle childhood.

Their groundbreaking research also accentuated the importance of studying *dyadic behavior*, rather than the frequency with which each partner displayed certain behaviors, in *attachment-relevant situations*. Their persistent focus on how dyads—especially parent-child dyads early in life—respond to situations that activate the attachment system of one or both dyad members ushered in diathesis-stress predictions that, at the time, were unique to attachment theory. These findings helped establish attachment theory as a major and novel theoretical perspective in the 1980s. Their research also introduced new theory-centered methods of coding behavior in dyadic interactions. Before Egeland/Sroufe, most coding systems focused on counts or ratings of isolated behaviors rather than clusters of *functionally related* behaviors presumed to tap higher-level constructs central to a theory (e.g., secure-base behavior). The novel approaches to behavioral coding that Sroufe and Egeland pioneered influenced many scholars outside of developmental psychology, particularly those who studied romantic relationship dynamics (e.g., Simpson, Rholes, & Nelligan, 1992; Simpson, Rholes, & Phillips, 1996).

Of even greater importance, their research brought to the fore the pivotal role that *early life stressors* assume in social development from infancy into middle adulthood (Sroufe et al., 2005). While conducting this pioneering work, Egeland and Sroufe also developed several new and important constructs that now figure prominently in psychology. These constructs include heterotypic continuity, lawful discontinuity, resilience as a developmental process, developmental coherence, and felt security. It is difficult to imagine what the field of social development would look like today without these seminal contributions.

Sroufe and Egeland's primary program of research was guided by two fundamental questions: (1) "What are the primary *sources* of significant influences on personal and relational functioning?" and (2) "What are the specific *processes* through which these influences occur?" Answers to these questions are essential if one wants to predict and really understand social development across the lifespan. Several studies conducted by Sroufe, Egeland, and their colleagues are shining exemplars of this unique approach to understanding social development. We now highlight how the Egeland/Sroufe perspective of social development has influenced our own research on the antecedents of emotion in adult romantic relationships.

A Longitudinal-Developmental Perspective on Emotion in Relationships

Bowlby (1980) believed that emotional reactions to relationship events are rooted in earlier relationship experiences, initially with early caregivers and then with other significant relationship partners during adolescence and adulthood (see also Ainsworth, 1989; Waters & Cummings, 2000). This core tenet of attachment theory has inspired several longitudinal studies in which the same individuals have been studied continuously from infancy onward. One of the most famous and influential studies has been the MPCLS (see Sroufe et al., 2005). This seminal project has focused on how early attachment experiences prospectively predict the quality and functioning of close relationships in adolescence and early-to-middle adulthood.

Although Bowlby (1973, 1980) hypothesized that working models guide how individuals think, feel, and behave in later relationships, he also believed that representations of early relationship experiences should not necessarily predict later relationship outcomes in a direct or straightforward manner. Rather, representations should be continuously modified and updated as individuals enter and leave different attachment relationships across successive phases of development (Carlson et al., 2004). Relationship experiences with early peers in childhood, for instance, should (and do) predict the quality of close friendships in adolescence. Moreover, the quality of experiences with caregivers in infancy and early

childhood should (and typically do) forecast the quality of adolescent friendships, above and beyond the contributions of more concurrent experiences with same-age peers (Sroufe, Egeland, & Carlson, 1999).

In adult relationships, individuals' patterns of attachment during infancy (assessed by the Strange Situation) also predict certain features of their behavior with their romantic partners in early adulthood (Collins & Van Dulmen, 2006; Roisman, Collins, Sroufe, & Egeland, 2005). For example, if individuals had a disorganized attachment pattern in infancy, their observer-rated conflict resolution interactions with current romantic partners in early adulthood reveal fewer secure-base behaviors, less balance between couple functioning and each partner's personal interests and needs, less caring, less trust, less emotional closeness, less sensitivity to each other's needs and wishes, and poorer general outcomes. In addition, if individuals were disorganized during infancy, both they and their romantic partners display greater hostility during conflict resolution interactions, as rated by observers.

As Sroufe, Egeland, and their colleagues have shown, attachment insecurity in infancy and early childhood also forecasts other important relationship outcomes across time, such as peer competence rated by classroom teachers between the ages of 6 and 8 (Sroufe et al., 1999) and ratings of parent-child interactions at age 13 (Sroufe et al., 2005). There also are clear links between these chronologically later measures of family interaction and subsequent romantic relationship behaviors and perceptions assessed early in adulthood (Roisman, Madsen, Hennighausen, Sroufe, & Collins, 2001). Until 2007, however, no research had investigated whether or how the nature of early parent-child relationships (before age 13) were related to the experience of positive and negative emotions in adult romantic relationships.

A Longitudinal Study of Emotion in Relationships

To fill this gap in our knowledge, we (Simpson, Collins, Tran, & Haydon, 2007; see also Roisman, Collins, Sroufe, & Egeland, 2005) conducted a study that focused on 78 target participants in the MPCLS. Between the ages of 20 to 23, each target participant and his or her current romantic partner completed self-report relationship measures.

Each couple was also videotaped while trying to resolve a major conflict in their relationship. The primary goal of our investigation was to test whether and how attachment experiences and relationships during critical stages of development—during infancy, middle childhood, and adolescence—are systematically related to the self-reported experience and the observer-rated expression of emotions with romantic partners in early adulthood. We tested our predictions by comparing participants who had secure versus insecure attachment histories at age 1.

We hypothesized that the emotional qualities of romantic relationships in early adulthood should be predicted by a set of sequential links from attachment security status at age 1, to the quality of peer relationships in childhood at ages 6 to 8, to the quality of relationships with close friends in adolescence at age 16. We anticipated that the quality of childhood peer relationships and the quality of close friendships in adolescence would mediate the link between early attachment status (assessed in the Strange Situation at age 1) and the emotional tenor of adult romantic relationships (assessed at ages 20 to 23). Specifically, we conjectured that individuals classified as secure in infancy would be rated as more socially competent by their grade-school teachers. Early social competence, in turn, would predict stronger-rated secure-base friendships during adolescence. And friendship security during adolescence would then predict both the experience and expression of less negative relative to positive emotion in adult romantic relationships.

This developmental model is anchored on the principle that relationships at any stage of development can be influenced by both familial and extrafamilial relationships at earlier stages (Sroufe et al., 2005). As a result, attachment relationships with caregivers early in life should have an impact not only on later relationships with caregivers, but also on other important relationships with peers, close friends, and romantic partners across time. This developmental process should involve dynamic interactions between experiences in one's successive relationships and the mental representations of those experiences, which often are constructed and revised across relationships from each successive earlier period (Carlson et al., 2004).

Measures were collected at three critical stages of social development: (1) during early childhood (at age 1), (2) during early elementary school

(grades 1 to 3; ages 6 to 8), and (3) during adolescence (at age 16). Assessments were made at these specific periods of social development, because each one represents a stage at which new and different kinds of relationships are being formed and developed. This measurement approach is consistent not only with the current conceptualization of social development, but also with the principle of heterotypic continuity (Rutter & Sroufe, 2000). According to this principle, the infancy measures obtained from target participants at age 1 assessed their attachment and exploratory behaviors with their caregivers in the Strange Situation. The middle childhood measures at ages 6 to 8 assessed target participants' competence at engaging peers in social interactions and their attunement to interpersonal dynamics in organized peer groups across grades 1 to 3. The adolescence measure at age 16 assessed the nature and quality of target participants' behaviors indicative of having secure attachment representations of close same-sex friends (e.g., greater disclosure, more trust, and more authenticity). And the early adulthood measures at ages 20 to 23 indexed the experience and expression of emotions evident in target participants' current romantic relationships. Although target participants' behaviors, relationships, and relationship representations were assessed by different measures in different relationships at different points of social development, the underlying *meaning and function* of those behaviors and representations should be consistent across time, because the measures tap the general coherence of attachment representations and behaviors at each developmental stage (Sroufe & Waters, 1977).

As predicted, we found that the experience and expression of emotions in adult romantic relationships were meaningfully tied to attachment-relevant experiences earlier in social development. As shown in Figure 5.1, target participants' early attachment security at age 1 predicted their competence with peers (rated by teachers) during early elementary school. Elementary school peer competence, in turn, predicted the degree of security evident in target participants' representations of their close friendships at age 16. This measure in turn predicted daily reports of emotions experienced in romantic relationships (reported by target participants *and* their partners), as well as the expression of emotions (rated by observers) during a videotaped conflict-resolution task. Thus, corroborating Bowlby's conjectures and fundamental principles originally

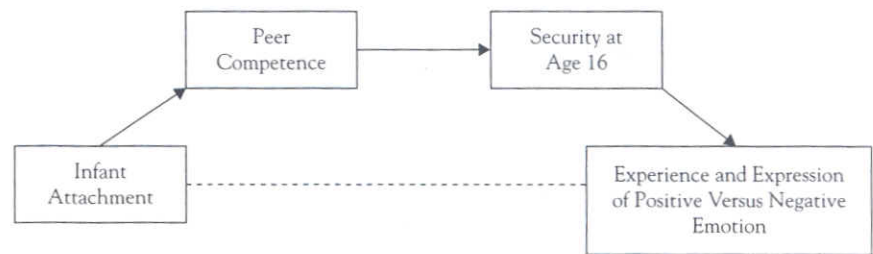


Figure 5.1 Links between infant attachment and later relationship outcomes

articulated by Sroufe/Egeland, the experience and expression of emotion in romantic relationships is connected in predictable and meaningful ways to experiences in earlier relationships and phases of social development. However, earlier developmental stages have the strongest and most direct impact on the stages immediately following them (Carlson et al., 2004).

THE BROADER LEGACY

Even today, many nondevelopmental psychologists disregard how the *past*—a person's unique developmental history—situates, frames, and influences the *present*—what is currently happening in a person's life and how he or she interprets current events. As Egeland and Sroufe have repeatedly demonstrated in their long-standing programs of research, a complete understanding of interpersonal outcomes in adulthood requires that one consider how processes associated with different levels of analysis—especially ontogeny—have operated to shape current relationship outcomes (Tinbergen, 1963). This viewpoint is just beginning to be appreciated in the wider field of close relationship.

Understanding an individual's complete developmental history may also clarify whether and why current relationship outcomes are likely to be stable versus variable across time, along with the variables that are likely to change certain outcomes. Consider, for example, two adults who have the same level of marital satisfaction at a given point of their lives but have very different developmental histories. A person who starts and continues across the life course on an insecure trajectory is likely to have less stable levels of marital satisfaction that may be changed by different

events than someone who starts and continues life on a secure trajectory. Someone who has an insecure history, for instance, may react in a more extreme manner to positive and especially negative daily events in their relationship than an individual who has a secure history (Campbell, Simpson, Boldry, & Kashy, 2005). Given the benevolent and forgiving nature of their internal working models, secure people should be more inclined to ignore, discount, or dismiss minor partner transgressions, opting to remain focused on the long-term goals they want to achieve for their partners and their relationships.

In conclusion, supporting several core principles originally articulated by Sroufe, Egeland, and their colleagues, our work shows that the relationship past is meaningfully tied to the present for many people, but primarily through what occurs in different relationships at intervening stages of social development. One must understand the trajectory of an individual's relationship history to fully appreciate, situate, and comprehend his or her adult relationships. This view of how development and relationships continually intersect across the lifespan is one of the major and lasting legacies of Sroufe and Egeland's work on the entire field of psychology.

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