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Secure-Base Caregiving and Adult Attachment Development Within the Client-Psychotherapist Relationship

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Walden University
2015

Abstract

Secure-Base Caregiving and Adult Attachment Development

Within the Client-Psychotherapist Relationship

by

Dennis A. Weeks

EdS, Tennessee Technological University, 1996

MA, Pepperdine University, 1979

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Psychology

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May 2015

Abstract

Recent studies have shown significant improvements in the attachment security of adult therapy clients during therapy, supporting Bowlby's theory that such improvement can be influenced by secure-base caregiving provided by mentors such as therapists. However, because these studies did not measure the secure-base variable, its relationship to client attachment development remains unknown. The present study is the first to evaluate that relationship by measuring clients' pre and posttherapy attachment security using the *Relationship Scales Questionnaire* and therapists' secure-base caregiving using the *Client Attachment to Therapist* and *Working Alliance Inventory, Short Form*. Of 21 initially insecure client participants, 17 experienced high levels of secure-base caregiving from their therapists (the SBC-High group) while 4 experienced low levels (the SBC-Low group). Comparison of pre and posttherapy group mean attachment scores, using the Wilcoxon Signed Ranks Test, found a statistically significant improvement ($a = .01$) in attachment security for the SBC-High group with no statistical change in attachment security for the SBC-Low group. These findings suggest that therapists and other mentors can positively influence the attachment development of their insecure mentees. Purposeful incorporation of this knowledge into the design and goals of existing graduate and professional mentoring programs can positively influence regenerative social change by promoting the attachment security of approximately one third of mentees expected to be insecurely attached, based on demographic studies. Improving their attachments can equip them to positively influence the attachments of all their future insecure clients who, like them, might then realize the multiple benefits associated with attachment security.

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Dedication

This dissertation is dedicated to my wife Linda and my children Evan and Leah. Linda, you have been a continual source of encouragement, patience and tolerance. Thank you for understanding and even insisting that I appropriate much of our time and our resources to work on this project. Thank you for selflessly persevering through all those solitary evenings and weekends. This project is a reflection of the many gifts with which I have been blessed by you. Evan and Leah, your love and belief in me as well as your own dedication to the development of whatever abilities God gave you have helped me realize the significance of my role as a caregiver, helped inspire the original focus of this dissertation, and have been ongoing sources of encouragement during my involvement in this research.

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Chapter 1: Introduction to the Study

Origins of Attachment Development Theory

According to attachment theory, originally conceptualized by psychoanalyst, child psychiatrist, and developmental researcher John Bowlby (1969, 1973, 1980, 1988), infants and children develop emotional attachments to adult caregivers who respond to their needs and experiences of distress over time. The majority of infants and children develop *secure* attachments by adulthood when the responses they receive from caregivers are consistently satisfying and provide comfort. Bowlby (1988) referred to the collective set of caregiver attitudes and behaviors that influence children's development of normal attachment security as *secure-base* caregiving. A minority of children, specifically those whose caregivers do not provide secure-base caregiving, develop *insecure* attachments, which remain in adulthood. Attachment research has shown that individuals' cognitive and emotional attachment schemas, and resulting attachment behavioral styles regulate their attitudes and behaviors toward themselves and others and also influence their social, environmental, and cognitive focus and related development (e.g., Benson, McWey, & Ross, 2006; Bosmans, Braet, Leeuwen, & Beyers, 2006; Curran, Hazen, Jacobvitz, & Feldman, 2005; Westen, Nakash, Thomas, & Bradley, 2006).

Bowlby (1951, 1969, 1973, 1980) began conceptualizing attachment theory during World War II based on his observational studies of the effects of parental deprivation on various groups of children orphaned, abandoned, hospitalized, and institutionalized during his work with the London Child Guidance Clinic. He observed

that compared to children who remained living at home and receiving continuous adult caregiving, the majority of deprived children suffered negative effects on their social, emotional, and intellectual development. These effects included delinquency, lack of affect, and difficulty in forming relationship bonds. He concluded that the mother's continuous involvement and her emotional attitude toward her child were two essential requirements for normal childhood emotional, social, and cognitive development.

After the war, while working as the head of the Department for Children and Parents at the Tavistock Clinic in London, Bowlby was commissioned by the World Health Organization to write a report on the mental health effects of homeless children in postwar Europe (Bretherton, 1992). In writing this report, Bowlby used his own studies as well as those by other maternal deprivation researchers (e.g., Goldfarb, 1943, 1945; Spitz, 1946) and data and observations from clinicians including psychiatrists, pediatricians, and social workers in both the Unites States and Europe. In this report, titled *Maternal Care and Mental Health* Bowlby (1951) concluded that healthy child development requires that infants and children "experience a warm, intimate, and continuous relationship with his mother (or permanent mother substitute) in which both find satisfaction and enjoyment" (p. 13). Emphasizing the importance of economic and other forms of social support to help assure that mothers and other caregivers can maintain their ongoing relationship with their children, Bowlby stated that, "If a community values its children it must cherish their parents" (p. 84). Subsequently, a half million copies of Bowlby's report, titled *Child Care and the Growth of Love*, was sold to the general public worldwide.

Bowlby's (1951, 1969, 1973, 1980) conceptualization of attachment theory was also influenced by ethnological studies of attachment-like behavior in animals, such as imprinting. These studies included Harlow's (1958, 1962) work on the effects of maternal deprivation on young rhesus monkeys. Harlow found that during times of stress, when denied the availability of their mothers, young monkeys spent more time clinging to a terry cloth surrogate than to one made of wire that could provide milk. Harlow saw this behavior as evidence that when distressed, primates have an innate need for comfort that is stronger than their need to satisfy hunger.

However, though the terry cloth surrogate appeared to provide more comfort than the wire surrogate, monkeys limited to a surrogate suffered in their personal and social development compared to those reared by their mothers. When later introduced to other monkeys, those raised only in the presence of the terry cloth surrogate demonstrated maladaptive interpersonal behaviors, including fearfulness, aggressiveness, abnormal sexual responses, and abuse or neglect of their own children. Thus, it appeared that actual adult caregiving was necessary to satisfy both a developing monkey's comfort needs and personal and interpersonal developmental needs (Harlow, 1962).

Bowlby's associate, Ainsworth (1967), reviewed his maternal deprivation research data and identified three categories of maternal deprivation, including a complete lack of maternal care, inconsistency in maternal care resulting from discontinuity, or distorted maternal care. Using these categories as guidelines for the study of maternal behaviors, Ainsworth conducted naturalistic observational studies of the relationships between infants and their Ugandan mothers between 1954 and 1955.

Based on these studies, Ainsworth categorized maternal caregiving responses according to extent to which mothers visibly accepted or rejected their infant's distress behavior, the extent to which they helped their infant address the distress, the extent to which they appeared psychologically available to the infant, and the extent to which their caregiving behaviors actually helped resolve the infant's distress.

Ainsworth (1967) found that the infants of mothers whose caregiving responses were consistently strong in all four of these dimensions appeared to have developed a positive emotional attachment toward their mothers as indicated in their expressions and behaviors, such as appearing eager to establish proximity to their mothers and appearing to experience relief and contentment as a result of her caregiving administrations. Ainsworth referred to these as having developed secure attachments toward their mothers.

On the other hand, Ainsworth (1967) found that infants whose mothers were inconsistent or weak in one or more of these dimensions appeared anxious or even indifferent toward their mothers when distressed. These infants did not appear to be soothed or reach a state of contentment as a result of their mothers' caregiving. Ainsworth referred to these as infants as having developed insecure attachments toward their mothers.

Bowlby (1988) later characterized the caregiving Ainsworth had associated with the development of attachment security as secure-base caregiving. This phrase refers to the child's consistent experience of the caregiver as a safe haven or secure base—secure in terms of providing relief of distress as well as emotional comfort—to which he or she

can return in times of distress. Thus, based on actual experience of a caregiver as one who provides secure-base caregiving, a child comes to have positive feelings and expectations about that caregiver. He or she becomes securely attached to that caregiver. On the other hand, based on a child's repeated experiences of a caregiver who does not respond as a secure base for need meeting and distress reduction, he or she develops an insecure attachment toward that caregiver.

Adult Attachment Development

Psychoanalytic and other developmental theories view many forms of development as time-limited during the period from birth to adulthood. On the other hand, Bowlby (1969, 1973, 1980), Ainsworth (1973, 1982, 1989, 1990), and other attachment researchers have provided evidence that attachment development is an ongoing aspect of emotional and cognitive development that is continually influenced by a variety of reciprocal *attachment-caregiving* relationships, potentially throughout the lifespan, so long as those relationships are available and until terminating at the point that he or she develops attachment security. Thus, in terms of developmental time frame, Bowlby referred to attachment development as a *cradle to grave* phenomenon.

According to this view, termination of attachment development is not regulated by a biological clock but by the cumulative effects of secure-base caregiving, resulting in the individual reaching a point at which his or her attachment is maximally adaptive or secure. For most individuals, this process is completed during childhood through consistent exposure to secure-base caregivers. However, according to Bowlby (1980, 1988), the attachments of insecure adults can continue to develop toward security if the

individual becomes involved in close personal relationships with mentors or other securely attached adults who provide adult-relevant secure-base caregiving responses within the context of that relationship.

For several decades following Bowlby's (1969, 1973, 1980) development of attachment theory, attachment research has focused on the existence, categorization, influence, and development of attachments in infants and children. While the resultant body of research confirmed and refined Bowlby's attachment theory, as it applied to the developmental period from birth to adulthood, researchers have only recently begun evaluating Bowlby's broader theoretical position that the existence, functions, influence, and development of attachments concern people of all ages, rather than just children.

The first of these adult attachment studies provided evidence consistent with that previously shown in childhood attachment research: that adult attachment security is also stable and resistant to regressive change toward insecurity. On the other hand, adult attachment insecurity appears to change or fluctuate both within insecure subcategories and from insecure toward security, with changes in environmental relationship-related conditions (Davila, Burge, & Hammen, 1997; Hamilton, 2000; Roisman, Padron, Sroufe, & Egeland, 2002; van IJzendoorn, 1995; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000; Weinfield, Sroufe, & Egeland, 2000).

Several longitudinal, demographic, and other studies of adult attachment development and functioning have shown that the majority of individuals, 68% to 75%, reach the stage of attachment security by the end of childhood (e.g., Sroufe, Egeland, Carlson, & Collins, 2005; Waters et al., 2000; Weinfield et al., 2000). These and other

studies (e.g., Ammanti, van IJzendoorn, Speranza, & Tambelli, 2000) have shown that once reached, and when compared to attachment insecurity, security is the most adaptive, stable, and change-resistant aspect of personality throughout the lifespan. Conversely, insecure attachments, as seen in approximately 25% to 32% of the adult population, are less adaptive, especially in relationships, and less stable and change-resistant (e.g., Baldwin & Fehr, 1995; Kirkpatrick & Hazan, 1994; Scharfe & Bartholomew, 1994). Thus, it appears that while secure attachments appear to remain stable over time, despite future changes in environmental and relationship experiences, insecure attachments appear to co-vary over time, both within insecure sub-categories and sometimes between insecure and secure categories, along with environmental and relationship influences.

A second set of studies provided indirect evidence that, as theoretically anticipated, adult attachment-caregiving-type relationships appear to influence the development of attachment security in insecure adults. In the first of these studies, focused on adult romantic or pair-bond relationships, Shaver and Hazan (1987) found that adult romantic relationships provide ongoing occasions for attachment and caregiving responses, similar to those experienced between caregivers and their children. Subsequent research on adult romantic relationships have provided evidence that the attachments of insecure individuals become secure over time when they are paired with a securely attached partner (e.g., Collins & Read, 1990; Davila, Karney, & Bradbury, 1999; Locke & Wallace, 1959).

However, in only a few recent studies have researchers directly evaluated the relationship between adult attachment development and involvement in an adult

caregiving-type relationship. These studies have focused on the client-psychotherapist relationship. Bowlby (1988) that the client-psychotherapist relationship is a potentially ideal adult prototype of the child-caregiver attachment development relationship in terms of its potential for attachment development through the influence of adult secure-base caregiving. In both relationships, the distressed insecurely attached individual seeks proximity with an adult capable of providing secure-base caregiving responses that relieve his or her distress.

For adult psychotherapy clients, the therapist evaluates the source and nature of the distress by exploring his or her feelings, thoughts, and experiences. The psychotherapist provides solutions that relieve the client's distress. During this relationship, the therapist's empathy and reassurance provide the client with emotional comfort. As stated by Bowlby (1988), the therapist is expected to provide secure-base caregiving responses in that he or she "strives to be reliable, attentive, and sympathetically responsive to his patient's explorations and, so far as he can, to see and feel the world through his patient's eyes, namely to be empathetic" (p. 159). In fact, results from several studies support Bowlby's view that clients perceive their therapists as attachment figures (Mallinckrodt, Gantt, & Cable, 1995; Mallinckrodt, Porter, & Kivlighan, 2005; Parish, 2000; Parish & Eagle, 2003). Accordingly, these perceptions are based on clients' experiences of therapists' actual attitudes and behaviors. Therapists are not "automatically experienced as a secure base simply by virtue of being a therapist" (Eagle, 2006, p. 187).

Similarly, in Byng-Hall's (1999) more recent discussion couple and family therapy, a number of therapist characteristics are identified that, in terms of a client's experiences, define the therapist as a secure-base attachment figure, whose attitudes and behaviors might foster client attachment development. These include the therapist's ability to be aware of the sources of emotional and interpersonal danger, provide safety from that danger, and help family members understand and implement resolutions to their fears and distress. Byng-Hall believed that when working with a family unit, a therapist's ability to accomplish these goals constitutes secure-base caregiving that will influence development of increased attachment security in each insecurely attached family member.

The first direct study of adult attachment change resulting from the client-therapist relationship was not published until 1999. In this study, Kilmann, Laughlin, Downer, Major, & Parnell (1999) selected a group of 13 insecurely attached young college women and again evaluated their attachments after providing them with a 17-hour attachment-related group intervention. This and six subsequent studies (Diamond, Stovall-McClough, Clarkin, & Levy, 2003; Janzen, Fitzpatrick, & Drapeau, 2008; Lawson, Barnes, Madkins, & Francios-Lamonte, 2006; Levy et al., 2006; Makinen & Johnson, 2006; Travis, Binder, Bliwise, & Horne-Moyer, 2001) have consistently shown that insecurely attached psychotherapy clients can develop attachment security during their involvement in the client-psychotherapist relationship across a variety of treatment focuses and modalities.

Problem Statement

Several decades of childhood attachment development research have established a relationship between the development of attachment security, the stable and terminal state of attachment development, and various adult caregiving attitudes, skills, and behaviors, referred to by Bowlby (1969, 1988) as secure-base caregiving. Conversely, this research has shown that when caregivers, because of their own attachment insecurity, do not provide secure-base caregiving, their children's attachments do not develop but remain insecure into adulthood. That is, they reflect the attachment insecurity of their caregivers.

Bowlby (1988) viewed attachment development in terms of social learning that can occur at any time during the lifespan, rather being biologically regulated and, thus, limited to childhood, as had been the prevailing psychoanalytic view. Thus, he believed that adults, whose childhood attachment development did not terminate with security due to the lack of consistent and appropriate nurturing over time, could continue their development of attachment security through involvement in mentoring relationships with securely attached adults who provide secure-base caregiving responses. Bowlby viewed the client-psychotherapist relationship as an ideal adult attachment development prototype of the child-caregiver relationship in terms of attachment development potential.

Using the client-psychotherapist relationship as a prototype for potential adult attachment development, researchers in seven recent studies have evaluated changes in clients' insecure attachments with exposure to various types of psychotherapy relationships and modalities. In order, these have included Kilmann et al. (1999), Travis

et al. (2001), Diamond et al. (2003), Levy et al. (2006), Lawson et al. (2006), Makinen and Johnson (2006), and Janzen et al. (2008). All of these studies have confirmed a relationship between positive client attachment change and involvement in a client-psychotherapist relationship, as anticipated by Bowlby (1988), or in some form of therapeutic intervention.

However, the relationship evaluated in these studies was between client attachment change and psychotherapy as a modality or entity that to some degree might focus on attachment-related issues. None measured and identified actual secure-base caregiving responses and levels of those responses as provided by therapists and then evaluated their relationships to client attachment changes. Thus, while the results of these studies suggest that there may be a relationship between adult attachment development and secure-base caregiving responses, they provide no statistical evidence of that relationship. Therefore, until both client attachments and therapists' secure-base responses are measured together, and their relationships statistically evaluated, Bowlby's (1969, 1988) suggestion of a cause and effect relationship between the two, similar to that already demonstrated in childhood attachment development, remains theoretical.

Purpose of the Study

The purpose of the present study was to address this gap in the existing adult attachment research by measuring both changes in therapy clients' attachment security over time, along with measuring levels of therapist-provided secure-base caregiving, so that the relationship between the two could be statistically evaluated. Evidence that there

is a statistically significant relationship between the two provides support for three related

attachment development tenets proposed by Bowlby (1969, 1988):

1. Evidence of adult attachment development would support Bowlby's view that attachment development is not regulated by time-limited biological processes but by social learning. Therefore, attachment development can occur at any time across the lifespan.

2. Within the context of close personal relationships, secure-base caregiving can influence adult attachment development just as it has been shown to influence childhood attachment development.

3. Bowlby (1988) was correct in his assertion that the adult client-psychotherapist relationship can function as a prototype of the child-caregiver attachment relationship, in terms of secure attachment development through the influence of secure-base caregiving.

Hypotheses

In the present study, this researcher addressed the gap in adult client-psychotherapist attachment development research by evaluating both sides of the adult attachment development relationship: the insecurely attached adult client and the caregiving behaviors provided by his or her psychotherapist. This study compared changes in two groups of initially insecure clients with their attachment security after completing several therapy sessions, as measured by The Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994). One group received therapy by therapists they perceived as having provided low levels of secure-base caregiving (the

SBC-Low group) while the other perceived their therapists as having provided high levels of secure-base caregiving (the SBC-High group). Clients rated their therapists' secure-base caregiving levels using both the Client Attachment to Therapist Scale (CATS; Mallinckrodt et al., 1995) and the Working Alliance Inventory-Short Form (WAI-S; Horvath & Greenberg, 1989; Tracey & Kokotovic, 1989).

Pre and posttherapy differences in each group's attachment security mean scores were statistically evaluated using the Wilcoxon Signed Ranks Test of significance to test the following hypotheses.

H_O: When compared to their pretherapy attachment security group mean scores, there will be no significant difference in the posttherapy group mean scores, as measured by the RSQ (Griffin & Bartholomew, 1994), within either the SBC-High or the SBC-Low group.

H_A: When compared to their pretherapy attachment security group mean scores, there will be a significant difference, in the direction of greater attachment security, in the posttherapy group mean sores, as measured by the RSQ (Griffin & Bartholomew, 1994), within the SBC-High group.

Relationship of Hypotheses to the Attachment Development Research

Adult attachment development theory, based on the actual findings of years of childhood attachment development research, proposes that insecurely attached adults can develop attachment security by exposure to relationships in which another adult provides secure-base caregiving. Conversely, insecurely attached individuals remain insecure, that is, attachment development does not occur and is associated with caregivers or mentors

who provide no or low levels of secure-base caregiving. Thus, attachment research and theory would support the alternative hypothesis for the SBC-High group while supporting the null hypothesis for the SBC-Low group.

Scope, Assumptions, Limitations, and Delimitations

Several potential confounds may have potentially limited the internal validity of the present study. These include the quasi-experimental design that focuses on attachment as a personality construct and the lack of random assignment of participants to treatment groups. The latter limits control of participant variables, resulting in the possibility that along with the attachment variable, other uncontrolled participant variables might co-vary with different levels of therapist-provided secure-base caregiving and, thus, operate as confounding variables. Such uncontrolled participant variables, unique to psychotherapy clients, might include non-distress-related motivations for seeking psychotherapy, various effects of mental illness on client perceptions of the therapist, and effects of psychotropic medication.

Internal validity might have also been influenced by demand characteristics that were difficult or impossible to predict or control, some of which may have been inherent in the counseling and assessment processes. These might have included practice effects of the before and after attachment testing, social desirability influencing responses on both the attachment and secure-base measures, and answering with responses sets that anticipate the instrument's focus, such as the overall effectiveness of counseling.

Another potential confound may have resulted from the uncontrolled influence of transference, rather than any effects of therapist-provided caregiving responses, on how

various individuals in the study sample responded to the items on the posttreatment therapist assessment instruments. For instance, transference may have influenced some individuals to rate their therapists as having provided low levels of secure-base caregiving when, if objectively rated, the therapists actually provided high levels of secure-base caregiving.

The self-report measurements used in the present study to evaluate client attachments and perceptions of therapist secure-base behaviors were developed for their strong construct validity that conceptualizes attachment relationships in terms of internal perceptions of self-and-other relationship behavior, which should be ideally suited to self-report measurement. However, regardless of the fit between this particular method of measurement and the construct being measured, responses on this as on any self-report measure can also be influenced by other cognitive, emotional, and environmental factors. Thus, internal validity might have suffered because no additional and more objective behavioral measure of attachment security, such as the Adult Attachment Inventory (AAI; George, Kaplan, & Main, 1985), was used to confirm the self-reports.

External validity or generalizability of the study results may also have limitations. External validity is inherently limited to the extent that there may be problems with internal validity, as discussed previously. Even if there were no such concerns, the relatively small sample size may have resulted in reduced generalizability. To the extent that conclusions can be drawn from this study, they should be limited to the population of psychotherapy clients, from which this study's sample was derived. Generalizability can only be suggested in terms of the larger population of adults.

Significance of the Study

Bowlby (1988) and others theorized that attachment development is the result of ongoing cognitive social-learning within a relationship context and, as such, is not primarily regulated by biological processes that would limit it to childhood, as other developmental theories contend. Thus, attachments can continue to develop throughout the lifespan, so long as the individual has access to the appropriate relationships responsible for that development. Secondly, Bowlby proposed that the same type of secure-base caregiving responses, shown by research to be responsible for childhood attachment development, is also responsible for adult attachment development. He proposed that insecurely attached adults are likely to experience such caregiving responses in adult mentoring relationships such as those between the insecurely attached adult and his or her pair-bond partner, minister, priest, social worker, or psychotherapist. Finally, Bowlby suggested that the adult client-psychotherapist relationship represents an ideal prototype of the child-caregiver relationship in terms of providing an opportunity for the insecure therapy client to develop attachment security through exposure to secure-base caregiving, provided by the therapist.

The results of the present study are potentially significant in the field of attachment development theory and research because they address the gap in existing research that would show a direct relationship between adult attachment development and high levels of secure-base caregiving provided by psychotherapists during the client-psychotherapist relationship. By filling in the gap of existing attachment research,

statistically significant results of this study would provide the first direct support of these

three theoretical positions proposed by Bowlby (1988).

Significance for Social Change

As is discussed in Chapter 5, the concept that securely attached adults can

positively influence the attachment development of other insecurely attached adults

during mentoring and other close personal relationships, as supported by the results of the

present study, has a number of applications for significant social change. Among the

countless number of social applications for this concept, those related to the mentoring

relationship, focused on by the present study, include (a) mentoring relationships through

which social welfare programs are implemented; (b) mentoring relationships between

therapy educators and licensed psychologists other therapists, and the students and trainee

therapists they supervise during their educational, prelicensure training, and even during

periods of licensure sanctioning, should this ever be required; (c) and the mentoring

relationship between a psychotherapist and his or her clients.

These mentoring relationships can have profound positive influences on the

mentees' personal attachment development when the mentor is capable of providing

secure-base caregiving responses during the relationship. However, the positive social

change effects are not limited to the attachment security these mentors can influence in

their many clients. These professional mentors have been placed in mentoring

relationships because of their educational and professional training and development.

However, in attachment development terms, these are not the credentials that influence

their clients' attachment security development. Rather, it is their own personal history of

secure attachment development, influenced by caregivers and perhaps adult mentors through which they have experienced secure-base caregiving.

From this perspective, the many clients they mentor, whose attachment development might be positively influenced through their secure-base caregiving, have all become capable of positively influencing the attachment development of their children, spouses, friends, and others with whom they develop close personal relationships over the course of their lifetime. This expectation would be consistent with the findings of childhood attachment development studies and adult attachment development theory, that attachment security provides the basis for secure-base caregiving that, in turn, influences the development of attachment security. In this way, there is an unlimited potential for the results of this study to influence positive social change that is regenerative within society itself, by shifting the focus on assuring the attachment development of psychotherapy educators, psychotherapists, and others who administer social welfare programs.

Conclusions

The present study provided an evaluation of adult attachment development using the client-psychotherapist relationship as a prototype for the child-caregiver attachment relationship, as discussed by Bowlby (1988). The study was designed to address the gap in existing adult attachment research that would focus on directly linking attachment development in insecure psychotherapy clients with secure-base caregiving responses by their therapists during the client-psychotherapist relationship. The purpose of the study was to confirm or reject Bowlby's views of attachment development as an aspect of

cognitive development that can occur across the lifespan, related to secure-base caregiving provided by an adult caregiver or mentor that can occur within the client-psychotherapist relationship. The results of the present study have significant implications for influencing positive social change in terms of the effects of changing the awareness and focus toward that of secure-base caregiving and attachment development in a of a variety of educational and professional programs and services involving mentoring, such as social welfare programs, therapy training, and psychotherapy itself.

Chapter 2 presents the literature on the history of childhood attachment development theory and research. This review establishes the basis for the subsequently evolved theory and research on adult attachment development and the focus for of the present study.

Chapter 3 reviews the most recent studies of attachment development, in terms of limitations in their designs and variables that have left a gap in the adult attachment development knowledge, addressed by the present study. Chapter 3 then discusses this study's design and the variables identified and controlled for the purpose of addressing that knowledge gap regarding the relationship between adult attachment development and secure-base caregiving within the client-psychotherapist relationship. Finally, Chapter 3 describes the assessment instruments, sample selection, group assignment, and other methods and procedures used to conduct the present study.

Chapter 4 presents descriptive statistics of the study's sample and two research groups receiving different levels of therapist-provided secure-base caregiving. The

statistical results, including significance, are presented, comparing the pre- and post-treatment group attachment security mean scores, within each of the two research groups.

Chapter 5 provides an overview of the study, including the historical background related to the study, study limitations, and implications for future research. Chapter 5 discusses implications of the study results in terms of therapist development, the practice of psychotherapy, and their potential for influencing positive social change on a variety of levels.

Chapter 2: Literature Review

Introduction and Methodology

Chapter 2 presents the principles of attachment and attachment development, beginning with the origins of attachment development research and its focus on childhood attachment development. The purpose of this review is to establish the foundation for attachment and attachment development knowledge and theoretical principles that have been applied to the more recent study of adult attachment development, relevant to secure-base caregiving. Chapter 2 then reviews studies resulting from the recent trend to apply these theories and principles developed from the study of childhood attachment development to the incidence, functions, and development of adult attachments. Finally, the findings and designs of seven recent studies of adult attachment development during the client-psychotherapist relationship are evaluated to identify both the levels of current knowledge and gap in that knowledge, addressed by the present study.

Strategies used for identifying and locating appropriate studies for this review began with a reference search of all listed studies and books related to attachment theory and development and attachment in psychotherapy, published since the beginning of attachment research, in popular media and peer-reviewed publications. In person library searches included book and publication searches at the following college libraries: Vanderbilt University, Tennessee Technological University, and Indiana University. Online databases searched included Psychology: A Sage Full Text Collection, PsycINFO, SocINDEX with full text, PsycARTICLES, PsycEXTRA, PsycBOOOKS, Academic

Search Complete/Premier, ERIC, ProQuest Central, ProQuest Dissertations & Theses, APA PsychTESTS, Mental Measurements Yearbook, and Health and Psychosocial Instruments (HaPI). Key words used in the searches included *attachment*, *attachment development, attachment style*, *attachment theory*, *attachment change*, *Bowlby*, *secure-base*, *attachment therapy*, *attachment and psychotherapy*, *alliance*, *working alliance*, *therapeutic alliance*, *attachment outcome research*, *treatment outcomes*, *therapist characteristics*, *therapist factors*, and *client characteristics*. References in identified articles were also used to verify references found using the previously mentioned search strategies and identify new references.

Childhood Attachment Theory and Research

Bowlby's Phylogenic Theory

Bowlby (1969) believed that initiation of the reciprocal child-caregiver attachment relationship, through which the child's need for relief of distress and comfort is potentially satisfied, is initially triggered by innate mechanisms. Thought to be evolved aspects of human phylogeny, Bowlby referred to these mechanisms as the *attachment behavioral system* in children and the *caregiving behavioral system* in adults. Activation of the child's attachment behavioral system was thought to begin when the infant or child is aroused by a distressing experience such as fear, fatigue, pain, or by a drive state such as hunger. The immediate goal of this arousal is the establishment of close physical proximity with an adult caregiver. Behaviors triggered by this system include crying, visually seeking, and reaching out. In turn, these behaviors, when seen and heard by the caregiver, trigger activation of his or her caregiving behavioral system,

resulting in behaviors such as calling out, following, and reaching out to the child.

Together these behaviors help both parties locate one another and establish close physical

proximity.

Establishment of close physical proximity between child and caregiver puts the

caregiver in a position where he or she can closely observe and evaluate the cause of the

infant or child's distress and respond appropriately. According to Bowlby (1969),

appropriate responses are those that resolve the child's distress and provide him or her

comfort. Based on his observations, Bowlby concluded that reduction of the child's

distress triggers deactivation of his or her attachment behavioral system, resulting in the

child's engagement in behaviors such as smiling, cooing, and attending to and exploring

the environment. In turn, these non-attachment-related behaviors signal and deactivate

the caregiver's caregiving behavioral system and the need to maintain close physical

proximity with his or her child.

Bowlby (1969) believed that when the infant experiences distress, biological

processes trigger the initial drive states and behaviors, in both the infant and his or her

caregiver, that end in the establishment of their close physical proximity so that the

caregiver is in a position to evaluate the cause of distress and provide caregiving

responses to reduce that distress. However, his attachment development theory attributed

the caregiver's actual caregiving attitudes and behaviors, influencing the infant's

attachment development, as the results of the caregiver's own prior attachment

development learning experiences. Bowlby's associate, Ainsworth (1967), provided the

first research on child attachment development, based on Bowlby's initial studies on maternal deprivation and his attachment development theory.

Ainsworth's Research

    Uganda. Evaluating Bowlby's (1951, 1969) data on studies of maternal deprivation, Ainsworth (1967) identified three kinds of deprivation that appeared to have different effects on the infant attachment process: lack of maternal care, distorted maternal care, and discontinuity in maternal care, such as separations or cases where the child may be given to different mother figures.

    While involved in Ugandan field studies in 1954 and 1955, Ainsworth (1967) evaluated these types of maternal behaviors and their effects on infant attachment development. Repeatedly visiting the homes of Ugandan mothers and their infants, Ainsworth exhaustively recorded their individual and interactive caregiving and attachment behaviors. After recording hundreds of such interactions, Ainsworth was able to categorize two qualitatively different infant attachment behavioral styles, secure and insecure. Based on identifiable differences in attachment and caregiving behavioral patterns, she identified two different forms of infant attachment behavioral styles, *insecure-avoidant* and *insecure-ambivalent*. In referring to the two general attachment categories identified as secure and insecure, Ainsworth was essentially redefining how these personality categories were conceptualized by the current psychoanalytic literature in terms. Rather than a security or insecurity resulting from theoretical, unobservable, conflicts between innate unconscious processes and the environment, Ainsworth provided empirical evidence that they resulted from the cumulative effects over time of repeated

instances of the familiar and observable relationship between a distressed and needy infant and his or her caregiver.

Ainsworth's (1967) study was the first to provide strong evidence as to the causal relationship between the quality of infants' developing attachments to their caregivers and the quality of caregiving responses provided by those caregivers (van IJzendoorn 1995). Ainsworth observed and evaluated the quality of maternal caregiving responses provided to both secure and insecure infants during feeding, in response to infants' emotional expressions, during the establishment of close physical proximity and bodily contact, and during face-to-face interactions with the infants. She found that the quality of maternal caregiving responses provided to infants classified in each of the identified attachment categories, differed along four dimensions: (a) the degree to which caregivers displayed acceptance versus rejection of the infant's behaviors, (b) the degree to which they appeared to cooperate with the infant's need-related behaviors, (c) the degree to which they appeared to make themselves psychologically available to the infant, and (d) the degree to which they appeared to be sensitive to the infant's needs.

Sensitivity was defined in terms of how quickly they responded to the infant's needs and distress and how accurately their responses identified the cause of and provided a resolving response to that distress. Mothers of securely attached infants were strong in all four dimensions while mothers of insecurely attached infants were weak in one or more dimension, correlating with infants' insecure subcategory classification.

Ainsworth (1967) found that mothers of securely attached infants were more warm, sensitive, accepting, attuned to the infant's needs, and cooperative with and

responsive to those needs. When in need or distress, these infants demonstrated their

secure attachment expectations of satisfying caregiving by seeking their mothers'

presence, without hesitation, and readily responding to her caregiving efforts. Their

expectations of secure-base caregiving availability, should they become distressed, were

seen in their ready environmental exploration once their needs were satisfied. If, as they

explored, their mothers left their sight, these secure infants would initially appear upset

and might cry but would cry less than did insecure infants during their mothers' absence.

Upon their mothers return, securely attached infants would eagerly greet them and

warmly respond to their affections. Furthermore, securely attached infants were the most

compliant with the mother's wishes and objected the least if she put them down after

being held.

Mothers of infants whose attachments were classified as insecure-avoidant, often

appeared emotionally and psychologically unavailable, rejected or showed annoyance

when the infant expressed attachment-related needs, and were likely to reward their

infants for behavior they perceived as demonstrating independence rather than attachment

needs. When in their mothers' presence, they avoided demonstrations of their own

attachment needs toward her and outwardly appeared even less dependent on them than

the securely attached infants did toward their mothers. Rather than behave as though

their mothers functioned as a secure base, these infants appeared to reflect an expectation

that their mothers were unavailable to respond to their attachment behaviors. However,

while outwardly appearing independent, the avoidant infants were simultaneously

clingier and more demanding than securely attached infants and less responsive, even

acting angry, to their mothers' attempts to hold them or provide care. If while being held, their mothers tried to put them down, the insecure-avoidant infants acted more upset than infants in the other attachment categories and would sometimes cling and resist or even hit their mothers. In general, of all attachment groups, the insecure-avoidant infants were most likely to display anger toward their mothers, including hitting her, both in reaction to her attempts to meet their needs and simply at random times. By the time these children were one year old, they seldom sought maternal contact. By about one year of age, their insecure-avoidant attachment styles appeared to be well established. After this point, they seldom sought attachment-related contact with their mothers.

Mothers of infants classified by Ainsworth (1967) as insecure-avoidant responded unpredictably toward their infant's displays of distress. They were sometimes attentive to their infants' distress but at other times were unresponsive, appeared to respond randomly, chaotically, or provide responses that were out of synch with their infant's needs, and often failed to accurately identify the issue over which the infant was distressed and provide an appropriate resolution. Furthermore, they were selective as to the types of distress to which they responded, most frequently responding to their infant's displays of fear, effectively amplifying and reinforcing rather than resolving those fears.

Being unable to predict when, whether, or how their mothers would respond to their distress, the insecure-ambivalent infants were the most anxious, uncertain, and preoccupied in their attachment behaviors toward their mothers when distressed. They also cried the most, and were the clingiest, most demanding, and most angry toward their mothers, showing great distress even at brief separations from their mothers. However, if

their mother initiated affection after returning from a brief absence, these infants might respond to her attempts to hold them by going limp or angrily arching away. It was as if these infants were transfixed in a permanent state of uncertainty about and preoccupation with their caregivers. When their mothers returned from a separation and tried to hold them, they would sometimes become limp or resist being held by angrily arching away from her. They seemed continually preoccupied with eliciting a response from their mothers, to the extent that they had little time to engage in environmental exploration, engaging in less environmental exploration than children in all other attachment categories.

The Strange Situation. Based on her Ugandan findings, Ainsworth, Blehar, Watters, and Wall (1978) subsequently developed a 20-minute experimental paradigm they referred to as the *Strange Situation*, a controlled experimental situation with a child-caregiver pair, designed to trigger the child's distress in order to activate the attachment-caregiving relationship. This provided a sample of the unique reciprocal attachment-caregiving relationship typical of any given mother-child dyad, so that this relationship could be observed and classified. The relationship between infant distress and caregiving responses had previously been discussed by Bowlby (1988) in his earlier studies and secure-base theory and confirmed by Ainsworth's (1967) Ugandan observations. By creating an experimental paradigm in which any researcher could manipulate infant distress while in the presence of his or her caregiver in a controlled laboratory environment, attachment development could now be studied by any researchers, without the necessity of conducting a lengthy naturalistic study.

The Strange Situation procedure involved having a mother bring her infant to the researcher's office, remain with the infant for a period of time, leave the infant in the unfamiliar situation under the researcher's care, and then return to the room after a designated period of time. The Strange Situation paradigm provided the researcher with multiple opportunities to observe both the infant's attachment-related behaviors and the caregiver's caregiving behaviors, including the presence of the unfamiliar researcher, absence of the mother-caregiver, and then the return of the mother-caregiver. As in naturalistic settings, the Strange Situation provided opportunities to observe both the relationship between infant attachment style and maternal caregiving behaviors as well as that between infant attachment style and other developmentally significant behavioral systems, including the *exploratory behavioral system*, the *fear and wariness behavioral system*, and the *social behavioral system*.

Using the Strange Situation to evaluate infant attachment styles, Ainsworth et al. (1978) found that when securely attached infants became upset about something in the presence of their mothers, they would engage in attachment behaviors such as signaling or seeking her comfort. When left alone with the researcher, they responded to their distress by actively looking for their mothers and showing signs of missing her. While she was gone, they were sometimes friendly with the researcher, even accepting his or her comforting. Upon their mother's return, they would seek her proximity, greet her with smiles, gestures, or vocalizations, and readily respond to her attempts to provide comfort. After being comforted, they would return to their exploration.

During the Strange Situation, Ainsworth et al. (1978) found that infants with insecure-avoidant attachments would explore their environments while their mothers were present, as though she was not in the room. During the stressful situation involving the unfamiliar researcher's presence, they would avoid their mothers and not relate to her as a secure base. When their mothers were absent, their responses were minimal with little or no signs of distress and they tended to treat the unfamiliar researcher in ways similar to how they treated their mothers during her presence. Upon her return from being absent, they would not seek her proximity but would respond to her with indifference, look away from her, actively avoid her, and would often continue playing with their toys. They sometimes simultaneously seemed both angry and in need of comfort but would not respond positively if their mothers attempted to comfort them. If she tried to pick them up they were unresponsive and made no efforts to maintain the contact.

Insecure-ambivalent infants were visibly distressed upon entering the strange room with their mothers. While in the room, they were unable to use her as a secure base from which to explore the novel situation; they seldom engaged in any exploration. They were wary of the researcher and often sought proximity with their mothers even before she left the room. While in their mothers' presence, these infants were passive and seemed preoccupied and fretful. When their mothers left the room, they were visibly disturbed, wary of, and could not easily be calmed by the stranger. When their mothers returned they demonstrated ambivalence regarding whether to seek contact with her. Some appeared to want contact but continued crying while remaining in their places.

However, the most common response was to seek contact and then angrily resist the mother's comforting attempts or throw a tantrum. They did not appear to be comforted by their mothers' responses.

Using the Strange Situation, Main and Solomon (1990) identified a third insecure attachment style, *insecure-disorganized*, typifying infants and children whose attachment styles are profoundly disturbed. These infants appeared to lack any discernible attachment strategy when distressed. They behaved as though confused and disoriented, frequently showing fear and apprehension of their mothers. When distressed during the Strange Situation, they sometimes engaged in bizarre behaviors such as freezing, hand clapping, or head banging when distressed. Upon their mother's return they might fall down, huddle on the floor, or cling to their mother while simultaneously crying and looking or leaning away from her. They appeared to want to escape the situation even when their mothers were present.

Mothers of insecure-disorganized infants sometimes responded to their infant's distress by providing reassurance while at other times they appeared unable to respond or would respond in ways that were inappropriate, bizarre, frightening, confusing, intrusive, abusive, or confusing, as also shown by other researchers (Carlson, Cicchetti, Barnett, & Braunwald, 1989; Lyons-Ruth, 1996; Lyons-Ruth, Alpern, & Repacholi, 1993; Lyons-Ruth, Bronfman, & Parsons, 1999; Lyons-Ruth, Connell, Grunebaum, & Botein, 1990; Main & Solomon, 1990; Schuengel, Bakermans-Kranenburg, & van IJzendoorn, 1999; Swanson, Beckwith, & Howard, 2000). They might have, themselves, been victims of trauma and may have posttraumatic stress or dissociative disorders. As a result, instead

of eliciting an appropriate caregiving response, the infant's distress and fear may inadvertently trigger the mothers own trauma-based memories and responses, including dissociation.

Subsequent to its identification as an insecure attachment sub-category, the disorganized attachment style has been extensively studied. Its development has been associated with economic poverty, extremely dysfunctional family relationships, chronic marital conflict, child abuse, caregivers who have been diagnosed with a mental disorder or who have histories of physical or sexual abuse and neglect as children (e.g., Carlson et al., 1989; DeMulder & Radke-Yarrow, 1991; Green & Goldwyn, 2002; Lyons-Ruth et al., 1993; Owen & Cox, 1997; Schuengel et al., 1999; Teti, Gelfand, Messinger, & Isabella, 1995).

By correlating the results of infants evaluated both naturalistically and in the Strange Situation, Ainsworth determined that this experimental paradigm provided highly accurate evaluations of infant attachment styles. The Strange Situation has subsequently replaced naturalistic studies as the standard method used by attachment researchers for evaluating the attachment styles of infants and childrens.

Bowlby and Subsequent Research on Childhood Attachment Development

Learned attachment-related secure-base caregiving. Bowlby's (1969) phylogenic theory holds that an innate drive causes the infant to seek the caregiver's physical proximity at times of distress, resulting in establishment of what Bowlby referred to as the *attachment-caregiving social bond*, which begins the ongoing establishment of a relationship that, over time, appears to influence the quality of

attachment the child develops toward his or her caregivers. However, activation of the innate infant attachment behavioral system and adult caregiving behavioral system only serves to remove the infant from harm and establish the physical proximity necessary for the caregiver to more closely examine the infant in order to identify the reason for his or her distress and provide some kind of response. Neither the innate attachment and caregiving drives, nor the resultant physically close relationship that results account for development of the child's attachments toward his or her caregivers.

Bowlby's (1969) view, supported by the findings of other researchers (e.g., George & Solomon, 1996; Hesse, 1999) was that the child's feelings and expectations toward each caregiver—his or her attachment to them—appears to develop as an accumulated set of emotions and expectations that recall what actually and has repeatedly occurred when distressed and in proximity with the caregiver. It is the extent to which the caregiver's administrations relieve, partially, relieve, or fail to relieve the child's distress and provide comfort, and the consistency with which the resultant feelings are experienced by the child over time that influences the type of attachment developed toward each of his or her caregivers.

In terms of the caregiver, such caregiving responses are not innate but learned during his or her own history of attachment development. How well an adult caregiver assesses the cause of a child's distress, administers an appropriate remedy, and provides comfort, is a reflection of the childhood history of care received at the hands of his or her own caregivers. For instance, only learned skills, attitudes, and abilities can help the caregiver determine whether his or her infant's distress is due to fear of an unfamiliar

noise, pain from an insect bite or diaper pin prick, or discomfort from digestive upset or a wet diaper, and then choose and administer a remedy for the distress. As Bowlby (1988) noted,

> while parenting behavior, like attachment behavior, is in some degree pre-programmed . . . all the detail is learned, some of it during interaction with babies and children, much of it through observation of how other parents behave, starting during the parent-to-be's own childhood and the way his parents treated him and his siblings. (p. 5)

Other attachment researchers have studied and identified several attitudinal and behavioral aspects of the responses provided by caregivers who are successful in reducing their child's distress by meeting his or her needs, and providing comfort, both of which are conditions necessary for the development of a normal healthy attachment, including,

- Demonstrating various aspects of sensitivity to, accurate understanding, and acceptance of the child's mental states and resultant behaviors, typically referred to as attunement and empathy (Beckwith, Cohen, & Hamilton, 1999; Bernier & Dozier, 2003; Braungart-Ricker, Garwood, Powers, & Wang, 2001; de Wolff & van IJzendoorn, 1997; Grienenberger, Kelly, & Slade, 2005; Grossmann, Grossman, Spangler, Suess, & Unzner, 1985; Koren-Karie, Oppenheim, Dolev, Sher, & Etzion-Carasso, 2002; McElwain & Booth-LaForce, 2006; Meins et al., 2002; Moran, Pederson, Pettit, & Krupka, 1992; Oppenheim, Koren-Karie, & Sagi, 2001; Pederson, Gleason, Moran, & Bento, 1998; Stams, Juffer, & IJzendoorn, 2002; van den Boom, 1994);

- Providing prompt responses to the child's signals of distress (Crockenberg, 1981; del Carmen, Pedersen, Huffman, & Bryan, 1993).

- Providing moderate and appropriate rather than excessive levels of stimulation and emotional responses to the child's distress (Belsky, Rovine, & Taylor, 1984; Jacobsen, Hibbs, & Ziegenhain, 2000; Main & Soloman, 1990);

- Providing synchronous versus asynchronous caregiving—agreement between their perceptions, interpretational accuracy, and resultant responses—toward their child's distress and other behaviors during the caregiving process (Isabella & Belsky, 1991; Isabella, Belsky, & von Eye, 1989; Leyendecker, Lamb, & Scholmerich, 1997);

- Being involved and psychologically available and providing caregiving responses that convey warmth and responsiveness (Ainsworth, 1967; Bates, Maslin, & Frankel, 1985; Bus & van IJzendoorn, 2001; Kerns, Aspelmeier, Guntzler, & Grabill, 2001; Kochanska, 1998; Leyendecker, Lamb, Fracasso, Scholmerich, & Larson, 1997; National Institute of Child Health and Human Development [NICHD] Early Child Care Network, 1997; O'Connor, Sigman, & Kasasi, 1992);

- Having more positive parenting emotions and attitudes, not using love withdrawal as a disciplinary style, and expressing more positive emotions, including joy (Magai, Hunziker, Mesias, & Culver, 2000; Slade, Belsky, Aber, & Phelps, 1999);

- Using words, gestures, and expressions that visibly display or accurately portray the child's internal distress, followed by a contradictory differential expression of the caregiver's own feelings of confidence and assurance related to successfully regulating or resolving the distress (Fonagy, 2001, Fonagy, Gergely, Jurist, Target, 2002; Magai et al., 2000; Meins et al., 2002);

- Not controlling and attempting to eliminate or ignore childrens' negative emotional displays (Berlin & Cassidy, 2003).

Bowlby (1969, 1988) collectively referred to the kind of learned caregiving responses that consistently and successfully reduce the child's distress and provide him or her with comfort, as secure-base caregiving. Through a child's repeated positive experiences with a secure-base caregiver, he or she comes to view that caregiver as the provider of a safe and certain or secure haven to which he or she can always return when distressed. Bowlby likened the secure-base concept to that of a commanding officer and his expeditionary force. The force is willing to venture forth and take risks, knowing that they can return to the safety and support of the base and commanding officer, if they have operational difficulties. Bowlby (1988) observed that likewise, having a secure-base caregiver provides a child or adolescent with the confidence to spend increasing time exploring his or her environment, knowing that when distressed or frightened, the secure base will always be a ready and available source where he or she will be "welcomed when he gets there, nourished physically and emotionally, comforted if distressed, reassured if frightened" (p. 12).

According to Bowlby (1988) when, in times of distress, an infant consistently experiences resolution of the distress, comfort, and the resultant good feelings at the hands of the secure-base caregiver, these feelings and the anticipation of their recurrence when in the caregiver's proximity, begin the process of developing a normal, or secure attachment to the caregiver. As childhood cognitive development proceeds, these conditioned attachment associations become incorporated together into a mental picture or cognitive schema of the child's attachment feelings and expectations of distress relief and comfort, associated with his or her caregivers. Thus, children whose cumulative attachment experiences have been influenced by secure-base caregivers, develop a secure attachments cognitive schema, through which they view their caregivers. In turn, the child's developing attachment schema influences or regulates his or her observable *attachment behavioral style*, which can be seen in how he or she approaches and behaves toward attachment figures while distressed (e.g., Fonagy et al., 2002; Mikulincer, 1995).

Thus, based on positive feelings and expectations resulting from consistently satisfying responses by a secure-base caregiver, the attachment-related behavioral style of a securely attached child is characterized by searching for and readily seeking proximity with his or her caregiver when frightened, in pain, or in discomfort. He or she cooperates with the caregiver's administrations and readily responds to the caregiver's attempts to provide comfort (e.g., Ainsworth et al., 1978).

Multiple person influence on childhood attachment development. While parents are typically the primary caregivers whose responses provide the greatest influence on childrens' attachment development, Bowlby (1969, 1973, 1980) believed

that any adult who consistently provides caregiving responses to a child's distress may influence his or her attachment development. Bowlby observed that infants display attachment behaviors toward any individual, in addition to a parent or primary caregiver, who is responsive to his or her crying. Subsequent research has shown that during the first year of life, most children develop multiple attachment relations with familiar individuals who are readily available and responsive to his or her needs, including siblings, grandparents, and aunts and uncles (Ainsworth, 1967; Schaffer & Emerson, 1964).

Longitudinal studies of attachment development, such as the 30-year study by Sroufe et al., (2005a, 2005b), have also shown that in addition to the primary influence of adult caregivers on their children's' attachment development, both sibling and peer relationships are also influential. When included in measures predicting childhood attachment development over time, predictions of children's' future attachment categories are significantly more accurate when attachment relationships with siblings and peers are included with those of their adult caregivers (Sroufe, 2005). Other researchers have provided further evidence that children develop attachment relationships with siblings (Schneider & Burke, 1999; Stewart & Marvin, 1984; Teti & Ablard, 1989), best friends (Markiewicz, Lawford, Doyle, & Haggart, 2006), and even day care workers (Howes, Rodning, Galluzzo, & Myers, 1988).

In their adolescent attachment study, Freeman and Brown (2001) found that adolescents pick current primary attachment figures—those to whom they go for support and comfort—based on their own historic attachment security. Predictably, secure

adolescents, whose histories involved attachment-caregiving relationships with secure-base parents, report viewing parents as their primary attachment figures. Adolescents whose attachment development histories involved inadequate caregiving typically seek attachment relationships outside their families of origin, listing friends and romantic partners as their primary attachment figures.

Attachment influence on other aspects of child development. Bowlby (1969) believed that relief of a child's distress through secure-base caregiving deactivates his or her attachment behavioral system, triggering activation of one of several other innate behavioral systems. Based on their observations of children's attachment-related behaviors, Bowlby and other attachment theorists (Ainsworth, 1990; Bowlby, 1969; Marvin, 1997) suggested that the attachment behavioral system interacted with other innate systems such as the *exploratory behavioral system*, the *fear and wariness behavioral system*, and the *sociable (or affiliative) behavioral system*. Subsequent attachment research has confirmed that once distress is relieved through distress-reducing secure-base caregiving responses, securely attached children discontinue attachment-seeking behaviors and begin showing interest in environmental exploration (Ainsworth, 1973; Ainsworth et al., 1978; Main & Solomon, 1990; van den Boom, 1994).

Cassidy (1999) provided a theoretical explanation of this interaction between the attachment and other developmentally significant behavioral systems. He suggested that deactivation of the attachment behavioral system, itself, becomes a trigger that activates the exploratory behavioral system. The function of the exploratory behavioral system is to create a state of readiness from which other behavioral systems can be activated,

including the sociable or fear and wariness systems, in response to events that occur as the child explores his or her environment. For example, if the child comes across a person while exploring his or her environment, the sociable behavioral system is activated. On the other hand, when a child's needs are not met through the secure-base caregiving relationship, he or she remains in distress so that activation of the other developmental systems, along with the developmental stimulation that would have resulted, does not occur.

Thus, it appears that, as opposed to secure children whose caregivers quickly and successfully respond to and alleviate their distress, the continuing unresolved or incompletely resolved distress of insecurely attached children, maintains activation of their attachment behavioral systems for prolonged periods of time. As a result of their lingering distress they continue to engage in attachment-related behaviors such as crying, and engage in little or no environmental or social exploratory behaviors. Thus, when these children are compared to those consistently exposed to secure-base caregiving, it is reasonable to predict that over the entire course of attachment development, their development will be negatively affected in other areas, due to having spent a relatively smaller amount of time exploring the external physical and social environments.

In fact, a great deal of evidence supports the theoretical position that attachment development either positively or negatively influences other areas of development, including:

- cognitive and academic development and functioning (Al-Yagon & Mikulincer, 2004; Bus & van IJzendoorn, 2001; Fish & McCollum 1997;

Jacobsen, Edelstein, & Hofmann, 1994; Jacobsen & Hofmann, 1997; Moss &

St-Laurent, 2001; Slade, 1987; van IJzendoorn & Vliet-Visser, 2001; Stams et

al., 2002);

- Self-esteem and positive self-concept (Carranza & Kilmann, 2000; Doyle &

  Markiewicz, 2005);

- Ability to accurately perceive and cope with stressful personal and

  interpersonal situations (Barrett & Holmes, 2001; Chapman, 1991; Howard &

  Medway, 2004; Seiffge-Krenke, 2006; Seiffge-Krenke & Beyers, 2005);

- Ability to regulate emotion and emotion-based behavior (Bosmans et al.,

  2006; Calamari & Pini, 2003; Contreras, Kerns, Weimer, Gentzler, & Tomich,

  2000; Cooper, Shaver, & Collins, 1998; Engels, Finkenauer, Dekovic, &

  Meeus, 2001; Smith, Calkins, & Keane, 2006);

- Development of emotional understanding in self and others, and interpersonal

  empathy (Kestenbaum, Farber, & Sroufe, 1989; Laible & Thompson, 1998;

  Ontai & Thompson, 2002; Raikes & Thompson, 2006; Steele, Steele, Croft, &

  Fonagy, 1999; van der Mark, van IJzendoorn, & Bakermans-Kranenburg,

  2002);

- Social skills and peer relationship competence (Allen, et al., 2002; Benson et

  al., 2006; Bohlin, Hagekull, & Rydell,2000; Cassidy, Kirsh, Scolton, & Parke,

  1996; Coleman, 2003; Elicker, Egeland, & Sroufe, 1992; Fagot, 1997; Freitag,

  Belsky, Crossman, Crossman, & Scheuerer-Englisch, 1996; Lewis & Feiring,

1989; Pierrehumbert, Ianotti, Cummings, & Zahn-Waxler, 1989; Szewczyk-Sokolowski, Bost, & Wainwright, 2005);

- Capacity for and quality of close personal relationships with siblings (Stewart & Marvin, 1984; Teti & Ablard, 1989; Volling & Belsky, 1992) and friends (Benson et al. 2006; Coleman, 2003; Kerns 1994, Schneider, Atkinson, & Tardif, 2001; Steinberg, Davila, & Fincham, 2006);

- Development and complexity of moral reasoning ability (Laible & Thompson, 2000; van IJzendoorn & Zwart-Woudstra, 1995);

- Adaptive psychological self-functioning and wellbeing versus mental illness (Abela, Hankin, Haigh, Adams, Vinokuroff, & Trayhern, 2005; Adshead & Bluglass, 2001; Bostik & Everall, 2007; Brown & Wright, 2003; Constantine, 2006; Green & Goldwyn, 2002; Gullone, Ollendick, & King, 2006; Keiley, 2002; Keiley & Seery, 2001; Margolese, Markiewicz, & Doyle, 2005; Miljkovitch, Pierrehumbert, Karmaniola, Bader, & Halfon, 2005; Nickerson & Nagle, 2004; Rice, Cunningham, & Young, 1997; Shirk, Gudmundsen, & Burwell, 2005; Soares, Lemos, & Almeida, 2005; Westen et al., 2006).

Adult Attachment Existence and Function

Caregiving for Infants and Children

The AAI. Attachment development theory Bowlby (1951, 1969, 1973, 1980, 1988), Ainsworth (1967, 1973, 1990), Ainsworth and Wittig (1969), and Ainsworth et al. (1978), provided evidence that the development of children's attachment security is related to the quality of caregiving responses they receive when distressed. Development

of attachment security appears to be related to a child's consistent experience of secure-base caregiving responses to his or her distress. Children show characteristics of insecure attachments when secure-base caregiving is inconsistent or unavailable.

The first adult attachment research, conducted by Main and Goldwyn (1984) in developing the AAI (George et al., 1985, 1996), provided the first evidence that adults also have attachments and those attachments appear to influence the extent to which they are capable of providing secure-base caregiving. Securely attached adults have experienced secure-base caregiving and are therefore capable of providing secure-base caregiving. By virtue of their lack of first-hand experience of secure-base caregiving, insecurely attached caregivers provide caregiving responses associated with children whose attachments are insecure.

Main and Goldwyn (1984) conducted a 6-year follow-up of children whose attachments had originally been classified in 1982 using the Strange Situation. During their study, Main and Goldwyn began to realize that they were able to accurately predict the attachment category in which each of these children had originally been placed by listening to and evaluating the quality of each of their caregiver's reports of his or her own childhood attachment experiences. For instance, they were usually correct when they predicted the original secure classification for a child whose caregiver reported, six years later, memories of secure-base caregiving experiences in his or her own childhood. This led to the hypothesis that attachments developed in childhood are retained and influence the expression of adult caregiving responses toward children during attachment relationships.

Main and Goldwyn's studies ultimately led to development of the AAI question protocol (George et al., 1985, 1996) and scoring classification system (Main & Goldwyn, 1984, 1998). The Strange Situation provided a scoring system for a number of here-and-now child attachment behaviors and corresponding caregiver responses, resulting in a categorical child attachment style classification. Now, the AAI could classify an adult's attachment style, by coding the manner in which he or she responded memories elicited by a number of questions about various aspects of his or her childhood attachment-caregiving relationships.

Description and use of the AAI. The Strange Situation was designed to evaluate an infant or child's actual attachment behavioral style toward his or her caregiver, subsequent to priming his or her attachment care-seeking schema using a distressing situation. On the other hand, the AAI (George et al., 1985, 1996) was designed to evaluate an adult's current attachment-related state of mind in terms of his or her memories of childhood attachment experiences with parents or other individuals. His or her verbal responses to questions regarding these memories are then coded as to their potential attachment category fit. Summarized scores suggest an attachment category in which the individual can be classified. Rather than evaluating an adult's attachment to a specific individual in the present, the resultant categorization is thought to represent a more enduring attachment state of mind from which various behaviors can be predicted. These include caregiving behaviors toward children as well as behaviors in other significant relationships and situations, similar to the broad influences of children's attachments, as discussed earlier (Hesse, 1999).

As reviewed by Hesse (1999), the AAI protocol (George et al., 1985, 1996) is a semi-structured protocol consisting of 18 questions plus follow-up probing questions, appropriate for administration to teenagers and adults in one to two hours. After asking each question, the examiner transcribes the entire conversation, including subsequent probes and the examinee's responses, verbatim. Based in this transcript, responses are later scored. While the AAI was originally designed to evaluate adult parents of children whose attachments had been previously classified using the Strange Situation, it has been used to evaluate any individual who can verbalize memories of childhood attachment experiences, as early as approximately 15 years of age (e.g., Ward & Carlson, 1995).

Because neither the test protocol nor scoring systems are published and available for sale, they do not appear in Tests in Print or the Mental Measurements Yearbook. The AAI (George et al., 1985, 1996) test protocol is unpublished and can only be attained by writing Professor Mary Main, at the University of California, Berkeley. The scoring and classification system is not available in written form and can only be learned during a 2-week training institute periodically scheduled with one of several authorized trainers. A reliability check is provided all individuals 30 days after completing training.

AAI attachment classifications. The first AAI classification system (George et al. 1985, 1996) classified adult attachments into either of three categories, corresponding to those identified in children by Ainsworth et al. (1978) as a result of their development of the Strange Situation. These include s*ecure/autonomous*, corresponding with the Ainsworth et al. s*ecure* category, *insecure-dismissing* corresponding to the Ainsworth et

al. *insecure-avoidant* category, and the *insecure-preoccupied* category corresponding to the Ainsworth et al. *insecure-resistant/ambivalent* category.

A fourth category, *insecure-unresolved/disorganized*, identified by Main and Solomon (1990), was incorporated into both the second AAI (George et al., 1996) scoring system and subsequent versions of the Strange Situation (Main & Solomon, 1990) where it corresponded to the *insecure-disorganized/disoriented* classification.

Extensive evaluation of the AAI has demonstrated good test-retest and inter rater reliability (Bakermans-Kranenburg & van IJzendoorn, 1993), alternate form reliability (van IJzendoorn & Bakermans-Kranenburg, 1996), discriminant validity (Bakermans-Kranenburg & van IJzendoorn, 1993; Crowell et al., 1996; Sagi et al., 1994), and predictive validity (Biringen et al., 2000; Roisman et al., 2001; van IJzendoorn, 1995).

In order to be classified as secure/autonomous by the AAI (George et al., 1985, 1996), the adult respondents must provide internally consistent memories of helpful and satisfying childhood caregiving experiences. The respondent values his or her attachment to childhood caregivers but is objective in discussing specific events, whether they were originally perceived as being favorable or unfavorable. When one or both caregivers are described as loving, the examinee is able to give clear examples to support that characterization. On the other hand, when a caregiver's prior behavior is characterized negatively, the secure examinee describes it in a reflective, objective, and implicitly understanding or forgiving manner. Thus, the examinee's evolved and current attitude toward prior parental caregiving behaviors, rather than how the behaviors themselves might be characterized, is characteristic of attachment security (Hesse, 1999).

Adults categorized as dismissing by the AAI (George et al., 1985, 1996) dismiss the importance of attachment relationships and behave as though they are strong, independent, and normal. Their reports of childhood attachment experiences are typically brief, unelaborated, and not coherent or clearly defined. They characterize their caregivers as having been normal and minimize or deny them having had negative characteristics. However, their reports of historical events to support these characterizations are weak or inconsistent (Hesse, 1999).

Adults who meet the AAI (George et al., 1985, 1996) coding criteria for the preoccupied classification seem excessively confused and preoccupied with prior attachment relationships. Their reports are often excessively long, verbally entangled, lack coherence, and contain vague characterizations, lacking in insight. They sometimes speak of attachment figures passively, angrily, or fearfully (Hesse, 1999).

The reports of unresolved/disorganized adults may at times have characteristics similar to either dismissing or even secure adults. However, when discussing childhood loss or abuse experiences they periodically exhibit what Hesse (1999) calls "lapses in metacognitive monitoring" (p. 404), characterized by appearing to lose contact with awareness of the conversation's direction and organizational structure. These may be characterized by prolonged periods of silence, excessive preoccupation with inner memories, and reports of bizarre perceptions about the status of an attachment figure as though the respondent were in a dissociative state.

Correspondence between child and caregiver classifications. The original findings by George et al. (1985, 1996) on the strong correspondence between childrens'

attachment categories and their caregiver's current attachment state of mind, as reflected by his or her memories of childhood attachment-caregiving experiences, have been repeatedly duplicated using both the AAI (George et al., 1985, 1996) and the Strange Situation (Ainsworth et al., 1978) and other measures for evaluating attachments. For instance, Main and Goldwyn (1984) found a strong correlation between AAI evaluated mothers who remembered experiences of rejection by their own mothers and, thus, subsequently classified as dismissing, and their own infants ignoring them and not seeking proximity when distress, during their Strange Situation evaluation, and subsequently evaluated as avoidant.

Fonagy, Steele, and Steele (1991) conducted a prospective study in which they first categorized pregnant women as either secure or insecure based on the quality of their childhood recollections regarding the extent to which they experienced loving mothers. Subsequently, Fonagy et al. (1991) evaluated their infants' attachment categories at one year of age and found a 75% correspondence between the attachment categories mothers and their infants. In his meta-analysis of 18 studies on the correspondence between caregiver and infant attachment styles, using these measures, van IJzendoorn (1995) noted an overall correspondence of 75%. Typical of such studies was that by Ward and Carlson (1995) who found a 78% correspondence between the attachment categories of adolescent mothers, evaluated with the AAI, and their infant children, assessed using the Strange Situation.

Similarly, using the same measures, Sagi et al. (1997) found a 76% correspondence between parent caregivers and their children, but only a 40%

correspondence between children and their parents when the children were reared in a community Kibbutz. Similar results were reported by Sagi, Koren-Karie, Gini, Ziv, and Joels (2002) in their analysis of the Haifa Study of Early Child Care study that extensively evaluated the attachments of 758 infants across a variety of child-care settings including their mothers, relatives, paid care-givers, and day-care centers. Using a variety of measures of attachment of both parents and their children, including extensive home observation and the AAI (George et al., 1985, 1996), George and Solomon (1996) studied attachments in 32 mothers and their kindergarten-aged children. They found significant correspondence between ratings on three categories of measures: behaviors involving acceptance versus rejection of the child's expressions, extent of secure-base behaviors, certainty versus uncertainty of caregiver understanding and response, and caregiver helplessness vs. control; adult caregiver attachment classification; and child attachment classification.

In their meta-analysis summarizing the results of 66 similar studies to date, de Wolff and van IJzendoorn (1997) confirmed this correspondence between caregiver and child attachment categories across a wide variety of cultures and situations. These, included common caregivers and children in Israeli Kibbutzim (Sagi et al., 1995), Japanese parents and their children (Takahashi, 1986, 1990), Botswana Bushman parents and their children (Bakeman, Adamson, Konner, & Barr, 1990), and Zambian Pygmy parents and their children Zambia (Morelli & Tronick, 1992).

Several subsequent studies have found results consistent with these findings. Data from three large studies were pooled by van IJzendoorn, et al. (2000) to evaluate

attachment correspondence between 138 pairs of siblings and their mothers. Attachment categories, determined at approximately 12 and 18 months using the Strange Situation (Ainsworth, et al. 1978), showed a 62% concordance. Studying families with existing and ongoing relationships between three generations, including children, their parents, and their grandparents, Kretchmar & Jacobvitz (2002) found a significant level of intergenerational attachment category correspondence. Huth-Bocks, Levendosky, Bogat, and von Eye (2004) conducting a prospective study of 206 women, found a significant relationship between their own prenatally-evaluated attachment experiences, based on memories of attachment experiences with their mothers, and their infant's actual attachments at one year of age. In one of the most recent studies, Feeny (2006) found a strong relationship between the attachment security of adult college students and the current attachment conceptualization of their parents toward each other.

Evidence that relationship influences, rather than genetic factors, play a predominant role in developing this attachment correspondence is suggested in studies of adopted infants and their foster caregivers. For instance, Dozier, Stovall, Albus, and Bates (2001) found a 72% correspondence between the attachments classifications of 50 infant-foster mother dyads, assessed when the infants were 12 and 34 months old. This relationship held true regardless of the age at which the infants were originally placed with their foster mothers. Similarly, in a study of the attachments among 157 monozygotic and dizygotic twins, Bokhorst et al. (2003) determined that 52% of the variance between secure and insecure attachment categories was due to caregiving influence while the remaining 48% was due to a combination of measurement error and

uncontrollable environmental factors. They concluded that genetics appeared to play a

negligible part in the variance between attachment categories. Brussoni, Lang, Livesley,

and MacBeth (2000) evaluated genetic versus environmental influences on attachment

security categories of 116 monozygotic and 104 dizygotic adult twin pair, raised in

different environments and ranging in age from 16 years to 79 years of age. Individuals'

attachments were categorized using the RSQ (Griffin & Bartholomew, 1994). Brussoni

et al. (2000) determined that environmental influences appeared to account for the

majority of variance in all attachment styles.

Attachment and Caregiving in Adult Pair-Bond Relationships

Findings leading to development of the AAI (George et al., 1985, 1996)

confirmed Bowlby's (1969, 1973, 1980) postulations that adults retain their original

attachments and that these are broadly influential, in this case in influencing their

caregiving behaviors that, in turn, influenced their children's attachment development.

These findings encouraged further exploration of the adaptive influence of adult

attachments beyond the adult-child attachment-caregiving relationship, beginning with

the most obvious adult attachment-type relationship, the romantic or pair-bond

relationship.

Bowlby (1969; 1988) had originally provided the adult pair-bond relationship as

an adult prototypic of the child-caregiver relationship (Hazan & Zeifman, 1999). The

primary difference between the two, in addition to the age-based differences the causes of

and remedies necessary to relieve the distress, involves the potential for mutual

reciprocity of caregiving roles. In the adult pair-bond relationship each adult partner will,

from time to time, assume the caregiving role to the other partner in distress. In addition

to its adaptive function of relieving distress, Bowlby (1988) believed that because of its

secure-base caregiving potential, provided by a securely attached partner, the adult

romantic relationship provides an ideal environment to influence an insecure partner's

ongoing attachment development toward security.

Hazan and Shaver (1987) were the first to study and confirm Bowlby's (1969,

1988) conceptualization of adult pair-bonds as adult attachment relationships. Hazan and

Shaver were struck by observable similarities between children's' attachment-related

behaviors towards their adult caregivers and the behaviors demonstrated by adult

romantic partners toward one another. These included behaviors such as eye gazing,

sharing interests, needs, and concerns, expressions of comfort and safety when in the

other's presence, and the apparent activation of exploratory and creative behaviors.

To evaluate the potential that these and variants of these behaviors might be the

product of adult secure versus insecure attachments, Hazan and Shaver (1987) developed

a forced-choice, self-report attachment measure designed to elicit recipients' attachment

attitudes in their romantic relationships. Recipients responded to these items after first

reading three paragraphs, each of which consisted of salient descriptions of each of the

three attachment behavioral styles previously delineated by Ainsworth et al. (1978).

Respondents were forced to answer which of the three paragraphs most closely described

either their historic or their current romantic relationships.

Hazan and Shaver (1987) mailed their attachment questionnaire to adults,

receiving 620 responses from adults ranging in age from 14 to 82. The study was then

replicated with 108 undergraduate students. Validity of the questionnaires was suggested by the fact that the percentages of individuals assigned to each attachment category were similar to those identified by other: 56% were securely attached, 23% were insecure-avoidant, and 20% were insecure-ambivalent. Mickelson, Kessler, and Shaver (1997) subsequently determined the following adult attachment category percentages in their nationwide representative sample of attachments: 59% secure, 25% avoidant, and 11% preoccupied.

Consistent with previous findings regarding behaviors associated with various attachment styles, Hazan and Shaver (1987) found that securely attached individuals reported experiencing more trust, happiness, and the experience of friendship in their romantic relationships than did insecurely attached respondents. Ambivalently attached adults viewed their relationships as characterized by emotional labiality and involving significant levels of jealousy, to which they attributed their own intimacy and closeness fears, consistent with this attachment style. Compared to secure individuals, insecurely attached individuals reported that they experienced fewer intimate relationships and that these relationships were of shorter duration.

Using a variation of the Hazan and Shaver (1987) questionnaire, Simpson (1990) evaluated attachment experiences of 144 college dating couples. Hypothesizing that the romantic relationships are attachment relationships, Simpson proposed that the romantic relationships of securely attached partners will be higher in characteristics such as stability, trust, supportiveness, interdependence, and satisfaction. Conversely, he anticipated that insecure-avoidant partners will seek and develop romantic relationships

characterized by greater emotional distance, resulting in less trust, commitment, interdependence, and satisfaction. Finally, he predicted that the relationships of insecure-anxious partners, due to their mixture of strong need yet doubt as to the dependability of their partner, should be characterized as experiencing lower levels of trust, commitment, interdependence, and satisfaction than securely attached partners. Simpson's results supported his hypothesis. Securely attached couples characterized their romantic relationships as interdependent and involving high levels of trust and commitment. Both anxious and avoidant individuals reported less interdependence, fewer positive emotions, and more frequent negative emotions. At the time of a six-month follow-up interview, and consistent with this attachment category, insecure-avoidant men whose romantic relationships had subsequently ended, reported experiencing the least emotional distress compared to individuals in the other attachment categories.

These and other similar studies of adult pair-bonds, evaluated respondent attachments using similarly structured close-ended self-report measures. Feeny and Noller (1990, 1991) were concerned over the potential that such measures might not actually be measuring adult attachments, due to their potential to bias participant responses in the direction of perceived experimenter demand and social desirability. Thus, they designed a study to evaluate attachments of partners in romantic relationships in which dating couples were asked to provide their own descriptions of their relationship. Participants were given 5 minutes to discuss the type of partner they were with and how well the two of them get along in their relationship. Responses were taped

and analyzed for attachment category-salient statements. Participants were given the

Hazan and Shaver (1987) attachment measure two weeks later.

The Hazan and Shaver (1987) measure describes five salient aspects of

attachment relationships, differing in how they function depending on the participant's

attachment style, including commitment, openness, closeness, dependence, and affection.

Comparing participant voluntary responses to those elicited with the Hazan and Shaver

(1987) measure, Feeny and Noller (1991) found that 89% of the participants mentioned at

least one salient aspect of attachment also contained in the Hazan and Shaver descriptions

while 25% referred to every salient area in their descriptions of partners and their

relationships. Participant voluntary responses were consistent with their attachment style

categories, as determined by the Hazan and Shaver measure. For instance, secure

participants emphasized friendship as a basis of their romantic relationship, and stressed

the importance of mutual support, but valued balance in the extent to which each partner

gives and receives support. On the other hand, ambivalent participants presented their

partners in idealized ways, stressing values of total commitment, affection, and closeness,

while avoidant participants did not report experiencing any of the attachment relationship

aspects identified as salient by the Hazan and Shaver.

Leading to development of the AAI, George et al. (1985, 1996) found a

relationship between adult attachment classifications, based on their memories of

childhood attachment experiences, and the attachment categories developed by their

children. In similar fashion, other researchers subsequent to Hazan and Shaver (1987)

and using the same or similar adult romantic attachment measures, found statistical

relationships between their attachment styles within pair-bond relationships and their memories of childhood attachment-caregiver relationship experiences (e.g., Bartholomew & Horowitz, 1991; Collins & Read, 1990; Feeney & Noller, 1990). For example, Collins and Read (1990) first evaluated adult attachments toward their romantic partner using Hazan and Shaver's (1987) measurement, then evaluated memories of their childhood attachment relationships with their parents. Results showed predictable correspondence between current attachment styles, partner choices, ongoing relationship satisfaction, and childhood attachment experiences.

Along these same lines, in a study of 234 married couples Curran et al. (2005) found strong predictable associations between attachment categories, presumed on the basis of participants' childhood memories of their parents' marital relationships, and the extent to which they maintained closeness to their own marriage partners, measured both during their first pregnancy and again at 24 months postpartum. More recently, Steinberg et al., (2006), studying 96 young adults, found a strong relationship between their perceptions of their parents' marital relationships, their own attachments to their parents, and their expectations of future romantic relationships. Markiewicz et al. (2006) have shown that while adults continue to have attachment relationships with parents and close personal friends, those involved in romantic relationships direct the majority of their attachment-related behaviors, such as proximity-seeking, toward romantic partners.

Subsequent researchers went on to study a variety of ways in which different attachment styles influence and effect pair-bond relationships. These researchers have demonstrated predictable influences of secure and insecure attachments in adapting to

and maximizing the potential of romantic relationships. These studies have shown that attachment security can influence a variety of outcomes, including:

- Overall relationship satisfaction (Keelan, Dion, & Dion, 1998).

- The extent and types of intimacy displays (Guerrero, 1996).

- Differences in psychophysiological responses to laboratory induced stressful situations in either the presence or absence of the romantic partner (Feeney & Kirkpatrick, 1996; Roisman, 2007).

- The extent to which individuals' perceptions of their romantic relationship changed after either a minor or major argument (Simpson, Rholes, & Phillips, 1996).

- Partner support-seeking when distressed (Collins & Feeney, 2000).

- Methods for coping with relationship conflict (Creasey & Hesson-MCInnis, 2001; Downey, Freitas, Michaelis, & Khouri, 1998; Seiffge-Krenke, 2006).

- Differences in caregiving responses toward the distresses partner (Feeney & Collins, 2001).

- The effects on interpersonal romantic attraction (Klohnen & Luo, 2003; Simpson, 1990).

- Perceptions (versus the reality) of partner conflicts and anticipated rejection (Campbell, Simpson, Boldry, & Kashy, 2005).

- Affect regulation and the expression of emotions (Paley, Cox, Burchinal, & Payne, 1999; Simpson, Collins, Tran, & Haydon, 2007).

- Long-term relationship stability (Lehnart & Neyer, 2006).

- Behaviors displayed when interacting with individuals toward whom there is a perception of potentially developing a new relationship (Bartz & Lydon, 2006).

These and other studies have identified adult pair-bond relationships as arenas in which adults' historic attachment experiences as well as their ongoing attachment styles are play a significant role. Because these relationships are reciprocal, they provide both adults with an opportunity to facilitate his or her adaptivity by providing the potential for relief of distress through the resolution of needs and problems, the development of intimacy, and the provision of caregiving to children. Theoretically, they also provide the potential for adult attachment development.

Multiple Adult Attachment Relationships

As discussed in Chapter 1 of this study, after developing a large body of research focused on the relationship between attachment development within the relationship between children and their primary caregivers, subsequent investigators found that children can also develop attachment relationships between older siblings and other influential family members, day care workers and other caregivers, and close personal friends.

Just as the primary and strongest attachment relationship for children is typically with primary caregivers, for adults romantic partners are primary (Weiss, 1991). In a study of 812 adults attachment questionnaire respondents Doherty and Feeney (2004) confirmed the primacy of the pair-bond attachment relationship. However, in responding to the questionnaire on preferred attachment figures and their relative ranking, adult

respondents included their own parents, their adult siblings, close personal friends, and even their own adult children.

Imamoglu and Imamoglu (2006) provided 110 Turkish university students with attachment-related questionnaires in order to evaluate both their general attachment category orientations and their attachment orientations toward specific types of relationships including family members, romantic partners, and friends. They found consistency between the general attachment category determined by students' questionnaire responses and how they described their attachment relationships with each of the three groups. For instance, students classified as secure also reported relationship attitudes, behaviors, and consistent with attachment security with family members, romantic partners, and personal friends. Though relationships with each group were characterized as secure, students reported relative differences in the levels of security they felt toward individuals in each group. Predictably, students reported the strongest feelings of attachment security toward family members.

Thus, it appears that adults both maintain their original childhood attachments to primary caregivers, and develop subsequent adult attachments to siblings, friends, and romantic partners.

Adaptive Influences of Adult Attachments

Just as was the case with childhood attachment research, numerous adult attachment studies found predictable relationships between secure and insecure attachment categories and a variety of adaptive adult functions. These have included:

- Positive versus negative interpersonal expectations, affect, trust, and intimacy (Mikulincer, 1998; Rowe & Carnelley, 2003).

- Quality of interpersonal peer relationships (Bartholomew & Horowitz, 1991).

- Willingness to seek help and support from others when needed (Butzel & Ryan, 1997; Collins & Feeney, 2000; Dozier, 1990; Larose & Bernier, 2001; Feeney & Ryan, 1994; Florian, Mikulincer, & Bucholtz, 1995; Lopez, Melendez, Sauer, Berger, & Wyssmann, 1998; Shaver & Hazan, 1993; Vogel & Wei, 2005).

- More involved, cooperative, and develop a better therapeutic alliance when involved in psychotherapy (Dozier, Cue, & Barnett, 1993; Dozier & Tyrrell, 1998; Eagle, 2003; Fonagy, 2001; Mackie, 1981; Slade, 1999).

- Expectation toward and desire to have children (Rholes, Simpson, Blakely, Lanigan, & Allen, 1997).

- Mental health versus psychopathology (Latzer, Hochdorf, Bachar, & Canetti, 2002; Muller, Lemieux, & Sicoli, 2001).

- Self-image (Mikulincer, 1995).

- Empathy, compassion, and altruistic behavior (Mikulincer et al., 2001; Mikulincer, Shaver, Gillath, & Nitzberg, 2005).

- Change-resistance of self-image in response to negative feedback from significant others (Broemer & Blumle, 2003).

- Quality of parenting/caregiving toward children (Adam, Gunnar, & Tanaka, 2004. Adshead & Bluglass, 2001; Baer & Martinez, 2006; Bosmans et al.,

2006; Jaeger, Hahn, & Weinraub, 2000; Koren-Karie, 2001; Sagi et al., 2002;

Tomlinson, Cooper, & Murray, 2005).

- Positive personal health patterns and increased longevity (Feeney & Noller, 1990; Hazan & Shaver, 1987; Scharfe & Eldridge, 2001).

- Better academic learning dispositions (Larose, Bernier, & Tarabulsy, 2005).

Adult Attachment Development

Evidence of Adult Attachment Development

The AAI earned-secure attachment category. The earliest research on adult attachments began with development of the AAI (George et al., 1985, 1996), focusing on the role of adult caregivers in the process of childhood attachment development. The AAI provided evidence that adults have attachment styles similar to those already identified in children and established their relationship to childhood attachment development. The AAI also provided evidence that some adults, categorized as *earned-secure*, may have been insecurely attached as children but have developed attachment security as adults.

While developing the AAI coding manual and in subsequent adult attachment studies using the AAI, George et al. (1985) and Main and Goldwyn (1998) observed that a small percentage of adults reported memories of attachment figures whose caregiving should have produced attachment insecurity, yet the quality and complexity of these respondents' reports resulted in a classification of attachment security. The assumption was that despite growing up in poor caregiving and presumably being insecurely attached as children, these respondents had gone on to earn attachment security as adults.

Based on Main and Goldwyn's (1998) observations of apparent adult attachment responses to the AAI, Pearson, Cohn, Cowan, and Cowan (1994) began referring to adults with such responses to the AAI as earned-secure as opposed to the typical *continuous-secure* adults whose memories of childhood attachment experiences were predictable, based on their current secure classification. In studying adults so categorized, Pearson et al. found that despite apparently not having the advantage of experiencing secure-base caregiving as children, earned-secure adults were equal with continuous-secure adults in their ability to able to provide secure-base caregiving to and affect the attachment security of their own children. These results were confirmed by Phelps, Belsky, and Crnic (1997) who found that under highly stressful life situations, earned-secure mothers were equal to continuous-secure mothers in their parenting abilities. Thus, it appeared that the earned-secure category of adults evaluated by the AAI provided indirect evidence in support of Bowlby's (1969, 1988) theory that initially insecure individuals can develop attachment security in adulthood through experiences with other secure adults.

The AAI (George et al., 1985, 1996) appears to be a valid instrument in terms of its purported ability to provide an attachment category based on assessing an individual's current attachment state of mind as revealed in how he or she thinks about attachment-related experiences. It is not, however, designed to elicit accurate memories and, based on those memories, attempt to assess the quality of actual caregiving behaviors provided to an adult respondent during childhood by his or her caregivers. Thus, the AAI's scoring manual cautions against evaluating the meaning of adult an adult respondent's

recollections of childhood attachment experiences in terms of their relative and literal truth. However, conceptualization of an earned-secure AAI attachment category requires belief in the literal correctness of currently secure adults whose memories of childhood attachment experiences are typical of insecure attachment development.

Countering the earned-secure theory, and in keeping with the stated intent of the AAI (George et al., 1985, 1996), to limit evaluation to the adult's current attachment state of mind rather than evaluate the relationship between actual childhood caregiving experiences and current attachment security, various researchers have suggested explanations other than earned attachment security to account for why these currently securely attached adult respondents recall negative, rather than positive, childhood attachment experiences. These explanations suggest that current states, such as depression, can alter the way one recalls past events, so that those now seen as salient are more consistent with the current mood, regardless of whether they represent typical caregiving experiences (Henry, Moffitt, Caspi, Langley, & Silva, 1994; Yarrow, Campbell, & Burton, 1970). These researchers suggest that if the truth could be known, individuals categorized as earned-secure, may have actually had good childhood attachment experiences and may have always been securely attached but are currently recalling negative experiences due to the influences of their current mood.

Using both the Strange Situation (Ainsworth et al. 1978) and the AAI (George et al., 1985, 1996) Roisman et al. (2002) tested the earned-secure conceptualization in their evaluation of a 23-year longitudinal study from infancy to age 21. These researchers repeatedly evaluated the relationship between actual childhood attachment-caregiving

experiences and attachment development and categories of 170 individuals and the

relationship to their subsequent adult attachment categories to determine consistency with

both the attachment categories and memories of childhood attachment experiences of

these same individuals, elicited through the AAI, as adults. Actual childhood caregiving-

attachment experiences were theoretically consistent with measured childhood

attachment developmental categories that were maintained through adulthood.

Furthermore, despite the negative memories of childhood attachment-caregiving

experiences by those classified as earned-secure, there were no significant differences in

their actual caregiving experiences than those rated as continuous-secure. Thus, it

appears that, due to its measurement limits, the AAI is probably not a valid source of

evidence as to the possibility that historically insecurely attached adults can go on to

develop attachment security as adults.

Longitudinal attachment studies. Indirect evidence that adult attachment

security is not fixed and actually can change in the direction of greater security has come

from longitudinal studies of attachment styles from childhood through adulthood.

Studies, such as the 19-year study by Weinfield et al. (2000), the 20-year study by Waters

et al. (2000), the 23-year study by Roisman et al. (2001), and the 30-year study by Sroufe

and associates (Sroufe, 2005; Sroufe & Egeland, 1991; Sroufe et al. (2005a, 2005b),

found that, for some individuals, attachments change over time, rather than being fixed

and stable. Furthermore, attachment change was associated with environmental

influences, specifically those involving changes in adult caregiving attitudes during

childhood, rather than by intrinsic or inherited characteristics such as temperament.

These and other studies have shown the quality of those caregiving behaviors—the extent to which they collectively characterize secure-base caregiving—determines whether childhood attachment development successfully terminates with attachment security by the end of childhood, or remains unfinished in the form of an insecure attachment.

These and a number of other longitudinal and demographic studies of attachment have shown that approximately two thirds, of infants, children, and adolescents, those who are consistently exposed to secure-base caregiving develop attachment security, which remains stable and highly change-resistant up to and during adulthood (Crowell, Treboux, & Waters, 2002; Hamilton, 2000; Hazan & Shaver, 1987; Klohnen & Bera, 1998; Mickelson et al., 1997; van IJzendoorn, 1995). Studies of adult attachment demographics show similar percentages of secure versus insecure attachments in adults. For instance that conducted by Mickelson et al., (1997), using a very large nationwide sample of adults, found 59% secure and 41% insecure.

Conversely, approximately one third of the infants, children, and adolescents in these studies either never develop attachment security or their attachments are unstable, changing from time to time between secure and insecure or changing sub-types within the insecure category. For these individuals, repeated measures of both their attachment styles and the characteristics of their caregiving environments, from infancy to adulthood, show strong co-varying relationships between their unstable and insecure attachments and their experience of inconsistent or unsatisfying caregiving responses. The attachments of those who are consistently categorized as insecure often fluctuate between insecure attachment categories along with fluctuations in the kinds of inadequate

caregiving they receive. Those, whose attachments fluctuate between secure and insecure, appear to do so in response to fluctuations in the quality and availability of caregiving responses over time.

For instance, in the Waters et al. (2000) longitudinal study, the authors found that 44% of children, whose mothers had experienced a significant negative life event, such as a life-threatening illness or mental illness, changed attachment categories, while only 22% did not change in response to such events occurring during the course of their childhood. These results confirm Waters (1978) earlier study, specifically focusing on the relationship between childhood attachment stability and the stability of the adult caregiving environment. After repeatedly measuring both children's' attachment styles and their caregiving environments over a 6-month period, Walters found that when caregiving environments remained consistent, whether good or poor, the attachment styles of 96% of the children studied did not fluctuate, whether secure or insecure.

These studies showing a relationship between childhood attachment stability during the developmental process, and the corresponding stability of their caregiving environment, are, as Hazan and Shaver (1987) state, consistent with "the idea that social development involves the continual construction, revision, integration, and abstraction of mental models" (p. 523). In describing this same process Bowlby (1973) stated that at every point in time, an individual's attachment development across the lifespan, he or she will be influenced by "an interaction between the organism as it has developed up to that moment and the environment in which it then finds itself" (p. 412). In his discussion of the 30-year longitudinal study, Sroufe et al. (2005b) agrees with Bowlby's position and

summarizes his own study as showing that "both history and present circumstances are important, but also . . . established patterns of adaptation may be transformed by new experiences while, at the same time, new experiences are framed by, interpreted within, and even in part created by prior history of adaptation" (p. 350).

These studies suggest that attachment development in adulthood (a) only pertains to insecurely attached adults, (b) within the context of close personal relationships, (c) in which the other adult is securely attached who is capable of providing secure-base caregiving responses.

Attachment development in adult pair-bond relationships. Subsequently, studies of adult pair-bond relationships have suggested that attachment security, of previously insecure adults, can be earned through positive and supportive adult romantic relationships. Over a two-year period, Davila et al. (1999) repeatedly evaluated both the attachments and marital satisfaction of 172 newlywed couples, using the Revised Adult Attachment Scale (Collins & Read, 1990) and The Marital Adjustment Test (MAT; Locke & Wallace, 1959). They found that, on average, insecure attachments became increasingly secure and marital satisfaction improved during the first two years of marriage.

Crowell, Gao, Fyffe, Pan, and Waters (2002), evaluated 157 couples 3 months before their weddings and after 18 months of marriage using the AAI and several attachment and relationship measures. They found that that during the transition and early stage of marriage, secure attachments remained very stable with very few initially secure individuals changing attachment categories over time. As stated by the authors,

the results suggest that "once a secure representation is achieved . . . it is very difficult to unlearn, undermine, or distort, even in the face of a close relationship with a partner who has an insecure attachment representation" (p. 476). On the other hand, individuals starting with insecure attachments were significantly less stable. Of this group, 64% moved from insecure to secure attachment categories after 18 months of marriage. Crowell et al. (2002) suggested that, a romantic relationship provides the secure-base potential for responding to needs in ways not previously experienced by insecurely attached partners in their families of origin, thus, helping them assimilate a new and more secure attachment representation, as discussed by Bowlby (1988).

Finally, while not a direct study of pair-bond relationships, Laub, Nagin, and Sampson (1998) evaluated the ongoing levels of 500 serious persistent criminal offenders over a 25-year period, beginning with their original offences as adolescents. Adjustment changes in these individuals were compared to those in a 500 participant control group. A number of measures of adjustment and situations were correlated with the extent to which original offenders desisted from criminal activity over the course of the study. Laub et al. found a significant relationship between the extent of desisting from criminal activity over time and the development of strong marital bonds. The results imply attachment change and the anticipated improvement in social adaptability associated with development of positive attachment change through relationships with romantic partners.

Bowlby's Theory of Adult Attachment Development in Psychotherapy

As an experienced psychotherapist, and developer of attachment theory, Bowlby (1988) suggested that from an attachment development perspective, a psychotherapist is responsible for helping his or her client accomplish the following five tasks:

1. Experience his or her psychotherapist as a secure-base from which he or she can feel safe to explore.

2. Explore his or her relationships with current attachment figures.

3. Explore his or her relationships with childhood attachment figures.

4. Explore his or her relationship with the therapist as an attachment figure.

5. Understand how to resolve his or her current distress and regulate future emotions when distressed.

These functions are age- and situation-appropriate duplications of the child-caregiver attachment relationship and incorporate the essential characteristics of that relationship, as identified by a number of researchers (e.g., Ainsworth, 1973, 1982, 1989, 1990; Bernier & Dozier, 2003; Fonagy et al., 2002; Jacobson et al., 2000; Kerns et al., 2001; Leyendecker et al., 1997; Meins et al., 2002), including (a) activation of the child's attachment system as a response to distress; (b) establishment of physical proximity between child and caregiver; (c) exploration and identification of the cause of the distress; (d) resolution of the child's distress by providing him or her a solution to that distress and giving comfort; (e) and the use of words and gestures to mirror the child's distress, describe his or her states of mind, provide comfort, and discuss solutions.

Consistent provision of these responses when the child's attachment system is activated results in the child viewing the caregiver as an emotional secure base to return to when experiencing distress and from which to safe in exploring the environment once the distress is relieved. Experiencing the caregiver as a secure-base is associated with child attachment security development.

Bowlby (1988) viewed the client-psychotherapist relationship as a prototypic attachment relationship in which an insecure adult can develop attachment security by experiencing the therapist as a secure-base attachment figure. Accordingly, a primary function of the therapist is to "provide the patient a secure base from which he can explore the various unhappy and painful aspects of his life, past, and present, many of which he finds it difficult or perhaps impossible to think about and reconsider without a trusted companion to provide support, encouragement, sympathy, and, on occasion guidance" (p. 138).

Pistole (1999) observed that therapists are implicitly viewed by clients, who are typically seeking therapy at times of distress, as attachment/caregiver figures since they are perceived as "stronger and wiser because of the unilateral focus on the client's concerns, the counselor's congruence in the relationship, and the counselor's socially sanctioned expertise in counseling" (p. 439). Recent studies have provided confirmation that the client-therapist relationship shows similarities to the child-caregiver relationship. For instance, a number of studies evaluating client cognitions during early stages of psychotherapy and between clients with different levels of attachment security have found that clients view therapist as potential secure-base attachment figures

(Mallinckrodt et al., 1995; Mallinckrodt et al., 2005; Mikulincer, Shaver, Sapir-Lavid, & Avihou-Kanza, 1999; Parish & Eagle, 2003).

Based on the results of studies of secure-base behaviors in romantic relationships (Bretherton, 1987, 1990; Mikulincer & Shaver, 2007; Waters, Rodrigues, & Ridgeway, 1998; Waters & Waters, 2006) Mikulincer et al. (2009) theoretically summarize the mental secure-base script of securely attached individuals in potential attachment relationships, including that between client and psychotherapist: "If I encounter an obstacle and/or become distressed, I can approach a relationship partner for help; he or she is likely to be available and supportive; I will experience relief and comfort as a result of proximity to this person; I can then return to other activities (p.616)." Bowlby's (1988) view was that insecurely attached adults who do not have this script in their attachment schemas, based their lack of experience that would help them develop this caregiver expectation, it can be developed by consistently experiencing actual secure-base responses from a psychotherapist.

Research by Tyrrell, Dozier, Teague, and Fallot (1999) support the position proposed by Bowlby (1988) and supported by other researchers in terms of child caregivers (e.g., de Wolff & van IJzendoorn, 1997; Fonagy & Steele, 1991; Huth-Bocks et al., 2004; Kretchmar & Jacobvitz, 2002; Main & Goldwyn, 1984), that securely attached therapists are more likely to provide deeper therapeutic interventions, including accurately identifying, challenging, and helping clients change their insecure relationship strategies while insecurely attached therapists are more likely to mirror client's existing insecure relationship dynamics. Using the Components of Attachment Questionnaire

(CAQ; Parish, 2000), Parish and Eagle (2003) have identified nine attachment

components typically present in the client-therapist relationship:

1. Proximity seeking by the client.

2. The client protests his or her separation from the therapist.

3. The therapist acts and is perceived as a secure base.

4. The therapist is perceived his or her client as stronger and wiser.

5. The client turns to his or her therapist for comfort, support, and reassurance.

6. The therapist is available and responsive to his or her client.

7. The client shows particularity for his or her therapist.

8. The client has strong feelings for his or her therapist.

9. The therapist evokes a mental representation in his or her client.

Attachment-Based Interventions

Evidence that adult attachments exist and may be influenced toward corrective

change in close personal relationships, along with Bowlby's (1988) theory of positive

attachment change in the client-psychotherapist relationship, have encouraged a focus on

attachment-based interventions. A number of clinicians and researchers have

incorporated professional and paraprofessional attachment-based concepts into their

therapeutic interventions and have provided descriptions and attachment-theoretical

support for their approaches.

These have included attachment-based interventions for the treatment of

psychogenic medical symptoms (Maunder & Hunter, 2004), facilitating attachment

relations between chronically ill patients and their caregivers and romantic partners

(McWilliams, 2004; Tan, Zimmermann, & Rodin, 2005), improving attachment

relationships and adaptive functioning between fostered and adopted children and their

adopting parents (Dozier et al., 2006; Howe, 2006), attachment-related therapy for

improving attachments and adaptive functioning of children of drug-dependent mothers

by improving attachment-related caregiving (Suchman, Pajulo, DeCoste, & Mayes, 2006,

attachment-based individual psychotherapy to treat conversion disorder (Axelman, 2012;

Axelman, Rosenbaum, & Shahar, 2012), group therapy to increase maternal sensitivity in

residentially mothers with drug dependency (Polansky, Lauterbach, Litzke, Coulter, &

Sommers, 2006), individual attachment-related therapy to treat personality disorder

(Perris, 2000) individual attachment-related treatment for partner violent men (Lawson,

Kellam, Quinn, & Malner, 2012), individual attachment-related therapy for anxiety

disorder (Gold, 2011). Finally, a number of clinicians and researchers have discussed the

logical relationship of attachment and attachment development principles to family

systems theory, and have developed therapeutic approaches incorporating these principles

(e.g. Byng-Hall, 2002; Cook-Darzens & Brunod, 1999; Dallos, 2004; Leveridge,

Stoltenberg, & Beesley, 2005; Liddle & Schwartz, 2002; McCluskey, 2002).

Several formalized attachment-based intervention systems and programs have

been developed and have been the focus of empirical study. One of the earliest of these

is Emotionally Focused Therapy (EFT; Greenberg & Johnson, 1998) that uses an

attachment-based approach with couples and families, designed to increase interpersonal

here-and-now experience to increase empathy and emotional relationship bonds (Crawley

& Grant, 2005; Johnson, Maddeaux, & Blouin, 1998; Makinen & Johnson, 2006; Reid & Woolley, 2006).

Another, Parent and Child Therapy (PACT) is a treatment system developed by a Northern Ireland residential treatment program for 16 to 24 year old women and their children. The PACT program works with mothers with the goal of promoting their children's attachment development and re-integration into the community (e.g., Amos, Beal, & Furber, 2007; Chambers, Amos, Allison, & Roeger, 2006; Newman & McDaniel, 2005).

Mentalization-Based Treatment (MBT; Bateman & Fonagy, 2004; Fonagy & Bateman, 2006) for borderline personality disorder is designed to improve attachment security by increasing attachment-related mentalization. The therapist facilitates the process by focusing on the client's current thoughts and feelings rather than focusing on past experiences. The immediate goal of therapy "is not insight but the recovery of mentalization: achieving representational coherence and integration for intentional states" (p. 415).

Dyadic Developmental Psychotherapy (DDP; Becker-Weidman, 2006) was developed as an attachment-based family therapy intervention for children with attachment disorders. Becker-Weidman and Hughes (2008) describes the essential focus of DDP as a "collaborative, sensitive, reflective and affectively attuned relationship between therapist and child, between caregiver and child, and between therapist and caregiver" (p. 239).

Similar in focus to both EFT and MBT, Accelerated Experiential Dynamic Psychotherapy (AEDP; Lamagna, 2011; Lamagna & Gleiser, 2007) attempts to improve attachment security by emphasizing the relationship between client and psychotherapist. During therapy, the therapist helps the client maintain a focus on constructive integration of present thoughts and feelings while interrupting those that come from insecure attachment schemas based on prior attachment injuries. As Lipton and Fosha (2011) note, the AEDP therapist "strives to actively and explicitly foster secure attachment by offering a new experience of emotional safety" (p. 260), by responses that are "welcoming, encouraging, affirming, and emotionally engaged" (p. 261).

The Circle of Security (COS; Hoffman et al., 2006; Marvin, Cooper, Hoffman, & Powell, 2002) intervention system provides 20-weekly group therapy and education sessions, containing five or six caregivers, provided by experienced psychotherapists. The system uses pre and posttreatment attachment-based assessments, including video-tapes interactions that incorporate a Strange Situation (Ainsworth et al., 1978) scenario, to provide data with which to both facilitate and evaluate accomplishment of the goals of secure-base caregiving and secure child attachment development. The first two 75-minute weekly sessions involve educating caregivers about caregiving and child attachment development. During the subsequent 18 group sessions, therapists help caregivers identify their own caregiving styles and their child's corresponding attachment styles by reviewing and evaluating each caregiver's video-taped sessions during three sessions. The focus of this examination is to facilitate caregiver sensitivity, ability to provide emotional comfort, and ability to mentalize or reflect on thoughts and emotions,

and help teach the caregiver's children learn to do so. Following treatment, caregivers are again video-taped with their children, during which another Strange Situation scenario is enacted, to provide coded data with which to evaluate the program goals of improvement in caregiving and child attachment development.

The Attachment and Biobehavioral Catch-up (ABC; Dozier et al., 2009; Dozier et al., 2006) intervention was designed to improve children's attachments to new foster or adoptive adult caregivers. Attachment improvement is seen as the ability to regulate emotions. As a result, insecurely attached children have greater anxiety, resulting in abnormal fluctuations of stress-related cortisol, due to the inability to anticipate the reduction of distress by secure-base caregivers. ABC attempts to help caregivers increase their foster child's ability to regulate emotions by increasing their sensitivity and responsiveness toward the child's behavior, increasing their capacity to provide comfort through touching and affection, by helping them create an environment in which their child can express emotions, and by helping them recognize and understand those emotions.

Evidence of Attachment Development Associated With Interventions

Given Bowlby's (1988) emphasis on the client-psychotherapist relationship as a vehicle for adult attachment change, and the development of attachment-informed interventions, studies have recently begun to focus on and measure attachment and evaluate the relationship between therapeutic interventions and client attachment change. A number of these intervention studies, represented by several examples to follow, though not designed as studies of adult attachment change have, nonetheless, provided

indirect evidence of adult attachment change associated with a variety of therapies and other interventions working with individuals, parent-child dyads, families, and couples. Studies of this type have been the subject of several reviews and meta-analyses (e.g., Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003; Davila & Levy, 2006; Eagle, 2006).

For example, indirect evidence of attachment change in mothers of high risk infants was provided in a study of professional and paraprofessional social service interventions by Lyons-Ruth et al., (1990). A group of 26 infant-mother dyads, determined to be at risk due to maternal depression or histories of psychiatric hospitalization, were provided 9 months of weekly individual and group therapy by master's level psychologists and parenting educational training by lay mothers from the local community. The program focused on creating an accepting relationship between both the lay trainers and therapists and mothers, helping mothers learn how to access financial, educational, health, and other community services, helping mothers develop more appropriate caregiving interactions with their infants, including discipline, education, and those related to establishing emotional security, and increasing mothers' social involvement. Interactions between the mother-infant dyads were periodically videotaped to be evaluated on the basis of maternal caregiving quality including warmth, provision of comfort, affection, and sensitivity. Shortly after the videotaped interactions, each infant's attachment security was evaluated using the Strange Situation (Ainsworth et al., 1978). After the infants were 18 month old, repeated measures of the mothers' caregiving responses showed a significant increase in maternal sensitivity, warmth,

verbal communication, and quality of comforting. However, evaluations of infants after

18 months showed no significant change in attachment security despite significant

cognitive gains. The fact that the caregiving characteristics that improved over the course

of treatment are associated with attachment security, the results suggest the possibility

that mothers' own attachment security may have developed in a positive direction relative

to the intervention. However, caregiver attachment security is associated with the

corresponding development of infant and child attachment security (e.g., Main &

Goldwyn, 1984), an association not seen in this study. Unfortunately, the study provides

no direct evidence of adult maternal attachment change only the infants were evaluated

over time using an attachment style measure.

In a 3-month intervention designed to increase maternal sensitivity and increase

infant attachment security, van den Boom (1994), 100 mothers and their 9-month old

well-functioning but irritable infants, were randomly assigned to either one of two

treatment or two control groups. Mothers were provided with a 3-month maternal skills

development training designed to help them better attune to their infant's behavior and

respond appropriately. The hypothesis was that the treatment would improve both

maternal sensitivity and infant attachment security. One treatment group was provided

with measures of maternal sensitivity based on observations during 80-minute periods of

play. Infant attachments were evaluated using the videotaped Strange Situation

(Ainsworth and Witting, 1969). Evaluations were compared to the non-treatment control

group and the treatment group prior to treatment when infants were 6-months old, at the

end of treatment when infants were 9-months old, and again following treatment when

the infants were 12-months old. The second treatment group and both control groups received only posttreatment assessments and delayed posttreatment assessments. Results, maintained at the time of the 3-month posttreatment evaluation, showed that treatment group mothers had significantly improved in maternal caregiving behaviors including visual attentiveness, responsiveness with no significant changes in the control group and significant improvement in treatment group infant attachment security (78%) compared with control group infants (38%). The author concludes that "maternal sensitive responsiveness is causally related to infant attachment" (p. 1472). While infant attachment security is associated with caregiving responses that are, themselves, associated with maternal attachment security, there is no way to know whether the intervention influenced maternal attachment security or simply improved skills of already secure mothers in dealing with exceptionally irritable infants, since the study design did not include measures of mother's attachment security.

Using random assignment to either treatment or control group, adapted families were provided an intervention based on that provided by van den Boom (1994), Stams, Juffer, van IJzendoorn, and Hoksbergen (2001), designed to increase maternal sensitivity and child attachment security. The intervention was provided when children were ages 6 and 9 months, with follow-ups at age 7. A variety of repeated measures including videotaped laboratory interactions between mother-child dyads, evaluated child attachments and adjustment and maternal sensitivity. At age 7, follow-up evaluations were provided for 17 intervention dyads and 18 control dyads to evaluate longitudinal stability of the initial results. Although initial changes in infant attachments and maternal

sensitivity were significant, implying the possibility that caregiver attachments had been positively affected by the treatment, they were no longer significant at the time the mother-child dyads were re-evaluated at the time of the age 7 follow-up.

Armstrong, Fraser, Dadds, and Morris (2000) provided a home-based intervention for mothers at risk with newly born infants. Families were randomly assigned to either treatment or control groups with eighty families in each group completing the study. Treatment was provided by trained nurses over a six month period. An attachment-based focus emphasized developing a trust relationship with the provider, work on improving the caregiver's self-esteem, helping the caregiver learn caregiving skills, and helping the caregiver learn how to access community services. Measures of both caregiver and child functioning were provided at 6 weeks and repeated at 4 months. The facilitator made regular observations of child and caregiver behaviors and interactions. Results of the repeated measures within the treatment group and compared to the control group showed significant improvements over the course of the intervention in competence and quality of various maternal interactions with infants including emotional responsivity, and satisfaction in the relationship with the facilitator, and infant behavior. The authors interpret the results to show a significant improvement in caregiver attachment. However, while improvement in some maternal caregiving behaviors, suggests the possibility of positive attachment change, the study did not incorporate a direct measure of the attachment construct.

Bosquet and Egland (2001) provided bi-weekly attachment-based group sessions and home visits for at-risk mothers from the second trimester of pregnancy through the

end of their child's first year. The goal of this intervention, provided by paraprofessional

mothers holding bachelor's degrees in a social science, was to improve maternal

caregiving skills, including sensitivity to the infant's needs, and facilitate infant

attachment security development. Facilitators individually tailored sessions to meet the

needs of participants, rather than follow a programmed approach. Facilitators focused on

helping mothers develop secure attachments to the facilitators, helped mothers evaluate

their own early attachment experiences relevant to their current caregiving behaviors, and

helped them learn appropriate relationship and overall adaptive skills. Using random

group assignment, 40 mothers and their infants ultimately participated in the treatment

group and 62 in the non-treatment control group. Mothers were given the AAI (George

et al., 1985, 1996) to evaluate their attachment states of mind when their children were 19

months old. When children were 24 months old, mothers and their children were

observed in two laboratory interactions and their attachment and caregiving relationship

behaviors were coded and evaluated by trained evaluators. When comparing results

between treatment and control groups, the authors conclude that the study supports the

conclusion that attachment-oriented interventions may influence both adult caregiving

behaviors and attachment states of mind. However, this conclusion is only inferred since

the study did not directly evaluate caregiver's attachments prior to involvement in the

intervention.

Working with depressed mothers and their infants, Toth, Rogosch, Manly, and

Cicchetti (2006) provided average of 58 weeks of a toddler-mother psychotherapy

prevention program designed to enhance the mother-toddler relationship and improve

children's attachment security. Mothers (n = 130) with a diagnosis of Major Depressive

Disorder, since their child's birth, were randomly assigned to either a toddler-parent

psychotherapy group or non-treatment control group, with assessment and treatment

beginning when the child was approximately 20 months of age. A non-depressed non-

treatment group of new mothers (n = 68) was also used for comparison. Interactions

between mothers and their children during these conjoint therapy sessions were seen from

an attachment-theoretical view as enactments of the mother's own attachment

development history. Therapeutic interventions, therefore, focused on correcting the

resultant unhealthy maternal caregiving behaviors, so that new responses typified secure-

base responses that are theoretically conducive to the child's attachment security

development. The approach also emphasized development of an attachment relationship

between the mother-infant dyad and the therapist who provided empathy and support.

Infant attachment security was assessed prior to beginning the intervention and again at a

follow-up postintervention at age 3, using the Strange Situation (Ainsworth et al., 1978).

Initially, the rate of attachment security was the same between the treatment and control

groups. However, at the time of the posttreatment measure, 54% of the treatment group

children were evaluated as securely attached compared to only 7.4% of the non-treatment

control group. The results clearly provided evidence that this intervention promoted

child attachment security and that it's development was directly associated with both the

therapist's secure-base responses and mother's development of caregiving responses.

Furthermore, given the therapeutic focus on both helping the mother view the therapist as

a secure base and evaluating and reflecting on and correcting her own caregiving

responses in keeping with positive attachment development it is likely, from an

attachment theoretical view, that the treatment promoted the mother's own attachment

development and assisted her in expressing her own increased attachment security in her

caregiving responses. However, since the study did not include a direct measure of her

pre and posttreatment attachment security, the study provides no actual evidence that the

intervention influenced mothers' attachment development.

Van Zeijl et al. (2006; see also, Velderman, Bakermans-Kranenburg, Juffer, &

van IJzendoorn, 2006) used a short-term behavioral-focused video feedback intervention

designed to improve maternally sensitive discipline and reduce children's externalizing

behaviors. Mothers ($n = 237$) of children demonstrating normal behavior problems, such

as oppositional behavior, were randomly assigned to either a treatment or control group.

The treatment group mothers received six 90-minute behaviorally-oriented intervention

sessions during which mother-child interactions, video-taped in their homes, were

evaluated to help mothers understand their responses from an attachment viewpoint.

Also during the sessions, mothers were given positive reinforcement for positive

caregiving attitudes and responses, representing attunement and response sensitivity. A

variety of measures evaluated maternal attitudes and behaviors as well as their child's

externalizing behaviors. Treatment group results showed a significant increase in

maternal sensitivity and sensitive discipline, and decreased both child externalizing

behavior and marital discord. Given the theoretical relationship between maternal

caregiving behaviors and the mother's own attachment, and the relationship between

child externalizing behaviors and attachment security, the implication is that the

intervention may have facilitated maternal attachment development, which in turn, facilitated child attachment development. However, and again, while these conclusions are implied, the study provides no evidence of attachment development since mother and child attachments were not measured.

Becker-Weidman (2006) used an average of 11 months of Dyadic Developmental Psychotherapy (DDP) to treat 34 children, ages 5 to 16 years old, with reactive attachment disorder, residing with foster or adoptive caregivers. Outcome measures, to evaluate attachment improvement, were compared with those of 30 untreated children in a control group of children with the same disorder. DDP provides individual attachment-based therapy with the child, focusing on development of a secure-base attachment with the therapist, as well as evaluations and interventions with adult caregivers to help them facilitate attachment-related caregiving. Therefore, both the therapists and caregivers provide potential secure-base caregiving responses that potentially influence the children's positive, and in the case of attachment disorder treatment, curative attachment change. Results showed a significant reduction in attachment disorder symptoms compared to both their pretreatment scores and those of the untreated control group. The implication is that symptom reduction resulted from the attachment development influence of both the therapist and improved attachments of caregivers. However, the evidence of attachment improvement in both the clients and their caregivers is implied since no actual attachment measures were used either before or after treatment.

In their developmental study of the Circle of Security intervention, designed to help at risk mothers improve their caregiving to facilitate their children's secure

attachment development, Hoffman et al. (2006) provided the intervention with 65

volunteer and Head Start referred dyads consisting of mothers and toddlers and

preschoolers. Comparison of pre and postintervention child attachment style assessments

using the coded results of the Strange Situation (Ainsworth et al., 1978) or the MacArthur

Preschool Strange Situation (Cassidy & Marvin, 1992), Hoffman, et al. (2006) showed

that the attachments of 44% of the infants and children had changed from initially

insecure to secure. This, in turn, provides indirect evidence of a corresponding shift in

caregiver attachments since the two are shown to co-vary in the attachment literature

(e.g., George et al., 1985, 1996; George & Soloman, 1996) and since only the caregivers

interacted directly with their children during the intervention. However, since caregiving

attitudes and behaviors, rather than the caregiver's own attachment, was the focus of an

intervention designed to facilitate child attachment development, caregiver attachment

development was not directly evaluated.

In the initial development and subsequent follow-up study on the effectiveness of

the Attachment and Behavioral Catch-up (ABC) intervention, discussed in the previous

section, Dozier and associates (Dozier et al., 2006; Dozier et al., 2009) developed and

studied an attachment-based intervention designed to help foster parents facilitate secure

attachment development in their adopted and foster children. In their first study, Dozier

et al. randomly assigned the foster parents of 60 foster children to either a 10-week ABC

intervention or a developmental education control group with the same number of

sessions. An additional group of 104 children were included in a non-foster comparison

group. Results showed that the foster children of parents receiving the ABC intervention

demonstrated better emotional control, indicated by more normal cortisol levels, and had

fewer behavioral problems compared to control group children, both of which are

associated with attachment security. In their second study of the ABC intervention,

Dozier et al. (2009) reports preliminary findings on children of 46 families also randomly

assigned to either the ABC intervention or an educational development group. In this

study the ABC program, administered by social workers and psychologists, who also

required the caregivers to keep diaries of the foster child's behavior while distressed, and

their responses. Both child and caregiver responses were coded and used to provide a

single attachment security score, based on the attachment-theoretical relationship

between caregiver security, caregiver responses, child's secure-base anticipatory

behavior, and child's attachment security. The results suggest that the ABC intervention

with foster parents significantly improves the abilities of insecurely attached foster

children to seek caregiving support from their new foster parents, when distressed.

Presumably, the intervention helps them improve the ability to regulate emotions,

presumably by internally anticipating availability of foster parents as secure bases from

which to seek relief from distress. Furthermore, foster parents receiving the intervention

reported more appropriate caregiving responses and less distress than did the foster

parents receiving the educational intervention. When the coding results of the Strange

Situation (Ainsworth et al., 1978) evaluation of children's attachments are completed and

compared with the attachment diaries, the results confirm the initial suggestion that

children have experienced attachment security development. Due to the well-defined and

coded relationships between foster child attachment-like behaviors and secure-base

caregiving behaviors, this study provides strong evidence of that a therapeutic intervention might positively influence adult attachment security. Again, the evidence is indirect due to the lack of direct before and after assessment of the caregivers' attachment security.

Evidence of Attachment Development During Psychotherapy

Only a few studies have directly focused on manipulating the development or positive change in adult attachment security and have, in some way, evaluated or measured that change. All of these have utilized either the client-psychotherapist relationship or one or another type of therapeutic intervention as the attachment change agent. The following is a review of all such studies known by the researcher.

Kilmann et al. The earliest study of attachment development within the client-therapist relationship was conducted by Kilmann et al. (1999). These researchers provided a 17-hour attachment-related group intervention for 13 insecurely attached young college women, whose attachments were evaluated both before and again after the intervention program. The sample consisted of 23 female applicants, 10 of which were in the non-treatment control group, who had not been married, were not engaged, or did not have children, and who were initially classified as insecurely attached. Eight members of each group were currently in committed relationships. The 17-hour therapeutic intervention was conducted in several sessions over one weekend by non-licensed graduate student leaders, ostensibly to prevent relationship problems. The manualized interactive approach addressed and explored participants' relationship beliefs, principles of attachment in relationships, participants' relationship experiences, exercises to

improve self-image and relationship fulfillment, relationship skills training, and information about the characteristics and results of various relationship strategies.

A variety of measures were provided both before and after the treatment, including the RSQ (Griffin & Bartholomew, 1994), designed to measure attachment styles in close relationships, using the four-category attachment style model, the Relationship Belief Inventory (RBI; Eidelson & Epstein, 1982) designed to evaluate dysfunctional relationship beliefs, and others measuring marriage preparedness, anger expression and management, and relationship problems. Though the results were not statistically significant, presumably due to the small sample size, positive changes in attachment style and related behaviors were observed in the treatment group, compared to the control group, both at the time of the posttesting and the 6-month follow-up. On both occasions, the treatment group showed less agreement with dysfunctional beliefs about relationships, better functioning in their interpersonal relationships, and more secure attachment patterns.

In his review of the Kilmann et al. (1999) study, from the view of Bowlby's (1988) views on adult attachment change within the client-psychotherapist relationship, Brennan (1999) reiterates Bowlby's position regarding the necessity for the therapist to provide a secure-base relationship. Accordingly, such a relationship is one of the therapist's primary functions and goals whose function serves to activate the client's attachment needs, from which he or she will be able to feel safe to explore and understand the influence of prior attachment relationships, and that with the therapist, on his or her current attitudes, feelings, and behaviors. Such understanding is a prerequisite

for understanding reality-based adaptive change. Brennan praises Kilmann et al. for their

pioneering study of the potential influence of a therapeutic intervention on adult

attachments to encourage future studies of the relationship between psychotherapy and

adult attachment development. However, in keeping with Bowlby's theory, he cites the

study's primary theoretical limitation, in terms of influencing adult attachment change: its

failure to provide clients with a secure-base relationship, due to its group-focused

intervention.

     Travis et al. The second psychotherapist-client study, conducted by Travis et al.

(2001), who evaluated the attachments of 29 clients both before and after completing a

prior to beginning involvement in Time-Limited Dynamic Psychotherapy (TLDP; Strupp

& Binder, 1984). Bowlby (1988) suggested that a therapist's secure-base attitudes and

behaviors would help an insecurely attached client develop attachment security. He

noted the similarity between these behaviors and the therapeutic focus and procedures

used in TLDP. In an attempt to test Bowlby's theory, Travis et al. evaluated the

attachments of clients both before and after a minimum of 5 and an average of 21.4

therapy sessions of TLDP. Therapy was provided by 16 experienced licensed

psychologists and psychiatrists who were personally recommended for the study by their

instructors, after completing a 1-year TLDP training program.

     The sample consisted of psychotherapy clients with either an Axis I (87%) or

Axis II (67%) diagnosis or both, initially determined as insecure, using the interview-

based Bartholomew Attachment Rating Scale (BARS; Bartholomew & Horowitz, 1991)

that categorizes attachment into four categories, by rating reported attachment behaviors

on four 9-point scales. Five trained raters, consisting of undergraduate psychology

majors, rated clients. Each client was evaluated by two raters by viewing videotaped

pretherapy client interviews. Any rater disagreements were resolved by a third rater.

Upon completion of therapy, each client was given a second videotaped exit

interview. These were simultaneously reviewed by all five original raters who again

evaluated each client's attachment category using the BARS (Bartholomew & Horowitz,

1991) rating scales.

Comparison of pre and postattachment ratings showed that the attachment styles

of approximately 24% ($n = 7$) of the clients had categorically changed from one of the

insecure subcategories to the secure category. As a whole, the group showed a

significant movement toward greater attachment security, based on an increase in secure

attachment themes and a decrease in insecure attachment themes from pre to posttherapy

attachment evaluations.

Diamond et al. The third, a longitudinal study by Diamond et al. (2003),

evaluated attachment change in 10 clients receiving Transference-Focused Psychotherapy

(TFP; Clarkin, Yeomans, & Kernberg, 1999) for the treatment of Borderline Personality

Disorder at the Personality Disorders Institute at New York Presbyterian Hospital. TFP

is a manualized psychoanalytically oriented therapy system, based on object relations

theory. This therapy system focuses on the transference process for the purpose to help

the client identify and work through, and change the types of insecure attachment

representations associated with borderline pathology.

Clients' attachments to their therapists were evaluated at the 4-month and 1-year points of therapy, using both the AAI (George et al., 1985, 1996) to evaluate current attachment-related state of mind toward their childhood attachment relationships with parents, and a revision of the AAI, the Patient-Therapist Adult Attachment Interview (PT-AAI; Diamond et al., 1999), designed to evaluate their current attachment states of mind toward the current relationship with their therapist. Clients' responses to the PT-AAI were also scored on an additional scale, the Reflective Function Scale (RF Scale; Fonagy, Steele, Steele, 1997, 1998; Fonagy & Target, 1997) that measures the complexity of reflective function, or ability to mentalize or think about others in current relationships—their therapist—as attachment figures, using mental concepts. Studies have shown that secure attachment development includes and requires development of an increasingly complex and accurate internal representation of self and others and their relationship, that is represented in one's attachment-related reflective functioning ability, mentalization ability (e.g., Fonagy et al., 2002; Fonagy, et al., 1996). As anticipated, given the theoretical similarities in environmental conditions simultaneously influencing both Borderline Personality Disorder and attachment insecurity, 9 clients were classified as insecure, with low mentalization scores when evaluated after the initial 4 months of therapy, while only one client was classified as secure/autonomous.

After one year of therapy, the initially secure client was again classified as secure/autonomous while a second client initially classified as insecure/preoccupied was re-classified as secure/autonomous. Seven clients, while not changing attachment categories, showed movement in the direction of positive attachment development in that,

compared to their 4-month responses, their recollections of childhood attachment relationships and the current therapeutic relationship showed greater complexity of mentalization, or reflective function, about these attachment relationships. All but one of the ten clients studied showed change indicative of positive attachment development.

Levy et al. A fourth study, and another on attachment development in therapy clients with Borderline Personality Disorder, was conducted by Levy et al. (2006). Levy et al. studied attachment change in 88 psychotherapy clients, initially diagnosed with Borderline Personality Disorder (those with additional diagnoses were excluded from the study group), over a course of 12 months of individual psychotherapy. Clients were randomly assigned to one of three therapy treatment groups, including 30 to the Transference Focused Psychotherapy (TFP) group, 30 to the Supportive Psychodynamic Psychotherapy (SDP) group, and 28 to the Dialectical Behavior Therapy (DBT). Therapy was provided by doctoral level therapists, each having several years of experience in the specific type of therapy represented in his or her treatment group, including 8 therapists in the TFP group, 5 in the DBT group, and 7 in the SPT group.

Clients were assessed by trained raters using the AAI (George et al., 1985, 1996), including the RF Scale (Fonagy et al., 1997, 1998; Fonagy & Target, 1997) to evaluate both attachment categorization and complexity of attachment mentalization before and after completion of 1-year of therapy. Initially, only 3 of the 88 clients were given the Secure/Autonomous classification while the mean RF score was 2.86; An RF score below 3 is considered to be low and indicative of a naïve simplistic reflection of the mental state of self and others. Reflecting the earlier study by Diamond et al. (2003), the authors

predicted that upon completion of treatment, clients receiving TFP, as opposed to the other non-attachment-focused therapies, would show increased attachment security, including significantly increased reflective function.

As predicted, assessment after 1-year of therapy revealed that there was no significant change in the direction of increased RF and no categorical attachment change in both the SDP and DBT groups. However, the mean RF scores of clients receiving TFP group were significantly higher, at 4.11 than the initial score of 2.86. An RF of 5 is the most typical non-clinical score and is considered indicative or normal and adequate reflective functioning. Of clients in the TFP group, 72.7% had RF scores of 4 or higher. RF changes in the other groups were negligible and insignificant between assessments (DBT= 3.31 vs. 3.38; SPT= 2.80 vs. 2.86).

Of these, 31.8% had scores greater than 5. Furthermore, only the TFP group showed a significant mean change from their insecure classifications to the Secure/Autonomous re-classification after one year of therapy. Of the TFP clients, 7 were re-classified from their initial classification in one of the insecure categories, to the secure/autonomous category while none were re-classified in either the DBT or SPT groups. Classifications of the 3 clients initially classified as secure/autonomous, randomly distributed in the 3 treatment groups, did not change over time.

Lawson et al. The fifth of these studies by Lawson et al. (2006) studied attachment change in 33 men receiving 17 weeks of integrated behavioral/psychodynamic group treatment for partner abuse. Treatment, designed for clients on probation for mild (pushing) to severe (beating up) partner violence, was

provided by three advanced doctoral students being supervised and trained by a licensed psychologist. Their backgrounds included at least one year of membership in a domestic violence research team. Participants were assigned to one of four different therapy groups, each conducted by a separate therapist, in which they were provided with 17 weekly group sessions lasting 2.5 hours each.

Participant attachments were assessed on three occasions using the 18-item Adult Attachment Scale (AAS; Collins & Read, 1990): 2-3 months before the start of treatment to provide a baseline, just prior to treatment, and at completion of treatment. To evaluate progress in reduction of symptom distress, interpersonal relations, and social role, participants were given the Outcome Questionnaire-45 (OQ-45; Burlingame, Lambert, Reisinger, Neff, & Mosier, 1995) just before beginning and just after completing treatment.

Lawson et al. (2006) hypothesized that a significant number of participants would both report significantly more secure attachment themes as well as showing changes in attachment categories from insecure to secure, based on their pre and posttreatment responses on the AAS but that there would be no difference, from the effects of time alone, between baseline and pretesting. They also hypothesized that compared to their insecure counterparts, participants categorized as secure at posttreatment would show significantly fewer negative symptoms and significant reductions in partner violence.

As anticipated, there were no significant positive changes in attachment security as a function of time alone. Furthermore, as hypothesized, the results showed a statistically significant positive change in apparent attachment security with 13

participants, initially classified as insecure, re-classified as secure at posttesting. Finally,

significant differences supported hypotheses regarding a reduction in symptoms and

partner violence in participants classified as securely attached at posttesting.

Makinen & Johnson. Using Emotionally Focused Therapy (EFT; Greenberg &

Johnson, 1988), the goal of Makinen and Johnson's (2006) study was to repair

attachment injuries, experienced between 24 married couples. For the purpose of study

control, a manualized form of EFT was provided over the course of an average course of

13 marital therapy sessions. Makinen and Johnson view breeches in the marital

attachment, such as sexual or emotional infidelity, as having a traumatic effect on the

injured member of the relationship, with symptoms similar to posttraumatic stress

disorder. Such symptoms result from the loss of caregiving and care receiving support

that helps individuals in attachment relationships regulate their emotions during times of

distress. From this viewpoint, damage to the attachment relationship results in

attachment insecurity; repair of the damage re-establishes attachment security.

Makinen and Johnson (2006) used a number of measures, prior to and again after

completion of treatment, including level of anger, trust, forgiveness, marital happiness,

and the development of therapeutic alliance to one-another during therapy. Attachment

security verses anxiety was also assessed before and after treatment using the

Experiences in Close Relationships Scale (ECRS; Brennan, Clark, & Shaver, 1998).

The therapeutic process focused on helping the injured party discuss the

relationship breech and its attachment effects, including grief and fear over the loss of the

attachment relationship and on helping the uninjured party become emotionally engaged

in empathetically experiencing the injured partner and in accepting responsibility and expressing feelings of sorrow and regret. These experiences are designed to help the injuring party move emotionally closer to the injured party to offer and provide comfort and caregiving while the injured party moves toward opening up to experiencing caregiving and attachment mending.

Based on comparing pre and posttreatment assessment results, by the end of the course of treatments, 15 of the 24 couples no longer experienced the effects of the original attachment injury; the researchers considered their attachment relationships to be resolved or secure. However, there was no significant change in these couples' pre and posttreatment global attachment scores measured by the ECRS (Brennan, Clark, & Shaver, 1998). Makinen and Johnson (2006) hypothesize that the lack of attachment change may have been due to long-term attachment stability, not affected by the relatively short-term treatment or the possibility that the test instructions asked participants to rate their experiences with romantic attachments in general, rather than their toward their existing partner. Given the fact that participating couples had been dealing with the attachment injury in question for an average of five years before seeking treatment, their responses to ECRS items may have involved their history with their current partner. However, the study results provide evidence of positive attachment change since many of the measures evaluate changes in caregiving and relationship behaviors and responses characteristic of attachment security. Apparently these represented changes over attitudes and behaviors associated with attachment insecurity that had characterized these relationships for several years.

Janzen et al. In the seventh and most recent study, Janzen et al. (2008) evaluated the effect of client-perceived critical relationship building incident, during the first three therapy sessions, on their subsequent development of attachment security toward their therapist. Client participants included 30 undergraduate students, aged 21 to 61 years, whose participation was part of their course of study in a human science program. Participants were provided with 12 to 15 counseling sessions, at their university, in which to explore issues of their choosing. Therapy sessions were provided by 28 trainee therapists, from another university, who were enrolled in a therapy practicum course and had completed approximately 30 hours of training. Prior to beginning counseling sessions, and again after completion, participants' global attachments were evaluated using the ECRS (Brennan et al., 1998). After each of the first four sessions, clients completed the CATS (Mallinckrodt et al., 1995) to evaluate clients' levels of attachment security toward their therapists, the Session Impact Scale (SIS; Elliott & Wexler, 1994) to evaluate their perceptions of session progress, and were interviewed regarding whether they had experienced a critical relationship building incident during that session. All participants included in the study had experienced such an incident during the second or third counseling sessions.

Results of the repeated CATS (Mallinckrodt et al., 1995) measures showed that clients' attachments to their therapists as well as session progress significantly improved after experiencing a critical relationship building incident with their therapists. However, no significant relationship was seen between pre and posttreatment global attachment scores on the ECRS (Brennan et al., 1998) and the other measures. This study assumed

that the client-psychotherapist relationship facilitates the development of a client's

attachment toward his or her therapist and hypothesized that this process is facilitated by

the client's experience of a significant relationship building experience during the early

stage of therapy. Therefore, the authors did not specifically compare the extent of

attachment change in initially insecure clients with that of initially secure clients.

However, the fact that the study provided evidence of increased attachment security over

the course of therapy provides evidence that in addition to experiencing a significant

relationship building event, involvement in the therapeutic relationship may have

influenced that movement.

Conclusions

Bowlby's (1969, 1973, 1980, 1988) attachment theory focuses on the central role

of adult caregivers and their caregiving attitudes and behaviors in their children's

attachment development. Bowlby (1969, 1988) collectively referred to the specific

attitudes and behaviors consistently provided by a caregiver over time, in response to his

or her child's distress that result in the child's development of attachment security, as

secure-base caregiving.

As discussed in this chapter, extensive field studies conducted Bowlby's associate

Mary Ainsworth (1967) and later studies conducted by Ainsworth and her associates

(Ainsworth et al., 1978) verified the central importance of secure-base adult caregiving in

the development of childhood attachment development. Their work and that of numerous

researchers (e.g., Bokhorst et al., 2003; Fonagy et al., 1991; Green & Goldwyn, 2002;

Hesse, 1999; Lyons-Ruth et al., 1993; Roisman et al., 2002; Sroufe et al., 2005a, 2005b;

Swanson et al., 2000; Waters et al., 2000; Weinfield et al., 2000) over the next two decades have provided further evidence of the adult caregiving attitudes and behaviors that define secure-base caregiving and have confirmed their relationship to childhood attachment development.

While Bowlby (1969) emphasized a biologically based motivation in the initial establishment of physical proximity between an infant and his or her caregiver, he conceptualized the process of child attachment development in terms of social-learning and cognitive processes that occur only with the intimate child-caregiver relationship. Given the fact that cognitive processes occur throughout the lifespan, Bowlby believed that attachment development can continue "from cradle to the grave" (Bowlby, 1988, p. 82) across the lifespan until its terminal state of attachment security develops if that does not occur during childhood.

Exploration of Bowlby's (1969, 1988) views on attachments throughout the lifespan—including the notion that that adults have attachments, that they have adaptive functions as do those of children, and that they can continue to develop as they do in children—did not begin until 1987 when Hazen and Shaver conducted their research on adult attachments. They determined that attachment and caregiving responses occur between romantic partners, similar to those occurring between a child and his or her caregiver, and that those responses influence the quality and level of relationship satisfaction. Subsequent researchers confirmed both the existence of adult attachments and their influence on interpersonal relationships, caregiving attitudes and behaviors, and other areas of adult adjustment and well-being (e.g., Bosmans et al., 2006; Curran et al.,

2005; Larose et al., 2005; Markiewicz et al., 2006; Mikulincer et al., 2005; Steinberg et al., 2006; Vogel & Wei, 2005).

As also discussed in this chapter, the first direct study of adult attachment development was not conducted until 1999, by Kilmann et al., who evaluated an attachment-related group therapy study of insecurely attached women. This and the six subsequent studies discussed provide evidence of positive changes in the attachment security of adult psychotherapy clients.

However, because the designs of these studies did not identify whether or at what levels therapists provided responses consistent with the secure-base caregiving, their positive results can only provide evidence that adult attachment development can occur within the client-psychotherapist relationship. The results do not address Bowlby's central adult attachment development tenet: that attachment development within adult mentoring relationship such as the client-psychotherapist relationship, as in the relationship between child and caregiver, attachment development will be a function of exposure to secure-base caregiving.

Chapter 3 presents the design and implementation of the present study of adult attachment development, within the client-psychotherapist relationship, that will address this knowledge gap in the existing adult attachment development research, regarding the relationship between adult attachment development and secure-base caregiving.

Chapter 3: Research Method

Design-Related Issues Addressed by the Present Study

Bowlby (1969, 1973, 1980, 1988) discussed the client-psychotherapist

relationship as an adult mentoring relationship in which an insecurely attached adult can

develop attachment security through exposure to secure-base caregiving responses

provided by his or her therapist. He viewed this relationship as an adult prototype of the

child-caregiver attachment relationship, shown by attachment research to be responsible

for childhood attachment security development. In the present study, this researcher

tested the prototypic adult attachment development relationship by evaluating the

attachment development, over a course of psychotherapy, of a two groups of insecurely

attached adult psychotherapy clients, having experienced their therapist as providers of

either high or low levels of secure-base caregiving.

The level of attachment security in adult psychotherapy clients, the dependent

variable, was measured both before and after clients' involvement in several

psychotherapy sessions. The attachment security levels of those determined to be

insecurely attached prior to beginning therapy were again measured after clients complete

several sessions of psychotherapy. At the time of the second measure of attachment

security, each client-participant was also rated his or her therapist in terms of the quality

of secure-base caregiving responses, the independent variable, provided during the client-

psychotherapist relationship. Based on these ratings, clients were subsequently assigned

to either of two groups, representing two levels of the independent variable: those

experiencing their therapist as having provided either high levels of secure-base

caregiving (the SBC-High group) or low levels (the SBC-Low group). This design made it possible to statistically evaluate the relationship between any pre and posttreatment changes in each group's mean attachment security levels and whether that change was related to experiencing their therapists as having provided either high or low levels of secure-base caregiving.

The design made it possible to statistically evaluate the relationship, in adults, between the attachment development variable and the secure-base variable, as has already been done in the childhood attachment development research but that remains hypo0thetical in the adult attachment research literature. More specifically, this study provides a test of Bowlby's (1988) view that as an adult prototype of the child-caregiver relationship, the client-psychotherapist relationship provides an ideal opportunity for adult attachment development.

Informed by the seven studies discussed in Chapter 2, the design of the present study incorporated some of their design features and improved on others, in attempt to more accurately duplicate the conditions and constructs identified in the attachment literature as responsible for attachment development. The first is that attachment development occurs within the context of a one-on-one personal relationship between the developing individual and his or her mentor. Childhood attachment research has established that attachments develop within an ongoing reciprocal relationship involving close proximity between the developing individual and the adult caregiver.

In keeping with this requirement, the present study evaluated attachment development between individual pairs of client-participants and their therapists, as was

done in the studies by Diamond et al. (2003), Levy et al. (2006), and Travis et al. (2001).

It does not include the study of groups of clients and their relationships with a single

group therapist, such as those studied by Kilmann et al. (1999) and Lawson, et al. (2006).

Eliminating groups from the study also controlled for the potential development of

attachment relationships between group members during their involvement in therapy.

An attachment relationship between two group members could result in the development

of increased attachment security in an insecurely attached group member if the other is

capable of providing secure-base caregiving during that relationship. The availability of

multiple sources of secure-base caregiving during the process of therapy might reduce the

validity of the therapist-provided secure-base caregiving variable and limits

generalizability of any statistically significant study results.

The most significant factor involved in attachment development is the provision,

by the mentoring member of that relationship, of secure-base caregiving responses as the

primary influence on the attachment development of the individual child or adult being

mentored or receiving the caregiving. This construct has been defined as a set of

personality characteristics that a caregiver or mentor develops as a product of his or her

own historical attachment experiences with secure-base caregivers. In the attachment

research literature, those characteristics have been identified as aspects of the caregiver,

mentor, or therapist's personality, rather than as specific therapeutic methods or

techniques.

The seven studies of adult attachment development attachment development in

psychotherapeutic settings identified therapeutic modalities or attachment-related therapy

content as independent variables. They were viewed as procedures that could be learned by the therapists in these studies, rather than as measurements of the therapists' abilities to provide secure-base caregiving responses, related to their personality histories of attachment development. The implicit assumption of these studies, contrary to the attachment literature, was that, for therapists, learned therapeutic behaviors can duplicate the function of secure-base caregiving in terms of client attachment development. It is probable that, as suggested by Bowlby (1988), psychotherapists are more likely than other mentors to be securely attached and, therefore, be more capable of providing secure-base caregiving. However, because these studies measured methods and techniques rather than secure-base caregiving, it is not possible to determine the role of therapist-provided secure-base caregiving, if any, based on the positive results of these studies. The present study provided for the identification secure-base caregiving as an independent variable so that its relationship, at either a high or low level, to the dependent variable, client attachment development, could be statistically evaluated.

Research Design

The present study employed a two-way mixed (2 X 2) pretest-posttest or repeated measures design. Therapy client-participants were assigned to either of two treatment groups, based on their posttherapy evaluation of their therapists as having provided either high levels of secure-base caregiving (the SBC-High group) or low levels of secure-base caregiving (the SBC-Low group). The attachment securities of each participant in both groups were measured before and after involvement in therapy so that changes in mean attachment security scores over time could be statistically evaluated. Within each group,

the before and after-treatment attachment security mean scores were compared to determine whether differences were statistical significant, using the nonparametric Wilcoxon Matched-Pairs Signed Ranks Test via Version 21 of the IBM SPSS Statistics program (SPSS, 20012).

The dependent variable, client attachment security, was measured both before and after each client-participant's involvement in psychotherapy, to provide the within group measures, using the RSQ (Griffin & Bartholomew, 1994). Only clients whose scores classified them as insecurely attached prior to their involvement in therapy were retained for the participant pool. All clients initially classified as securely attached were rejected as potential study participants. The attachment security of these clients was re-assessed after completion of a minimum of three 1-hour therapy sessions over a 12-week period, similar to the time frame used by the Travis et al. (2001) study. Those completing fewer sessions were not included in the participant pool.

At the time of participant posttesting, each client was asked to rate his or her therapist using both the CATS (Mallinckrodt et al., 1995) and the WAI-S (Horvath & Greenberg, 1989; Tracey & Kokotovic, 1989). These instruments provided independent measures of each therapist's level of secure-base caregiving, the independent variable, as perceived by each individual client-participant. Client-participants rating their therapists as having provided high levels of secure-base caregiving on both of these measures were assigned to the SBC-High group. Client-participants who rated their therapists at a low level of secure-base caregiving were assigned to the SBC-Low group.

Measures of Dependent and Independent Variables

Adult Attachment Security

The RSQ. The present study measured adult therapy participants' attachment security, the dependent variable, using the RSQ (Griffin & Bartholomew, 1994) self-report instrument. The RSQ allows adult participants to evaluate their attachment-related feelings about relationships using a 30-item 5-point Likert-type scale, ranging from *not at all like me* to *very much like me*. One advantage of this instrument is that the items are worded such that the initial instructions can ask participants to apply their answers to general relationship orientations in close relationships, romantic relationships specifically, peer relationships, or any specific relationship of concern to the researcher.

The items were developed using several adult attachment measures, representing the most commonly studied attachment categories. Use of several existing attachment measures in developing the RSQ made it possible to evaluate test results according to what some researchers have identified as the four basic factors that underlie attachment security and insecurity. Notable among these is the four-category model presented by Bartholomew and Horowitz (1991). Bartholomew and Horowitz suggested that the four commonly identified attachment categories can be understood as differing levels of convergence between an individual's positive or negative view of self and positive and negative view of others. For instance, using this model, attachment security can be defined as a convergence of both positive view of self and others. On the other hand, insecure attachments result from the convergence of a negative image of self and a positive image of others (preoccupied or ambivalent attachment), positive image of self

and a negative image of others (dismissing attachment), or a negative image of both self and others (fearful attachment).

The RSQ (Griffin & Bartholomew, 1994) was developed using items derived or taken directly from several measures of adult attachment including Hazan and Shaver's (1987) Adult Attachment Questionnaire (AAQ), Collins and Read's (1990) Adult Attachment Scale (AAS), and Bartholomew and Horowitz' (1991) Relationship Questionnaire (RQ). The RSQ can be scored as a continuous measure of adult attachment on six subscales, including security, avoidance, ambivalence, closeness, anxiety, and dependence. Scores can also be used to derive *self* and *other* dimensions of attachment. Also, several items were designated to represent each of four discreet attachment categories such that the appropriate attachment classification for an individual can be obtained by selecting the highest mean scores among the four commonly studied attachment categories, including secure, preoccupied, dismissing, and fearful.

RSQ scoring methods used. The present study utilized the RSQ (Griffin & Bartholomew, 1994) as a measure of each client-participant's attachment security both before and after his or her completion of several sessions of psychotherapy. Each completed test received three separate attachment-security-related scores, derived by using three different continuous scoring methods.

The present study was designed to repeat the attachment measure both before and after a client's participation in therapy in order to provide a way to measure the relationship between his or her attachment development security over time depending on whether he or she was exposed to high or low levels of secure-base caregiving. Scores

reflected by the three RSQ (Griffin & Bartholomew, 1994) scoring methods represent

different attitudes and behaviors that together represent the attachment construct:

negative attitudes and behaviors that reflect the existence of insecure attachment schema,

positive attitudes and behaviors that reflect the existence of secure attachment schema,

and a combination of the two that represents a point in on the overall continuum of

attachment schema development at any point in time. Viewed separately, each of these

scores provides a measure of a different aspect of attachment security. Together they

help clarify both the structure of an individual's attachment schema and the aspects of

that schema that may have or has not been most influenced by either high or low levels of

secure-base caregiving. Positive changes in attachment security can result from increases

in secure ideation, a decrease in insecure ideation, or a combination of both.

The first scoring method represented an overall measure of attachment security,

which factors in both secure and insecure ideation. The purpose of this scoring method

was to show whether the overall level of attachment security had increased or decreased

over time, compared to a prior level, without considering whether that change was due to

an increase in attachment security alone, a decrease in insecurity alone, or some

combination of both.

This method provided a single score that measured overall attachment security by

combining both the items that reflect attachment security and those that reflected

insecurity, and eliminating two that are duplicate items to total 28 scored items. This

method assigned positive values to ratings on the items representing attachment security.

Thus, since the RSQ (Griffin & Bartholomew, 1994) uses a 5-point rating scale, each

secure item could receive a maximum of 5 points, meaning that the respondent views the characteristic or behavior described in the item as very much like me. Items representing insecure ideation were scored such that lower rating levels were assigned to increasingly higher scores. The score of a participant rating an item as *not at all like me* is typically given the lowest score of 1 point, the lowest possible rating for that item. Using the single score method, scores are reversed so that in this case, the respondent is given an item score of 5.

Therefore, by assigning higher scores on secure items and reversing the scores on insecure items, the highest possible score of the 28 scored items, with each receiving 5 points, was 140 points. This method conceptualized the highest level of attachment security a combination of both the existence of positive attachment conceptualizations and the lack of existence of insecure attachment ideations. Any movement in the direction of reducing insecure ideations or increasing secure ideations increased the score on the single attachment score scale.

This single attachment score method was initially used to categorize clients as either securely or insecurely attached. Those attaining a score in the 112 to 140 point range were classified as securely attached and eliminated from the study. Since the RSQ (Griffin & Bartholomew, 1994) items are rated on a 5-point scale, ratings of 4 or 5 are in the positive range while ratings of 1 or 2 are in the negative range, with a rating of 3 being in the middle. Thus, the score of 112 meant that the individual's per item score average was 4 points.

The second scoring method included only items that make up the various secure attachment scales, taken from other instruments incorporated in the RSQ (Griffin & Bartholomew, 1994). Higher scores on this scale reflected higher levels of secure attachment ideation by itself. The third scoring method included only the items that made up the various insecure scales, taken from other attachment instruments and included on the RSQ. This scoring method provided a single scale representing various categories and aspects of attachment insecurity. Using this method the higher the score the higher the levels of insecure attachment ideation. Compared with the pretherapy score, a lower posttherapy RSQ insecure scales score reflected a reduction in insecure ideation over time, implying an overall improvement in the direction of increased attachment security. A posttherapy reduction of the insecure scales score were directly reflected as a higher score on the posttherapy single attachment score since this scoring method assigns higher values to lower scores on the items that comprise the insecure scales, even if there was no increase posttherapy secure scales score.

Secure-Base Caregiving

Bowlby (1988) conceptualized secure-base caregiving as a set of attitudes and behaviors demonstrated by a securely attached adult caregiver toward another insecurely attached adult, within the context of a mentoring relationship that results in the mentee's experience of the caregiving adult as a source of comfort and distress reduction—a secure base to which he or she can return for relief during times of distress. As Crowell et al. (2002) note, Bowlby's conceptualization of adult attachment development simply reflects what is already known about the relationship between childhood attachment and adult

caregiving from years of child attachment development research. Attachment development, whether in a secure or insecure direction, is the result of an ongoing reciprocal relationship between the developing individual and his or her caregiver and the type of caregiving responses provided. As such, attachment development cannot be studied and understood without simultaneously studying and understanding the caregiver's responses. However, simultaneously evaluating the ongoing phenomenon of adult attachment development and its relation to the experience of secure-base or lack of such responses, has been problematic for adult development attachment research.

Crowell, et al. (1998) attempted to provide a way to study the link between adult attachment development and secure-base caregiving in do so in the development of the Secure Base Scoring System for adults (SBSS). Utilizing this measure first requires that trained observers administer the AAI (George et al., 1985, 1996; Main & Goldwyn, 1994) to each of two individuals involved in a romantic pair-bond or other close personal relationship, to determine each individual's level of attachment security. It then places the couple in a stressful situation that might elicit either an attachment or a caregiving response from either individual from time to time during the experience. Both types of responses are observed and rated by the trained observer. Thus, the reciprocal relationship between attachment and caregiving behaviors can be evaluated. However, in addition to the problem of observer training and certification requirements to use this system, there are a number of reasons that such a system are not appropriate in a study of the client-psychotherapist relationship. The procedure does not study the client-psychotherapist relationship itself and its effects on client attachment development over

time but only on the existing characteristics of that relationship outside of the therapy process. It is unlikely that any client-psychotherapist dyad would volunteer to be involved in several such evaluations over time due to both ethical issues, such as those related to privacy and prevention of harm, and dual relationships.

In their operationalization of the secure base caregiving construct for the SBSS scoring system, based on the earlier works of Ainsworth et al. (1978) Bowlby (1969, 1973, 1980, 1988) and subsequent researchers, Crowell et al. (2002) identified four constructs, for which they developed scales to rate the secure-base behavior of whichever partner happens to be functioning in a caregiving mode at any particular moment: (a) *interest in the partner*, including the ability to listen and encourage the partner to express his or her feelings and thoughts; (b) *recognition of distress or concern*, which involves being sensitive enough to notice a partner's distress or concern; (c) *interpretation of distress*, involving the extent to which a partner accurately identifies and verbalizes the salient aspects of the other's distress or concern; (d) *responsiveness to distress*, defined as the degree to which one is effective and cooperative in helping the other resolve the distress.

No self-report instruments have been developed to operationalize the secure base caregiving construct, similar to the Crowell et al. (2002) rating scales. Therefore, the present study utilized two self-report measures of the independent variable, secure-base caregiving: the CATS (Mallinckrodt et al., 1995) and the Working Alliance Inventory-Short Form (WAI-S; Tracey & Kokotovic, 1989). These measures were chosen because they both appear to capture a participant's perceived experience of the levels of various

secure-base caregiving attitudes and behaviors demonstrated by his or her therapist during the therapy relationship. The present study used these measures along with repeated measures of the client's attachment security to capture both aspects of the attachment development relationship.

The CATS. The first measure used was the 14-item secure sub-scale of the CATS (Mallinckrodt et al., 1995) to which participants can respond using a 6-point Likert-like scale, ranging from *strongly disagree* to *strongly agree*. Rather than a direct measure of a client's general attachment schema or style, the CATS (Mallinckrodt et al., 1995) was developed to indirectly evaluate a client's attachment schema, before development of a working relationship with his or her therapist, by asking him or her to rate the therapist's caregiving attitudes and behaviors. Responses to question items can be used to categorize him or her as either secure, avoidant-fearful, or preoccupied-merger. The goal in development of the CATS was to help a therapist develop a more effective treatment approach by identifying a client's attachment-related strengths and weaknesses at the beginning of the client-psychotherapist relationship.

Unlike other attachment measures that directly evaluate an individual's attachment security based on historical relationship experiences, when used at the beginning of the client-psychotherapist relationship, the CATS (Mallinckrodt et al. 1995) provides an indirect measure of attachment security by asking the client to rate the therapist's secure-base attachment-related behaviors based before he or she has experienced them over time. The information initially provided by the CATS can help the therapist anticipate the emergence of attachment-related relationship during his or her

relationship with each client. As the CATS developers note, "in therapy, the client re-experiences a primary attachment, reproducing with the therapist parts of an old and usually unsatisfactory relationship" (p. 308). By using this information to anticipate a client's potential attachment-related strengths, weaknesses, and relationship patterns, that are likely to emerge during the client-psychotherapist relationship, the therapist can develop treatment goals, approaches, and consider timing that would be most effective given the client's level of attachment security.

A test item that demonstrates the direct self-focused approach to measuring existing attachment security, used in the RSQ (Griffin & Bartholomew, 1994), is, "I find it easy to get emotionally close to others." On this item, higher ratings reflect greater attachment security in the closeness dimension. On the other hand, the CATS (Mallinckrodt et al., 1995) provides an indirect other-focused measure of attachment security as seen in the item, "My counselor is sensitive to my needs." Such items were considered by Mallinckrodt et al. as indirect measures of attachment security because, when administered before the client has developed an actual relationship with his or her therapist, as originally intended, they required projected responses based on the client's existing attachment schema.

However, regardless of their original purpose, since the items on the secure scale of the CATS (Mallinckrodt et al., 1995) were created to describe the most salient aspects of the existing secure-base construct, they are well suited for use in the present study as one of two posttreatment therapist rating instruments, along with and to verify the results of the WAI-S. This focus was created by instructing client-participants who had

completed several counseling sessions, to rate their therapists based on their experience during the client-psychotherapist relationship.

Mallinckrodt et al. (1995) has given a general license for use of the CATS by researchers (p. 311).

The WAI-S. A number of studies have demonstrated the relationship between attachment security and development of a working alliance within the client-psychotherapist relationship (e.g., Johnson, Ketring, Rohacs, & Brewer, 2006; Mallinckrodt, Gantt, & Coble, 1995; Mallinckrodt et al., 2005; Parish & Eagle, 2003; Satterfield & Lyddon, 1995). Therefore, a measure of working alliance from the client's point of view can be viewed as measures of a client's attachment security and, as such, should co-vary along with changes in that security.

The 12-item short form of the original 36-item Working Alliance Inventory (WAI; Horvath & Greenberg, 1989), the WAI-S (Tracey & Kokotovic, 1989) was used in the present study to evaluate aspects of therapists' secure-base behavior, after the fact, from the client-participant's point of view. The WAI includes two self-report instrument designed to allow both therapist and client to evaluate the working relationship at any point during or following the therapeutic relationship. Items are rated by clients on a 7-point Likert-type scale, ranging from *never* to *always*.

The focus on the reciprocal client-therapist relationship as both transcendent and potentially more influential on therapy outcome than the therapist's theoretical orientation, had its origins in Freud's (1958) early writings in which he discussed the influence on therapeutic success of a patient's *neurotic* or *friendly* feelings toward the

therapist. In his client-centered therapy approach, Rogers' (1951, 1957), the most widely known proponent of this position, emphasized the therapist characteristics of empathy, unconditional positive regard, and congruence as necessary conditions for client change. Subsequent proponents of the relatively atheoretical relationship view of therapy influence and outcome include Strong's (1968) social influence theory, and Bordin's (1975, 1976) view of the working alliance as an integration in mutual purpose between client and therapist.

Rather than focusing on the therapist's real or client-perceived qualities, as agents influencing the working alliance and client change, Bordin's (1975, 1976) position was that these results require interdependence between client and therapist in a reciprocal relationship in which both parties collaborate to and mutually develop a common bond, goal, and therapeutic task. Thus, in Bordin's view, the WAI (Horvath & Greenberg, 1989) provides an opportunity to evaluate the working alliance from both the client and therapist's views in terms of each party's perception of and satisfaction with the bond, goal, and task that has resulted from the client-therapist relationship.

The items on the WAI (Horvath & Greenberg, 1989) client instrument ask the client to report his or her actual after-the-fact experiences of the therapist and the therapeutic situation in terms of the mutual bond, understanding and development of the goal and the therapy results. On face value, the items closely parallel attachment theory's secure-base construct, in terms of the caregiver or therapist as outlined by Crowell et al. (2002), including showing interest in the client, recognizing as well as understanding the

client's concern or distress, and appropriately responding toward the end of distress reduction.

The following WAI (Horvath & Greenberg, 1989) items illustrate this conceptual similarity as well as similarity to items contained on attachment tests such as the CATS (Mallinckrodt, et al., 1995): "I believe my therapist likes me." My therapist and I understand each other." "I feel comfortable with my therapist." "I believe my therapist is genuinely concerned for my welfare." "I believe the way we are working with my problem is correct."

Borsanyi (2001) found a relationship between working alliance scores on the WAI (Horvath & Greenberg, 1989), and clients' attachments to their therapists, as measured by the Reciprocal Attachment Questionnaire (West, Sheldon, & Reiffer, 1987). Similarly, using the WAI-S (Tracey & Kokotovic, 1989) and the Attachment Style Questionnaire (ASQ; Feeney, Noller, & Hanrahan, 1994), Bair (2007) found a relationship between therapy clients' working alliance and their attachments in general. Compared to other measures and criteria, the WAI (Horvath & Greenberg, 1989) has demonstrated both strong reliability and validity as a measure of therapeutic working alliance (Hanson, Curry, & Bandalos, 2002; Horvath & Greenberg, 1989).

The 12-item WAI-S (Tracey & Kokotovic, 1989) was developed by selecting 4 items with the highest factor loading from each of the three original Task, Goal, and Bond scales of the WAI (Horvath & Greenberg, 1989). Busseri and Tyler (2003) subsequently, found very high correspondence in how therapists and clients answered

both scales and very high predictive validity for the short scale, concluding that the two measures are comparable.

Prior to beginning the present study, this researcher was given a specific license to use the WAI-S (Tracey & Kokotovic, 1989) in the present study (see Appendix A).

CATS and WAI-S scoring procedures used. The focus of the present research was on the relationship between adult attachment development and secure-base caregiving provided by another adult. To help increase validity of the therapist secure-base caregiving measure, the present study employed two independent instruments, the CATS (Mallinckrodt et al., 1995) and the WAI-S (Tracey & Kokotovic, 1989). The CATS was developed specifically to evaluate a client's perceptions of his or her therapist in terms of the secure-base caregiving construct. Like the CATS, the WAI-S is also a measure of client perceptions of his or her therapist but purports to be an inferential measure of working alliance within the client-psychotherapist relationship. However, when viewed from an attachment theoretical perspective, the WAI-S items address therapist attitudes and behaviors that also involve secure-base caregiving. For instance, the earliest and one of the most frequently researched aspects of secure-base caregiving (e.g., Ainsworth, 1967, 1973, 1989), is attunement. Attunement to the client's needs would be essential for a therapist to receive a high client rating on the following WAI-S item: "My counselor and I agree about the things I will need to do in counseling to help improve my situation." Given the attachment-related implications of the WAI-S items, the present study anticipates that both CATS and WAI-S scores will co-vary in the same

direction in terms of high or low participant ratings of their therapists' secure-base caregiving levels.

Scores of 56 to 84 on the CATS (Mallinckrodt et al., 1995) and 60 to 84 on the WAI-S (Tracey & Kokotovic, 1989) were considered to indicate high levels of therapist-provided secure-base caregiving. To attain this score on the 14-item CATS, a participant would have to give his or her therapist an average rating of 4 or greater on each 6-point scaled item. To attain this level on the 12-item WAI-S, would require an average per-item rating of 5 or greater on each 7-point scaled item. Scores below these levels on both the CATS and WAI-S were considered as indications that a participant experienced his or her therapist as having provided low levels of secure-base caregiving.

Study Method and Procedures

Data Collection

Data collection was conducted over a 12-month period following the recruitment of psychotherapists who were willing to provide their new adult clients with an opportunity to participate in the study. Clients volunteering to participate provided the pre and posttherapy data, with which their assignment to either of the two research samples was based. These clients, attending therapy sessions with therapists working in private practices in a variety of locations, were selected using first come first serve convenience sampling.

Recruitment of therapists. To recruit therapists for the study, this researcher met individually with all available licensed psychologists, clinical social workers, and professional counselors working private practices in a several county area of Middle

Tennessee. During these meetings, therapists were informed of the general nature of the

present study on adult attachment development during the process of psychotherapy.

Therapists were advised that their participation would be limited to having their

receptionist provide a sealed research packet to each new adult client, to take home and

look at, upon completion of his or her initial counseling session. Therapists were shown

the information contained in the client research packets, including the attachment

assessment instrument. Therapists were also informed that some clients would be sent a

second research packet in the future to provide them with an opportunity to evaluate their

experience of the client-psychotherapist relationship during the psychotherapy process.

Finally, therapists were informed of measures used in the study to assure the anonymity

of both themselves and all clients participating in the research. Therapists were asked to

participate in the distribution of client research packets during the designated 12-month

period of data collection. Therapists agreeing to participate in the study signed a copy of

the *Research Disclosure and Therapist Participation Agreement* (see Appendix B).

Using the previously described recruitment method, 15 therapists agreed to

participate in the study. Each therapist was provided with 10 sealed research packets to

be distributed to their new adult therapy clients, totaling 150 initial research packets.

Every 3 months during the 12-month data collection period, therapists were sent reminder

postcards (see Appendix C) advising them that the collection of client research data

would continue for several months and requesting that they continue distributing research

packets to their clients. At the end of the 12-month data collection period, therapists

were again sent this reminder card with a note from this researcher advising them that the

period for data collection had ended, requesting that they discontinue distributing research packets, and thanking them for their participation in the study.

Pretherapy data collection. The first set of research data was provided by adult therapy clients completing and returning the first research packet received at their therapist's office after completing their initial counseling session. These packets, consisted of a sealed envelope labeled *Relationship Research* containing the *Research Participant Instructions A* form (see Appendix D), the *Research Disclosure and Informed Consent Form A* (see Appendix E), the *Demographic Information Form A* (see Appendix F), the RSQ (Griffin & Bartholomew, 1994; see Appendix G), and a stamped envelope addressed to the *Relationship Research* post office box.

Upon receipt of each client's initial research packet, the RSQ (Griffin & Bartholomew, 1994) attachment security questionnaire was scored, initially using the single attachment security scale scoring method, to determine whether he or she met the initial criteria required for inclusion in the study participant sample. All respondents were sent a $10 gift card as remuneration for his or her involvement in completing and returning the first research packet.

Because the present study focused on attachment development in initially insecurely attached therapy clients, any respondent initially scoring in the secure range of the RSQ (Griffin & Bartholomew, 1994), considered in this study to be between 112 and 140 points, was eliminated as potential member of the study sample. His or her personal demographic information was destroyed and he or she received no further study-related correspondence. Respondents scoring below 112 points were classified as initially

insecurely attached. Their research packets were retained. These individuals made up the group from which future study participants were chosen.

Posttherapy data collection. In order to provide sufficient time for completion of a minimum of three counseling sessions, potential participants were sent the second research packet approximately 12 weeks from the date of their initial counseling session. This research packet provided assessment instruments that made it possible to both attain a posttherapy repeated measure of the client's attachment security his or her evaluation of the level of therapist-provided secure-base caregiving. This completed the data necessary to select the client-participant research sample, assign participants to the treatment groups, and statistically evaluate the relationship between client attachment change and therapist-provided secure-base caregiving.

The second research packet contained the *Research Participant Instructions Form B* (see Appendix H) and the *Research Disclosure and Informed Consent Form B* (see Appendix I) and the *Demographic Information Form B* (see Appendix J) which included a request to record the number of counseling sessions completed to date. Also included were a second copy of the RSQ (Griffin & Bartholomew, 1994), the CATS (Mallinckrodt et al., 1995; see Appendix K), the WAI-S (Horvath & Greenberg, 1986; see Appendix L), and a self-addressed stamped return envelope.

All client-participants returning the second research packet were sent the handout *Your Relationship Research Participation* (see Appendix M) that provided summary information describing measures taken to assure their anonymity and privacy general information about the purpose of the research. These clients were also sent a $30 gift

card as remuneration for completing the three questionnaires and demographic form included in the packet.

The three questionnaires were scored by this researcher and each participant's second research packet was combined with his or her first packet to create a single set of study data representing that client. The data from both packets were combined with the appropriate client based on duplicated demographic information included with each packet, including participant pseudonyms and addresses. The final data set, representing each client, consisted of a scored CATS (Mallinckrodt et al., 1995) and WAI-S (Horvath & Greenberg, 1986) and the two RSQ (Griffin & Bartholomew, 1994) measures, separately labeled as pre and posttherapy measures. The participant's pseudonym was written on each page of data. All of the data were stapled together to create a single data packet containing a cover page that provided both identifying information and a summary of the data, including the client's provided pseudonym, age, sex, date he or she began therapy, the number of therapy sessions completed, and the scores for pre and posttherapy RSQ, the CATS, and the WAI-S. The original demographic forms, that included addresses used to correspond with the client during the data collection phase of the study, were destroyed. Thus, the remaining research packets contained only pseudonyms and data, assuring clients' future anonymity.

Sample Selection and Group Assignment

Criteria used by this researcher to identify respondents as study participants included requirements that respondents (a) be 18 years of age or older, (b) have pretherapy attachment scores classifying them as insecurely attached, defined as a single

security score below 112 points on the RSQ (Griffin & Bartholomew, 1994) and, (c) that they had completed at least three counseling sessions prior to submitting the second research packet. Participants meeting these selection requirements were included in the study's client-participant sample group.

Fifteen psychotherapists, agreed to provide research packets to their next 10 adult therapy clients. Of the potential 150 clients provided the opportunity to participate in the present study, 29 were initially included in the potential participant pool after having completed and returned their initial research packets during the 12-month data collection period. Of these, 12 were subsequently excluded as study participants due to being classified as securely attached based on their pretherapy RSQ (Griffin & Bartholomew, 1994) scores ($n = 2$), completing only one counseling session rather than the required minimum of three sessions ($n = 1$), and not completing and retuning their second posttherapy research packets ($n = 9$). Meeting all study requirements, the remaining 17 clients were included in study sample of initially insecure adult therapy clients.

This researcher assigned the 17 client-participants in the sample group to either of two research groups for the purpose of statistical analysis and hypotheses testing. Of the 17 participants, 13 were assigned to the first group of clients who experienced their therapists as having provided high levels of secure-base caregiving (the SBC-High group), based on their CATS (Mallinckrodt et al., 1995) and WAI-S (Horvath & Greenberg, 1986) ratings. Based on rating their therapists as having provided low levels of secure-base caregiving, the remaining four participants were assigned to the SBC-Low group.

Assignment to these two groups allowed for the statistical evaluation of the mean differences between each within group pre and posttherapy attachment security scores to test the hypotheses about the relationship between secure-base caregiving and its influence on the development of adult attachment development.

Protection of Participants' Rights

Participants were thoroughly informed of the requirements, protections from potential risks, and potential benefits of participating in the study and were provided an opportunity to make informed choices as to whether or not to participate in the study in the three disclosure documents provided them in the first research packet, the second research packet, and in the handout discussing the research project provided to those completing both research packets.

The present study employed several procedures designed to protect participants' autonomy and protect them from harm, including assuring their rights to privacy and the confidentiality of personal identifying information. The first protection of privacy as a study participant was to have therapist's offices provide them with the initial sealed research packet at the end of their initial therapy session as the client was leaving the office. This procedure assured client privacy in relation to his or her therapist or therapist's staff by implying that he or she open and review or respond to the research packet at a separate location.

Several additional procedures were employed to help assure participant privacy and anonymity. Privacy with respect to participant's personal addresses was assured by limiting correspondence to the researcher alone, using a United States Post Office Box

address, dedicated to the present study, to be closed upon completion of the study.

Furthermore, participants were informed that their personal addresses would only be used

by the researcher to provide them with research-related correspondence including

remuneration for their participation, after which it would be permanently destroyed and

never associated with the retained research data.

Participants were requested to remain anonymous by using pseudonyms or

nicknames instead of their real names on their demographic forms. Even though they

were required to provide actual mailing addresses to receive correspondence from the

researcher, that correspondence utilized their provided pseudonym rather than actual

names.

The assessment instruments used in the study were designed prevent harm to

participants in terms of the ongoing client-psychotherapist relationship and the

effectiveness of the therapeutic process and goals by focusing on the client's own past

perceptions and experiences, rather than on evaluating or rating the success of the therapy

or goals. The participant's ratings of attachment-related relationship experiences The

participants' ratings of attachment-related experiences and perceptions using the RSQ

(Griffin & Bartholomew, 1994) was used as a repeated measure both before and after

therapy and addresses relationship experiences in general.

Finally, this researcher considered the possibility that the measurements used in a

study of the client-psychotherapist relationship could potentially harm a client by

negatively influencing the quality or effectiveness of that relationship. The researcher

determined that use of both the CATS (Mallinckrodt et al., 1995) and the WAI-S

(Horvath & Greenberg, 1986) as client measures of therapist-provided secure-base caregiving would minimize the potential for harm to the client-psychotherapist relationship because these instruments do not focus on the legitimacy, effectiveness, or success of the therapy itself. Rather, they only address the participant's impressions of a variety of personal characteristics of the therapist. Furthermore, participants were not provided these instruments for at least 12 weeks after beginning their involvement in therapy. This researcher felt that this should be sufficient time for one of several things occurrences that would reduce the possibility that rating the therapist in any way might negatively influence the client-psychotherapist relationship by bringing up potential negative feelings about the therapist. First, it is likely that by this time the therapeutic goals have been accomplished and the relationship ended or the relationship ended because of a failure in the therapeutic alliance. Once goals have been accomplished or therapy has ended, there is no ongoing relationship that can be harmed by a client's reflection on the personal characteristics of his or her therapist. Secondly, it is probable that the only clients continuing to be involved in the relationship after 12 weeks would be those who have developed a strong therapeutic alliance with their therapists and whose therapeutic goals are being successfully realized. It would appear likely that individuals in this category would provide high therapist ratings in alliance and secure-base caregiving characteristics.

In fact, the therapist ratings and demographic information provided by this study's client-participants appear to support these conclusions. Participants in the SBC-High group averaged 9.15 therapy sessions over a 12-week period. All of these individuals

gave their therapists high alliance and secure-base caregiving ratings. However, six or approximately half of the 13 participants in this group had completed between six and eight therapy sessions. It is likely that therapy had ended for these individuals at the typical rate of one session per week, thus eliminating the chance that rating their therapists, especially positively, could have harmed an ongoing relationship. The remaining seven clients had completed between 10 and 15 sessions after 12 weeks. It is likely that these were the only study participants who may have been involved in an ongoing client-psychotherapist relationship at the time they provided their therapist ratings. However, again, it is inconceivable that their positive therapist ratings could have negatively influenced their therapeutic experience.

On the other hand those rating their therapists low on the secure-base caregiving dimension, including the individual not included in the SBC-Low group because of completion of only one therapy session, averaged only four sessions during the same period. It is unlikely that given only four sessions over a 12 week period, any of these clients were in a continuing relationship with their therapists that might have been harmed by the therapist rating process.

Conclusions

The present study was designed to directly study the relationship between the development of greater attachment security, in insecurely attached adult therapy clients, and their experience of either high or low levels of therapist-provided secure-base caregiving responses over a course of psychotherapy. As discussed in this chapter, psychotherapists were recruited who volunteered to provide the initial research packet to

their new adult therapy clients. Clients who completed and returned those packets at the beginning of their involvement in the client-psychotherapist relationship were sent a second research packet approximately 12 weeks later. A number of measures were taken to assure the privacy and anonymity of both therapists and clients participating in this study.

Initially insecure clients who completed both research packets were included in the study sample and were then assigned to either the SBC-High or the SBC-Low groups, reflecting whether they rated their therapists as having provided either high or low levels of secure-base caregiving on both the CATS (Mallinckrodt et al., 1995) and the WAI-S (Horvath & Greenberg, 1986).

In each group, the participants' pre and posttherapy attachment security scores, measured by the self-administered RSQ (Griffin & Bartholomew, 1994), were combined to attain a both pre and posttherapy group mean attachment scores. Scores were compared within each group to determine whether there had been a significant change in each group's attachment security over time.

Chapter 4 provides a statistical description of the participants in both the SBC-High and SBC-Low research groups. The central focus of Chapter 4 is on the statistical comparison between each group's pre and posttherapy attachment security mean scores and the statistical significance of any changes in those scores over the course of the client-psychotherapist relationship evaluated in this study.

Chapter 4: Results

Introduction

The purpose of the present study was to add to the existing research knowledge of adult attachment development by evaluating Bowlby's (1969, 1973, 1980) theoretical view that, as with childhood attachment development, the attachments of adults who are insecure can develop toward security by the influence of secure-base caregiving attitudes and behaviors provided by other securely attached adults during meaningful mentoring or caregiving-type relationships. Specifically, Bowlby (1988) proposed that the client-psychotherapist relationship can function as an ideal adult prototype of the child-caregiver attachment relationship because of the opportunity for therapists to provide secure-base caregiving during that relationship. The present study was designed to evaluate the attachment development of insecurely attached adult therapy clients over a course of therapy with psychotherapists experienced as sources of either high or low levels of secure-base caregiving, potentially providing a test of Bowlby's theory. The two research hypotheses the present study was designed to test were that (a) initially insecure clients will become significantly more secure over time when involved in therapy with therapists seen as having provided secure-base caregiving (the SBC-High group) whereas, (b) the attachments of those involved with therapists perceived as having provided low levels of secure-base caregiving (the SBC-Low group) would not significantly change. This chapter presents the results of the statistical analyses of differences between the levels of pre and posttherapy attachment security for each of these two research groups.

Descriptive Statistics

SBC-High and SBC-Low Group Statistics

Seventeen counseling clients ultimately met the requirements for inclusion as participants in the present study. As shown in Tables 1 and 2, participants were assigned to either the SBC-High or SBC-Low groups based on whether they rated their therapists as having provided either high or low levels of secure-base caregiving on both the CATS (Mallinckrodt et al., 1995) and WAI-S (Horvath & Greenberg, 1986). Thirteen participants rated their therapists as having provided high levels of secure-base caregiving, as indicated by their scores of 56 or greater on the CATS and 60 or greater on the WAI-S. These participants were assigned to the SBC-High group. Four participants indicated that they perceived their therapists as having provided low levels of secure-base caregiving by scoring below those levels. These participants were assigned to the SBC-Low group.

Of the participants in the SBC-High group, 11 were women and two were men. Participants in this group ranged in age from 20 to 71 years with an average age of 39.69. The number of counseling sessions received by participants in the SBC-High group ranged from five to 15, averaging 9.15 sessions. CATS (Mallinckrodt et al., 1995) scores ranged from 70 to 83 with a mean score of 75.08. WAI-S (Horvath & Greenberg, 1986) scores ranged from 60 to 82 with a mean score of 71.54.

All participants in the SBC-Low group were women ranging in age from 18 to 47, with an average age of 38. Participants in this group scored within a range of 39 to 54 on the WAI-S (Horvath & Greenberg, 1986), the average score was 44.25. Their CATS

(Mallinckrodt et al., 1995) scores ranged from 33 to 53 with an average of 44.25. They

attended three to six counseling sessions, averaging 4.75 sessions. Both the CATS and

WAI-S varied together closely and in the same direction, as measures of secure-base

caregiving. The SBC-High group means score of 75.05 on the CATS was 30.83 points

higher than that of the SBC-Low group, of 44.25. On WAI-S mean score of 71.54 for the

SBC-High group was 27.29 points higher than the SBC-Low mean score of 44.25.

Table 1

SBC-High Group, Participant Demographics

Participant	Age	Gender	Sessions	CATS	WAI-S
H-1	71	F	10	83	76
H-2	45	M	8	71	60
H-3	61	F	15	74	80
H-4	20	F	12	72	82
H-5	26	F	6	67	64
H-6	24	F	8	80	67
H-7	43	F	11	77	76
H-8	40	F	6	75	74
H-9	29	M	10	80	79
H-10	22	F	5	81	73
H-11	40	F	12	74	76
H-12	40	F	10	70	64
H-13	55	F	6	72	67
	39.69		**9.15**	**75.08**	**71.54**

Note. Means shown in bold.

Table 2

SBC-Low Group, Participant Demographics

Participant	Age	Gender	Sessions	CATS	WAI-S
L-1	40	F	3	45	43
L-2	47	F	5	33	41
L-3	47	F	5	53	54
L-4	18	F	6	46	39
	38		**4.75**	**44.25**	**44.25**

Note. Means shown in bold.

RSQ Category Scores for SBC-High and SBC-Low Groups

Tables 3 and 4, show individual and group mean RSQ (Griffin & Bartholomew, 1994) scores as measured both before and after involvement in psychotherapy, for the SBC-High and SBC-Low groups, respectively. For each group, scores are categorized for each of the three RSQ scoring methods used, including the single security score method, the combined secure scales scoring method, and the combined insecurity scales scoring method. Group mean scores and standard deviations are shown at the end of each column of scores for each of the three sets of scores.

Table 3

RSQ Before/After Scores, SBC-High Group

Single Security Score Method

(Higher Score = More Secure)

Participant	Before therapy	After therapy
H-1	110.00	116.00
H-2	53.00	72.00
H-3	93.00	125.00
H-4	105.00	117.00
H-5	102.00	106.00
H-6	71.00	73.00
H-7	62.00	64.00
H-8	74.00	86.00
H-9	64.00	77.00
H-10	66.00	67.00
H-11	73.00	76.00
H-12	62.00	66.00
H-13	81.00	91.00
	78.15 (18.55)	**87.39 (21.55)**

Combined Secure Scales Method

(Higher Score = More Secure)

H-1	43.00	49.00
H-2	20.00	35.00
H-3	45.00	55.00
H-4	44.00	52.00
H-5	40.00	42.00
H-6	35.00	35.00
H-7	27.00	27.00
H-8	34.00	35.00
H-9	32.00	35.00
H-10	29.00	30.00
H-11	31.00	33.00
H-12	30.00	33.00
H-13	40.00	40.00
	34.62 (7.47)	**38.54 (8.63)**

Combined Insecure Scales Method

(Higher Score = More Insecure)

H-1	29.00	29.00
H-2	63.00	59.00
H-3	48.00	26.00
H-4	35.00	31.00
H-5	36.00	32.00
H-6	60.00	57.00
H-7	61.00	59.00
H-8	56.00	44.00
H-9	64.00	54.00
H-10	59.00	59.00
H-11	54.00	50.00
H-12	64.00	63.00
H-13	57.00	47.00
	52.77 (12.01)	**46.92 (13.23)**

Note. Score means shown in bold; standard deviations shown in bold parentheses.

Table 4

RSQ Before/After Scores, SBC-Low Group

_____

Single Security Score Method

(Higher Score = More Secure)

_____

Participant	Before scores	After scores
L1	95.00	80.00
L-2	83.00	76.00
L-3	61.00	57.00
L-4	75.00	64.00
	78.50 (14.27)	**69.25 (10.63)**

_____

Combined Secure Scales Method

(Higher Score = More Secure)

_____

L-1	45.00	41.00
L-2	32.00	36.00
L-3	18.00	23.00
L-4	31.00	31.00
	31.50 (11.03)	**32.75 (7.68)**

_____

Combined Insecure Scales Method

(Higher Score = More Insecure)

L-1	46.00	57.00
L-2	49.00	55.00
L-3	53.00	62.00
L-4	53.00	63.00
	50.25 (3.40)	**59.25 (3.86)**

Note. Score means are in bold; standard deviations are bold in parentheses.

For the 13-participant SBC-High group, RSQ (Griffin & Bartholomew, 1994) pretest scores, using the single attachment score method of scoring, ranged from 62 to 110 of a possible 140 points with a group mean score of 78.15. The posttest scores of every individual in this group increased, with a range of 66 to 125. The group mean score increased, showing an overall increase in attachment security, to 87.38.

Using the combined secure scales scoring method, pretest scores of the SBC-High group ranged from 27 to 45 out of a possible 60 points, with a group mean score of 34.62. Posttest scores ranged from 27 to 49, with an increase in the group mean score to 38.54, indicating an increase in positive attachment security schema.

When scored using the combined insecure scales, the SBC-High group's pretest scores ranged from 29 to 64, of a possible 80 points, with a group mean score of 52.77. With this method of scoring, higher scores reflect greater attachment insecurity. Within

this group, individuals' posttest scores ranged from 29 to 63 with a group mean score of 46.92, representing a reduction of characteristics that typify various forms of attachment insecurity.

Pretest scores of the 4-participant SBC-Low group, scored with the single attachment security score method, ranged from 75 to 95 with group mean score of 78.5. Posttest scores of this group ranged from 57 to 80 with a group mean of 69.25.

Using the secure scales scoring method, SBC-Low participants scored within a range of 18 to 45 and a mean score of 31.5 on the pretest. Posttest scores for this group ranged from 23 to 41 with a group mean score of 32.75.

On the insecure scales score, the pretest score range of the SBC-Low group was from 46 to 53 with a group mean score of 50.25. This group's posttest scores ranged from 55 to 63 with a group mean score of 59.25, representing an increase in insecure attachment schema.

Analysis of Pre and Posttherapy RSQ Scores

Statistical Assumptions and Analysis Used

Because data collection over approximately a one year period resulted in a sample size of only 17 client-participants, with 13 assigned to the SBC-High and four assigned to the SBC-Low group, the sample was too small to meet the criteria for analysis with parametric statistical methods. Therefore, group means were compared using the nonparametric Wilcoxon Matched-Pairs Signed-Ranks Test. All statistical tests were evaluated with an alpha level of .01with a 99% confidence level.

SBC-High Group

In the SBC-High group, 13 participants who perceived their therapists as having provided high levels of secure-base caregiving were tested using the RSQ (Griffin & Bartholomew, 1994) both before and after their involvement in therapy. Both tests were scored using the three scoring methods described earlier in Chapter 4. Each set of before and after scores were compared using the Wilcoxon Matched-Pairs Signed-Ranks Test to determine positive or negative changes in scores and the statistical significance in any median differences between the before and after scores. The results of each scoring evaluation for the SBC-High group were as follows:

Single scale attachment security scoring. As shown in Table 5, using the single attachment security score, representing both secure and insecure items, all 13 participants were assigned positive ranks, that is, their posttherapy scores were higher than their pretherapy scores. A change in mean score from 78.1538 to 87.3846 was significant at the .01 level (*p*-value = .001) with a 99% confidence interval.

Table 5

SBC-High Group, RSQ Single Scale Scoring (Wilcoxon Signed Ranks Test)

Comparison of Ranks After Versus Before Therapy

	N	Mean rank	Sum of ranks	*Z*
Negative score ranks	0	.00	.00	
(after score < before score)				
Positive score ranks	13	7.00	91.00	-3.183
(After score > before score)				
Ties	0			
(After score = before score)				

Note. Test statistics: *Z* is significant at the .001 level of confidence (2-tailed); based on negative ranks.

   Combined secure scales scoring. As shown in Table 6, using the combined secure scales only scoring method, 10 of the 13 participants were assigned positive ranks or higher posttherapy scores on the secure scales score. A positive group mean score increase from a pretherapy mean of 34.6154 to a posttherapy mean of 38.5385 was statistically significant at the .01 level (*p*-value = .005).

Table 6

SBC-High Group, RSQ Combined Secure Scales Scoring (Wilcoxon Signed Ranks Test)

Comparison of Ranks After Versus Before Therapy

	N	Mean rank	Sum of ranks	*Z*
Negative score ranks	0	.00	.00	
(After score < before score)				
Positive score ranks	10	5.50	55.00	-2.809
(After score > before score)				
Ties	3			
(After score = before score)				

Note. Test statistics: *Z* is significant at the .01 level of confidence (2-tailed); based on negative ranks.

Combined insecure scales scoring. As described in Table 7, using the combined insecure scales only scoring method, 11 of the 13 participants were assigned negative ranks; their insecure scale scores were lower at posttest than were their pretest scores. Their group mean scores were lowered from a pretherapy mean score of 52.7692 to a posttherapy score of 46.9231. The reduction in the insecure group mean score was significant at the .01 level (*p*-value = .003).

The results showed that after exposure to therapists providing high levels of secure-base caregiving, the SBC-High group's attachment security scores were significantly higher than were their pretherapy scores. This suggested a significant improvement in this group's attachment security over time.

Table 7

SBC-High Group, RSQ Combined Insecure Scales Scoring (Wilcoxon Signed Ranks Test)

			Comparison of Ranks After Versus Before Therapy	
	N	Mean rank	Sum of ranks	*Z*
Negative score tanks	11	6.00	66.00	
(After score < before score)				
Positive score ranks	0	.00	.00	-2.950
(After score > before score)				
Ties	2			
(After score = before score)				

Note. Test statistics: *Z* is significant at the .01 level of confidence (2-tailed); based on positive ranks.

SBC-Low Group

In the SBC- Low group, the attachment security of four participants, who perceived their therapists as having provided low levels of secure-base caregiving, was

also tested both before and after their involvement in therapy using the RSQ (Griffin &

Bartholomew, 1994). As with the SBC-High group, scores were developed using the

three RSQ scoring methods and results were analyzed to determine significance at the .01

level, using the Wilcoxon Matched-Pairs Signed-Ranks Test. The results were as

follows:

     Single scale attachment security scoring. As shown in Table 8, below, using

the single attachment security scale scoring method, all four participants in this group

were assigned negative ranks. Their individual scores at the time of posttherapy testing

were lower than at the time of pretreatment testing. However, the reduction in the group

mean attachment security score from 78.5 to 69.25 was not statistically significant (p-

value = .068).

Table 8

SBC-Low Group, RSQ Single Scale Scoring (Wilcoxon Signed Ranks Test)

Comparison of Ranks After Versus Before Therapy

	N	Mean rank	Sum of ranks	*Z*
Negative score ranks	4	2.50	10.00	
(After score < before score)				
Positive score ranks	0	.00	.00	-1.826
(After score > before score)				
Ties	0			
(After score = before score)				

Note. Test statistics: *Z* is not statistically significant (2-tailed); based on positive ranks.

Combined secure scales scoring. As shown in table 9, below, using the secure scales scoring method, one participant was assigned a negative rank, indicating a lower secure scales score, and three were assigned positive ranks due to higher scores. The group mean increased from 31.5 for the pretherapy test to 32.75 for the posttherapy test. The resultant change is not statistically significant (*p*-value = .414).

Table 9

SBC-Low Group, RSQ Combined Secure Scales Scoring (Wilcoxon Signed Ranks Test)

Comparison of Ranks After Versus Before Therapy

	N	Mean rank	Sum of ranks	*Z*
Negative score ranks	1	1.50	1.50	
(After score < before score)				
Positive score ranks	2	2.25	4.50	-.816
(After score > before score)				
Ties	1			
(After score = before score)				

Note. Test statistics: *Z* is not statistically significant (2-tailed); based on negative ranks.

Combined insecure scales scoring. As shown in Table 10, below, using the insecure scales scoring method, all four participants were assigned positive ranks, based on higher posttherapy insecurity scales scores. The initial group mean of 50.25 increased to 59.25 on the posttest. However, the results were not statistically significant (*p*-value = .068).

Table 10

SBC-Low Group, RSQ Combined Insecure Scales Scoring (Wilcoxon Signed Ranks Test)

	N	Mean rank	Sum of ranks	*Z*
Negative score ranks	0	.00	.00	
(After score < before score)				
Positive score ranks	4	2.50	10.00	-1.826
(After score > before score)				
Ties	0			
(After score = before score)				

Note. Test statistics: *Z* is not statistically significant (2-tailed); based on negative ranks.

Summary of Findings and Evaluation of Hypotheses

Once assigned to either the group experiencing high levels of secure-base caregiving (SBC-High) or low levels of secure-base caregiving (SBC-Low) from their therapists, based on their CATS (Mallinckrodt et al., 1995) and WAI-S (Horvath & Greenberg, 1986) scores, each participants posttherapy attachment security score was attained and a group attachment security mean score developed. This score was compared to that group's initial pretherapy attachment security mean score to determine whether the group had experienced any development or change in attachment security during their involvement in the client-psychotherapist relationship. For the 13-participant

SBC-High group, the mean posttherapy attachment security scores, for every one of the three scoring methods used, were significantly higher than their pretherapy scores. Using the full attachment scale single score method of scoring, which incorporates both secure and insecure scales into a single continuous measure, significance was at the .01 level with every participant scoring attaining a higher posttherapy attachment security score. That is, every participant in the SBC-High group showed a significant improvement in attachment security based on some combination of increased secure or decreased insecure attachment ideation.

On the other hand, for the four-participant SBC-Low group, there was no significant posttherapy change in mean attachment security scores on any of the RSQ (Griffin & Bartholomew, 1994) scoring methods. In fact, while not statistically significant, the posttherapy attachment security mean score for this group, using the single attachment security score method of scoring, actually decreased by approximately 9 points. Scores of every individual decreased within a range of 4 to 15 points out of a possible 140 points.

The study's null hypothesis (H_O) states that there will be no significant change in pre and posttherapy attachment security within either the SBC-High or SBC-Low groups. The alternative (H_A) hypothesis, in keeping with the adult attachment theoretical relationship between secure-base caregiving and attachment development, anticipates a significant increase in the posttherapy attachment mean score for the SBC-High group. In keeping with findings of the attachment literature, in which development and maintenance of attachment insecurity are associated with low levels of secure-base

caregiving, the alternative hypothesis (H_A) does not anticipate a significant change in pre

and posttreatment attachment mean scores for the SBC-Low group. For this group,

results of the statistical evaluation support the null hypothesis (H_O), in keeping with

research findings.

Chapter 5: Discussion, Conclusions, and Recommendations

Historical Background Related to the Study

Several decades of research, beginning with Bowlby's (1951) work on maternal deprivation, Bowlby (1969, 1973, 1980), Ainsworth (1967, 1973), Ainsworth and associates (Ainsworth, et al., 1978; Ainsworth & Wittig, 1969), and a host of other researchers (e.g., Bates, et al., 1985; Beckwith, et al., 1999; Carlson et al., 1989; Crockenberg, 1981; Main & Solomon, 1998) identified a number of adult caregiving attitudes and behaviors that are associated with a child's development of attachment security. These have included attunement to a child's mental states and behavioral expressions, quick responses to a child's distress signals, providing appropriate levels of response to a child's emotional distress, synchronous caregiving—that which accurately matches caregiving responses to a child's inner states, psychological availability and warmth, positive emotions and attitudes, and providing gestures and words that overtly express and describe, or mirror to the child, the child's inner states.

Bowlby (1988) referred to these adult caregiving attitudes and behaviors as secure-base caregiving. When a child consistently experiences a caregiver as a source of secure-base caregiving responses, resulting in both reliefs from inner distress and the receipt of comfort, he or she develops positive feelings and expectations, a secure attachment, toward that caregiver, providing the basis for future relationship attitudes and behaviors.

Secure-base caregiving has been shown to reflect an adult caregiver's own attachment security; caregivers who are not, themselves, securely attached, cannot

provide secure-base caregiving. For instance, their responses may not be attuned or appropriate to the child's inner states, may not result in the reduction of distress, may amplify or increase the child's distress, or may be appropriate at some times and unavailable or inconsistent at others. The child's attachment feelings and expectations toward such a caregiver are reflected in the child's insecure attachment schema. As opposed to a secure attachment schema, the four-category attachment model categorizes these types of insecure attachment schema according to the three most characteristic central attachment responses toward the caregiver: ambivalent, avoidant, or disorganized.

Along with other areas of study in developmental psychology, attachment development research has, until recently, have centered on development during infancy and childhood. However, because Bowlby (1988) viewed attachment development as the result of learning that occurs during certain types of close personal relationships, rather than the result of time-limited biologically based processes, he believed it can occur at any time one experiences such relationships, across the human lifespan, until completed by the development of attachment security. Thus, he believed that when a child does not experience secure-base caregiving and reaches adulthood with an insecure attachment, his or her attachment can continue to develop in the direction of attachment security through involvement with a securely attached friend, spouse, or mentor who provides age-appropriate forms of secure-base caregiving during their relationship. However, the existence, function, and potential development of attachments in adults have not been studied until recently.

The first adult attachment research opened the door to the study of the actual ongoing development of attachment in adults by confirming that, similar to children, adults also have attachments (e.g., George et al., 1985; Main & Goldwyn; 1984) that are either secure or insecure (e.g., Hazan & Shaver, 1987; Mickelson et al., 1997) and that correspond to the type of attachments their children develop (e.g., Fonagy et al., 1991; George & Solomon, 1996; Main & Goldwin, 1984; van IJzendoorn et al., 2000; Ward & Carlson, 1995). The first studies provided evidence that, like childhood attachment relationship, adults involved in close personal relationships such as romantic pair-bond relationships, demonstrated reciprocal attachment and caregiving behaviors and showed evidence of attachment security development over time when an insecure partner is paired with a secure partner capable of providing secure-base caregiving responses (e.g., Collins &Read, 1990; Crowell et al., 2002; Curran et al., 2005; Davila et al.. 1997, Davila et al., 1999; Feeny & Noller, 1991; Hazan & Shaver, 1987).

Prior to this research, in his book A Secure Base, Bowlby (1988) presented the adult client-psychotherapist relationship as a prototype of the parent-child attachment relationship, in terms of its potential for influencing the development of attachment security. Bowlby pointed out that, as in the child-caregiver attachment relationship, the client-psychotherapist relationship is initiated by a client experiencing some type of distress. In turn, the therapist accurately evaluates the nature of the client's distress enabling him or her to provide responses that resolve the client's issue and reduces his or her distress. Finally, the therapist provides reassurance and emotional comfort. Bowlby collectively referred to these caregiving behaviors as secure-base caregiving that, as in

children, can influence the development of attachment security in insecure adult clients across the lifespan.

The first and all subsequent researchers to directly evaluate adult attachment change within a controlled relationship setting have utilized the client-psychotherapist discussed by Bowlby (1988). This group of studies began with the Kilmann et al. (1999) study and has included six other studies of insecure adults involved in either individual therapy or group therapy or psychoeducation, focusing on attachment issues or relationship dynamics thought to potentially influence client attachment development (Diamond et al., 2003; Janzen et al., 2008; Lawson et al., 2006; Levy et al., 2006; Makinen & Johnson, 2006; Travis et al., 2001). All of these studies have shown significant improvement in the attachment security of adult clients over the course of their involvement in some type of client-psychotherapist relationship.

Collectively, the statistically significant results of these studies support Bowlby's (1988) lifespan attachment development theory by showing measurable improvements in the attachments of adult psychotherapy clients. However, these studies did not actually identify and measure secure-base caregiving as an independent variable involving personality characteristics of the therapists, so that the relationship between these responses and client attachment change. Rather, they focused on various therapeutic modalities and attachment-related focuses and contents, identifying these as responsible for the improvement in clients' attachment security. Therefore, their results cannot be interpreted as providing direct support for Bowlby's central theme, that secure-base caregiving is responsible for adult attachment development. At best, the results of these

studies provide indirect support for the relationship between secure-base caregiving and attachment development. From an attachment theoretical point of view, since secure-base caregiving is responsible for childhood attachment development and has been associated with adult attachment development in pair-bond relationships, it operated in these studies as an unidentified, uncontrolled, intervening variable, confounding the influence of the various therapeutic modalities on which these studies have focused.

Attachment Theoretical Implications

The present study is designed to add to the existing research knowledge of adult attachment development by continuing the current trend of studying the client-psychotherapist relationship. This study is the first known by the researcher to directly measure and statistically evaluate the relationship between both client attachment development and therapist-provided secure-base caregiving.

From an attachment theoretical view, the significance of the present study is that it demonstrates an example of a close personal relationship in which an insecurely attached adult becomes more securely attached apparently due to the secure-base caregiving responses provided by another adult. The client-psychotherapist relationship, while presented as an ideal attachment development relationship by Bowlby (1988), is only one of many possible adult relationships that have either been implicated by research or theoretically suggested as potential attachment development relationships due to their caregiving potential. These have included romantic pair-bond relationships, close personal friendships, and other mentoring relationships such as that with a minister or

priest. From this view, the results of the present study confirm adult attachment development theory and are applicable to any close personal adult relationship.

The results of the present study provide evidence of the development of improvements in attachment security, in initially insecure client-participants, over the course of several sessions of psychotherapy for client-participants experiencing their therapists as sources of secure-base caregiving. The initial attachment security group mean scores of the 13-member SBC-High group show significantly increases on all three measurement scales, derived from the RSQ (Griffin & Bartholomew, 1994) used in the present study to evaluate attachment security. Posttherapy group mean scores derived from the scale measuring only feelings and ideations that define attachment security are significantly higher; scores derived from the scale measuring insecure feelings and ideations are significantly lower (implying an improvement in security by the reduction of insecure feelings and ideation); and scores derived from the single scale combination of both these two scales are significantly higher. Statistically, these results suggest that for adult therapy clients, there is a relationship between their potential attachment development and exposure to secure-base caregiving provided by their therapists. Perhaps even more meaningful is the fact that within the SBC-High group, the posttherapy score of every client-participant is higher on the single attachment security scale score (that combines the scales measuring both increases in security and decreases in insecurity) than is his or her pretherapy score.

On the other hand, the posttherapy attachment security group mean scores of the four-participant SBC-Low group did not significantly change from their pretherapy mean

scores on any of the three attachment scales used in the present study. That is, there is no

significant increase in overall attachment security in terms of either an increase in secure

feelings and ideation or a reduction in insecure feelings or ideation. However, while the

changes are not statistically significant, the posttherapy scores of every member of the

SBC-Low group are actually lower than their pretherapy scores on the single security

score measure that incorporates both the secure and insecure scales and are significantly

higher on the combined insecure scales measure. Given this trend it is possible that

differences in this group's pre and posttherapy scores may have reached statistical

significance had the group size been larger. Certainly, based on comparison of the group

mean scores, these results suggest that in the absence of secure-base caregiving, therapy

alone did not improve the attachments of these insecure clients. The trend shown by the

individual scores suggests the possibility that this client-psychotherapist relationship may

have actually negatively influenced their attachment security. This trend is reminiscent

of the findings in the attachment development literature associating long-term childhood

attachment insecurity with attachment instability and fluctuations when the caregiving is

characterized by non-responsiveness, threatening or intrusive behavior, or is inconsistent.

Together the results of the present study are consistent with those established in

the childhood attachment development literature and hypothesized in the adult attachment

development literature. Within the context of close personal relationships with an adult

caregiver or mentor, the attachments of insecure individuals become more secure when

the caregiver or mentor provides secure-base caregiving and remain insecure and

unstable when the caregiver provides low levels of secure-base caregiving. The caregiver

or mentor's capacity for providing secure-base caregiving is a reflection of his or her own attachment security. Specifically, related to the present study, the results provide the first known direct evidence that links client attachment development to secure-base caregiving behaviors provided by therapists, without regard to therapists' theoretical approach or focus. The results also suggest that without exposure to secure-base caregiving, the attachments of insecure clients will not become more secure; therapy alone is not related to the development of attachment security. These results can also be considered as evidence in support of Bowlby's (1988) theory of adult attachment development in general and specifically within the client-psychotherapist relationship.

Limitations of the Study

Validity

A potential limitation of the present study is that validity may suffer due to the influence of unknown and uncontrolled variables. The study sample may include participants who do not meet the conditions that would be necessary for an attachment relationship to occur and attachment development to result. Because of individual participant characteristics and or problems with the test instruments, assessment scores may not reflect actual attachment security or therapist-provided secure-base caregiving.

Non-distressed participants. One problem that may affect validity is failure to identify and control all potential intervening variables may have resulted in inclusion of some participants who did not meet the theoretical requirements for being in an attachment-caregiving relationship. Thus, their attachments would not change over time

regardless of the level of secure-base caregiving to which they were exposed during therapy. This would include insecurely attached but non-distressed participants.

According to the findings of childhood attachment development research, which provide the theoretical framework for adult attachment development theory, an essential characteristic of the attachment-caregiving relationship, influencing attachment development, is the recipient's distress. Distress on the part of the recipient, initiates the caregiving relationship by causing him or her to seek the caregiver for relief of the distress. The caregiver's ability to relieve that distress and provide comfort results in the recipient's development of a secure attachment toward that, which includes both positive emotions and expectations. Without the recipient experiencing distress, because there are no experiences of relief and comfort that become associated with the caregiver, there is no attachment development. A relationship without the recipient experiencing distress may be constructive but is not an attachment relationship.

An inherent limitation of the present study is that the existence of client distress is assumed rather than clearly identified and controlled by initially eliminating any non-distressed clients from the study participant sample. Resolution of personal distress is not the motivation of all clients seeking involvement in the client-psychotherapist relationship. For instance, some individuals seek counseling for other reasons such as intellectual curiosity, coercion by other individuals, or requirements of courts or other legal entities. It is theoretically appropriate to assume that non-distressed participants could not have experienced attachment development when exposed to therapists providing secure-base caregiving provided by their therapists. It is also appropriate to

assume that the lack of attachment development in any of the members of the SBC-Low

group may have been due to their lack of distress as a motivating factor for entering

therapy, rather than the fact that there therapists did not provide secure-base caregiving.

According to attachment research and theory, without distress to initiate and

activate the attachment relationship, there is no attachment development. Therefore,

especially because of the small sample size, failure of the present study to control the

distress variable potentially reduces the likelihood that the research sample represents the

group of distressed therapy clients whose attachment development might be influenced

by secure-base caregiving provided by a therapist. This, validity of the results is reduced

to the extent that the present study sample may have included non-distressed participants.

Use of self-report measures. The design of the present study provided for an

evaluation of both the client attachment security variable and the therapist-provided

secure-base caregiving variable. While the use of multiple external objective evaluations

of these variables provide the most valid measures, it is unlikely that solicitation of

therapists to volunteer their new therapy clients to participate in such evaluations will be

successful. It is also unlikely that therapists will participate knowing that doing so will

also involve an objective evaluation of their therapy behaviors. Furthermore, in addition

to problems with privacy and anonymity, third party objective evaluations of might alter

the client-psychotherapist relationship, causing harm to the client. Therefore, objective

measurement of the attachment and secure-base variables are ethically problematic.

Finally, because the use of validated objective measures such as the AAI (George,

Kaplan, & Main, 1985) can require special training and certification and, potentially, the

involvement of additional researchers their use is cost prohibitive for an unfunded study of the present type.

Compared to more objective measures, self-report measures are more likely to suffer validity problems due to the increased potential that answers can be influenced by variables other than that being measured, such as individual cognitive perceptions and expectations, fluctuating environmental influences, reading and language problems, and response sets such as carelessness and social desirability. These problems potentially limit the validity of the measurements used in the present study.

However, to avoid problems associated with objective measures, the present study uses readily available paper and pencil self-report measurements that have been subjected to extensive use and evaluation, including validation studies, in the attachment literature. The use of self-report measures provides an ethical way to attain the desired measures while helping assure the privacy and anonymity of both therapists and their clients and providing boundaries separating client-therapist relationships from their involvement in the present research. Unfortunately, the tradeoff for these benefits is the potential reduction in validity of the measure.

Representativeness of the Sample and Generalizability

Small sample size. From a statistical point of view, and to the extent that the study itself is valid, generalizability of the attachment development results is limited to the larger population of adult therapy clients from which the sample is selected. However, an unavoidable problem in trying to select a sample that represents the client-psychotherapist relationship is the wide variety of variables occurring in that population,

including differences in age, sex, regional influences, education, personality characteristics, cognitive abilities, life experiences, diagnosis, age and sex of the therapist, and therapeutic approach used. Statistically, to include and represent all the salient characteristics of such a diverse population, a very large sample must be developed whose individuals are randomly selected over a wide geographic range. Data developed from a study of such a sample can be evaluated using more powerful and reliable parametric statistical procedures.

Because a large representative sample cannot be developed in small study such as this one, the sample is small and cannot include all the potentially salient variables present in the larger population of therapy clients. For this reason, results can only be evaluated using a less powerful nonparametric statistical method whose results are less reliable. Therefore, the extent to which the sample may not fully represent the larger population, limits generalizability of the results attained in the present study.

Sample characteristics influenced by sampling method used. The design of the present study uses opportunity sampling, rather than random sampling to attain participants and for the two study groups. This type of sampling reduces representation of the larger population of psychotherapy clients because it results in the selection of clients with certain characteristics while excluding clients with other characteristics. A randomly selected sample would include all characteristics. For example, clients selected as participants in the present study are limited to those who have the average to above average reading comprehension skills required to read instructions and questionnaires and to answer questionnaires and complete demographic forms. Among the larger population

of therapy clients, those unable to meet these requirements are not represented in the present study's sample. Therefore, because the selection process used to develop the sample skews its representation of certain client characteristics, generalizability of the present study's results may be limited even beyond that resulting from its small size.

Implications Related to Psychotherapy

Evidence of a relationship between a therapist's personality-based capacity for providing secure-base caregiving and the attachment development of his or her clients, as provided in the present study, does not invalidate or in any way replace academically and clinically developed knowledge of psychology and therapy methods and techniques. Rather they are complimentary aspects of a successful therapy outcome.

Secure-base caregiving provides a relationship context within which traditional knowledge and therapeutic methods can be most effectively utilized to provide the solutions necessary to resolve client anxiety. Attachment research suggests that the caregiver's abilities to accurately access the cause of distress, develop and verbalize a solution, and apply that solution so that the initial distress is reduced, are key elements in the development of a child or adult mentee's attachment security. Given the complex nature of distress-causing problems for which individuals seek a relationship with a psychotherapist, he or she cannot fulfill this requirement without benefit of the traditional formal education and clinical supervision and experience required to develop that level of knowledge and skill.

In addition to helping a client develop attachment security, and even if he or she does not, it is likely that a securely attached therapist, through the provision of secure-

base caregiving, will be more successful in helping his or her client identify the actual causes of his or her distress, develop treatment plans that address those causes, and, thereby, accomplish treatment goals that resolve the client's distress. For example, without the ability to create an accepting and empathetic interpersonal environment, it is unlikely that a client will provide and reveal the types and levels of information necessary for the therapist to accurately access the nature of his or her distress. Without this information, the therapist cannot apply his or her knowledge of biological, social, and psychological processes and how they are interacting in relation to the origins and nature of the client's distress.

The ability to accurately empathize or become attuned to another person is a primary aspect of an adult's attachment security and his or her ability to provide secure-base caregiving, according to the attachment literature (e.g., Ainsworth, 1967, 1973; Bowlby, 1988). Empathy and attunement are associated with development of the therapeutic alliance (e.g., Tracey & Kokotovic, 1989) and the effectiveness of psychotherapy (e.g., Ahn and Wampold, 2001).

Attachment security is associated with the ability to empathize or become attuned, a primary aspect of secure-base caregiving construct. Empathy is associated with development of a therapeutic alliance between client and therapist. Therefore, as suggested by the results of the present research, it is reasonable to assume that when working with a client, a securely attached therapist, capable of providing secure-base caregiving, will be more successful accurately assessing, planning and implementing appropriate treatments, and achieving meaningful treatment goals. A therapist's

professional knowledge and skills, applied during the assessment, treatment planning, and treatment phases of therapy, compliment and become part of the secure-base caregiving process. Working together, they can maximize the success of a therapist's treatment and positively influence development of his or her client's attachment security.

Implications for Social Change

The results of the present study suggest that therapists who provide secure-base caregiving, a response set associated with the therapist's attachment security in the attachment literature, can help influence attachment security in their insecurely attached clients. Presumably, as Bowlby (1988) believed, this has always occurred for the clients of approximately 60% of therapists who, based on nationwide attachment demographic information, are likely to be securely attached (e.g., Crowell, et al., 2002; Klohnen & Bera, 1998; Mickelson et al., 1997).

Evidence provided by the present study can be used to effect significant and positive social change through its application in mentoring programs for psychotherapists and other social service program mentors, notably those whose attachments are insecure. To the extent that they are successful, mentoring programs focusing on the attachment development of these individuals, especially the potentially 40% whose attachments might be insecure, could potentially improve their effectiveness, thus complementing and strengthening their personal and social identities as key figures in the implementation of positive social change.

In terms of positive social change, though the initial benefits would be experienced by the therapists and social mentors themselves, the larger benefit would go

to all their insecurely attached clients and mentees, whose attachments might be positively affected, and then to all those with whom they have mentoring relationships, whose attachments might be positively affected. However, while positive attachment change is the immediate goal, the result of realizing that goal is the potential for positive social change as influenced by the many effects that result from attachment security.

As discussed in Chapter 2, a large number of studies have found associations between attachment security and variety of positive adaptive effects and functions not associated with attachment insecurity. These have included, for instance, overall relationship satisfaction, related to areas such as intimacy, the development of trust, and resolving conflict, (e.g., Campbell, et al., 2005; Guerrero, 1996; Keelan et al., 1998; Seiffge-Krenke, 2006; Simpson, et al., 1996), ability to regulate emotions (e.g., Roisman, 2007), numerous aspects of relationships with peers and others in general such as trust and empathy (e.g., Bartholomew & Horowitz, 1991; Mikulincer, et al., 2005; Rowe & Carnelley, 2003; Vogel & Wei, 2005), willingness to seek help and greater involvement and effectiveness of psychotherapy (e.g., Eagle, 2003; Fonagy, 2001), better mental health (e.g., Latzer, et al., 2002; Muller, et al., 2001); positive self-image (e.g., Mikulincer, 1995); personal health patterns and longevity (e.g., Feeney & Noller, 1990; Scharfe & Eldridge, 2001); better dispositions for academic learning (e.g., Larose, et al, 2005); higher quality of parenting and caregiving (e.g., Baer & Martinez, 2006; Bosmans et al., 2006; Tomlinson et al., 2005).

Therefore, by applying the evidence provided in the present study to the development of mentoring programs for psychotherapists, social workers, and

administrators of a variety of social welfare programs, positive social change begins with positive effects personally experienced by the professionals completing these programs. Those effects can continue to the second level when they positively affect the attachment development of the insecurely attached client with whom these professionals work. Positive social change can continue to the third level when, through their securely developed attachments, these clients go on to develop attachment relationships with their own children and attachment mentoring relationships with other insecurely attached adults, through which they can influence development of attachment security at the forth level.

Adult attachment security is regenerative because it results in an adult's capacity to provide secure-base caregiving toward others in all future close personal relationships with children, friends, and romantic partners. Furthermore, individuals who develop attachment security are also likely to experience a variety of associated benefits such as better health and wellbeing, greater academic achievement, better mental health, and more satisfying and stable relationships. Therefore, in terms of positive social change, mentoring programs designed to improve the attachment security and secure-base caregiving skills of psychotherapists and other social welfare mentors, can potentially initiate a process that is both regenerative and self-sustaining, resulting in a multi-faceted array of positive effects on an infinite number of individuals.

Social Welfare Programs

The results of the present study have implications that could affect the focus and outcomes of social welfare programs, helping them better realize their existing goals

related to positive social change. Historically, programs such as those administered by children and family services agencies, designed to help improve functionality in families at risk have focused on content and programs such as instruction on anger management and appropriate techniques for child discipline.

From an attachment theoretical position, relationship violence and parenting problems are related to attachment insecurity but are not associated with security. Therefore, in addition to program content, if re-designed to include attachment measurements and a focus on the development of attachment security in the program recipients, realization of program goals would be far more likely. Furthermore, periodic measurement documenting client attachment change over the course of the program, would both support the effectiveness of program in influencing goal-related positive personality change, supported by research evidence, and provide legal documentation that would be more meaningful than a certificate of program completion.

The problem with this shift in focus toward client attachment development is that implementation would necessitate the evaluation of all field-level counselors and program administrators to confirm their attachment security and the related capacity for secure-base caregiving. Furthermore, attachment development-related mentoring would have to be provided for those with various forms of attachment insecurity. These measures raise a number of concerns including employee privacy, the creation of a personality-related job requirement not required as a condition of employment, and costs related to access to attachment-development professionals such as therapists and employee production time lost during the mentoring process.

Psychotherapist Training and Mentoring Programs

Results of the present study also have implications that if incorporated into graduate level psychotherapist training programs, could result in positive social change through by benefiting training therapists and their future clients. In addition to the existing focus on therapeutic theory, methods, and techniques, programs of this type could include both curricula-based attachment-related coursework as well as an ongoing mentoring component. Curricula-based courses could include historic reviews of the attachment literature, emphasizing the role of secure-base caregiving involved in both child and adult attachment development, application of this information to the assessment, treatment, and attachment relationship within the client-psychotherapist relationship.

The second component, ongoing one-on-one mentoring should also be required of all program participants. In keeping with the attachment research, mentors should, themselves, be securely attached therapists capable of providing secure-base caregiving responses. Mentoring should focus on ongoing attachment assessment and development of future therapists within a larger context of professional identity development that incorporates and integrates skills related to secure-base relationship development and clinical practice skills within that context.

Through participation in attachment-focused graduate-level educational programs, therapists would benefit by improvements in their attachment security and by learning to maximize the effectiveness of their assessment knowledge and treatment skills through deliberate integration of these skills within a secure-base caregiving relationship. Their

future clients would potentially benefit by experiencing resolution of their distress through effective identification of the nature of that distress and treatment that successfully resolves the distress within a relationship that provides an opportunity for secure attachment development.

Recommendations for Future Research

Because the present study is limited to the personal resources of this researcher, without the benefit of external funding or sponsorship by a hospital, college, or mental health counseling center and without an available an ongoing source of clients and psychotherapists, control of the study variables is limited and the participant sample small. These limitations potentially limit validity of the results, representativeness of the sample, and limit the confidence with which the results can be trusted and generalized to the population of therapy clients involved in client-psychotherapist relationships.

Therefore, at best, the present is a limited introductory study that provides evidence suggesting that there is a relationship between therapist-provided secure-base caregiving and the development of adult secure attachment development within similar client-psychotherapist relationships. The relationship between adult attachment development and secure-base caregiving is of great personal and social significance within the context of professional relationships such as that between client and therapist and that between social welfare program clients and their mentors. For that reason, the present researcher believes it is crucial for future researchers to design studies that address the limitations of the present study and develop better studies of the relationship between secure-base caregiving and client attachment development.

Perhaps the most difficult problem in developing a study of the relationship between client attachment development and therapist secure-base caregiving is to procure a source of clients and therapists of sufficient numbers to develop participant samples large enough to allow parametric statistical evaluation of the results. Replication of the present study requires that both the high and low secure-base caregiving groups include at least 30 participants initially identified as insecurely attached.

The most desirable design, to assure validity and reliability, involves the development of a large randomly selected participant group from which the members are randomly assigned to therapists who have been objectively pre-selected as providers of either high or low levels of secure-caregiving. While implementation of such a design might be problematic due to both ethical concerns and the reluctance of clients and therapists to participate, it may be possible for a researcher with access to a large base of clients and therapists, such as those in an educational or institutional setting, to more closely approach these design goals than does the present study.

At the least, adult attachment development studies should be conducted with sufficiently large samples to allow evaluation of the results with parametric statistics. Unfortunately, for a variety of ethical and practical reasons, it may be impossible to develop a large sample through the processes of random selection and treatment group assignment.

This researcher also suggests that a valuable area of future study involves the identification and elucidation of specific therapist behaviors, identified by therapy clients, as representative of the secure-base caregiving behaviors described in self-administered

attachment instruments such as the RSQ (Griffin & Bartholomew, 1994) used in the present study. For instance, a group of therapists could be selected who clients have consistently given them high secure-base caregiving scores using an instrument such as the RSQ. Clients could then operationalize these therapists' secure-base caregiving behaviors by identifying and describing them in terms of the conceptual aspects of the secure-base caregiving construct, such as the accurate assessment of sources and nature of the client's distress, communication and mirroring that information so that the client understands his or her own internal functioning, developing remedies to resolve the distress, and providing comfort.

Once categorized as aspects of secure-base caregiving, therapists' behaviors might then be further categorized in domains, types, forms, or levels of expression such as gestures, facial expressions, forms of eye contact, verbal expressions, tone of voice, questioning, listening, instructing, using tools, adjusting the atmosphere, and so on. Operationalizing therapist-provided secure-base caregiving responses would (a) increase understanding of the adult secure-base caregiving construct, (b) help researchers identify the age-related differences between the secure-base caregiving responses already identified within the child-caregiver attachment relationship and those associated with the adult client-psychotherapist relationship, and (c) would provide a basis for development of more valid secure-base caregiving measures, to be used in future adult attachment development research.

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Appendix A: Working Alliance Inventory Release Letter Note:

SFU SIMON FRASER UNIVERSITY
THINKING OF THE WORLD

Mr. Dennis Weeks
Walden University (doctoral student)
Psychology
34 N Jefferson Ave
Cookeville TN
38501
USA   May 21, 2009

LIMITED COPYRIGHT LICENSE (ELECTRONIC) # 2009215.9

Dear Mr.   Weeks

You have permission to use the Working Alliance Inventory (WAI) for the investig
ation: "Adult Corrective Attachment Experiences-Dissertation."

This limited copyright release extends to all forms of the WAI for which I hold copy
right privileges, but limited to use of the inventory for not-for-profit research, and
does not include the right to publish or distribute the instrument(s) in any form.

I would appreciate if you shared the results of your research with me when your
work is completed so I may share this information with other researchers who mig
ht wish to use the WAI. If I can be of further help, do not hesitate to contact me.

Sincerely,

Dr. Adam O. Horvath
Professor
Faculty of Education and
Department of Psychology

Ph# (778) 782-3624
Fax: (778) 782-3203
e-mail: horvath@sfu.ca
Internet: http://www.educ.sfu.ca/alliance/allianceA

Appendix B: Research Disclosure and Therapist Participation Agreement

Research Disclosure and Therapist Participation Agreement

You and/or your staff, along with other therapists in this and other areas, are being asked to assist in the initial phase of a doctoral dissertation research study by providing a research packet, which will include a brief questionnaire, to your adult clients at the time of their initial counseling session. The researcher is requesting your participation for approximately 3 months. You will be notified by the researcher when sufficient data has been received and collected can be discontinued.

The purpose of the study is to evaluate clients' personal relationship attachment perceptions and whether their involvement in a few sessions of psychotherapy may influence those perceptions. This research does not address or evaluate the actual psychotherapy you will provide, including theoretical orientation, techniques or methods, goals, or results. Its focus is limited to studying the effects a counseling relationship may or may not have on clients' personal relationship attachment feelings and perceptions.

The researcher's goal is complete anonymity of data and involvement for all and between all who in any way participate in this study by including the following safeguards:

1) Participants will use pseudonyms instead of actual names on research forms and data they complete and return.

2) Research forms and data do not elicit information about or that identifies individual participants' therapists or their places of business.

3) Research materials do not identify the researcher and the researcher requests that you not disclose this information to your clients.

By signing the following you are stating that you understand the above information and agree to the following:

1) To provide or instruct your staff to provide new clients with the sealed research packet provided you by the researcher at the time of their initial counseling session (either before or at the time they leave the session).

2) If asked by your clients, to limit discussion about this research to the issue of anonymity of all parties, as addressed above.

_____

Therapist/Participant's Signature/Date

Appendix C: Therapist Research Reminder Postcard

RELATIONSHP RESEARCH
P 0 BOX

PLEASE
PLACE
STAMP
HERE

_____

_____

_____

_____

Thank you again for your participation in the Relationship Research study.

This note is a reminder that collection of client questionnaires for this study will continue for several more months. I greatly appreciate your ongoing support by handing out Relationship Research packets to your new adult clients after their first counseling session.

If you need additional Relationship Research packets, please contact me by phone at or by e-mail at

Dennis Weeks, EdS, LPC

Appendix D: Research Participant Instructions A

Research Participant Instructions A

1. Please read the attached Research Disclosure and Informed Consent form.

2. If you would like to participate in this research project, please complete the attached Relationship Scales Questionnaire and Demographic Information Form A.

3. Please mail the completed questionnaire and demographic form using the enclosed self-addressed envelope.

You should receive your WalMart gift card within two weeks.

Thank you for your participation in this research project!

Appendix E: Research Disclosure and Informed Consent Form A

Research Disclosure and Informed Consent Form A

Information about the Research

You are invited to take part in a research study of experiences and feelings about close personal relationships, conducted by Dennis Weeks, a doctoral student at Walden University. The researcher is inviting adults who are beginning involvement in the counseling process to participate in the study. The purpose of this study is to see how involvement in a counseling relationship may or may not affect how adults feel and think about their close personal relationships.

What Your Participation Requires

If you agree to participate in this study you will be asked to:

1) Fill out a questionnaire and contact information enclosed in the envelope. This should take no more than 3 to 5 minutes.

2) Some individuals, scoring within a certain range on their initial questionnaire, will be sent a second research packet approximately 3 months after the researcher receives the first questionnaire. If you are one of those individuals chosen, you will be asked to complete three questionnaires and another contact information form and return them in a self-addressed envelope. This should take no longer than 5 to 10 minutes.

Voluntary Nature of the Study

This study is voluntary. Everyone will respect your decision to choose to be or not be involved in this research. No one at your counselor's office will be aware of your choice and will not treat you differently regardless of your choice. If you decide to participate in the study at this point and are chosen to participate again in approximately 3 months, you can decide not to continue your participation at that time. You are free to discontinue your participation at any time. If you do so, no one will follow up or contact you again.

Risks and Benefits of Being in the Study

Being in this type of study should provide no risk to your safety and wellbeing since you are simply being asked to reflect on your prior feelings and experiences about close personal relationships. However, such reflection may have the slight risk of

causing some individuals to feel some slight distress over past or current relationships or about their relationship feelings and experiences in general. Should this be the case you are encouraged to discuss these feelings with your therapist. If you are no longer involved in therapy and would like referral information you can feel free to contact the researcher who will provide you with referral information.

Participation in this research will allow you to contribute to knowledge currently being developed about how adult relationships, such as the relationship between client and therapist, might work to help improve the overall quality of future client-therapist relationships and other adult relationships.

Payment

Upon receipt of your information, the researcher will send you a $10.00 WalMart gift certificate to compensate your for your time and effort in assisting with this research project.

Privacy

Any information you provide will be anonymous. The Demographic Information Form requests that you use a nickname or pseudonym so that who you are will remain anonymous. Your address will be kept confidential by the researcher and will only be used to send you research-related materials. Once you have completed your involvement in the research and have received the necessary responses, such as payments, by the researcher, your pseudonym and address will be permanently destroyed and no record will remain to show that you have participated in this research. Nothing through which you might be identified will be retained, or will ever be included in the research study. Only your questionnaires will be retained to provide the data needed to complete the research. Questionnaires will be retained by the researcher for a period of 5 years, as required by the university.

Contacts and Questions

If you have questions at any point during your participation in this research, you may contact the researcher at waldenu.edu. If you want to talk privately about your rights as a participant, you can call the Walden University Research Participant Advocate at 612 312-1210, extension 001 or via e-mail at irb@waldenu.edu. Walden University's approval number for this study is 01-15-0092139 and it expires on January 14, 2012.

Appendix F: Demographic Information Form A

Demographic Information Form A

Please fill out and return this page along with the completed relationship questionnaire in the self-addressed envelope. In order for your participation to be useful for this research project, it is important that you return your completed questionnaire *prior to your second counseling session*. Please use a nickname or pseudonym on this form to assure that your participation will be anonymous. Upon the researcher's receipt of this information you will be mailed a $10 WalMart gift certificate to compensate you for your time and involvement. Thank you for your participation in this research.

Nickname or Pseudonym_____

Address _____

Street Number or PO Box_____

City_____Zip Code_____

Date You Started Counseling _____Age _____Male ( ) Female ( )

Appendix G: Relationship Scales Questionnaire

Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994)

Instructions

Please read each of the following statements and rate the extent to which you believe each statement best describes your feelings about *close relationships*. 1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

1. I find it difficult to depend on other people.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

2. It is very important to me to feel independent.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

3. I find it easy to get emotionally close to others.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

4. I want to merge completely with another person.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

5. I worry that I will be hurt if I allow myself to become too close to others.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

6. I am comfortable without close emotional relationships.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

7. I am not sure that I can always depend on others to be there when I need them.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

8. I want to be completely emotionally intimate with others.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

9. I worry about being alone.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

10. I am comfortable depending on other people.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

11. I often worry that romantic partners don't really love me.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

12. I find it difficult to trust others completely.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

13. I worry about others getting too close to me.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

14. I want emotionally close relationships.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

15. I am comfortable having other people depend on me.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

16. I worry that others don't value me as much as I value them.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

17. People are never there when you need them.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

18. My desire to merge completely sometimes scares people away.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

19. It is very important to me to feel self-sufficient.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

20. I am nervous when anyone gets too close to me.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

21. I often worry that romantic partners won't want to stay with me.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

22. I prefer not to have other people depend on me.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

23. I worry about being abandoned.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

24. I am somewhat uncomfortable being close to others.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

25. I find that others are reluctant to get as close as I would like.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

26. I prefer not to have other people depend on me.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

27. I know that others will be there when I need them.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

28. I worry about having others not accept me.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

29. Romantic partners often want me to be closer than I feel comfortable being.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

30. I find it relatively easy to get close to others.
1= not at all like me, 2= not like me, 3= somewhat like me, 4= like me, 5= very much like me

Appendix H: Research Participant Instructions B

Research Participant Instructions B

1. Please read the attached Research Disclosure and Informed Consent form.

2. If you would like to participate in the final phase of this research project, please complete the three questionnaires attached: The Relationship Scales Questionnaire, The Client Attachment to Therapist Scale, and the Working Alliance Inventory Short Form.

3. Please fill out the Demographic Information Form B.

4. Please mail the completed questionnaires and demographic form using the enclosed self-addressed stamped envelope.

You should receive your WalMart gift card within two weeks.

Thank you for your participation in this research project!

Appendix I: Research Disclosure and Informed Consent Form B

Research Disclosure and Informed Consent Form B

Information about Phase 2 of the Research

Because of your range of scores on the first research questionnaire, you are being selected for the opportunity to participate in the second and final phase of this research, being conducted by Dennis Weeks, a doctoral student at Walden University. The purpose of this study is to see how involvement in a counseling relationship may or may not affect how adults feel and think about their close personal relationships.

If you choose to participate in this second phase of research, please retain a copy of this document for your personal records.

What Your Participation Requires

If you choose to participate in this study you will be asked to completely fill out three questionnaires and another contact information form and return them in a self-addressed envelope. This should take no longer than 5 to 10 minutes.

Voluntary Nature of the Study

This study is voluntary. Everyone will respect your decision to choose to be or not be involved in this research. No one at your counselor's office will be aware of your choice and will not treat you differently regardless of your choice. You are free to discontinue your participation at any time. If you decide to do so, no one will follow up or contact you again.

Risks and Benefits of Being in the Study

Being in this type of study should provide no risk to your safety and wellbeing since you are simply being asked to reflect on your prior feelings and experiences about close personal relationships. However, such reflection may have the slight risk of causing some individuals to feel some slight distress over past or current relationships or about their relationship feelings and experiences in general. Should this be the case you are encouraged to discuss these feelings with your therapist. If you are no longer involved in therapy and would like referral information you can feel free to contact the researcher who will provide you with referral information.

Participation in this research will allow you to contribute to knowledge currently being developed about how adult relationships, such as the relationship between client

and therapist, might work to help improve the overall quality of future client-therapist and other adult relationships.

Payment

Upon receipt of your information, the researcher will send you a $30.00 WalMart gift certificate to compensate you for your time and effort in assisting with this research.

Privacy

Any information you provide will be anonymous. The Demographic Information Form requests that you use a nickname or pseudonym so that who you are will remain anonymous. Your address will be kept confidential by the researcher and will only be used to send you research-related materials. Once you have completed your involvement in the research and have received the necessary responses, such as payments, by the researcher, your pseudonym and address will be permanently destroyed and no record will remain to show that you have participated in this research. Nothing through which you might be identified will be retained, or will ever be included in the research study. Only your questionnaires will be retained to provide the data needed to complete the research. Questionnaires will be retained by the researcher for a period of 5 years, as required by the university.

Contacts and Questions

If you have questions at any point during your participation in this research, you may contact the researcher at @waldenu.edu. If you want to talk privately about your rights as a participant, you can call the Walden University Research Participant Advocate at 612 312-1210, extension 001 or via e-mail at irb@waldenu.edu. Walden University's approval number for this study is 01-15-13-0092139 and it expires on January 14, 2014.

Appendix J: Demographic Information Form B

Demographic Information Form B

Please fill out and return this page along with the completed three questionnaires in the self-addressed envelope. Please use the same nickname or pseudonym you used on the first Demographic and Information Form so that the researcher can keep your data together and respond back to you at the appropriate time. Upon the researcher's receipt of this information you will be mailed a $30 WalMart gift certificate to compensate you for your time and involvement, after which your contact information will be permanently destroyed and there will be no further record of your involvement in this study. Thank you for your participation in this research project.

Nickname or Pseudonym_____

Address_____

Street Number or PO Box_____

Appendix K: The Client Attachment to Therapist Scales

The Client Attachment to Therapist Scale (CATS; Mallinckrodt, Gantt, & Coble, 1995)

Instructions

These statements refer to how you *currently* feel about your counselor. Please try to respond to every item using the scale below to indicate how much you agree or disagree with each statement: 1= *strongly disagree*, 2= *somewhat disagree*, 3= *slightly disagree*, 4= *slightly agree*, 5= *somewhat agree,* 6= *strongly agree*.

l. I don't get enough emotional support from my counselor.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

2. My counselor is sensitive to my needs.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

3. My counselor is dependable.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

4. I feel that somehow things will work out OK for me when I am with my counselor.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

5. My counselor isn't giving me enough attention.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

6. When I show my feelings, my counselor responds in a helpful way.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

7. I don't know how to expect my counselor to react from session to session.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

8. I can tell that my counselor enjoys working with me.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

9. I resent having to handle problems on my own when my counselor could be more helpful.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

10. My counselor helps me to look closely at the frightening or troubling things that have happened to me.

1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

11. My counselor is a comforting presence to me when I am upset.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

12. I know my counselor will understand the things that bother me.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

13. I feel sure that my counselor will be there if I really need her/him.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.

14. When I'm with my counselor, I feel I am his/her highest priority.
1= strongly disagree, 2= somewhat disagree, 3= slightly disagree, 4= slightly agree, 5= somewhat agree, 6= strongly agree.
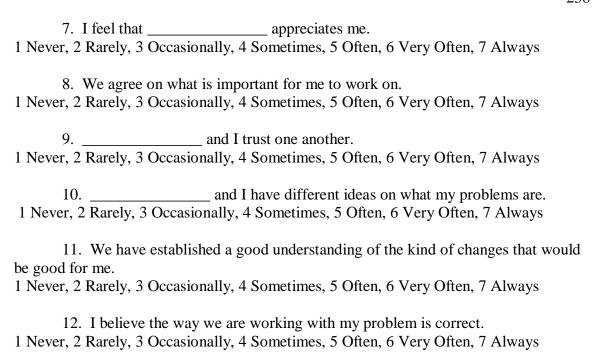
Appendix L: Working Alliance Inventory Short Form-Client

Working Alliance Inventory Short Form-Client (WAI-S; Horvath & Greenberg, 1986, 1989; Tracey & Kokotovic, 1989)

Instructions

On the following page there are sentences that describe some of the different ways you might think or feel about your counselor.

As you read the sentences mentally insert the name of your counselor in place of _____in the text.

Below each statement there is a seven point scale: 1= Never, 2= Rarely, 3= Occasionally, 4= Sometimes, 5= Often, 6= Very Often, 7= Always

For example, if the statement describes the way you *always* feel (or think) circle the number 7; if it never applies to you, circle the number 1. Use the numbers in between to describe the variations between these extremes.

Work quickly, your first impressions are the ones we would like to see.
Please don't forget to respond to every item.

1. _____ and I agree about the things I will need to do in counseling to help improve my situation.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

2. What I am doing in counseling gives me new ways of looking at my problem.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

3. I believe _____ likes me.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

4. _____ does not understand what I am trying to accomplish in counseling.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

5. I am confident in _____ 's ability to help me.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

6. _____ and I are working towards mutually agreed upon goals.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

7. I feel that _____ appreciates me.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

8. We agree on what is important for me to work on.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

9. _____ and I trust one another.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

10. _____ and I have different ideas on what my problems are.
 1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

11. We have established a good understanding of the kind of changes that would be good for me.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

12. I believe the way we are working with my problem is correct.
1 Never, 2 Rarely, 3 Occasionally, 4 Sometimes, 5 Often, 6 Very Often, 7 Always

Appendix M: Your Relationship Research Participation

Your Relationship Research Participation

What you should know about your privacy and confidential information

There are several protections to your privacy and confidentiality built into the research project in which you have participated. The first has to do with the nature of research. The purpose of the research in which you have participated, as is the case with most research studies, is to gather responses from a number of individuals and to subject those responses, as a group, to mathematical analysis so that things like averages and trends can be studied. Therefore, the actual data used in the research does not include your name, address, or any personal identifying information, nor could anyone ever tie the research results to you as a person since your responses to questionnaires are mixed with those of a number of other individuals.

The second set of protections involves how the researcher in this study handled the names, addresses, and other personal contact information from the individuals who participated in the study. As soon as your research packets were received, the questionnaires themselves were separated from your personal contact information so that they could never be included in the research data to be stored and used for the study. In addition to the questionnaires themselves, the only information included in the research study was information such as the number of therapy sessions completed and the age and sex of the individual who completed the questionnaire. That information is essential to the study but does not in any way identify you personally. For instance, the study might use this information to categorize all females who completed the questionnaire.

Finally, your nickname, or pseudonym and your address, since they were not needed as research data, were only used to mail you the second research packet, gift certificates, and this handout. By the time you receive this information, all your personal contact information will have been permanently destroyed. There will be no record of your involvement and no one will know you have been involved unless you choose to disclose that.

About the present research study

You have participated in a research study about relationship feelings and experiences related to a specialized field of study in psychology referred to as "Attachment" research. In this field of study, an attachment is thought of as an emotional bond we have to people with which we are involved in close personal relationships. Children develop attachments toward their caregivers, usually their parents, grandparents, and sometimes older siblings. Those attachments become the relationship eyes with which we think about, feel toward, and have expectations toward people with whom we develop closer personal relationships as adults. Typically those types of relationships

include romantic partners, close personal friends, religious or social mentors, and counselors.

Very little research has been done to help the field of attachment psychology understand how attachments work for adults who are involved in close personal relationships with other adults. The study in which you have been involved focused on attachments clients may develop toward their therapists while involved in a counseling relationship. Answers on the questionnaires you completed will be pooled with those of other participants to allow the researcher to study the question of whether or not being involved in a client-therapist relationship can help influence positive changes in an individual's general feelings about their attachments in close personal relationships.

Whether or not clients develop feelings of attachment toward their therapists or whether their overall feelings about personal relationships changed as a result of their counseling relationship is not typically an issue addressed in counseling. As a client, your concern is whether counseling helped you resolve certain issues. This research does not address whether or not counseling is effective or whether it works. There is a huge volume of research developed over many years showing that counseling works. The purpose of this research is simply to study whether or not that kind of relationship also has a side effect of influencing how clients feel toward people with which they have close relationships compared to how they felt before becoming involved in that relationship.

Your involvement along with that of other clients may provide valuable information that will encourage future research in the field of adult attachments, which could increase our understanding of what goes on in close personal relationships, such as the one that can occur between clients and their therapists. This could help improve the effectiveness of counseling, especially when it focuses on relationship issues, by providing information that help counselors better understand ways in which their own relationships with their clients may be helping clients learn to develop more satisfying attachments to others.

You have participated in a doctoral research project. Because such projects are not published in a public journal or magazine, but are only available for professional researchers, you will not have access to the completed research study. This also protects the anonymity and privacy of both you and the researcher. However, if you would like to read more in the area of attachments, you may be interested in the following books.

Thank you very much for your participation in this research and your contribution to the field of adult attachment research.

Attachment references

Karen R. (1998). Becoming attached. New York: Oxford University Press.

Siegel, D. J. (1999). The developing mind. New York: Guilford Press.

Sperling, M. B., & Berman, W. H. (1994). Attachment in adults. New York: Guilford Press.

Curriculum Vitae

Dennis A. Weeks

Education

PhD (Walden University, Psychology, May 2015)

EdS (Tennessee Technological University, Educational Psychology and Counselor Education, 1996)

MA (Pepperdine University, Psychology, 1979)

Professional Credentials

Licensed Professional Counselor/Mental Health Service Provider (TN, 1996)

National Certified Counselor (1996)

Certified Family Therapist (1996)

Professional Memberships

American Counseling Association

National Counseling Association

International Association of Marriage and Family Counselors

Tennessee Licensed Professional Counselors Association

Employment History

Private Counseling Practice (Cumberland Counseling Services, Cookeville, TN, 1996 to Present)

Outpatient Mental Health Counselor (Plateau Mental Health Center, Cookeville, TN, 1994 to 1996)

Corporate Vice President, Vocational Rehabilitation Counselor (Rehabilitation Services and Vocational Plans, Riverside, CA, 1984 to 1993)