Draft (09/21/06) of a chapter for L. Underwood, S. Sprecher, & B. Fehr (Eds.), *The Science of Compassionate Love: Research, Theory, and Application*. Malden, MA: Blackwell Publishing. Please do not quote without the authors' permission.

A Behavioral Systems Perspective on Compassionate Love

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Running Head: ATTACHMENT, CAREGIVING, AND COMPASSION

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Is it possible for a person to be compassionate and kind without also being selfish at some level? After all, Dawkins's (1989/1976) metaphor, "the selfish gene," has been associated in many intellectual circles with the assumption that selfish genes lead to selfish people. Can a person really love others in an unguarded way if she does not also love herself? What is the best way to foster compassion and loving-kindness, especially toward people from outside one's network of close relationships?

As noted throughout this volume, there are many approaches to these questions, and several relevant levels of analysis, from genes to culture. In our work (e.g., Mikulincer & Shaver, 2003, 2004, in press; Shaver & Mikulincer, 2002, 2005) we use Bowlby and Ainsworth's attachment theory as a framework for studying love and compassion, because it has already proven of inestimable value in the study of various forms of love (see Cassidy & Shaver, 1999, for an overview). Using this framework, we focus on the "substrate" component of Underwood's (this volume) model of compassionate love and deal with the effects of being loved, protected, and comforted by others, beginning with parents during infancy, on the capacity to love others and react sensitively and compassionately to their needs.

For more than 30 years, since the publication of Bowlby's (1982/1969) first conceptual book, attachment theory has guided research on the development of love and empathy in parent-child relationships. Since 1987, when Hazan and Shaver first applied the theory to the study of romantic and marital love (see Feeney, 1999, and Shaver & Clark, 1994, for reviews), researchers have continued to make remarkable discoveries about the psychological system that governs attachment behavior (what Bowlby, 1982/1969, called the attachment behavioral system) and the complementary system that governs caregiving in attachment relationships (the caregiving behavioral system).

In recent studies, for example, we (Mikulincer, Gillath, & Shaver, 2002) found that when a young adult is presented subliminally with threatening words such as "failure" or "separation," his or her mind turns automatically to mental representations of caregivers, or "attachment

figures." This is the mental equivalent of an infant's behavior in Ainsworth's famous "strange situation" laboratory procedure (Ainsworth, Blehar, Waters, & Wall, 1978): When an infant is frightened, it drops previously engaging toys and moves quickly toward a parent to be picked up, protected, and soothed. Interestingly, in the case of adults as well as and infants, individuals whose caregivers have been relatively inaccessible, insensitive, or unreliable have a difficult time using attachment figures confidently and effectively and hence are chronically insecure. This insecurity, we argue, makes it more difficult for them to be compassionate and altruistic. Moreover, insecurely attached people tend to be deficient in what Underwood (this volume) views as the motivational signature of compassionate love: Their motives for helping others are not centered on the good of others.

We begin this chapter with a summary of Bowlby's conceptualization of the attachment and caregiving behavioral systems. Specifically, we describe the normative components and individual-difference parameters of the attachment and caregiving behavioral systems, as well as the interplay of these systems. We then summarize research on the ways in which individual differences in the attachment system affect caregiving behavior in various kinds of relationships. Finally, we describe new studies of attachment-related differences in altruistic helping, community volunteering, prosocial motives and behaviors, and emotional, cognitive, and behavioral reactions to other people' distress – all viewed as aspects or forms of compassionate caregiving.

The Attachment and Caregiving Behavioral Systems

Although Bowlby (1982/1969, 1973, 1980) focused mainly on the formation of attachment bonds in childhood, he also attempted to understand how evolutionary mechanisms shape other kinds of human behavior (e.g., exploration, parental caregiving, and affiliative and sexual behaviors). For this purpose, he borrowed from ethology the concept of *behavioral system*, a species-universal neural program that organizes an individual's behavior in ways that increase the likelihood of survival and reproductive success in the face of environmental dangers and demands. Responses to these demands – e.g., dealing with threats to life and well-being by

relying on "stronger, wiser" attachment figures, exploring and learning how to cope with the environment, caring for dependent offspring – led to the evolution of distinct but interrelated behavioral systems (e.g., attachment, exploration, caregiving, and sexual systems), each with its own functions and characteristic behaviors.

A behavioral system is an inborn, goal-oriented neural program that governs the selection, activation, and termination of behavioral sequences that produce a functional change in the person-environment relationship, a change that has generally yielded adaptive advantages for survival and reproduction. Each behavioral system involves a set of contextual activating triggers (e.g., attaining a sense of safety and security, relieving others' distress and promoting their welfare) and a set of interchangeable, functionally equivalent behaviors that constitute the *primary strategy* of the system for attaining its particular goal (e.g., attaining safety and security through proximity-seeking, protecting or comforting another person). These behaviors are automatically "activated" by certain stimuli or kinds of situations that make a particular goal salient (e.g., loud noises that signal danger, an encounter with a distressed or needy person), and "deactivated" or "terminated" by other stimuli or outcomes that signal attainment of the desired goal. Each behavioral system also includes cognitive operations that facilitate the system's functioning and specific excitatory and inhibitory links with other behavioral systems.

Bowlby (1973) also discussed individual differences in the functioning of behavioral systems, especially the attachment system. Although behavioral systems are innate circuits or mental modules, they are manifested in actual behavior, guide people's transactions with the social world, and can be affected or shaped by close others' responses. Over time, social encounters mold the parameters of a person's behavioral systems in ways that produce individual differences in strategies and behaviors. Bowlby (1973) assumed that social interactions gradually correct a behavioral system's primary strategies and produce more effective action sequences. According to him, the residues of such experiences are stored as mental representations of person-environment transactions, which he called *working models of self and others*. With

repeated use, these models can become automatic and are an important source of within-person

continuity in behavioral system functioning.

The Attachment Behavioral System

The presumed biological function of the attachment system is to protect a person

(especially during infancy and childhood) from danger by assuring that he or she maintains

proximity to caring and supportive others (*attachment figures*). The attachment system is

activated by perceived (real or imagined) threats and dangers, which cause a threatened person to

seek actual or symbolic proximity to protective others (Bowlby, 1982/1969). In infants,

attachment-system activation includes nonverbal expressions of neediness and desire for

proximity, such as crying and pleading, as well as active behaviors aimed at reestablishing and

maintaining actual proximity, such as moving toward the caregiver, clamoring up, and clinging

(Ainsworth et al., 1978). In adulthood, however, attachment-system activation does not

necessarily entail actual proximity-seeking behavior. Instead, protection and relief can be

obtained by the activation of soothing, comforting mental representations of relationship partners

who have regularly provided care and protection (Mikulincer & Shaver, 2003).

The attainment of proximity and protection promotes an inner sense of attachment

security (based on expectations that key people will be available and supportive in times of need)

and results in the consolidation of optimistic beliefs about distress management; faith in others'

goodwill; a sense of being loved, esteemed, understood, and accepted by relationship partners;

and a sense of self-efficacy with respect to gaining proximity to a loving partner when support is

needed. Bowlby (1988) considered the optimal functioning of this behavioral system to be

crucial for mental health, the development of a positive self-image, and the maintenance of

positive attitudes toward others. A large number of studies provide strong empirical support for

the existence of these benefits of an optimal functioning attachment system (see Feeney, 1999;

Mikulincer & Shaver, 2003, in press; Shaver & Mikulincer, 2002, for reviews).

When a person's attachment figures are not reliably available and supportive, a sense of

attachment security is not attained and the distress that initially activated the system is

compounded by doubts and fears about the feasibility of attaining a sense of security. Moreover, negative interactions with attachment figures indicate that the primary attachment strategy, proximity and support seeking, has to be replaced with an alternative ("secondary") strategy. Attachment theorists (e.g., Cassidy & Kobak, 1988; Mikulincer & Shaver, 2003; Shaver & Mikulincer, 2002) emphasize two such secondary strategies: hyperactivation and deactivation of the system. Hyperactivation of the attachment system is manifested in energetic, insistent attempts to get a relationship partner, viewed as insufficiently available or responsive, to pay more attention and provide better care and support. Hyperactivating strategies include clinging to and attempting to control a relationship partner, cognitive and behavioral efforts to establish greater physical and emotional closeness, and overdependence on relationship partners as a source of protection (Shaver & Mikulincer, 2002). Hyperactivation keeps the attachment system chronically activated, constantly on the alert for threats, separations, and betrayals, thereby exacerbating relational distress and conflicts (Mikulincer & Shaver, 2003).

Deactivation of the attachment system includes inhibition of proximity seeking and the adoption of a personal style that Bowlby (1980) called "compulsive self-reliance." Deactivating strategies require a person to deny attachment needs; avoid closeness, intimacy, commitment, and dependence; and increase cognitive, emotional, and physical distance from others (Shaver & Mikulincer, 2002). They also involve active inattention to threatening events and personal vulnerabilities as well as inhibition and suppression of thoughts and memories that evoke distress and feelings of vulnerability, because such thoughts might cause unwanted reactivation of the attachment system (Fraley, Davis, & Shaver, 1998).

When studying individual differences in the functioning of the attachment behavioral system during adolescence and adulthood, attachment researchers have measured *attachment style* – the chronic pattern of relational expectations, emotions, and behaviors that results from a particular history of attachment experiences (Fraley & Shaver, 2000). Beginning with Ainsworth et al.'s (1978) studies of infant-caregiver attachment, continuing through Hazan and Shaver's (1987) conceptualization of romantic love as an attachment process, and followed up in many

studies by social and personality psychologists (e.g., Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998; Fraley &Weller, 1998; see Mikulincer & Shaver, in press, for a comprehensive review), researchers have found that individual differences in attachment style can be measured along two orthogonal dimensions, attachment-related *avoidance* and *anxiety*. The first dimension, attachment *avoidance*, reflects the extent to which a person distrusts relationship partners' goodwill, deactivates the attachment system, and strives to maintain behavioral independence and emotional distance from partners. The second dimension, attachment *anxiety*, reflects the degree to which a person worries that a partner will not be available in times of need and engages in hyperactivating strategies. People who score low on both dimensions are said to be secure or securely attached.

The two dimensions can be measured with reliable and valid self-report scales, such as the Experience in Close Relationships scale (ECR; Brennan et al., 1998), the Adult Attachment Questionnaire (AAQ; Simpson, Rholes, & Phillips, 1996), or the Adult Attachment Scale (AAS; Collins, 1996). These dimensions have been consistently found to be associated in theoretically predictable ways with affect regulation, self-esteem, psychological well-being, and interpersonal functioning (see Mikulincer & Shaver, 2003, in press; Shaver & Clark, 1994; Shaver & Hazan, 1993, for reviews). Several studies have also shown consistently that a person's positions on the attachment dimensions influence his or her motives (causing them to be more or less self-focused vs. altruistic) during social interactions, valuing or devaluing of other people and their needs and desires, and the actions taken in response to others' needs and feelings (see Mikulincer & Shaver, in press, for extensive review). As in Underwood's (this volume) model of compassionate love, the attachment behavioral system (the substrate) is shaped by familial forces and personal history, and it can in turn shape a person's social motives, attitudes, decisions, and actions.

Attachment styles begin to be formed in interactions with primary caregivers during early childhood (Cassidy & Shaver, 1999), but Bowlby (1988) claimed that impactful interactions with others throughout life can alter a person's working models and move him or her from one region

of the two-dimensional (anxiety by avoidance) space to another. Moreover, although attachment style is often conceptualized and measured as a single global orientation toward close relationships, a person's attachment orientation is actually rooted in a complex cognitive and affective network that includes many different episodic, context-related, and relationship-specific, as well as fairly general, attachment representations (Mikulincer & Shaver, 2003). In fact, research shows that attachment style can change, subtly or dramatically, depending on context and recent experiences (e.g., Baldwin, Keelan, Fehr, Enns, & Koh Rangarajoo, 1996; Mikulincer & Shaver, 2001).

Beyond focusing on the tendency to seek protection and support from close others in times of need, attachment theory also deals with the complementary tendency to provide protection and support to needy others. One of the major contributions of attachment theory and research is the identification and delineation of the normative components and individual-differences parameters of the caregiving behavioral system, which seem to underlie and organize a person's motives, feelings, attitudes, and actions when he or she witnesses another person's suffering. This is another component of Underwood's (this volume) conception of the substrate of compassionate love, which guides a person's choice to protect, support, and comfort others in times of need, or instead to ignore them without helping.

The Caregiving Behavioral System

According to Bowlby (1982/1969), human beings are born with a nascent capacity to provide protection and support to others who are either chronically dependent or temporarily in need. Bowlby (1982/1962) claimed that these caregiving behaviors, as they emerge in development, are organized around an innate *caregiving behavioral system* that emerged over the long course of evolution because it increased the inclusive fitness of human beings by increasing the likelihood that children, siblings, mates, and tribe members with whom one shared genes (or offspring) would survive (Hamilton, 1964). Although the caregiving system presumably evolved primarily to increase the viability of an individual's offspring and close relatives (George & Solomon, 1999), its products can be made more widely available to all suffering human beings

and even to members of other species. That is, through moral education and socialization, people can be induced to provide protection and support even to strangers – a goal of all major religions. In this way, caregiving motives can be extended to apply to anyone in need. If a person's caregiving system develops under favorable social conditions, compassion, loving-kindness, and generosity become the norm.

The goal of the caregiving system is to reduce other people's suffering, protect them from harm, and foster their growth and development (e.g., Collins, Guichard, Ford, & B. Feeney, 2006; George & Solomon, 1999; Gillath, Shaver, & Mikulincer, 2005; Kunce & Shaver, 1994). That is, the caregiving system is designed to accomplish the two major functions of a security-providing attachment figure: to meet another person's needs for protection and support in times of danger or distress (Bowlby, 1982/1969, called this "providing a safe haven") and to support others' exploration, autonomy, and growth when exploration is safe and viewed by the explorer as desirable. (Bowlby called this "providing a secure base for exploration"). According to Collins et al. (2006), caregiving motives and behaviors are likely to be activated (a) when another person has to cope with danger, stress, or discomfort and is either seeking help or would clearly benefit from it, and (b) when another person has an opportunity for exploration, learning, or mastery and either needs help in taking advantage of the opportunity or seems eager to talk about and be validated for his or her efforts and accomplishments. In either case, a person's caregiving system is activated, and he or she calls upon a repertoire of behaviors aimed at relieving a needy person's distress, supporting his or her coping efforts, or providing a secure base for exploration, growth, and development.

A key part of the caregiving system's primary strategy is the adoption of what Batson (1991) called an empathic stance toward another person's needs – e.g., taking the other's perspective in order to help him or her reduce suffering and distress or pursue growth and development. According to Collins et al. (2006), an empathic stance includes sensitivity and responsiveness, the two aspects of parental caregiving emphasized by Bowlby, Ainsworth, and subsequent attachment researchers. Sensitivity includes attunement to, and accurate

interpretation of, another person's signals of distress, worry, or need, and responding in synchrony with the person's proximity- and support-seeking behavior. Responsiveness includes generous intentions; validating the troubled person's needs and feelings; respecting his or her beliefs, attitudes, and values; and helping him or her feel loved, understood, and cared for (Reis & Shaver, 1988). Lack of sensitivity and responsiveness can cause a careseeker to feel misunderstood, disrespected, or burdensome, which exacerbates distress rather than providing a secure base.

According to Batson (1991), another person's visible suffering can evoke two different kinds of emotional reactions in a potential caregiver: empathic compassion and personal distress. Although both compassion and personal distress are signs that one person's distress has triggered emotional reactions in another, the two states are quite different in attentional focus and motivational implications. The main focus of compassion is the other person's needs or suffering, and the natural implication is that the distress should be alleviated for the sufferer's benefit. In contrast, the main focus of personal distress is the self's own discomfort, which might be alleviated either by helping or by ignoring or fleeing the situation. Moreover, whereas compassion sustains caregiving without any direct payoff to the caregiver (*unconditional caregiving*), personal distress is likely to be translated into helping only if helping is the best way to reduce the caregiver's own discomfort (Batson, 1991). Under conditions of "easy escape," when potential caregivers can reduce their distress by means other than helping, personal distress does not motivate empathic care (Batson, 1991).

Although Bowlby (1982/1969) assumed that everyone is born with the potential to become an effective care provider, optimal functioning of the caregiving system depends on several different intra- and interpersonal factors. Caregiving can be impaired by feelings, beliefs, and concerns that dampen or conflict with sensitivity and responsiveness. It can also be impaired by a careseeker's failure to express needs appropriately, by his or her rebuff of a caregiver's helping efforts, or by external obstacles to support provision. Effective care can also be disrupted by problems in emotion regulation that cause a caregiver to feel overwhelmed by the other

person's pain and suffering, to slip into the role of the needy person oneself rather than serving as a care provider, or to physically, emotionally, or cognitively distance oneself from the person in need in order to soothe one's own personal distress. Collins et al. (2006) discussed four factors that hamper optimal caregiving: (1) social skill deficits, (2) depletion of psychological resources, (3) lack of motivation to help, and (4) acting on egoistic motives while supposedly "helping." Social skill deficits interfere with accurate decoding of a needy person's signals and communications. Without sufficient psychological resources, it is difficult to attend empathically to a needy person's distress while also developing effective plans to intervene. Lack of willingness to take responsibility for another person's welfare disrupts caregiving from the start.

The Interplay of the Attachment and Caregiving Systems

Bowlby (1982/1969) noticed that because of a person's urgent need to protect him- or herself from imminent threats, activation of the attachment system can inhibit activation of other behavioral systems and thus interfere with non-attachment activities, such as exploration. In early childhood, this interference results in non-optimal learning and skill development. The same kind of interference can disrupt the caregiving system, because potential caregivers may feel so threatened that obtaining care for themselves seems more urgent than providing care to others. At such times people are likely to be so focused on their own vulnerability that they lack the mental resources necessary to attend sensitively and compassionately to others' needs. Only when a degree of safety is attained and a sense of security is restored can most people perceive others to be not only sources of security and support, but also worthy human beings who need and deserve comfort and support themselves.

Reasoning along these lines, attachment theorists (e.g., Gillath, Shaver, & Mikulincer, 2005; Kunce & Shaver, 1994; Mikulincer & Shaver, 2003; Shaver & Hazan, 1988) hypothesized that a sense of attachment security allows a person to shift attention to caregiving and provides a psychological foundation for accurate empathy and effective helping. In addition, secure adults have generally witnessed and benefited from the good care provided by their attachment figures, and this gives them positive models for their own behavior (Collins & B. Feeney, 2000). By

processes of identification and internalization, a person who perceived an attachment figure as sensitive and caring can view himself or herself as a sensitive and caring person as well and then maintain sensitive, empathic, and altruistic attitudes toward others.

We expect, therefore, that secure adults' social interaction goals and positive models of self and others will foster effective caregiving. Secure adults' comfort with intimacy and interdependence (Hazan & Shaver, 1987) allows them to approach others in need, because in order to be comforting and helpful a care provider typically has to acknowledge and accept other people's needs for closeness, sympathy, and support (Lehman, Ellard, & Wortman, 1986). Secure adults' positive expectations concerning other people's goodwill and cooperativeness make it easier for them to construe a distressed person as deserving sympathy and compassion. Moreover, positive models of self may help secure people feel confident about their ability to handle another person's distress and maintain emotional balance while addressing the person's needs, a task that might otherwise generate an overwhelming degree of personal distress (e.g., Batson, 1987).

Insecure adults, in contrast, are likely to have difficulty providing effective care (Collins et al., 2006; George & Solomon, 1999; Shaver & Hazan, 1988). Although anxiously attached people may have some of the skills and qualities needed for effective caring (e.g., comfort with intimacy and closeness), their characteristic focus on their own vulnerabilities and unsatisfied attachment needs may draw important mental resources away from attending to others' needs. Moreover, their strong desire for closeness and approval may cause them to become overly involved and enmeshed, intensifying their experience of personal distress and blurring the distinction between the other person's welfare and their own. Attachment anxiety can also taint caregiving motives with egoistic desires for intense closeness, acceptance, inclusion, and other people's gratitude. According to Collins et al. (2006), these self-centered motives encourage compulsive caregiving, based on lack of sensitivity to the needy other's signals. Anxious people may try to get too close or too involved when a partner doesn't want much help or any help of the kind insistently offered, and this can generate resentment, anger, and conflict.

An avoidant person's lack of comfort with closeness and negative models of others may also interfere with sensitive and responsive care. Their dislike of and discomfort with expressions of need and vulnerability may cause them to back away rather than get involved with someone whose needs are all too evident. For them, a distressed person sometimes provides a mirror that reminds them of their own vulnerabilities, causing them to detach and escape rather than offer help. In some cases, negative models of others and associated hostile attitudes toward them may even transform sympathy or pity into contemptuous gloating, causing them actually to enjoy others' unfortunate fate.

The Attachment-Caregiving Link in the Context of Close Relationships

These theoretical ideas have received strong support in studies assessing caregiving responses to close relationship partners' needs (i.e., the needs of one's children, parents, dating partners, or spouse). In studies of parent-child relationships, secure parents are consistently found to be more attentive, sensitive, and responsive to their infant's needs and less distressed when interacting with their infant, as compared with insecure parents (e.g., Bosquet & Egeland, 2001; Crowell & Feldman, 1988; Haft & Slade, 1989; Grossmann, Fremmer-Bombik, Rudolph, & Grossmann, 1988; Pederson, Gleason, Moran, & Bento, 1998).

For example, Haft and Slade (1989) videotaped interactions between mothers and their infant children and found that secure mothers were attuned to both positive and negative emotions expressed by their babies. They were also consistent in reacting to their baby's needs. In contrast, anxious mothers reacted inconsistently to both positive and negative emotions, and avoidant mothers did not seem to attend or react coherently to negative emotions at all. In another study, Crowell and Feldman (1988) found that secure mothers were rated by independent judges as warmer, more supportive, and more helpful toward their preschool children in a problem-solving situation than were insecure mothers. Crowell and Feldman (1998) also found that whereas avoidant mothers were cool and controlling when interacting with their child, anxious mothers gave confusing instructions and were intrusive when trying to help their children.

In a later study, Crowell and Feldman (1991) videotaped mothers' behavior when their child was exposed to an attachment-related threat – separation from mother in a laboratory setting – and found that secure mothers were more affectionate toward their children and prepared them better for a separation than insecure mothers did. However, whereas avoidant mothers showed little distress and affection toward their child, anxious mothers were agitated, found it difficult to leave the room, and were highly distressed during a subsequent reunion, making it more difficult for their children to recover from the separation. In another study, Goodman, Quas, Batterman-Faunce, Riddlesberger, and Kuhn (1997) asked parents to describe their interactions with their child after the child underwent a threatening and painful medical procedure. They found that secure parents were more likely than insecure parents to discuss the procedure with their child and physically comfort the child afterward. Edelstein et al. (2004) videotaped children's and parents' behavior when the children received an inoculation at an immunization clinic and found that more avoidant parents were less responsive to their distressed children. Thus, as expected based on attachment theory, insecure parents appear to be less effective caregivers.

The attachment-caregiving link has been studied at the other end of the age spectrum, when adult children are sometimes called upon to care for their aging parents. For example, Cicirelli (1993) and Townsend and Franks (1995) found that adult children who were more securely attached to their aging parents reported providing more care to their parents while experiencing less caregiver burden. In other studies, adult children who scored higher on attachment anxiety or avoidance reported experiencing more caregiver burden and providing less emotional support to their aging parents (e.g., Carpenter, 2001; Crispi, Schiaffino, & Berman, 1997). Relatively avoidant adult children whose parents suffer from progressive dementia are more likely than less avoidant ones to institutionalize their parents rather than provide care at home (Markiewicz, Reis, & Gold, 1997). Sörensen, Webster, and Roggman (2002) asked middle-age adults about their preparation for caring for their aging parents in the future and found that attachment anxiety and avoidance were associated with being less prepared.

Attachment-related differences in caregiving have also been assessed in the context of dating and marital relationships. Using the Caregiving questionnaire (Kunce & Shaver, 1994), several researchers have assessed caregiving attitudes toward a dating partner or spouse. This questionnaire measures responsive, controlling, and compulsive patterns of caregiving in couple relationships. Responsive caregiving is defined by *proximity maintenance* to a partner in times of need (e.g., "When my partner is troubled or upset, I move closer to provide support or comfort") and *sensitivity* to a partner's signals and needs (e.g., "I am very attentive to my partner's nonverbal signals for help and support"). *Controlling* caregiving includes maintenance of a domineering, non-mutual stance when offering 'help' and failure to respect a partner's ability to solve the problem at hand (e.g., "When I help my partner with something, I tend to do things my way"). *Compulsive* caregiving is indicated by over-involvement with the partner's distress and a tendency to merge with the needy partner (e.g., "I frequently get too 'wrapped up' in my partner's problems and needs").

Findings consistently indicate that secure individuals are more likely to provide support to their partner and be sensitive to the partner's needs, and less likely to be controlling or over-involved in caregiving (e.g., B. Feeney & Collins, 2001; Feeney, 1996; Feeney & Hohaus, 2001; Kunce & Shaver, 1994). Moreover, whereas avoidant individuals score lower on responsive caregiving and higher in controlling caregiving, anxious individuals score higher on compulsive caregiving, reflecting their over-involvement with a partner's problems. Importantly, B. Feeney (2005) found that attachment insecurities also interfered with providing a secure base for a dating partner's exploration: More avoidant people reported being less available when their partner pursued important personal goals, and more anxious people reported compulsive caregiving that disrupted a partner's activities.

Beyond identifying insecure adults' caregiving patterns within romantic and marital relationships, B. Feeney and Collins (2003) and B. Feeney (2005) assessed motives for providing care to a romantic partner and found that secure adults tended to endorse more altruistic reasons for helping (e.g., helping out of concern for the partner needs). In contrast, avoidant adults

reported more egoistic reasons for helping (e.g., to avoid a partner's negative reactions, to get something explicit in return). Moreover, they disliked coping with a partner's distress, lacked a sense of responsibility for their partner, and perceived the partner as too dependent. Attachment-anxious adults endorsed altruistic reasons for helping (helping because of concern for the partner), but they also reported helping in order to gain a partner's approval and increase the partner's relationship commitment. In addition, anxious people attributed their reluctance to provide a secure base for their partner's exploration to worries that the partner's independent pursuits might damage the relationship. In terms of Underwood's (this volume) model, insecurely attached persons seem to be lacking in the altruistic motives characteristic of compassionate love.

Insecure people's patterns of caregiving have also been observed in laboratory studies (e.g., Collins & B. Feeeney, 2000; B. Feeney & Collins, 2001; Simpson, Rholes, & Nelligan, 1992; Rholes, Simpson, & Orina, 1999; Simpson, Rholes, Orina, & Grich, 2002). For example, Simpson et al. (1992) unobtrusively videotaped dating couples while the female partner waited to undergo a stressful procedure, finding that secure men recognized their partner's worries and provided more emotional support and more supportive verbal comments if their partner showed higher levels of distress. In contrast, men who scored high on avoidance actually provided less support as their partner's distress increased. In another example, Collins and B. Feeney (2000) videotaped dating couples while one member of the couple disclosed a personal problem to the partner. Among participants who were assigned the role of caregiver (listening to a partner's disclosures), the attachment-anxious ones were less likely to provide instrumental support and were less responsive and more negative toward the distressed partner than participants who scored low on attachment anxiety.

Overall, these studies show that attachment insecurities interfere with caregiving in both parent-child relationships and adult couple relationships. In both kinds of relationship, avoidant people's deactivating defenses interfere with sensitive and responsive caregiving. Attachment-anxious people also have difficulties providing sensitive care to a partner. Their self-focus and

insensitivity, combined with a wish that their partner would occupy the role of "stronger and wiser" caregiver, bury anxious people's good intentions in a welter of ineffective behaviors.

The Attachment-Caregiving Link in the Wider Social World

The establishment of empirical links between adult attachment styles and caregiving patterns in both parent-child and couple relationships led researchers to explore the possibility that attachment insecurity interferes with compassion toward suffering strangers, members of minority groups, and community members with special needs. It led us in particular to explore the possibility that attachment security, whether assessed as an individual-difference characteristic or enhanced experimentally, would be associated with compassion and empathy beyond the realm of well-established close relationships.

Several correlational studies have shown that avoidance is associated with less empathic concern for others' needs, a weaker inclination to adopt the perspective of a distressed person, less ability to share another person's feelings, less sense of communion with others, and less willingness to take responsibility for others' welfare (e.g., B. Feeney & Collins, 2001; Corcoran, & Mallinckrodt, 2000; Joireman, Needham, & Cummings, 2002; Shaver et al., 1996; Zuroff, Moskowitz, & Cote, 1999). More avoidant people are less likely to be cooperative and to write comforting messages to a distressed person, and are perceived by peers as less supportive in a variety of hypothetical scenarios where someone was in need (e.g., Priel, Mitrany, & Shahar, 1998; Van Lange, Otten, DeBruin, & Joireman, 1997; Weger & Polcar, 2002). People who score high on attachment anxiety, on the other hand, report high levels of personal distress while witnessing another person's distress (Britton & Fuendeling, 2005; Joireman et al., 2002), and they score high on a measure of "unmitigated communion" – a compulsive need to help others even when they are not asking for assistance (Fritz & Helgeson, 1998; Shaver et al., 1996). In an observational study, Westmaas and Silver (2001) videotaped people while they interacted with a confederate who had (according to the experimenter) recently been diagnosed with cancer. Whereas more avoidant study participants were less verbally and nonverbally supportive during

the interaction, more anxious participants reported greater discomfort while interacting with the confederate and were more likely to report self-critical thoughts after the interaction.

In an attempt to examine the link between attachment and altruistic helping behavior more directly, we (Gillath, Shaver, Mikulincer, Nitzberg, Erez, & van Ijzendoorn, 2005) assessed young adults' attachment orientations, their involvement in voluntary altruistic activities in their communities (in either Israel, the Netherlands, or the United States), and their motives for volunteering. Participants completed the ECR (a measure of attachment anxiety and avoidance), a scale assessing volunteer activities (e.g., teaching reading, counseling troubled people, providing care to the sick), and the Volunteer Functions Inventory (VFI; Clary et al., 1998), a measure of the extent to which participants volunteered for either selfish, egoistic reasons (self-protection, career promotion, ego-enhancement, achieving a sense of togetherness that benefits the self) or more exploration-oriented and altruistic reasons (other-focused values, achieving a more mature understanding of the world and the self). In addition, participants completed scales tapping self-esteem and interpersonal trust, so that we could evaluate competing explanations for the results.

The findings were similar across the three countries. Avoidant attachment was consistently associated with engaging in fewer volunteer activities, devoting less time to such activities, and being less motivated by desires to express altruistic values and to understand, learn, and explore oneself and the world. Attachment anxiety was not generally related to engaging in volunteer activities or to devoting more or less time to such activities, but it was associated with more egoistic reasons for volunteering. That is, highly anxious individuals were not less likely to engage in volunteer activities than their less anxious counterparts, but their reasons for volunteering were often tinged with wishes to fit in, be thanked and appreciated, or be distracted from or relieved of their own problems. We also found that the associations between attachment and volunteering could not be explained by other factors, such as self-esteem or interpersonal trust.

Subsequently, we turned to experimental tests of causal predictions concerning the links between attachment security, compassion, and caregiving. In this experiment, we used well-validated priming techniques – e.g., exposing study participants to security-related words (love, hug, close) or names of their security-enhancing attachment figures (e.g., their mother or spouse), leading participants through a guided imagery scenario in which they felt safe and secure, or asking them to visualize the face of a security-enhancing attachment figure – in order to contextually activate mental representations of attachment security. Then, we assessed the effects of these priming procedures on feelings and attitudes toward needy people (Mikulincer et al., 2001; Mikulincer et al., 2003; Mikulincer, Shaver, Gillath, & Nitzberg, 2005). We tried both subliminal priming (e.g., presentation of an attachment figure's name for only 20 milliseconds, which was not long enough to allow participants to recognize the name) and supraliminal priming (e.g., asking participants to visualize the face of an attachment figure or to think about a particular interaction him or her) to be sure that the effects occurred whether or not the person knew how he or she was being influenced. Although this might have resulted in perceived "demand characteristics" in the case of supraliminal priming, the results were quite similar regardless of the priming method used.

In the first of these studies, Mikulincer et al. (2001, Study 1) performed an experiment assessing compassionate responses to others' suffering. Dispositional attachment anxiety and avoidance were assessed with the ECR scale, and mental representations of attachment security were experimentally activated by having participants read a story about support provided by a loving attachment figure. This condition was compared with ones that induced either neutral or positive affect (reading a set of instructions about the installation of a high fidelity stereo or a series of brief jokes, describing comic social interactions and consequences). Following the priming procedure, all participants rated their mood, read a brief story (similar to the one used by Batson et al., 1989) about a student whose parents had been killed in an automobile accident, and rated how much they experienced compassion (e.g., compassion, sympathy, tenderness) and personal distress (e.g., tension, worry, distress) when thinking about the distressed student. The

security induction produced higher levels of compassion and empathy than the neutral and positive affect conditions.

In addition, dispositional attachment anxiety and avoidance were inversely related to compassion, and anxiety was positively related to personal distress in response to another's suffering. That is, attachment anxiety, as expected based on theory, seemed to amplify a form of distress that, while possibly aroused via empathy, fails to motivate a person to take care of a needy other. These findings were conceptually replicated in four additional studies (Mikulincer et al., 2001, Studies 2-5), using different methods of priming mental representations of attachment security (e.g., asking people to recall personal memories of supportive care, subliminally exposing them to positive attachment-related words) and measuring different dependent variables (e.g., coded descriptions of feelings elicited by others' suffering, accessibility of memories in which participants felt compassion or distress).

Mikulincer et al.'s (2001) studies also showed that the effects of security priming and the correlates of attachment-style dimensions could not be explained in terms of conscious mood. Although the priming of positive affect reduced personal distress, this priming procedure did not significantly affect compassion. In addition, mood reports did not mediate the effects of security priming and dispositional attachment scores on compassion and personal distress. The effects of attachment security were not the same as the effects of the positive affect induction and were not explicable in terms of mood.

In another set of three experiments, Mikulincer et al. (2003) documented links between attachment security and two self-transcendent values, benevolence (concern for close others) and universalism (concern for all humanity). The values were measured either with standardized scales (Schwartz, 1992) or by asking study participants to list their most important values. Dispositional attachment anxiety and avoidance were assessed with the ECR scale and mental representations of attachment security were experimentally activated by asking participants to recall personal memories of supportive care or by exposing them unobtrusively to a picture of a supportive interaction. Higher scores on the ECR avoidance scale were associated with lower

scores on the two self-transcendent values, showing again that avoidant attachment is not conducive to concern for others' feelings. More important from a practical standpoint, priming mental representations of attachment security led to higher scores on the two prosocial values (compared with priming neutral or positive affect).

In a recent series of experimental studies, Mikulincer et al. (2005) examined the decision to help or not to help a person in distress. In the first two experiments, American and Israeli participants watched a confederate while she performed a series of increasingly aversive tasks. As the study progressed, the videotaped confederate became increasingly distressed by the aversive tasks, finally becoming quite upset about the prospect of having to pet a large, live tarantula in an open-topped glass tank. After a short break in the procedure, supposedly to allow the confederate to calm down, and after being told that the other person refused to continue performing the aversive tasks but would be willing to exchange roles, the actual participant was given an opportunity to take the distressed person's place.

Shortly before the scenario just described, participants were primed with either mental representations of attachment security (the names of a participant's security-enhancing attachment figures) or attachment-unrelated representations (the names of close people who did not function as an attachment figure or the names of mere acquaintances). To obtain the names of each participant's security-enhancing attachment figures, all of them completed a 6-item WHOTO scale developed by Fraley and Davis (1997). Participants provided the first names of people to whom they sought proximity (e.g., "Who is the person you most like to spend time with?") and people who provided a safe haven and/or secure base for them (e.g., "Who is the person you want to talk to when you are worried about something?", "Who is the person you know will always be there for you?"). The three kinds of primes were administered either subliminally (via very rapid presentations of a person's name while participants performed a computerized cognitive task) or supraliminally (by explicitly asking participants to recall an interaction with a particular person). At the point of making a decision about replacing the

distressed fellow participant, people completed brief measures of compassion and personal distress (based on Batson et al.'s, 1989, research).

In both studies, security priming (either subliminally or supraliminally) caused participants to report higher levels of compassion toward the woman in distress and greater willingness to help her than attachment-unrelated priming (close person, acquaintance). More important, participants in the security priming conditions were more than twice as likely (~70% vs. ~30%) than those in the control conditions to actually replace the suffering woman and take on her remaining aversive tasks. Since these findings were obtained even when the primes were administered subliminally, we can be sure that the heightening of compassion and altruism produced by mental representations of attachment security did not require conscious mediation or deliberation. Rather, the attachment-caregiving link seemed to occur at a preconscious, automatic level. In addition, in line with previous findings, dispositional avoidance was negatively associated with compassionate and helpful responses, whereas attachment anxiety was associated with higher ratings of personal distress, but not greater compassion, while watching another person suffering. These effects were all obtained in both the American and Israeli samples.

Because there were no statistical interactions between security priming and dispositional attachment orientations, we know that increasing a person's sense of security increases his or her tendency to provide effective care regardless of attachment style. This implies that temporary activation of the sense of attachment security allows even chronically insecure people to react to others' needs in ways similar to those of people with a more secure attachment style. Contextual augmentation of security may remind people of similar experiences stored in memory, inhibit incongruent memories of attachment insecurity, and bring to mind cognitive and action schemas that are congruent with security. In this way, a particular mental representation of attachment security may spread throughout a person's memory network, causing the person temporarily to become more compassionate or helpful. It is important to note, however, that the findings suggest that temporary effects of security enhancement coexist with the effects of dispositional

attachment orientations. That is, reactions to others' needs are concurrently affected by experimentally enhanced attachment security and chronically accessible schemas related to attachment anxiety and avoidance.

In two additional studies, we (Mikulincer et al., 2005, Studies 3-4) asked whether contextual activation of mental representations of attachment security could override egoistic motives for helping, such as mood-enhancement (Schaller & Cialdini, 1988) and empathic joy (Smith, Keating, & Stotland, 1989). Study participants were randomly assigned to one of two priming conditions (security priming, neutral priming), read a true newspaper article about a woman in dire personal and financial distress, and rated their emotional reactions to the article (compassion, personal distress). In one study, half of the participants anticipated mood-enhancement by means other than helping (e.g., expecting, immediately after this part of the experiment, to watch a comedy film). In the other study, half of the participants were told that the needy woman was chronically depressed and her mood might be beyond their ability to improve (*no empathic joy* condition). Schaller and Cialdini (1988) and Smith, Keating, and Stotland (1989) had found that these two conditions, expecting to improve mood by other means or anticipating no sharing of joy with the needy person, reduced egoistic motivations for helping because a person gains no special mood-related benefit from helping the needy person. However, in our studies, these conditions failed to inhibit security-induced altruistic motives for helping, which arose even when the manipulated egoistic motives were absent (Batson, 1991).

We found that expecting to improve one's mood by means other than helping or expecting not to be able to share a needy person's joy following the provision of help reduced compassion and willingness to help in the neutral priming condition, but not in the security priming condition. Instead, security priming led to greater compassion and willingness to help even when there was no egoistic reason (no empathic joy, no mood relief) for helping.

Of special interest, both studies also indicated that expecting to improve one's mood by watching a comedy film or anticipating no sharing of joy with the needy person reduced compassion and willingness to help *only among relatively avoidant people*. Only they provided

evidence for the assumption that helping is an outgrowth of selfishness when it occurs at all. Egoistic concerns held less sway over people who were either dispositionally less avoidant or under the influence of a security prime. It seems, therefore, that attachment security counteracts some of the egoistic motives underlying avoidant people's failure to help.

The combined evidence from our experimental studies and the correlational studies reviewed earlier in this chapter indicates that attachment security, whether established in a person's long history of close relationships or induced experimentally by priming procedures, makes compassion and altruistic caregiving more likely. Although there are other reasons for one person to help another, the prosocial effects of attachment security do not depend on alternative egoistic motives, such as a person's desire to improve his or her own mood or the desire to share a suffering person's relief. We think it is likely that the sense of attachment security reduces one's need for defensive self-protection and allows a person to activate his or her caregiving behavioral system, direct attention to others' distress, and engage in altruistic behavior with the primary goal of benefiting other people rather than oneself. For secure people, helping others does not seem to be selfishly motivated and is not aimed at self-protection or self-enhancement, presumably because they already feel sufficiently safe and secure. The sense of security frees attention and mental energy to be used by the caregiving system, allowing a person to adopt a truly empathic attitude toward others' distress.

This conclusion fits with the two-level model of psychological defenses proposed by Mikulincer and Shaver (2005). In this model, attachment-figure availability and the resulting sense of attachment security provide a stable and secure foundation for psychological resilience and mental health. Being able to count on available, caring, and supportive attachment figures during times of need provides an important sense of personal safety and protection, and a solid and authentic sense of self-worth. Security-related mental representations and social skills act as resilience resources that maintain emotional balance and effective psychological functioning without the need for defenses. Attachment security, which sustains self-esteem and reduces selfish defenses, facilitates the functioning of other behavioral systems, including the caregiving

system, which maintains compassionate, generous, loving attitudes toward others even when

providing care produces no direct personal benefit other than achieving the natural goals of the

caregiving system.

A second level of defenses is required when a person fails to form secure attachments and

is unable to maintain a solid and stable psychological foundation. For an insecurely attached

person, many everyday experiences challenge the sense of safety and threaten the person's

already tenuous hold on life, self, and identity. At this secondary, defensive level, a "prevention

motivational orientation" (Higgins, 1998) and the use of ego-protective defenses can sometimes

compensate for a shortage of loving and accepting attachment figures, create a façade of self-

esteem, and contribute some degree of emotional equanimity and personal adjustment. But the

natural functioning of the caregiving system can be damaged by such a defensive stance,

subordinating its operation to self-protective goals and strategies. In such cases, the caregiving

system is activated mainly when helping others promises to improve one's own mood or enhance

one's own self-esteem.

We believe, in unison with Bowlby (1982/1969) and Batson (1991), that the caregiving

system is guided by the altruistic, benevolent goal of promoting other people's welfare, and that

egoistic motives for helping arise from the absence of attachment security. Unlike "selfish gene"

theories of human behavior (e.g., Dawkins, 1989/1976), which discourage us from believing that

evolution equipped *Homo sapiens* with a capacity for compassion and care, our findings and

reasoning suggest that the same caregiving behavioral system that evolved to assure adequate

care for vulnerable, dependent children can be extended, through kind social treatment and

effective moral modeling, to include care and concern for other people, even if we generally tend

to care more for people with whom we are closely related, either psychologically or genetically.

The attachment behavioral system affects the caregiving system, making it likely that

heightening security will yield benefits in the realm of compassionate, altruistic behavior.

The research reviewed here indicates that caregiving can be generalized or extended to

strangers and that attachment security facilitates a generalized compassionate attitude toward all

humanity. Although the prototypical biological function of the caregiving system is to facilitate the survival of offspring, which should cause it to be most strongly applied to people with whom one has a close relationship, recurrent functioning of the caregiving system in favorable, security-providing environments may transform empathy, compassion, and altruism into chronically accessible dispositions, traits, or skills that can be contextually activated by the presence of a distressed person, even a stranger in need. That is, what begins as caring for specific individuals (especially offspring) can become transformed and generalized into a prosocial disposition or trait that is applied very broadly. The availability of sensitive, loving, and caring attachment figures contributes greatly to this extension and expansion of compassion, caring, and altruism. Future studies should examine in greater depth the process by which compassionate love is generalized from close relationship partners to strangers and the extent to which security-enhancement through media or school systems can increase a compassionate attitude towards others' needs.

In following Bowlby and Ainsworth's lead, we have portrayed attachment security as a likely prerequisite for the optimal functioning of other behavioral systems. One reason for doing so is that attachment behavior and attachment styles appear early in infant development, whereas caregiving (e.g., as first indicated, for example, by empathy in 3-year-olds; Kestenbaum, Farber, & Sroufe, 1989) appears next. Another reason for giving prominence to the attachment system is that its biological function – assuring protection (i.e., survival) – is obviously necessary if one is to provide support and comfort to needy others. Once a child has a functioning attachment system and has begun to adapt to the local caregiving environment (i.e., once a stable attachment style has developed), the child's caregiving system comes on line to deal with sibling and peer relationships and to allow the child to be influenced by enculturation and moral socialization. Given that children with different attachment styles act in and experience social relationships differently, the operating parameters of the caregiving system may be shaped in compatible directions. Also important are imitation and modeling of primary caregivers, which create similarities between a child's attachment system (shaped by the parents) and his or her

caregiving system (modeled on those of the parents). Future developmental research should examine the developmental trajectories of attachment and caregiving from childhood to adulthood and determine how parenting behavior, a parent's personality, and other familial, social, and cultural factors shape these trajectories.

There are at least two ways to think about the interrelations between the attachment and caregiving systems. One possibility is that the two systems are affected by individual differences in temperament or personality. Several studies have been conducted to see whether global attachment styles, or attachment-style dimensions, are redundant with one or more of the "big five" personality traits: openness to experience, conscientiousness, extroversion, agreeableness, and neuroticism. The evidence so far suggests that they are related but not redundant (e.g., Shaver & Brennan, 1992; Carver, 1997; Noftle & Shaver, 2006). Attachment measures have frequently outperformed global personality measures in predicting caregiving behaviors (e.g., Simpson et al., 1996; Mikulincer et al., 2001, 2005). In addition, we have controlled for neuroticism, self-esteem, and interpersonal trust in several of our studies and still obtained predicted effects of attachment anxiety and avoidance (Gillath, Shaver, Mikulincer, Nitzberg, Erez, & van IJzendoorn, 2005; Mikulincer et al., 2005).

Nevertheless, attachment and caregiving may be influenced by genes. To date, there have been only a few behavior genetic studies of attachment in infancy and adulthood, and their findings are inconsistent. Some suggest a role for genetic, temperamental factors in shaping individual differences in attachment and some do not (e.g., Bakermans-Kranenburg, van IJzendoorn, Bokhorst, & Schuengel, 2004; Brussoni, Jang, Livesley, & Macbeth, 2000; Crawford et al., in press; O'Connor & Croft, 2001). It is likely that that similarities, degrees of overlap, and differences in what is tapped by measures of adult attachment and caregiving can eventually be better understood by discovering the extent to which they have similar or different genetic and social-environmental roots. Much more research is needed to determine how and to what extent security-enhancing experiences interact with genes and patterns of gene expression to influence caregiving motives and behavior.

A second alternative is that caregiving behavior feeds back on attachment security. This alternative fits with Underwood's (this volume) model, according to which being compassionate, loving, and caring toward others can alter the substrate of compassionate love, which we believe includes the attachment system. Even if the operating parameters of the caregiving system are shaped by variations in attachment security, they may also be influenced by specific life circumstances that facilitate or block effective caregiving (e.g., attending religious services or a school that fosters empathy, compassion, and benevolence). Moreover, adult attachment styles are not mere reflections of early parent-infant interactions but can be affected by later social experiences (e.g., Davila & Cobb, 2004; Fraley, 2002). Hence, expressions of the caregiving system (e.g., volunteering to help others and becoming more self-confident as a result) and experiences in close relationships (e.g., caring effectively for a romantic partner and thereby enhancing relationship satisfaction and stability) can feed back on a person's attachment security.

At present we know relatively little about the extent to which the caregiving system affects the attachment system. However, we have preliminary evidence from a cross-sectional, correlational study in which attachment-anxious people who volunteered in the community reported less loneliness and lower levels of interpersonal problems than attachment-anxious people who did not engage in such activities (Gillath, Shaver, Mikulincer, Nitzberg, Erez, & van IJzendoorn, 2005). We need more sophisticated longitudinal and experimental designs in order to delineate the boundaries and mediators of these effects.

Concluding Comments: A Broader Perspective

The process we have described in this chapter, whereby attachment security supports compassionate, altruistic love is referred to, either explicitly or implicitly, in many religious sayings and practices. In Buddhism, for example, a common form of compassion meditation involves remembering what it feels like to receive unconditional love from an attachment figure and then turn that love, in one's mind (and eventually in one's behavior), toward other targets. Chödrön (2003) describes the procedure as follows: "To begin, we start just where we are. We

connect with the place where we currently feel loving-kindness, compassion, joy, or equanimity, however limited they may be…. Then we gradually extend [this] to a widening circle of relationships…. 'May I be free from suffering and the root of suffering. May you be free from suffering and the root of suffering. May all beings be free of suffering and the root of suffering'" (pp. 66-67). This is remarkably similar to the security inductions we used in our research to foster compassion and altruism, even though we had not heard about the Buddhist technique. We began with reminders of others who had provided study participants with love and kindness, and we then checked to see whether greater compassion arose as a result – and it did. Our manipulations were based on attachment theory rather than Buddhism, but the two approaches are similar in this and other respects.

Buddhism also recognizes the importance of love to the development of a healthy mind. According to Chödrön (2003), "The essential practice is to cultivate maitri, or loving-kindness…. [An] image for maitri is that of a mother bird who protects and cares for her young until they are strong enough to fly away. People sometimes ask, 'Who am I in this image – the mother or the chick?' The answer is *both*…. Without loving-kindness for ourselves, it is difficult, if not impossible, to genuinely feel it for others" (pp. 9-10). This is similar to our ideas about the importance of attachment figures' love and secure self-representations to the ability to be compassionate, toward oneself and other people, but attachment theory and research point to the social origins of this ability and show that it is much more difficult for some people than for others to apply "maitri" to themselves or anyone else.

Our approach is also relevant to Judeo-Christian religions. The golden rule of these religions, for example, which enjoins people to treat others as they would like to be treated themselves, is obviously easier to follow if one knows what it is like to be treated well, can accurately empathize with other people's need for kind treatment, and can provide for others without feeling cheated, robbed, or entitled to praise. Moreover, religious "models" (Oman & Thoresen, 2003) are generally portrayed in Judeo-Christian scriptures and stories as security-enhancing attachment figures who love their followers and enjoin them to treat others lovingly as

well. Jesus, for example, is described by John (13:35) as saying, "By this all will know that you are my disciples, if you have love for one another." Luke (6:30-36) describes Jesus as giving the following instructions: "Give to everyone who asks of you…. Love your enemies, do good, and lend, hoping for nothing in return." Thinking about a caring and loving God or such a God incarnate, praying to a security-enhancing God, and acknowledging God's protective and comforting power may be effective ways to promote compassionate love and altruistic behavior because they enhance a believer's sense of security. Future research should test this intriguing possibility.

Seeing the similarity between attachment theory and religious traditions suggests that attachment theory (like other humanistic theories in psychology) grows out of a core set of ideas that appear repeatedly in human history and in psychology. The potential advantages of attachment theory, when seen in the context of previous psychological, religious, and philosophical approaches, are its roots in evolutionary biology and its growing body of empirical research evidence. Our hope, for both our work and the present volume more generally, is that it will prove possible to integrate the valid insights of previous and current thinkers while providing useful details concerning psychological and neural mechanisms. This should lead to valuable policies and practices for parents, educators, therapists, and political and religious leaders, all of whom play a role in moving humanity closer to universal compassionate love and world peace.

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