

**Attachment Theory and Its Place in Contemporary Personality Theory and  
Research**

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## **Attachment Theory and Its Place in Contemporary Personality Theory and Research**

While working in a home for maladjusted and delinquent boys in the 1930's, John Bowlby was struck by the boys' difficulty in forming close emotional bonds with others. After studying the family histories of the children, he learned that a disproportionate number of the boys had experienced severe disruptions in their early home lives. His observations led him to conclude that early parent-child relationships serve an important organizing role in human development and that disruptions in these relationships can have profound consequences on behavior, not only in the short term, but in the long term as well (Bowlby, 1944).

To better understand the significance of early relationships and how those relationships shape human development, Bowlby turned to a variety of literatures, including those pertaining to psychodynamic theory (Freud, 1933/1965, 1940), the emerging ethological models of the 1950's and 1960's (e.g., Hinde, 1966), cognitive developmental psychology (e.g., Piaget, 1953), and the principles of control systems (e.g., Craik, 1943; Young, 1964). Over the next few decades he integrated ideas from each of these domains to forge a theoretical perspective now known as *attachment theory* (Bowlby, 1969/1982, 1979, 1973, 1980).

Bowlby's attachment theory has had an enormous impact on psychological science, in large part because it speaks to many of the enduring subjects that psychologists wish to understand (e.g., emotions, relationships, love and loss, personality, nature and nurture, development, psychological defense); and importantly, it does so in a way that has multidisciplinary appeal, bringing together ideas and observations from social

psychology, developmental psychology, behavioral neuroscience and psychobiology, animal behavior, and clinical psychology. Indeed, by many standards, attachment theory is a strong candidate for being considered a “Grand Theory” in contemporary psychology. Nonetheless, the theory has never been fully embraced by contemporary personality psychologists, despite the fact that it was created to explain, in part, individual differences, personality organization and dynamics, and individual development.

One of the objectives of this chapter is to make the case that attachment theory should play a *central* role in contemporary personality theory and research. The theory offers conceptually rich “units of analysis” that are relevant for understanding much of personality functioning, a framework for modeling the structure of individual differences, and several testable hypotheses regarding the origin of individual differences and how those differences shape interpersonal development. But perhaps a more important reason why attachment theory warrants a more central role in contemporary personality psychology is that attachment theorists have struggled with many of the same conceptual issues that personality psychologists have struggled with over the past few decades (e.g., the person-situation debate, the stability of individual differences). As a result, attachment theory provides a rich and fertile testing ground for general models of personality processes, such as those that attempt to make sense of consistency and inconsistency in behavior (e.g., Mischel & Shoda, 1998), personality in context (Roberts, 2007), and patterns of stability and change in human experience (e.g., McCrae & Costa, 2006). Moreover, because attachment researchers have confronted many of the same

conceptual issues that personality psychologists have, there may be common solutions to these problems.

We begin with a brief overview of attachment theory, highlighting some of the major topics studied by researchers over the years. We describe ways in which attachment theory and research have addressed core issues in personality theory, including units of analysis, the structure and origin of individual differences, and development. Finally, we discuss key challenges faced by attachment researchers, how those challenges mirror ones faced in personality research more generally, and how various ideas and findings in each area might be able to inform the other.

### **A Brief Overview of Attachment Theory**

Bowlby developed attachment theory to explain the intense distress expressed by infants who are separated from their parents. He observed that separated infants go to extraordinary lengths (e.g., crying, clinging, frantically searching) either to prevent separation from or reestablish proximity to a missing parent. At the time of Bowlby's first writings, psychoanalytic theorists held that such emotional outbursts were manifestations of immature dependency, and many behaviorists thought they were signs of dysfunctional parental reinforcements of dependency. Bowlby noted that such expressions are common to a wide variety of mammalian species, suggesting that they serve an evolutionary function.

Drawing on ethological theory, Bowlby postulated that *attachment behaviors*, such as crying and searching, are adaptive responses to separation from a primary attachment figure—someone who has a history of providing support, protection, and care to the child. Because human infants, like other mammalian infants, cannot feed or protect

themselves, they are highly dependent on the care and protection of “older and wiser” adults. Bowlby argued that, over the course of evolutionary history, infants who were able to attract the attention of and maintain proximity to an attachment figure (i.e., by looking cute or by engaging in attachment behaviors) would be more likely to survive to a reproductive age. According to Bowlby, a motivational-control system, which he called the *attachment behavioral system*, was gradually “designed” by natural selection to do just that.

The attachment behavioral system is an important concept in attachment theory because it provides the conceptual bridge between ethological models of human development (e.g., Hinde, 1966) and modern theories of emotion regulation and personality (e.g., John & Gross, 2007). According to Bowlby, the attachment system essentially “asks” the following question: Is the attachment figure nearby, accessible, and attentive? If the child perceives the answer to be “yes,” he or she feels loved, secure, and confident, and, behaviorally, is likely to explore his or her environment, play with others, and be sociable. If, however, the child perceives the answer to be “no,” he or she experiences anxiety and, behaviorally, is likely to exhibit attachment behaviors ranging from simple visual searching to active following and vocal signaling (see Figure 1). These behaviors continue until either the child is able to reestablish a desirable level of physical or psychological proximity to the attachment figure, or until the child wears down, as may happen in the context of a prolonged separation or loss. Bowlby believed that such experiences lead to despair and depression and have the potential to shape the expectations a child develops regarding self-worth and availability and accessibility of all significant others.

### **Individual Differences in Infant Attachment Patterns**

Although Bowlby believed that the basic processes we have just described capture the normative dynamics of the attachment behavioral system, he recognized that there are individual differences in the way children appraise the accessibility of their attachment figures and regulate their attachment behavior in response to a threat. However, it was not until his colleague, Mary Ainsworth, began to study infant-parent separations systematically that a more complete and empirically informed understanding of these individual differences was established. Ainsworth and her students (Ainsworth, Blehar, Waters, & Wall, 1978) developed a technique called the *Strange Situation* to study infant-parent attachment. In the Strange Situation, 12-month-old infants and their parents are brought to the laboratory and systematically separated and reunited in a series of 3-minute scripted episodes. In this situation, most children (i.e., about 60%) behave in the way implied by Bowlby's normative theory. They become upset when their parent leaves the room, but when he or she returns they actively seek the parent and are easily comforted. Children who exhibit this pattern of behavior are often called *secure*.

Other children (about 20% or less) are ill at ease initially, and upon separation become extremely distressed. Of great importance theoretically, when reunited with their parents they have difficulty being soothed and often exhibit conflicting behaviors that suggest they want to be comforted but also want to "punish" their parent for leaving. These children are often called *anxious-resistant*. The third pattern of attachment (shown by around 20% of children) is called *avoidant*. Avoidant children do not appear to be overly distressed by the separation, and upon reunion they actively avoid seeking contact

with their parent, sometimes turning their attention somewhat rigidly to toys on the laboratory floor.

Ainsworth's research was important for at least three reasons. First, she provided one of the early empirical demonstrations of the ways in which attachment behavior is patterned in both safe and novel or threatening contexts. Second, she provided the first empirical taxonomy of individual differences in infant attachment patterns. According to her research, at least three "types" of children exist: those who are secure in their relationship with their parents, those who are anxious-resistant, and those who are anxious-avoidant. These individual differences have become the focus of the majority of empirical research conducted on attachment. We will discuss the relative merits of this particular taxonomy later, but for now we wish to highlight the fact that it was an important first step in delineating and studying individual differences in attachment.

Finally, and most importantly, Ainsworth demonstrated that these individual differences were predicted by infant-parent interactions in the home during the first year of life (i.e., before the Strange Situation assessments were made). Children who were classified as secure in the Strange Situation, for example, tended to have parents who were responsive to their needs. Children who were classified as insecure (i.e., as anxious-resistant or avoidant) often had parents who were insensitive to their needs, or inconsistent or rejecting in the care they provided. These data provided crucial support for some of Bowlby and Ainsworth's hypotheses about why some children develop secure relations with their caregivers whereas other children develop insecure patterns.

There has been a great deal of research since Ainsworth's that empirically tests some of her and Bowlby's claims about the origins of security and insecurity. Several

longitudinal studies have documented associations between early maternal sensitivity and a child's attachment classification in the Strange Situation. For example, Grossmann and colleagues (Grossmann, Grossman, Spangler, Suess, & Unzer, 1985) studied interactions between infants and their parents at home, and then later, when the infants were approximately a year old, brought them and their parents into the laboratory to participate in the Strange Situation. Children whose parents were rated as sensitive and responsive to their needs were more likely than other children to be classified as secure in the Strange Situation (see also Bates, Maslin, & Frankel, 1985; Isabella, 1993; Kiser, Bates, Maslin, & Bayles, 1986; see DeWolff & van IJzendoorn, 1997, for a review).

The association between infant-parent interactions and security has also been established experimentally. In one particularly interesting experiment, Anisfeld, Casper, Nozyce, and Cunningham (1990) randomly assigned parents who were participating in a parenting class to receive either a cozy, strap-on baby carrier or a plastic infant seat with a safety belt. Children whose parents had been assigned to the close-contact carrier condition were later more likely to be classified as secure in the Strange Situation than children whose parents received a plastic infant seat, which had the consequence of keeping the baby at a distance from the parents' bodies. Many experimental studies of non-human primates also demonstrate associations between maternal sensitivity and infant security and adaptation (Suomi, 1999), further suggesting that the infant-mother relationship can have effects on the way the child organizes his or her attachment behavior and regulates emotions.

There have been debates over the years regarding the extent to which the attachment classifications are "merely" reflections of child temperament instead of



capturing something about the way children organize their emotions and behavior in relation to a specific attachment figure – an organization based on the history of interactions with that figure. As some scholars have noted, there is only a modest overlap between attachment classifications when children are tested separately with their mothers and with their fathers (Fox, Kimmerly, & Schafer, 1991), suggesting that to a large extent the classifications are relationship-specific. This finding is difficult to explain if the attachment classifications are simply alternative ways of indexing a child's temperament. Moreover, the majority of studies that have examined measures of temperament and attachment classifications have found weak or inconsistent associations between them (see Vaughn, Bost, & van IJzendoorn, in press, for a review). This is not to say that temperament and parental relationships do not interact to affect a child's attachment classification (see Mangelsdorf, Gunnar, Kestenbaum, Lang, & Andreas, 1990, and van IJzendoorn & Bakermans-Kranenburg, 2006, for examples), but the findings we review here indicate that attachment classifications are not simply an alternative way of measuring temperament.

### **Developmental Pathways and the Legacy of Early Experiences**

Over the past few decades there has been a great deal of research on the developmental implications of early attachment experiences (e.g., Grossmann, Grossmann, & Waters, 2005; Weinfield, Sroufe, Egeland, & Carlson, in press). Most of this research has focused on the association between attachment classifications at one year of age and various later outcomes of developmental significance, such as ego-resiliency, the ability to get along well with and cooperate with peers, the ability to solve problems effectively, and psychopathology in adolescence (e.g., Carlson, 1998).

Although there are exceptions, the majority of published studies demonstrate that early attachment status is related to many outcomes of interest to psychologists, not just in early childhood, but in later adolescence and young adulthood as well (e.g., Roisman, Madsen, Hennighausen, Sroufe, & Collins., 2001). Of course, there are varying perspectives on what those associations mean. The most common interpretation is the *organizational* perspective (Sroufe, 1979), which was inspired by Bowlby's discussion of developmental pathways.

In his 1973 volume, *Separation*, Bowlby analyzed the concept of developmental pathways by exploring the metaphor of a complex railway system. If a traveler were to begin his or her journey by selecting the main route, he or she would eventually reach a point at which the railroad branches into a number of distinct tracks. Some of these tracks would lead to distant, unfamiliar lands; others, while deviating from the main route, would run more or less parallel to it. As the traveler's journey progressed, he or she would be faced with new choices at each juncture. The choices the traveler made would have important implications for his or her journey and its ultimate destination.

Bowlby believed that the railway metaphor was a good way to characterize personality development. Early in life, there are many pathways along which a person might develop, and a variety of destinations at which the person might arrive (Sroufe & Jacobvitz, 1989). Some of these "destinations" involve high-functioning relationships with family members, peers, and romantic or marital partners, some do not. As people navigate alternative pathways, many get further away from their common origins, making their life trajectory increasingly difficult to transform. One of Bowlby's goals was to understand the pathways by which people develop and, importantly, to elucidate the

processes that either keep them on a particular developmental course or allow them to deviate from routes previously established.

Bowlby's railway metaphor was inspired by C. H. Waddington's (1957) discussion of the cybernetics of cell development. Waddington, a developmental embryologist writing in the middle of the twentieth century, was attempting to understand how a cell maintains a particular developmental trajectory in the face of external disturbances. He and others had observed that, once a cell begins to assume specific functions (e.g., becomes integrated into a structure that is destined to become the visual system), weak experimental interventions are unlikely to alter the cell's developmental trajectory. Although early in development a cell has the potential to assume many different fates, once a developmental trajectory becomes established, it becomes *canalized* or buffered to some degree, making it less and less likely that the cell will deviate from that developmental course.

To illustrate these dynamics more concretely, Waddington compared them to the behavior of a marble rolling down a hill. In this analogy, the marble represents a cell, and the various troughs at the end of the landscape represent alternative developmental functions or "fates" the cell can assume. Waddington considered the specific shape of the landscape to be controlled by complex interactions among genes and between genes and the environment, leading Waddington to refer to it as the *epigenetic landscape*.

After the marble begins its descent, it settles into one of several pathways defined by the valley floors of the epigenetic landscape. A slight push may force the marble away from its course, but the marble will eventually reestablish its trajectory. As the marble continues along the basin of a specific valley, it becomes increasingly unlikely that

external forces will cause it to jump from one valley to the next. Certain features of the marble, such as its smoothness and momentum, help to keep it moving along the established path. Features intrinsic to the landscape itself also help to maintain the marble on its original pathway. The steepness and curvature of the hills, for example, serve to cradle the marble and buffer it from external forces.

Waddington considered the tendency for the marble to maintain its initial course in the face of external pressures to be an analogue to a fundamental self-regulatory process in cell development, *homeorhesis*. Homeorhesis refers to the tendency of a system to maintain a specific developmental trajectory—or a course toward a specific developmental outcome—despite external perturbations. Waddington argued that the specific pathways available to the cell early in development are determined by the way the genes interact to initiate and control biochemical reactions. Moreover, he believed that these reactions operate in a manner that leads the valleys of the epigenetic landscape to become more entrenched over time. Thus, once a cell settles into one of several available pathways, it becomes increasingly likely to follow that pathway.

The concept “degree of canalization” was important to Bowlby, and he often wrote of “environmentally labile” traits to refer to properties that were less subject to canalization. In his 1969 volume, *Attachment*, for example, he argued that the development of the attachment behavioral system is highly canalized, in the sense that the rudimentary set of control mechanisms and behavior programs needed to allow a child to regulate proximity to a caregiver emerges despite a diverse range of environmental circumstances. Bowlby believed, however, that the *specific way* a child comes to regulate his or her attachment behavior is influenced by interpersonal experiences, and if the

system is to function appropriately in a specific caregiving environment, it needs to be calibrated, more or less, to that environment. Bowlby thought that early experiences within the family—especially those concerned with separation or threats of loss—were particularly influential in shaping the way a child’s attachment system becomes organized. According to his railway metaphor, early experiences in the family help to determine which of many possible routes an individual will travel.

In the context of personality development, Bowlby believed that once an initial pathway is established, there are a number of homeorhetic processes that keep a person on that pathway. He separated these homeorhetic processes into two broad categories. The first is the *caregiving environment*. To the extent that an individual’s caregiving environment is stable, he or she is unlikely to experience interactions that challenge his or her representations of the world. Bowlby (1973) noted that a child is typically born into a family in which he or she has the same parents, same community, and the same broad ecology for long periods of time. Thus, it is during unusual periods of transition (e.g., parental divorce, relocating to a new town, being abused by an adult) that a person is most likely to be forced from one developmental track onto another. (This idea has been well supported in a 20-year longitudinal study by Waters, Merrick, Treboux, Crowell, & Albersheim, 2000).

Bowlby (1973) also discussed homeorhetic *intra-individual* or *psychodynamic* processes that can promote continuity. He noted that people often select their environments in ways that maximize the overlap between the psychological qualities of the situations and the people’s experience-based expectations and preferences. Moreover, Bowlby argued, the mind generally assimilates new information into existing schemas

rather than accommodating to it (an idea Bowlby borrowed from Piaget, whom he knew personally; see Collins & Read, 1994, for a discussion of this issue as it arises in the study of adult attachment and social cognition). Consistent with these ideas, empirical research has shown that people's working models influence the kinds of reactions they elicit from others (Arend, Gove, & Sroufe, 1979; Troy & Sroufe, 1987; Waters, Wippman, & Sroufe, 1979) and the kinds of inferences they make about people's intentions in experimental contexts (Brumbaugh & Fraley, 2006; Collins, 1996; Pierce, Sarason, & Sarason, 1992; Pietromonaco & Carnelley, 1994). Such dynamics allow working models to shape the kinds of interactions a person experiences, and in concert, helps to maintain the individual's already partially canalized pathway through development. To the extent that an individual diverges from such a pathway, the changed route seems likely to be fairly close to its predecessor.

The important point is that Bowlby's theory offered a means both to understand how variation in an early caregiving environment can influence a child's development and to acknowledge that it is not only the child who is affected by these experiences, but the subsequent developmental context and pathway as well. These processes are highly dynamic because, not only is the caregiving environment shaping the child's expectations about the world, but those expectations, in turn, influence the way people in the social world relate to the child. As a result, there is likely to be a detectable coherence over time in the way the child functions, and although the specific behaviors observed over time may change, the underlying themes that characterize the child's behavior may be relatively stable. One of the objectives of empirical research on attachment is to understand how caregiving environments affect children, how children's working models

influence their environments in turn, and how the interplay between these two factors shapes children's developmental paths. Whereas certain kinds of experiences have the potential to alter a person's life course, the homeorhetic dynamics of the attachment system promote continuity and coherence over time.

### **Attachment in Adults**

Although Bowlby was primarily concerned with understanding the infant-caregiver relationship, he believed that attachment characterizes human experience from “the cradle to the grave.” It was not until the mid-1980's, however, that researchers began to take seriously the possibility that attachment processes play out in adulthood in ways that go beyond what is predicted from infancy or childhood. Ideas about adult attachment were explored and developed in slightly different ways within different research traditions. Among developmental psychologists, researchers began to refine methods, such as the Adult Attachment Interview (AAI; e.g., Main, Kaplan, & Cassidy, 1985; see review by Hesse, in press), for understanding how young adults represent their early attachment experiences with parents. By studying transcripts based on an hour-long interview, Main and her colleagues developed a means for predicting which parents would have secure children and which would have insecure children as assessed in the Strange Situation.

Their studies indicated that parents who were able to recall and describe their early experiences in a coherent fashion are more likely than others to have infants classified as “secure” in the Strange Situation. Such parents, called “secure and autonomous with respect to attachment,” or just “secure,” are able to collaborate effectively with the interviewer and provide accounts that are internally consistent. Other parents provide less

coherent narratives. Some, for example, provide inconsistent information (such as describing their early relationships with parents as being “warm,” yet narrating specific episodes in which they felt neglected or unappreciated by their parents). Some adults tend to minimize the relevance of their parents, while others appear to be overly enmeshed in these relationships. Many studies (reviewed by Crowell, Fraley, & Shaver, in press) now confirm that adults’ AAI classifications predict their children’s attachment classifications (suggesting a degree of intergenerational transmission of attachment dynamics), their behavior toward their children, and their behavior towards their spouses or romantic partners (Roisman et al., 2007).

Among social and personality psychologists, the attachment dynamics and individual differences that Bowlby and Ainsworth discussed were examined in the context of close adult relationships, often of the romantic-sexual variety. Hazan and Shaver (1987) were two of the first researchers to explore Bowlby’s ideas in this context. According to them, the emotional bond that develops between adult romantic partners is partly a function of the same motivational system—the attachment behavioral system—that gives rise to the emotional bond between infants and their caregivers. Shaver, Hazan, and Bradshaw (1988) noted that adult romantic partners, like infants in relation to their caregivers, share the following features: (a) both infants and adults feel safer when their attachment figure is nearby and responsive; (b) both engage in close, intimate, bodily contact; (c) both feel insecure when their attachment figure is separated from them and inaccessible; (d) both share discoveries with each other; (e) both engage in mutual eye contact, touch each other’s faces gently or playfully, snuggle and embrace, and seem fascinated and preoccupied with each other; (f) both tend to use a special kind of



communication, called “motherese” in the infant-parent relationship and “baby talk” in romantic relationships. On the basis of these parallels, Hazan and Shaver (1987; Shaver et al., 1988) argued that many adult romantic relationships, like infant-caregiver relationships, are *attachments*, and that romantic love is a property of the attachment behavioral system, as well as the somewhat distinct motivational systems that give rise to caregiving and sexuality.

The idea that romantic relationships may be attachment relationships has had a profound influence on modern research in social and personality psychology. There are at least three important implications of this idea. First, if adult romantic relationships are attachment relationships, then we should observe the same kinds of individual differences in adult relationships that Ainsworth observed in infant-caregiver relationships. We may expect some adults, for example, to be secure in their relationships—to feel confident that their partners will be there for them when needed, and feel open to depending on others and having others depend on them. We should expect other adults to be insecure in their relationships. For example, some insecure adults may be anxious-resistant: they worry that others do not love them sufficiently and they are easily frustrated or angered when their attachment needs go unmet. Others may be avoidant: they may appear not to care much about close relationships and may prefer not to depend on other people or have others be dependent on them.

Second, if adult romantic relationships are attachment relationships, then the way adult relationships function should be similar to the way infant-caregiver relationships function. In other words, the same factors that facilitate exploration in children (i.e., having a responsive caregiver and the knowledge that he or she is available if needed)

should facilitate exploration in adults (i.e., having a responsive partner and knowing that he or she is available when needed). The qualities that make an attachment figure “desirable” to an infant (i.e., being available, responsive, supportive) should also be desirable qualities in an adult romantic partner. Importantly, individual differences in attachment should influence relational and personal functioning in adulthood in the same ways they do in childhood.

Third, whether an adult is secure or insecure in his or her adult relationships may be a partial reflection of his or her attachment experiences in childhood. As discussed previously, Bowlby believed that the mental representations or *working models* (i.e., expectations, beliefs, “rules” or “scripts” for behaving and thinking) that a child holds regarding relationships are a function of his or her experiences with caregivers. For example, a secure child tends to believe that others will be there for him or her because previous experiences have led to this conclusion. Once a child has developed such expectations, he or she will tend to seek out relational experiences consistent with those expectations and perceive others in ways colored by those beliefs. According to Bowlby, this kind of homeorhetic process should promote continuity in attachment patterns over the life course, although it is possible that a person’s attachment pattern will change if his or her relational experiences are inconsistent with expectations. In short, if we assume that adult relationships are attachment relationships, it is possible that children who are secure as children will grow up to be secure in their romantic relationships.

In the following sections we briefly address some of these implications in light of early and contemporary research on adult attachment. This is not meant to be a comprehensive review (for a more comprehensive one, see Mikulincer & Shaver, 2007a);

rather, it is designed to convey some of the major themes that have occupied attachment researchers over the past two decades while illustrating some of the ways in which the primary “units of analysis” in attachment research are studied.

**Do We Observe the Same Kinds of Attachment Patterns in Adults  
That We Observe in Children?**

The earliest research on adult attachment examined associations between individual differences in adult attachment and the way people think about their romantic relationships and recall their childhood relationships with their parents. Hazan and Shaver (1987) developed a simple questionnaire to measure these individual differences (which have been given different names by different investigators: attachment styles, attachment patterns, attachment orientations, or differences in the organization of the attachment system). Hazan and Shaver (1987, 1990) asked research subjects to read the three paragraphs below and indicate which one best characterized the way they think, feel, and behave in close relationships:

A. I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, others want me to be more intimate than I feel comfortable being.

B. I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't worry about being abandoned or about someone getting too close to me.

C. I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to get very close to my partner, and this sometimes scares people away.

Based on this three-category measure, Hazan and Shaver found that the frequencies of endorsing the different categories was similar to the frequencies observed in middleclass samples of infants in the Strange Situation: About 60% of adults classified themselves as secure (paragraph B), about 20% as avoidant (paragraph A), and about 20% as anxious-resistant (paragraph C).

Although this measure was useful for documenting the association between attachment styles and relationship functioning, it did not allow a full test of the hypothesis that the same kinds of individual differences observed in infants might also be evident in adults. (For the most part, the Hazan and Shaver measure assumed this to be true; it did not provide a means for testing the hypothesis.) Subsequent research has explored this hypothesis in a variety of ways. For example, Brennan, Clark, and Shaver (1998) collected a large number of statements conceptually related to attachment (e.g., "I believe that others will be there for me when I need them"), correlated people's responses on them, and determined their underlying structure using factor analysis. Brennan et al.'s findings indicated that there are two major attachment-style dimensions (see Figure 2). One of them was labeled *attachment-related anxiety*. People with high scores on this dimension tend to worry whether their relationship partner is available, attentive, and responsive. People who score low on this dimension are more secure with respect to their partners' responsiveness. The other dimension is called *attachment-related avoidance*. People who score high on this dimension prefer not to rely on others or open up

emotionally to them. People who score low are more comfortable being intimate with others and relying on them for comfort and support. A prototypically secure adult scores low on both dimensions (see Figure 2).

Recent analyses of the statistical patterning of infant behavior in the Strange Situation have revealed two conceptually similar dimensions, one indexing an infant's anxiety and resistance and the other indexing the child's willingness to use a parent as a safe haven and secure base (see Fraley & Spieker, 2003a, 2003b). These dimensions were also evident in a discriminant analysis included in Ainsworth et al.'s (1978) book, but subsequent investigators tended to use attachment categories instead of the two continuous dimensions. Taken together, studies of the structure of measures of attachment orientation at different ages suggest that two major individual-difference dimensions exist at different points in the life span.

In light of Brennan et al.'s findings, as well as taxometric research by Fraley and Waller (1998), most researchers currently conceptualize and measure attachment patterns dimensionally rather than categorically. The most popular measures of adult attachment style are Brennan et al.'s (1998) ECR and Fraley, Waller, and Brennan's (2000) ECR-R, a slightly revised version of the ECR based on item response theory. Both self-report instruments provide scores on the two continuous dimensions, attachment-related anxiety and avoidance.

Although contemporary attachment researchers tend to focus on the two attachment dimensions of anxiety and avoidance in their research, it is important to note that this two-dimensional space covers many of the distinctions that have been made by other attachment researchers. For example, Hazan and Shaver's (1987) description of security

refers to a combination of elements involving low anxiety and low avoidance, whereas their description of avoidance refers someone who is high in avoidance, and moderately high in attachment anxiety as well. Similarly, Bartholomew and Horowitz's (1991) four prototypes of security, preoccupation, fearful-avoidance, and dismissing-avoidance can be located in the two-dimensional space by rotating the anxiety and avoidance axes by 45 degrees, as show in Figure 2 (also see Griffin & Bartholomew, 1994). The prototypical dismissing individual, for example, is high on the avoidance dimension and low on the anxiety dimension.

For the purposes of this chapter, most of the work that we review will not focus on distinguishing the two dimensions. We will focus primarily on the way in which individual differences in security are related to other variables while not always specifying whether security was measured using an older categorical measure or a linear combination of anxiety and avoidance, or whether only one of the two attachment dimensions was related to the outcome. These distinctions are sometimes important in attachment research, but a simplified discussion will be sufficient here. We encourage interested readers to follow up these matters in the original publications.

### **Do Adult Romantic Relationships "Work" the Same Way as Infant-Caregiver Relationships?**

There is now a large and heterogeneous body of research showing that adult romantic relationships do function in psychologically similar ways as infant-caregiver relationships, with some noteworthy exceptions, of course. Naturalistic research on adults separating from their partners at an airport demonstrated that behaviors indicative of attachment-related protest and caregiving occurred, and that regulation of these behaviors

was associated with attachment style (Fraley & Shaver, 1998). For example, whereas couples who were about to separate (because one of them was leaving on an outbound flight) generally showed more attachment behavior (e.g., touching, watching, holding) than nonseparating couples, more avoidant adults displayed much less attachment behavior than less avoidant adults. In the sections below we discuss some of the other parallels between infant-caregiver relationships and adult romantic relationships.

### **Partner Selection**

Cross-cultural studies find that the secure pattern of attachment in infancy is universally considered the most desirable pattern by mothers (van IJzendoorn & Sagi, in press). For obvious reasons, there is no similar study asking infants if they would prefer a security-inducing attachment figure. Adults seeking long-term relationships identify responsive caregiving qualities, such as attentiveness, warmth, and sensitivity, as most “attractive” in potential dating partners (Zeifman & Hazan, 1997). Despite the attractiveness of secure qualities, however, not all adults are paired with secure partners. Some evidence suggests that people end up in relationships with partners who confirm their existing beliefs about attachment relationships (Frazier et al., 1997).

### **Secure Base and Safe Haven Behavior**

In infancy, secure infants tend to be the most socially adjusted, in the sense that they are relatively resilient, get along well with their peers, and are well liked. Similar kinds of patterns are notable in research on adult attachment. Overall, secure adults tend to be more satisfied in their relationships than insecure adults. Their relationships are characterized by greater longevity, trust, commitment, and interdependence (e.g., Feeney,

Noller, & Callan, 1994), and secure individuals are more likely to use romantic partners as a secure base from which to explore the world (e.g., Fraley & Davis, 1997).

Much of the research on adult attachment has been devoted to uncovering the behavioral and psychological mechanisms that promote security and secure base behavior in adults. There have been two major discoveries thus far. First and in accordance with attachment theory, secure adults are more likely than insecure adults to seek support from their partners when distressed (see Mikulincer & Shaver, 2007a, for a review). Moreover, they are more likely to provide support to their distressed partners (e.g., Simpson, Rholes, & Nelligan, 1992). Second, the attributions that insecure individuals make concerning their partner's behavior during and following relational conflicts exacerbate, rather than alleviate, their insecurities (e.g., Simpson, Rholes, & Phillips, 1996).

### **Avoidant Attachment and Defense Mechanisms**

According to attachment theory, children differ in the kinds of strategies they adopt to regulate attachment-related anxiety. As mentioned earlier, following a separation and reunion between an infant and his or her parent some insecure children approach the parents, but with ambivalence and resistance, whereas others withdraw from the parent, apparently minimizing attachment-related negative feelings and behavior. One of the big questions in the study of infant attachment is whether children who withdraw from their parents—avoidant children—are truly less distressed or whether their defensive behavior is a cover-up for their true feelings of vulnerability. Research that has measured the attentional capacity of children, heart rate, or stress hormone levels suggests that avoidant children are distressed by the separation, despite looking cool and unconcerned (e.g., Sroufe & Waters, 1977).



Recent research on adult attachment has revealed some interesting complexities concerning the relationships between avoidance and defense. Although some avoidant adults, the ones Bartholomew and Horowitz (1991) called fearfully avoidant, are poorly adjusted despite their defensive nature, others – the dismissingly avoidant, are able to use defensive strategies in an adaptive way. For example, in an experimental task in which adults were instructed to discuss losing their partner, Fraley and Shaver (1997) found that dismissing individuals (i.e., those who scored high on attachment-related avoidance but low on attachment-related anxiety) were just as physiologically distressed (as assessed by skin conductance measures) as other individuals. When instructed to suppress their thoughts and feelings, however, dismissing individuals were able to do so effectively. That is, they could deactivate their physiological arousal to some degree and minimize the occurrence of attachment-related thoughts. Fearfully avoidant individuals were not as successful in suppressing their emotions. Mikulincer, Dolev, and Shaver (2004) replicated this finding, but also discovered that avoidant adults were less proficient at inhibiting attachment-relevant thoughts and feelings when their attentional resources were depleted by a cognitively engaging task. This and other more naturalistic studies (e.g., Berant, Mikulincer, & Shaver, 2008) suggest that avoidant individuals' ability to suppress thoughts and feelings related to negative attachment experiences, as well as negative thoughts about themselves, is successful much of the time, perhaps partly because these thoughts can be avoided by shunning social interactions in which they would become salient. Under stress, however, the avoidant defenses can fail, leaving a generally cool and collected individual vulnerable to painful experiences.

### **Attachment Theory and Contemporary Personality Research**

One of the objectives of this chapter is to make the case that attachment theory has the potential to play an important role in contemporary personality research. Up to this point we have discussed some of the basic ideas in attachment theory, highlighting the core units of analysis, the developmental aspects of the theory, and the role of individual differences in attachment research. In the following sections we expand upon this theme by discussing conceptual challenges or debates that have arisen both in attachment theory and in personality research more generally. Our intent is to highlight the ways in which these issues have been handled in both areas and to suggest that some of the ideas, models, and solutions that have been developed in personality research could be useful for better understanding attachment processes. We will also contend that some of the ideas developed by attachment researchers have the potential to inform personality research more generally.

#### **Consistency across Situations**

Attachment researchers have tended to conceptualize attachment-related working models (cognitive-affective schemas) as generalized representations—representations that capture the broad, as opposed to the specific, relational themes common to diverse interpersonal experiences. This approach, which has sometimes been referred to as a “trait” or “individual-centered” approach (Kobak, 1994; Lewis, 1994) has obvious parallels to the trait concept in personality research and has been popular for a number of reasons. For one, if early childhood experiences with caregivers result in the formation of cognitive structures that are relatively general and stable, then this could be the basis for the continuity and coherence people display in their multiple close relationships.

Although there are undoubtedly variations from one relationship to another in how a person relates to significant others, a trait perspective implies that there is likely to be a common thread tying together the individual's thoughts, feelings, and behavior across the different relationships and contexts.

Despite its appeal, the trait approach to attachment has been criticized on at least two grounds. First, researchers have observed that people exhibit different attachment patterns across different relationships. Baldwin, Keelan, Fehr, Ennis, and Koh-Rangarajoo (1996), for example, demonstrated that there is considerable within-person variability in the expectations and beliefs that people hold about different significant others. A man may consider his spouse to be warm, affectionate, and responsive while simultaneously viewing his mother as cold, rejecting, and aloof. The fact that substantial within-person variation (i.e., "inconsistency") exists in the way people relate to others raises a number of questions about how working models should be conceptualized in attachment theory.

For most personality researchers, this problem will be familiar. Over 40 years ago Walter Mischel published *Personality and Assessment*, a review of the field that is now best remembered for its critique of trait models of personality (Mischel, 1968). According to Mischel's interpretation of the evidence, the correlations among measures of behavior from one situation to the next were lower than expected, leading him to question the usefulness of the trait concept (see Ahadi & Diener, 1989, however, for alternative interpretations).

Attachment researchers have offered several potential solutions to the *inconsistency issue* in the study of attachment. One popular proposal has been that people hold different

working models of different relationships, and that there can be different models at different levels of abstraction or generalization (e.g., Collins, Guichard, Ford, & Feeney, 2004; Overall, Fletcher, & Friesen, 2003). For example, people may hold relatively global representations of their “parents,” but they also hold relationship-specific representations of their mothers and fathers. Thus, it is possible for the same person to exhibit varying degrees of security in relationships with two parents, assuming that there is a different history of security and support in the two relationships.

From this point of view, the challenge for attachment researchers is not to explain why people experience different degrees of security in their various relationships, but why there is some degree of consistency across relationships when each relationship has its own unique aspects. Collins and her colleagues (2004) suggested that, in addition to forming relationship-specific representations, people develop a more abstract, global representation that captures some kind of “average” of their experiences. Indeed, theoretical work on this possibility using connectionist simulations suggests that mental systems easily extract the “gist” or themes that are common to many different experiences and that these more abstract representations can be used to guide the model’s response to new and ambiguous targets (Fraleay, 2007). As a result, behavior in any one context can be driven both by global, or abstract representations, and by ones that are more specific to the relationship in question. The global representation is part of what creates similarity in a person’s thoughts and feelings across relationships (and thus acts as a latent factor, in a psychometric sense), whereas the relationship-specific representation captures knowledge and strategies for managing specific relationships (and thus explains relationship-specific variance).

Another explanation for a degree of consistency across relationship partners is developmental in nature. If a relationship-specific representation is forged partly on the basis of those that already exist, we would expect a modest degree of association in security across different relationships. For example, if one relationship-specific representation (pertaining to mother, say) was constructed before another (i.e., pertaining to one's romantic relationship partner), and if the former played a role in shaping the latter, then the two sets of relational experiences would be similar (and, thus, correlated across targets; see Figure 3). In this scenario, there is no global model or "trait" per se (although there is no reason why there could not be); the associations among the security levels of representations of different relationships is explained by existing models playing a causal (but incomplete) role in shaping the development of new models. The association is imperfect because the new relationships are unique in many respects.

Social cognitive research on transference suggests that these kinds of dynamics occur and can be set in motion relatively easily with simple laboratory stimuli (e.g., Andersen & Chen, 2002). For example, when asked to rate how secure people feel with potential mates described in personal ads, people are more likely to feel secure with those potential mates when the ads have been constructed, unbeknownst to the research subjects, to resemble a former attachment figure (Brumbaugh & Fraley, 2006). This finding indicates that existing working models can be used to guide the interpretation of new experiences, thereby creating a degree of consistency.

These ideas bear on the consistency debate in personality psychology. In mainstream personality psychology, most of the initial responses to Mischel's arguments were "defensive" in nature—attempts to explain why Mischel was wrong or

misrepresenting the facts rather than attempts to understand how it is that people can exhibit coherence in their thoughts, feelings, and behavior without necessarily behaving in similar ways across situations. Some proposals, for example, focused on the fact that the expected correlation between two “samples” of behavior should be relatively small, as expected from the psychometric principles of classical test theory, but that such correlations will increase as more and more instances are aggregated (Epstein, 1979, 1980). Other proposals focused on the idiosyncratic meaning of trait-terms and how some traits might be relevant to some people while being irrelevant to others (thereby making their behavior less consistent across situations; see Bem & Allen, 1973; also Baumeister & Tice, 1988, for a discussion).

One of the more recent rapprochements has come from Mischel himself. Mischel and Shoda’s (1995; this volume) cognitive-affective processing system (i.e., CAPS) model assumes that an important aspect of personality is the “if-then” associations people hold. A person can behave in a way that appears inconsistent if a researcher simply aggregates measures of honesty across situations, but the person may in fact be behaving in a way that is perfectly consistent with the way his or her associations are organized. For example, a person may be relatively sociable and outgoing among friends and family (“If with family, then feel free to express self”), but less talkative and more shy when interacting with strangers (“If the situation and the other person’s preferences are unknown, then refrain from sociable outbursts for the time being”). If we were to aggregate measures of sociable behavior across the two contexts, it might seem that the person is “inconsistent,” but the person’s behavior might be quite lawful and coherent once the governing “if’s” and “then’s” are taken into account.

The CAPS framework is similar to ones that have been adopted in the study of attachment, although the attachment approach incorporates traditional trait-like concepts (e.g., attachment styles, general working models) with more contextually specific factors rather than removing trait-like constructs entirely. Indeed, the theoretical simulations by Fraley (2007) demonstrate that a connectionist cognitive system can construct both global representations and “if-then” representations in parallel, and that both kinds of representations can be used to guide behavior in new situations. It should therefore be possible for personality researchers to consider models that enable traits and more dynamic and situation-specific aspects of personality to exist simultaneously.

Although additional solutions to the person-situation debate have been put forward (Fleeson’s [2001] framework, for example, strikes us as promising), the CAPS model is worth discussing in particular because in many ways it resembles ideas advanced by Bowlby (1969, 1973, 1980) years before in his discussion of working models and how they are constructed and shape human experience. Moreover, some attachment researchers have explicitly embraced the CAPS framework as a means of understanding attachment dynamics in adult relationships (e.g., Zayas, Shoda, & Ayduk, 2002). Zayas and her colleagues provided a valuable discussion of how a close relationship can be viewed as a result of the interplay of two initially independent cognitive-affective systems (i.e., the two relationship partners) that eventually interlock and configure themselves in relation to each other. Such processes allow people to have pre-existing working models that are initially used to make sense of partners as new relationships form, but also allow the working models to be reconfigured (and for new models to develop) as people continue their relationships. Ultimately, the way each person thinks,

feels, and behaves in the relationship can be understood as lawful, but some of the classic concepts and measures used to study personality (e.g., measures of cross-situational consistency) may not always provide the best means of doing so.

### **Stability and Change: How Stable are Attachment Patterns across Time?**

One of the core themes in attachment research is that individual differences are relatively stable across time, but there have been heated debates about the extent to which attachment patterns are stable over the life course. Some scholars have highlighted the relative lack of stability in measures of attachment (e.g., Baldwin & Fehr, 1995; Kagan, 1996; Lewis, Feiring, & Rosenthal, 2000), whereas others have emphasized their stability (e.g., Waters et al., 2000). One reason these debates have been difficult to resolve is that test-retest correlation coefficients—the primary means of documenting and studying stability and change—can be difficult to interpret in a developmental context. If one were to assess a construct on two separate occasions and find a test-retest correlation of .30, some researchers might interpret it as “small,” whereas others might interpret it as “substantial.”

Fraley and Brumbaugh (2004) argued that test-retest coefficients across two time points are inadequate for determining whether a construct is stable. To illustrate, consider the data shown in Figure 4. The solid curve illustrates a scenario in which the test-retest correlation between two measures of a construct is relatively high at the beginning of the life course (e.g., between ages 1 and 2), but gradually gets smaller as the test-retest interval increases. In fact, as the test-retest interval increases, the expected value of the test-retest correlation approaches zero. Now consider the dashed curve. In this scenario the stability correlations are relatively high across the early years and, although they drop



to some extent, they approach a non-zero asymptote. The test-retest correlations between two measures of the construct are the same from Age 1 to Age 5 and from Age 1 to Age 35.

There are two important points to take away from this diagram. First, any test-retest coefficient (the bread and butter of longitudinal research on both personality and attachment) is compatible with two mutually exclusive scenarios, one in which there is a “stable degree of (in)stability” over time and one in which instability eventually “wins” and the long-run stability approaches zero. Most studies based on single test-retest coefficients are unable to address the original question: How stable are individual differences over long stretches of time? The second point is that questions about stability can be answered well only by studying test-retest correlations across multiple time points and estimating the asymptotic value of those correlations. It is the *pattern* of test-retest correlations over time that provides evidence of stability or instability, not the specific value of any one correlation, which on its own has no clear meaning (Fraley & Roberts, 2005).

Fraley (2002) initially discussed some of these issues in the context of attachment and formalized preliminary models that led to different predictions about the patterns of stability and change that should be observed in empirical studies. Based on a meta-analysis of the data that existed at the time, he concluded that attachment patterns were relatively stable from infancy to adulthood and that the asymptotic value of attachment stability was between .30 and .40. In other words, between Age 1 and Age 2, the expected stability is about .35, as it is between Ages 1 and Age 25. The test-retest correlations tend to be higher in intervals across the adult years, which Fraley and

Brumbaugh (2004) explain as being due to the accumulation of correlated variance across a person's environments.

These ideas were later adapted and elaborated by Fraley and Roberts (2005) to apply to similar debates in the study of personality traits. As in the domain of attachment research, debates have raged in trait research about the extent to which commonly studied personality traits are stable. Some researchers have argued that measures of personality are not highly stable over time (e.g., Lewis, 1999, 2001), whereas others have argued that they are (e.g., Caspi & Roberts, 2001; McCrae et al., 2000). Indeed, some researchers have argued that personality traits do not change much at all past the age of 30, and that observed instability is largely due to measurement error (e.g., Costa & McCrae, 1994; but see Srivastava, John, Gosling, & Potter, 2003).

Fraley and Roberts (2005) formalized some of the ideas discussed in the literature on personality stability and change and illustrated the differential implications of those ideas for the patterns of stability that should be observed empirically over time. They reanalyzed meta-analytic data on the test-retest stability of personality measures and demonstrated that, as with attachment, the data on personality are compatible with the idea that there is a "stable degree of (in)stability" in personality. In short, the stability of individual differences from early childhood to later childhood and adulthood is relatively low, but it does not get lower as the test-retest interval increases. Moreover, the test-retest correlations in later life follow the same pattern but are higher than those seen in childhood, probably again due to the accumulation of correlated variance over time.

In summary, there is value in integrating the study of attachment and the study of personality. Both areas of study have struggled with the same issues, and in this case a

solution that was developed in one area (i.e., the study of attachment) was able to affect the way personality researchers conceptualize and study stability and change.

### **What is the Relation between Attachment Constructs and Trait Constructs?**

One pressing issue for researchers working at the interface of attachment and personality is the association, both conceptual and empirical, between individual differences in attachment and personality traits, such as the Big Five dimensions (e.g., John & Srivastava, 1999). Theoretically, the issue is not as clear cut as some might wish. As we discussed previously, Bowlby (1973) conceptualized attachment and development in a manner that was inspired by Waddington's (1957) discussion of cell development. As a result, Bowlby (1973) explicitly argued that a child's preexisting dispositions play a role in his or her responses to the environment; in some respects, they are responsible for the shape of the epigenetic stage upon which attachment relationships play out (e.g., Bowlby, 1973, p. 369). But he also argued that the history of interactions between a child and his or her attachment figures will be the more proximate and crucial determinant of the thoughts, feelings, and behaviors that the child experiences in close relationships, regardless of the preexisting dispositions upon which they are layered.

In the lingo of contemporary personality psychology, it is unclear from Bowlby's writings whether he considered basic personality traits to be independent predictors of interpersonal behavior, the starting point in a mediated casual chain, a potential moderator of the relations between attachment and interpersonal behavior, or some combination of the above. Regardless of this ambiguity, it is certain that he did not conceptualize individual differences in security as being "nothing more" than pre-existing personality traits. In that spirit, it is worth noting that there has been a great deal of

research over the past decade examining the way individual differences in security predict various outcomes after statistically controlling individual's scores on measures of basic personality traits, such as neuroticism. For example, there is robust evidence that secure individuals tend to maintain more stable romantic relationships than insecure people (either anxious or avoidant) and report higher levels of relationship satisfaction and adjustment (see Mikulincer & Shaver, 2007a for a review). This pattern has been consistently obtained in studies of both dating and married couples and cannot be explained by other personality factors, such as the Big Five personality traits or self-esteem (Nofhle & Shaver, 2006). Moreover, research on seemingly basic affective responses reveals that measures of attachment predict emotional reactions even when basic personality traits are controlled (e.g., Erez, Mikulincer, van IJzendoorn, & Kroonenberg, 2008; Mikulincer, Gillath, & Shaver, 2002).

Despite the fact that individual differences in attachment are related to a variety of outcomes when basic personality traits are controlled, it is important to note that attachment and personality traits *are* related to one another in meaningful ways. Attachment anxiety, not surprisingly, is substantially correlated with neuroticism ( $r$ 's in the .40 to .50 range), and avoidant attachment is often negatively correlated (e.g.,  $r$ 's around -.20) with agreeableness and extraversion (see Nofhle & Shaver, 2006, for a detailed review). As a result, the core individual differences in attachment can be located in the well-known 5-dimensional space advocated in much contemporary personality research. It seems unlikely, however, based on the evidence reviewed above, that these relations exist because the attachment dimensions are simply manifestations of the Big Five personality traits. In light of the previous discussion of the ways in which people can

experience different levels of security with different significant others in their lives, it would be interesting for future research to examine the way relationship-specific measures of attachment relate to measures of basic personality traits and see if basic personality traits are able to explain part of what is common across varying relationships.

### **Adjustment and Psychopathology**

Many “Grand Theories” of personality have something to say about disorders of personality—ways in which the functioning of the system can break down. Attachment theory is similar to Freudian and other psychoanalytic theories in focusing on defenses and pathology, but it also includes ideas about the paths to “optimal functioning” that have much in common with classic humanistic and self-actualization theories of personality (e.g., Maslow, 1968; Rogers, 1961) and with contemporary perspectives on subjective well-being and “positive psychology” (Aspinwall & Staudinger, 2003; Peterson, 2006). Attachment theory emphasizes not only fears and defenses related to attachment insecurities, but also the ways in which good relationships can build psychological resources and broaden perspectives and skills associated with a sense of security. Research consistently confirms that the sense of attachment security is associated with positive mental representations of others, a stable sense of self-efficacy and self-esteem, and reliance on constructive ways of coping, which in turn facilitate mental health and psychological functioning even in times of stress (see Mikulincer & Shaver, 2003, 2007a, for reviews). Moreover, securely attached people tend to feel generally safe and protected, and they can interact with others in a confident and open manner without being driven by a defensive need to protect a fragile or false self-concept (Mikulincer & Shaver, 2005).

There is extensive evidence that secure individuals are more likely than their insecure counterparts to possess personality characteristics and virtues emphasized in “positive psychology,” such as resilience, optimism, hope, positive affectivity, curiosity and exploration, healthy autonomy, a capacity for love and forgiveness, feelings of interconnectedness and belongingness, tolerance, and kindness (see Lopez & Brennan, 2000; Mikulincer & Shaver, 2003, 2007a; Shaver & Mikulincer, 2002). Moreover, there are similarities between the way attachment security evolves from repeated episodes of attachment-figure availability and support and ideas discussed by classic humanistic psychologists about the parenting style that facilitates self-actualization (e.g., Maslow’s, 1968, concept of B-perception; Rogers’, 1961, concept of “unconditional positive regard”). The common idea that recurs across different “positive” or humanistic theoretical frameworks is that experiences of being loved, accepted, and supported by others constitute the most important form of personal protection and provide a foundation for confronting adversity and maintaining equanimity and effective functioning in times of stress without interrupting natural processes of growth and self-actualization.

Recently, Mikulincer and Shaver (2005) reviewed extensive data showing that the sense of attachment security attenuates a wide array of defensive motives, such as the need for self-enhancement, needs for consensus and uniqueness, intergroup biases, defense of knowledge structures, and defense of cultural worldviews. Adult attachment research has consistently shown that a sense of attachment security acts as an inner resource that may supercede defensive needs and render defensive maneuvers less necessary. These defensive maneuvers and the resulting biases in the appraisals of self and others tend to be more characteristic of insecurely attached individuals. Mikulincer

and Shaver (2005) noted that that these defensive needs indicate that a person has been forced by social experiences to face the world without adequate mental representations of attachment security and has had to struggle for a sense of self-worth.

According to Bowlby (1982/1969), the unavailability of security-providing attachment figures inhibits or blocks the activation of other behavioral systems, because a person who feels unprotected in the face of threats tends to be so focused on attachment needs that he or she lacks the attention and resources necessary to engage in other activities. This causes insecure people to be less tolerant of outgroup members (Mikulincer & Shaver, 2001), less humane in their values (Mikulincer et al., 2003), and less compassionate and altruistic (Mikulincer, Shaver, Gillath, & Nitzberg, 2005). Only when a sense of attachment security is restored can a person devote full attention and energy to other behavioral systems, such as exploration and caregiving. Interestingly, experimental induction of security causes beneficial short-term changes in people's attitudes, values, and altruistic behaviors (Mikulincer & Shaver, 2007b, 2007c), suggesting that the forces we have outlined here as childhood contributors to "positive" and "negative" personality tendencies can be applied even in adulthood, with therapeutic and ethical consequences.

Research supports the claim that secure individuals are more likely than insecure ones to exhibit all of Rogers' (1961) defining features of the "fully functioning person": openness to experience, existential living, organismic trust, experiential freedom, and creativity. Secure people are able to experience their thoughts and feelings deeply and to openly disclose these feelings to significant others, even if the thoughts and feelings are threatening and painful (e.g., Collins & Read, 1990; Mallinckrodt, Porter, & Kivlighan,

2005; Mikulincer & Orbach, 1995). Attachment security also facilitates cognitive openness and adaptive revision of knowledge structures, without arousing much fear of disapproval, criticism, or rejection (e.g., Green & Campbell, 2000; Mikulincer, 1997). Attachment security facilitates the savoring of good times and capitalizing on positive emotions, as evident in diary studies documenting secure people's enjoyment of daily activities and social interactions (e.g., Tidwell, Reis, & Shaver, 1996), as well as cognitive expansion following inductions of positive affect (e.g., Mikulincer & Sheffi, 2001). Securely attached people are able to engage in creative exploration and participate fully in the wider world while remaining sensitive and responsive to others' needs (e.g., Kunce & Shaver, 1994; Mikulincer, 1997). They are more likely than their avoidant peers to volunteer in their communities and have humanistic motives for so doing (Gillath, Bunge, Shaver, Wendelken, & Mikulincer, 2005).

In short, attachment theory offers a means to conceptualize a number of the qualities that have been emphasized in classical and contemporary research on personal adjustment and self-actualization. The theory does so within the same framework that is used to understand potential disorders of personality, thereby allowing the functional and dysfunctional aspects of personality functioning to be understood with a single set of concepts.

### **Concluding Comments**

Attachment theory arose from the psychoanalytic stream of personality theorizing, but because Bowlby was unusually open to emerging cognitive and ethological approaches to human and nonhuman primate behavior, and because he and Ainsworth were both very empirically as well as theoretically oriented, the theory has remained open



to other approaches and to subsequent theoretical and methodological developments. The theory naturally spans several usually separate areas of psychology: personality, social, developmental, clinical, and comparative. It is as congenial to “negative psychology” (i.e., focusing on psychopathology and dysfunction) as it is to “positive psychology” (prosocial behavior, self-actualization). The theory was cognitive in certain respects from the start, but it has become more sophisticated cognitively as researchers have used methods ranging from discourse analysis (in the AAI) to social cognition constructs and research paradigms. Although we have not stressed its connections with learning or behaviorist approaches to personality development, the ways in which parental behavior influences the attachment patterns of infants could easily, and perhaps productively, be conceptualized in learning theory terms. (We say this despite the fact that there was once considerable tension between attachment theorists and social learning theorists because of the behaviorist taboo on psychodynamic approaches.)

Attachment theory explains how social “situations” (i.e., interactions with regular caregivers) build personality (i.e., attachment patterns) and how the resulting personality patterns then influence a person’s choices among, and behavior, in social situations (especially close relationships). Most of the classic issues, debates, and conundrums in personality psychology have played themselves out within the field of attachment research, with largely productive results. We have not had space to say much about genetic influences or contemporary neuroscience methods, but there is already some interesting genetic and neuroscience research within the attachment domain (see Coan, in press, and Gillath et al., 2005, for examples). Attachment theory and research provide a model of integration across what were once separate and ferociously defended fiefdoms

within personality psychology. We look forward with great interest to the field's further development, diversification, and integration.

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### Figure Captions

*Figure 1.* An illustration of the basic control mechanisms underlying Bowlby's conceptualization of the attachment behavioral system.

*Figure 2.* The two-dimensional model that is commonly used in contemporary social-personality research to conceptualize and partition individual differences in adult attachment. The cardinal lines represent the dimensions of attachment-related anxiety and avoidance, as described by Brennan et al. (1998). The diagonal lines capture the four prototypes described by Bartholomew and Horowitz (1991).

*Figure 3.* An illustration of one way in which attachment representations in different relationships could become correlated with one another in a manner that would suggest, in a factor analysis, that there is a "global" or latent factor when there really is not.

*Figure 4.* An illustration of the ambiguity of single test-retest correlation coefficients for understanding the stability of individual differences. In this diagram, a single correlation is compatible with two developmental predictions. One assumes that stability gradually decays over time, approaching zero in the limit (see the solid line). The other assumes that, although stability is not high, it does not continue to diminish as the test-retest interval increases (see the dashed line).