# EXPLORING THE ROLE OF SECONDARY ATTACHMENT RELATIONSHIPS IN THE DEVELOPMENT OF ATTACHMENT SECURITY

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The process by which earned-secures achieve attachment security in adulthood, despite having insecure parent-child relationships in childhood, was the focus of the current study. As internal working models are thought to be formed within relationships, specifically primary attachment bonds (Bowlby, 1969), it was postulated that secondary attachment relationships, specifically those that were positive, had the capacity to revise insecure models of self and other. In the current study, the secondary attachment histories of undergraduates who were earned-secure and continuously-insecure, or insecurely attached since childhood, were compared. A new measure of secondary attachment quality was developed (Questionnaire About Secondary Attachment Figures (Q-SAF)), which was used to measure undergraduates' perceptions of their past and current secondary attachment figures.

Findings indicated that in comparison to continuous-insecures, earned-secures perceived their negative secondary attachment figures in adolescence as less mean. Earned-secures also reported being less dependent upon these figures' approval of them for their self-worth and more secure within these relationships. In adulthood, earned-secures reported more trust and intimacy with their positive secondary attachment figures. Compared to continuous-insecures, earned-secures described their peers as being more empathic and altruistic during childhood and more warm during adolescence; earned-secures also reported less dependency and greater closeness with their peers throughout development. Grandparents were listed the most frequently by earned-secures as positive secondary attachment figures during childhood and this number was more than double that for continuous-insecures. Further, earned-secures described their

grandparents in childhood as being more altruistic and they reported being less concerned with receiving their acceptance. Siblings from childhood were described by earned-secures as being more empathic than those of continuous-insecures, yet earned-secures also reported greater dismissing attachment to their siblings and cousins in childhood. Significant others from adolescence were rated by earned-secures as being less mean than those of continuous-insecures and earned-secures reported being more securely attached to these relationships in both adolescence and adulthood. Implications of the current study and directions for future research are presented.

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## LIST OF ABBREVIATIONS

AMB = Ambivalent attachment

ANX-AMB = Anxious-ambivalent attachment

ANX-AVD = Anxious-avoidant attachment

AVD = Avoidant attachment

CONT-INSEC = Continuously-insecure attachment

CONT-SEC = Continuous-secure attachment

CURR-INSEC = Currently-insecure attachment

DIS = Disorganized attachment

DISMISS = Dismissing attachment

ERN-SEC = Earned-secure attachment

FEAR = Fearful attachment

INSEC = Insecure attachment

IWM = Internal working model

PREOCC = Preoccupied attachment

SEC = Secure attachment

#### CHAPTER 1

#### **INTRODUCTION**

### Attachment Theory

Upon leaving the womb, an infant enters a world of unknowns. That infant who previously was kept safe within the confines of the mother's womb comes to interact with a world where safety is not guaranteed. Through experiences with parents, relatives, and other important figures, the life of an infant begins to take shape. Perhaps their needs are met by those around them, perhaps they are not. They may grow up in a loving, trusting environment where important others can be depended upon or they may experience a world that is unpredictable, hurtful, and lonely. As the child matures, experiences accumulate, knowledge and understanding grow, and an identity may develop. Although this child may grow in size and intellect, this child is largely impacted by her or his upbringing. The ways in which this child perceives herself or himself, interacts with the world, and copes with emotions is a continuation of early childhood experiences. The adult who was once this child understands and interacts with the world, because of what she or he has learned over a lifetime. Adult behaviors, feelings, and cognitions follow from personal histories and are reflections of lifetime experiences with self and important others.

Several major psychological theories have focused upon the significance of early parent-child relationships on later functioning. Object relations theorists argue that children internally represent formative experiences with parents and that these cognitive models contribute to an emerging sense of self, expectations of interpersonal experiences, and patterns of relational behaviors (Teyber, 1997). Similarly, Harry Stack Sullivan (1968), who developed the interpersonal approach to psychotherapy, suggested that personality, self-perception, coping strategies, and expectations of future relationships are learned from repeated experiences with

parents in childhood; these thoughts and behaviors are subsequently generalized to other relationships throughout life. Additionally, family theorists explore family of origin issues, such as roles, rules, organizational structures, and qualities of relations between family members, in order to explore the origins of adult symptomatology and improve dysfunctional family dynamics (Teyber, 1997).

Of particular interest, John Bowlby (1969) proposed a theory of attachment that highlighted the long-reaching effects of childhood security with parents on later personal and relational functioning. Bowlby suggested that *internal working models* (IWMs), or mental representations of oneself in relation to one's attachment figures, are developed in early parent-child relationships and IWMs are expected to be relatively permanent over time. IWMs characterize both self-perceptions and views of others within relationships. They also reflect the quality of attachment bonds, especially those with maternal figures.

Attachment theory is based on ethological observations of infant animals maintaining proximity to parents in order to promote survival (Bowlby, 1969). From an evolutionary standpoint, Bowlby suggests that humans, like other animals, have multiple behavioral systems that strengthen the propagation and survival potential of a species. Through natural selection, those behavioral systems that have been the most successful in protecting a species and producing offspring are thought to persist. According to Bowlby, *attachment behavior*, that concerns the nurturing and protection of young animals and humans, is an example of a system of behavior that serves evolutionary purposes. Given that animal and human young are highly vulnerable and incapable of caring for themselves, they are completely dependent upon their parental figures for survival (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969). In order to increase the likelihood of an infant remaining safe, the attachment system encourages an

infant to maintain proximity to and attach to parental figures. A parallel behavioral system is activated in parental figures (i.e., the *caregiving system*) that facilitates the protection and nurturing of an infant.

Observations of rhesus monkeys demonstrate the survival value and cross-species occurrence of attachment bonds (Hinde, as cited in Bowlby, 1969). When rhesus monkeys are between two days to two weeks old, they appear to attach to particular maternal figures and demonstrate inclinations towards these maternal figures over other monkeys with which they interact. Rhesus monkey juveniles will additionally use their maternal figures as *secure bases* to explore the environment and return to following exploration or the experience of threat. Similar to infant humans, the bonds rhesus monkeys develop with parental figures provide the safety and security needed for healthy development. The validity of generalizing ethological observations to human relationships is highlighted by Bowlby (1969):

At first sight it might appear that there is a sharp break between attachment behavior in man and that seen in subhuman primates. In the latter, it might be emphasized, clinging by infant to mother is found from birth or very soon afterwards, whereas in man the infant only very slowly becomes aware of his mother and only after he has become mobile does he seek her company. Though the difference is real, I believe it is easy to exaggerate its importance (p. 198).

For animal and human infants, attachment behavior is argued to occur naturally, to result from systems of behavior, and to serve the goal of maintaining specific relationships with others who are important for survival (Bowlby, 1969).

Thus, a major component of attachment behavior is the tendency of young infants to maintain proximity to parental figures (Bowlby, 1969). For instance, immediately upon birth, neonates will cry until their needs are sufficiently met by caregivers. Crying is considered to be a signaling behavior that is goal-directed. Once emitted by an infant, it is expected that an attachment figure will approach the infant and exhibit caregiving behavior. Other behaviors, such

as sucking of the mother's breast, clinging, and rooting help to strengthen the mother-infant bond. By as early as two-weeks of age, neonates are able to discriminate stimuli associated with attachment figures (e.g., smell) from those connected to strangers (Harper, 1989). Additionally, between 1 and 3 months, infants begin to smile in response to visual stimuli and subsequently start to coo. Caregivers find pleasure in observing these behaviors, which will likely increase engagement of caregivers with infants. Over the course of infant development, attachment behavior becomes more purposeful (Ainsworth, 1989). Between four and 12 months of age, infants will start to exhibit movement into the vicinity of the mother figure and signaling behaviors (e.g., reaching arms towards caregiver) will increase in frequency. As infants mature and cognitive processes become more complex, infants gradually develop the ability to remain mentally proximal to primary attachment figures through the construction of IWMs, despite the physical absence of their caregivers. The maintenance of these mental images appears to contribute to the ability of children to feel secure following a caregiver's departure.

IWMs of parents and of parents in relation to the child begin to develop during the first year following birth (Ainsworth, 1989). Characteristics of attachment figures and of their behaviors towards the child are incorporated into IWMs and persist in their internalized form throughout a lifetime (Bowlby, 1988b). Repeated experiences with attachment figures, in which perceptions and expectations are communicated through actual behaviors and verbalizations directed at the child, contribute to the child's forming self-image. A child's self-worth is a construction of the internal representations that attachment figures hold of the child. The IWMs that are created within the child guide the child's feelings and behaviors towards attachment figures and mold the child's expectations of how she or he deserves to be treated (Ainsworth, 1989; Bowlby, 1988b). IWMs remain largely unconscious, but strongly influence those

perceptions the child holds of herself or himself as a social being (Bowlby, 1988b). Once IWMs have solidified over the course of repeated experiences with caregivers, IWMs are expected to become integrated into a child's personality and to contribute to future expectations and behaviors within relationships (Collins & Read, 1994). Different types of parent-child relationships will produce distinctive IWMs.

As a way of measuring the differing attachment qualities of parent-child relationships, Ainsworth and colleagues (1978) developed the strange situation procedure. This experimental set-up consists of a series of situations in which an attachment figure and child are in close proximity, then separated, and finally reunited. These circumstances, which parallel happenings in daily life, are thought to elicit and make visible children's attachment styles to their caregivers. Several different episodes are employed to observe attachment behavior. For instance, the extent to which children explore their surroundings and engage in play when their attachment figure is present and absent are observed. Researchers also focus upon children's responses to a stranger when the child is proximal to and separate from her or his attachment figure. Lastly, children are observed when reunited with their attachment figure and their responses are compared to those exhibited when reunited with a stranger.

From the observations acquired through the strange situation research with infants and mothers, Ainsworth and colleagues (1978) identified three attachment styles that characterize the behaviors of parents and infants within differing attachment relationships. The largest percentage of infants (i.e., 66%) fell into the *securely attached* (SEC) group. SEC infants explore their environment while using their mothers as secure bases. The parents of SEC infants provide care in a sensitive, consistent, and warm manner. When separated from their mothers, SEC infants appear to feel the least threatened, in comparison to infants in the other attachment groups, as

crying and distress is demonstrated the least frequently. When negative emotions are aroused by the mothers' absence, however, SEC infants are able to be calmed by their mothers' nurturance when she returns. Moreover, SEC infants tend to seek out their mothers' caregiving when distressed

SEC infants are the least likely to evidence psychological and behavioral problems later in childhood (Pierrehumbert, Miljkovitch, Plancherel, Halfon, & Ansermet, 2000). Additionally, compared to the other attachment groups, SEC 12-year-olds evidence fewer anxiety and depressive symptoms than their peers who were not SEC in infancy (Muris, Mayer, & Meesters, 2000).

On the other hand, parent-infant relationships that are characterized by unavailable, rejecting, and/or intrusive parenting are considered to be *insecure* (INSEC; Ainsworth et al., 1978). Several types of INSEC bonds, that differ with regard to infant and parent behaviors, were identified by Ainsworth and colleagues (1978). Out of all of the attachment groups, the fewest number of infants (i.e., 12%) fell into the *anxious-ambivalent attachment* (ANX-AMB) category. The mothers of ANX-AMB infants are minimally attentive to their infants' needs. ANX-AMB infants cry frequently, possibly because they are uncertain of their mothers' dependability. In unfamiliar circumstances, ANX-AMB infants are less likely than SEC infants to turn towards their mother for security and are less likely to engage in exploratory play. They may appear ambivalent about maintaining close bodily contact to their mothers; however, they become distressed if they are not held when they desire. When their mothers depart, these infants become anxious quickly and their anxiety appears to be intense. An ANX-AMB infant is also less easily soothed by her or his mother upon her return. ANX-AMB infants demonstrate clinging and resistance behaviors.

According to Ainsworth and colleagues (1978), ANX-AMB infants who exhibit passive-aggressive behavior appear to have poorer prognoses than ANX-AMB infants who demonstrate minimal passivity. Children who are ANX-AMB exhibit greater immaturity compared to their peers at age 5 (Pierrehumbert et al., 2000). At age 12, these children evidence greater negative affect than do SEC children (Muris et al., 2000).

The third group of infants (i.e., 22%) identified by Ainsworth and colleagues (1978) exhibited anxious-avoidant attachment (ANX-AVD) behavior towards their mothers; these infants are also INSEC to their caregivers. Several studies have found the mothers of ANX-AVD infants to be the most rejecting (e.g., Ainsworth et al., 1978; Main 1973, as cited in Ainsworth et al., 1978; Main, 1977). As Ainsworth and colleagues observed (1978), these mothers avoid nurturing their infants through close bodily contact, are unresponsive to their infants' signals, and demonstrate frustration, annoyance, and anger towards their infants despite unsuccessful attempts to conceal these emotions. Subsequently, their attempts to suppress feelings may contribute to a rigidity of emotional expression that is directed towards the infants, as well as a rigidity in behaviors. Intimate experiences with these mothers are likely not pleasurable nor fulfilling for ANX-AVD infants, as they are frequently handled roughly by their mothers. Anger may be frequently experienced by ANX-AVD infants, as a result of the inadequate nurturing experienced from their mothers. These infants may doubt whether their mothers will be accessible when they need them and whether they will attend to their needs. During the strange situation procedure, which is a high anxiety-provoking situation, ANX-AVD infants cry infrequently when their mothers are absent. When mothers and infants are reunited, ANX-AVD infants appear unconcerned by their mothers' presence and detached from their mothers. This active avoidance of their mothers appears to minimize the infant's anxiety, perhaps because they

avoid experiencing their mothers' rejection. Interestingly, when ANX-AVD infants are separated from their mothers in a less anxiety producing situation, these infants are more distressed and anxious than are SEC infants. Thus, ANX-AVD infants appear to engage in an approachavoidance dance with their mothers.

ANX-AVD five-year-olds are more likely than SEC children, but as likely as ANX-AMB children, to be diagnosed with panic disorder, generalized anxiety disorder, social phobia, separation anxiety disorder, traumatic stress disorder, and/or depression (Muris et al., 2000). Further, ANX-AVD children demonstrate a significantly higher tendency towards exhibiting externalizing problems, such as being aggressive towards their peers, when compared to SEC children (Pierrehumbert et al., 2000; van IJzendoorn, Sagi, & Lambermon, 1992). Internalizing and somatoform problems are also prevalent (Pierrehumbert et al., 2000).

A fourth attachment classification was later identified by Main and Solomon (1990) in order to account for those infants (i.e., 15%; van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999) whose behaviors during the strange situation procedure did not resemble those of SEC, ANX-AMB, or ANX-AVD infants. These infants were initially considered to be *unclassifiable* (Main & Weston, 1981), but were subsequently labeled *disorganized* (DIS; Main & Solomon, 1990) due to their incomprehensible and disorganized behavior upon reunion with and separation from attachment figures. In contrast to infants from other attachment categories, DIS infants are heterogeneous in their stress responses and are inconsistent in their individual coping strategies. DIS infants are similar, however, in that they demonstrate disorganized behavioral sequences that appear to be devoid of goals, rationales, or purposes (Main & Solomon, 1990). For example, a DIS infant may quickly approach her parent upon reunion, but

withdraw suddenly and move towards a wall, where she will stand motionless and expressionless.

The parents of DIS infants appear to exhibit behaviors that scare and confuse their infants. Some of these parents maltreat their infants through physical, emotional, and/or sexual means (van IJzendoorn et al., 1999). Other parents, however, instill fright in their infants indirectly and unintentionally through their own recurrent experience of fear (Main & Hesse, 1990). These parents have yet to resolve their own past traumatic experiences and/or the significant loss of their attachment figure (e.g., feeling responsible for their attachment figure's death) and thus exhibit anxiety, stress, and fear in response to memories and internal and/or external triggers. Given that the causes of these stress responses are not clear to infants and the fearful behaviors are not predictable, DIS infants become frightened, anxious, and confused by their parents' behaviors. These parents may exhibit unusual voice intonations, sudden and/or invasive movements, and/or frightening speech content. At the same time as DIS infants are frightened by their parents' behaviors, however, they wish to be kept safe by their parents due to their attachment bonds (Main & Hesse, 1990). This paradoxical situation is difficult for DIS infants to resolve and likely leads to significant anxiety.

As a result, the coping strategies DIS infants employ for dealing with this overwhelming stress become disorganized (Main & Hesse, 1990). Some of these disorganized behaviors may include simultaneously exhibiting proximity and avoidant behaviors (e.g., reaching towards parent while sharply averting gaze), failure to move towards parent when frightened, stereotypical maladaptive behaviors (e.g., repeated rocking), physical immobility and/or dazed expression for substantial period of time, strong fear exhibited towards parent upon reunion, and

disoriented behavior in response to parent's arrival (e.g., raising hands to mouth and appearing confused; Main & Solomon, 1990).

DIS infants have been found to show more anger, resistance, and hostility towards their parents than SEC infants and their anger appears to increase significantly between the ages of two and three (Kochanska, 2001; van Bakel & Riksen-Walraven, 2002). At two years of age, DIS children demonstrate higher anger than both SEC and ANX-AMB children (Kochanska, 2001). In addition, 71% of five-year old children who act in an aggressive and hostile manner towards their preschool peers have been found to be DIS in infancy (Lyons-Ruth, Alpern, & Repacholi, 1993). Interestingly, later aggressive behavior appears to be affected by an interaction of DIS infant attachment and maternal psychosocial problems. Specifically, DIS children appear to be at heightened risk of increased aggression towards other children if their mothers have current depressive symptoms, a history of psychiatric hospitalizations, and/or a history of childhood maltreatment. Children who were DIS in infancy are additionally more likely to exhibit maladaptive behaviors during school at age seven, when compared to children who were SEC or ANX-AVD in infancy (Lyons-Ruth, Easterbrooks, & Cibelli, 1997).

#### Adult Attachment

Throughout a lifetime, the need to feel bonded to an important other in a close and emotional manner persists (Bowlby, 1988a). As Bowlby (1969) attests, attachment serves a "vital role...in the life of man from the cradle to the grave" (p. 208). The specificity and function of these attachment bonds change, however, as the individual matures. Children who once exhibited numerous behaviors aimed at remaining close to parental figures for safety and comfort start to form increasingly significant bonds with peers as they grow older. Bowlby (1969) postulates that this phenomenon may be due to a change in the behavioral system fueling

attachment responses or a heightened interest in other experiences and individuals, thus weakening the necessity of proximity to maternal figures.

Adolescents and adults are motivated to develop sexual pair bonds in addition to their existing parental bonds (Ainsworth, 1989). As hormone levels, sexual attraction, and the desire for companionship with a romantic partner are elevated in adolescents and adults, energy tends to be directed towards finding a partner for romantic, sexual, and/or intimate relations (Ainsworth, 1989; Bowlby, 1969). Adult-adult bonds, as in the form of romantic relationships, allow for mutual attachment and caregiving. Ainsworth (1989) refers to long-lasting sexual pair-bond relationships among adults as being "a reciprocal give-and-take" (p. 713). Partners will depend upon each other at times to provide support, validation, wisdom, and safety. Other times, partners will be asked to provide such caring and security for their partners. A unique aspect of adult attachment relationships is the activation of the reproduction behavioral system (Ainsworth, 1989; Bowlby, 1969). From an evolutionary stance, adults are motivated to become attached to each other, not only for security, but also to further propagation of their genes and promote survival.

Hazan and Shaver (1987) were the first researchers to empirically test Bowlby's (1969) contention that attachment and IWMs persist from childhood into adulthood. The attachment styles identified by Ainsworth and colleagues (1978) were applied to romantic adult bonds and similar percentages of individuals have been found to fall into the three attachment categories; 55% to 56% of adults were *secure* (SEC), 15% to 20% *ambivalent* (AMB), and 24% to 30% *avoidant* (AVD) (Feeney & Noller, 1990; Hazan & Shaver, 1987). Methodological approaches differ, however, between the assessment of infant and adult attachment. Instead of using the strange situation procedure, as is commonly used in infant attachment research, adult attachment

researchers rely on self-reports and structured interviews for gathering attachment-related information (e.g., Crowell & Treboux, 1995).

#### Secure Attachment

SEC adults view themselves in positive terms, report high self-esteem, and have fulfilling relationships (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987). They feel confident in social situations and are friendly towards others (Collins & Read, 1990). In relationships, SEC adults feel they have control over life outcomes. SEC love relationships last significantly longer than INSEC relationships, despite the findings that women with SEC, AVD, or AMB male partners view their relationships in a similarly positive manner (Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994). After a year and a half of marriage, SEC adults report acting less aggressively during disagreements and experiencing fewer arguments with their spouses than do INSEC adults (Crowell, Treboux, & Waters, 2002).

SEC adults perceive others positively and describe others as kind, having good intentions, and helpful (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987). Several studies indicate that SEC individuals view their partners as friends (Feeney & Noller, 1990; Hazan & Shaver, 1987). SEC adults trust others and are accepting and supportive of their partners (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987). These individuals, who feel comfortable with intimacy and experience minimal anxiety in their relationships, expect that others will provide them with support (Collins & Read, 1990; Crowell et al., 2002). SEC adults are also less likely to have a personality disorder than are INSEC adults (Brennan & Shaver, 1998).

In relationships, SEC adults adhere to their beliefs and are able to modify their behaviors across circumstances (Collins & Read, 1990). Adults who feel more comfortable with

interpersonal closeness are likely to view love in romantic terms and unlikely to perceive love in a practical manner. SEC and AVD adults appear to be similarly attracted to and preoccupied with their partners and to express comparable desires of union and reciprocation with their partners (Hazan & Shaver, 1987). A tendency has been demonstrated for individuals of all attachment styles to prefer SEC romantic partners over INSEC ones and to view their partners as being more SEC than INSEC (Latty-Mann & Davis, 1996). Nevertheless, SEC adults tend to perceive their partners as being the most SEC.

#### Insecure Attachment

Despite the heterogeneity of the INSEC category, there are commonalities between AMB and AVD romantic relationships. Both AMB and AVD individuals, for instance, report feeling more unhappy within their romantic relationships than do SEC individuals (Hazan & Shaver, 1987). Previous research has found that AVD men and women and AMB men are the least likely to express themselves verbally and nonverbally within romantic relationships (Tucker & Anders, 1999). Additionally, AVD men and AMB women tend to minimally discuss deep and personal thoughts, feelings, and behaviors with their partners.

There is also evidence for AVD-AMB matching among dating couples (Collins & Read, 1990; Kirkpatrick & Davis, 1994; Simpson, 1990). Adults who feel uncomfortable with intimacy are frequently paired with adults who are anxious about being abandoned and rejected by their romantic partners. Romantic partners also appear to be paired on their comfort levels with emotional closeness; adults who are uncomfortable with intimacy are often in relationships together (Collins & Read, 1990).

#### Ambivalent Attachment

AMB adults experience high anxiety within romantic relationships, as they fear being unloved and abandoned by their romantic partners (Collins & Read, 1990). They desire extreme closeness with their love partners and are highly dependent upon their romantic partners; however, their limited faith in their partners prevents them from being able to fully depend upon them (Feeney & Noller, 1990; Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994; Tucker & Anders, 1999). AMB adults tend to approach love in an obsessive manner and feel that others are unable to commit to relationships to the extent they desire (Collins & Read, 1990). These adults doubt themselves and feel that others do not appreciate them fully, nor understand them. Thus, they tend to feel extremely lonely within their relationships (Hazan & Shaver, 1987).

Enmeshment and unfilled needs have been reported by AMB adults (Feeney & Noller, 1990; Hazan & Shaver, 1987).

AMB adults report being highly attracted to and jealous of their partners, only moderately trusting of their partners, and emotionally labile within their romantic relationships (Collins & Read, 1990; Hazan & Shaver, 1987). Women who date AMB men perceive their relationships to be more conflictual than those involving AVD or SEC men (Kirkpatrick & Davis, 1994). On the other hand, AMB adults report limited love towards their partners and minimal commitment to their relationships. In contrast to AVD men, however, AMB men appear to be more committed to their long-term dating relationships and to exhibit greater passion towards their partners.

AMB adults have problems comprehending social events (Collins & Read, 1990). In interpersonal situations, AMB adults feel less assured and act less assertively than SEC adults. In social contexts, AMB adults tend to be conforming and devaluing of their belief systems.

#### Avoidant Attachment

Adults who are AVD view themselves more negatively than SEC adults (Collins & Read, 1990). Compared to adults who are SEC, AVD adults feel less assured in social contexts and are less assertive. AVD adults are less likely to report experiencing love in their past or current romantic relationships when compared to SEC and AMB adults (Feeney & Noller, 1990). AVD adults experience love as being minimally intense and fear intimacy with their partners (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994).

Partners who are AVD appear to characterize their romantic experiences in negative terms. They experience emotional instability, jealousy, and a lack of trust within their romantic relationships (Feeney & Noller, 1990; Hazan & Shaver, 1987). Adults who are AVD feel that others are not available for support (Collins & Read, 1990). Compared to SEC adults, AVD adults are less likely to view their partners as friends (Hazan & Shaver, 1987). AVD adults, however, report experiencing minimal anxiety in their relationships; a finding that is perhaps related to their active denial of negative thoughts and feelings (Bartholomew, 1990; Collins & Read, 1990).

AVD adults have difficulty understanding human interactions and tend to view others as being minimally altruistic (Collins & Read, 1990). They are less accepting of their partners' faults than are both SEC and AMB adults (Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994). In social situations, AVD adults are likely to dismiss their beliefs and conform to social pressures (Collins & Read, 1990).

#### Bartholomew's Adult Attachment Classifications

In evaluating past attachment research, Bartholomew (1990) observed that the defining characteristics of AVD adults across studies were not consistent. When attachment self-reports

were employed, AVD adults were those that desired attachment, but feared intimacy; whereas, when an attachment interview was used (i.e., Adult Attachment Interview (AAI); George, Kaplan, & Main, 1985), AVD adults were those who denied the need or desire for attachment relationships. From these findings, Bartholomew concluded that two types of AVD adults exist; those that are *fearful* of attachment (FEAR) and those that are *dismissing* of attachment (DISMISS). Bartholomew proposed a new model of attachment that took into consideration this differentiation of the AVD group, as well as the attachment styles previously identified in past research (i.e., SEC and AMB; Ainsworth et al., 1978; George et al., 1985; Hazan & Shaver, 1987). Bartholomew renamed the AMB group, which consists of adults who hold negative selfviews and are highly concerned with being accepted by others, as *preoccupied* (PREOCC). These four attachment classifications (i.e., FEAR, DISMISS, PREOCC, SEC) are distinguished by the negativity and/or positivity of self- and other-IWMs.

FEAR adults report having experienced rejection from their parents in childhood, particularly from their mothers (Bartholomew, 1990; Brennan & Shaver, 1998). Currently, they desire interpersonal relationships, but are afraid of the implications as they do not trust others and they perceive others as unsupportive, cold, and unavailable (Bartholomew, 1990). FEAR adults may be afraid of becoming close to others, because they may fear others' rejection. Thus, these adults appear to avoid intimacy out of fear and out of the sense that they are not worthy of others' affection and support. FEAR adults will likely avoid social interactions with those they fear will reject them. Additionally, they are four times as likely to have a personality disorder than not; Avoidant and Schizoid personality disorders are the most common (Brennan & Shaver, 1998).

FEAR men and women report decreased satisfaction with and fewer positive interactions within their dating relationships (Carnelley, Pietromonaco, & Jaffe, 1996). Caretaking behavior directed towards romantic partners appears to be minimally present among FEAR individuals (Carnelley et al., 1996; Kirkpatrick & Davis, 1994). Interestingly, FEAR women are more likely to marry FEAR or PREOCC men.

Adults defined as DISMISS also report having experienced rejection from their parental figures during childhood. In contrast to FEAR adults, however, DISMISS adults developed an IWM of the self that is self-sufficient, worthy, and seemingly unaffected by negative experiences (Bartholomew, 1990). DISMISS adults report minimal need for social interactions; although, their responding is marked by denial (Bartholomew, 1990). As a result of lacking insight into their social desires, DISMISS adults are unaware of the distress they are experiencing from limited social connections and decreased romantic intimacy (Bartholomew, 1990; Crowell et al., 2002). Fewer negative life events following marriage have been reported by DISMISS adults compared to PREOCC adults (Crowell et al., 2002). It appears that about 80% of DISMISS adults have at least one personality disorder; the diagnosis of Schizoid was found to be the most prevalent (Brennan & Shaver, 1998).

Adults who are PREOCC experienced negative childhoods, in which their parents treated them in an inconsistent and cold manner (Bartholomew, 1990). As children, a significant number of PREOCC adults encountered parental separation or divorce (Riggs & Jacobvitz, 2002). In addition, they frequently report a history of being physically and/or sexually abused by a relative during childhood. In their current relationships, PREOCC adults are extremely dependent on others and rely on others' approval to provide them with any sense of worth. In fact, adults who are PREOCC are especially likely to evidence a Dependent personality disorder and report

suicidal ideation (Brennan & Shaver, 1998; Riggs & Jacobvitz, 2002). There is a tendency for PREOCC women to marry FEAR men; however, these relationships are likely unfulfilling and not satisfying for these partners (Carnelley et al., 1996). PREOCC, among married women and men and among dating men, is associated with less positive communication between partners, less intimacy, and relationship dissatisfaction (Carnelley et al., 1996; Crowell et al., 2002).

PREOCC women and men are less likely to meet their married partners' needs and to care for them (Carnelley et al., 1996). Exclusively among PREOCC dating women, an imbalance between caregiving given and received has been observed. While these women exhibit high levels of caregiving towards their romantic partners, substantially less caregiving is received from their partners. Additionally, PREOCC husbands tend to receive minimal caretaking from their wives (Carnelley et al., 1996).

SEC adults are similar to those identified by Ainsworth and colleagues (1978) and Hazan and Shafer (1987). They experienced warm, supportive, and consistent upbringings (Bartholomew, 1990; Brennan & Shaver, 1998). SEC adults perceive themselves and others positively, and have satisfying and healthy adult relationships (Bartholomew, 1990).

# Continuity of Attachment

Clearly, from both the child and adult attachment literature, attachment is related to overall well-being and interpersonal functioning. A question that still remains, however, is how consistent attachment is over time. Bowlby (1969) contends that attachment to important figures tends to persist over a lifetime as, "bonds often develop rapidly and, once made, are apt to be long-lasting" (p.116). Using an ethological example, Bowlby (1969) cites the behavioral patterns of canaries building nests as illustrating the lasting impact of childhood experiences on later responses. Bowlby described how canaries will build nests of inappropriate building materials if

these are all that are made available to them. Likewise, canaries will continue building with these insufficient resources throughout their life, even if more useful equipment later appears. As with canaries, attachment theorists argue, therefore, that response patterns developed early in life tend to persist and maintain as an organism matures, despite the later appearance of more functional tools. Bowlby remarks that, "the precise form that any particular piece of behaviour takes and the sequence within which it is first organised are thus of the greatest consequence for its future" (p. 160). Behavioral sequences that arise early in development tend to endure despite the absence of the conditions that propelled their development.

In fact, Hazan and Shaver (1987) found support for Bowlby's argument (1969) that a continuity of attachment styles tends to exist from infancy into adulthood; although, this continuity appears to abate as individuals age. For instance, by evaluating descriptions of childhood relationships with parents and parents' relationships with each other, Hazan and Shaver were able to predict current adult attachment styles more often than by chance alone. The predictability of adult attachment styles from early childhood relationships with parents were highest among college students in comparison to older adults. This finding suggests that the experience gained from additional significant relationships in time may have helped INSEC older adults to modify their IWMs, thus changing their styles of attachment (Collins & Read, 1994). This hypothesis requires further exploration.

Nevertheless, perceptions of parental relationships in childhood appear to be associated with thoughts, feelings, and behaviors exhibited in adult romantic relationships (Collins & Read, 1990). Parental relationships that are remembered as warm and accepting are associated with current perceptions of others as being dependable and available for support (Collins & Read, 1990; Hazan & Shaver, 1987). Adults who report SEC childhood relationships with mothers and

fathers, as well as positive interactions between parents, are not likely to feel anxious about their partners' commitment or intentions towards them (Collins & Read, 1990). Thus, these individuals are more likely to be SEC as adults.

SEC childhood relationships with mothers are specifically related to a greater comfort with intimacy in adult romantic relationships (Collins & Read, 1990). Increased self-worth, interpersonal kindness, and awareness of others, along with a tendency to view others as helpful, trusting, and assertive, are observed among adults who recount warm experiences with their mothers. Dating and married women who recount more positive childhood experiences with their mothers are more likely to provide their current romantic partners with care, receive similar caretaking from their partners, and have their needs attended to by their partners; positive relationships with fathers when growing up appear not to have similar effects (Carnelley et al., 1996). Although not statistically significant, the engagement in caretaking and the meeting of needs by a romantic partner is positively correlated with having positive childhood experiences with an opposite-sex parent.

In contrast, adults who recount mothering experiences that were cold and inconsistent and fathering treatment that was unfair and unsupportive tend to be AMB as adults; adults who are AVD are more likely to report being separated from their mothers during childhood and to feel that their mothers rejected them (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987). As adults, decreased trust in others for support and availability is associated with feeling rejected by parents during childhood. The children of unaccepting and cold fathers are found to grow up into adults who are distrusting, incapable of standing up for their beliefs, and unable to control their lives. Increased negative feelings towards self and low social confidence are prevalent among adults with ambivalent and inconsistent mothers.

Bowlby (1969) suggested that IWMs may change after the occurrence of a significant life event. Some of these circumstances include getting married, having a baby, or experiencing the death of a loved one. Bowlby theorized that this modification in IWMs is necessary and occurs in most cases. He also asserted, however, that the revision of IWMs may be difficult, time-consuming, and flawed and that IWMs sometimes do not change and remain in their original form. Crowell and colleagues (2002) tested the stability of attachment classifications three months prior to and 18 months following wedding ceremonies and found support for the continuity of attachment. Seventy-eight percent of partners were classified as SEC, PREOCC, or DISMISS at both times. This finding goes counter to Bowlby's (1969) notion that change in attachment is likely following marriage. Nevertheless, the fact that 22% of partners changed their attachment style pre- and post-wedding is still promising, as it suggests that change in attachment is possible within a supportive relationship in adulthood.

# Lawful Discontinuity

Although IWMs of self and others tend to resist change as an individual matures, IWMs are able to be modified and revised (Bowlby, 1988a; Collins & Read, 1994). Belsky and Pensky (1988) suggest that discontinuity in attachment is as "lawful" as continuity and is most likely to occur when positive relational experiences throughout life "deflect a developmental trajectory" (p. 209). It is theorized that long-lasting relationships that are emotionally salient have the potential to change mental representations of attachment, given the presence of corrective experiences (Collins & Read, 1994). In order to catalyze change, an individual must have experiences within these relationships that disconfirm their existing IWMs of self and others. These relationship experiences help individuals to develop positive self- and interpersonal-views, adopt others' perspectives, develop nurturing caregiving behaviors, and learn to cope with

emotions more effectively (Belsky & Pensky, 1988). Revision of IWMs may also be motivated and/or encouraged by intrapsychic exploration and the acquisition of personal insight, alternative perspectives, and resolution (Main, 1991). This change process, however, is expected to be difficult and slow-moving and the individual is likely to rely on old IWMs until new IWMs have been fully adapted and integrated into one's mental representations (Collins & Read, 1994).

In fact, changes in attachment functioning have been documented in young children and this discontinuity appears to be associated with parental factors. Bar-Haim, Sutton, Fox, and Marvin (2000) observed an inconsistency in attachment from when children were one to two years old to when they reached four-and-a-half years of age. Those children whose attachment changed were more likely to have mothers who had experienced negative life events, such as instability in finances, a residence change, serious illness, and/or a family member's death, than were children who remained SEC. In contrast, the mothers of consistently SEC children reported the most life events that were positive; some of these events included a positive job change, social change, and/or living conditions change.

Other studies have reported similar influences of parental characteristics on childhood attachment stability. For instance, a significant decrease in negative emotionality between the ages of three and nine months appears to be associated with mother-infant interactions, a mother's personality, and the quality of the parents' marriage (Belsky, Fish, & Isabella, 1991). Specifically, infants whose negative affect decreased over time tended to have maternal experiences that were positive, responsive, and sensitive. Mothers of these infants tended to have high self-esteem and to be involved in marriages with limited conflict and ambivalence. On the other hand, infants who developed high negative emotionality by nine months of age, compared to those who consistently exhibited low negativity, tended to have fathers who were less aware

of and attentive towards others' feelings and less involved in caring for them; these fathers also perceived their marital relations more negatively prior to the birth of their infants. Incidentally, Park, Belsky, Putnam, and Crnic (1997) observed that children who initially demonstrated high negative affect were more affected by the quality of parenting when they were two-years or three-years-old than were children who were low in negative emotionality as infants. A stability of low negative affect, specifically between three and nine months, was related to equal caretaking involvement between parents (Belsky et al., 1991).

Between childhood and adulthood, a discontinuity of attachment has also be documented. Moller, McCarthy and Fouladi (2002) found that about 34% of their undergraduate sample evidenced different adult attachment styles from those reported in childhood. Regardless of whether maternal or paternal attachments were considered, an equal proportion of undergraduates developed SEC (i.e., 16%-17%) and INSEC (i.e., 17%) in adulthood. Additionally, similar percentages of individuals remained consistently SEC (i.e., 32%-33%) and INSEC (i.e., 33%-34%) throughout their lives. Why some individuals are able to develop security while others are not deserves research and clinical attention.

# Earned-Security: Theory and Research

Main (1994) suggests that adults who experienced difficult upbringings and developed INSEC relationships during childhood have the capability to form SEC relationships with others during adulthood. It appears that in the context of a safe and trusting relationship (e.g., therapeutic, marital), individuals can start to express hurtful feelings and discuss negative thoughts associated with unpleasant attachment experiences (Bowlby, 1988a; Crowell et al., 2002). As individuals attend to, experience, and gain understanding of their emotions associated with painful childhood memories, they will likely make progress towards restructuring their

cognitions, becoming more behaviorally and cognitively flexible, and engaging in more healthy behaviors (Bowlby, 1988a). Corrective emotional experiences within these supportive relationships are thought to help individuals build secure IWMs and form a more coherent understanding of their attachment experiences (Bowlby, 1988a; Main, 1994).

Main (1994) draws connections between how adults discuss their early experiences with attachment figures, or specifically their discourse style, and the quality of their adult attachment bonds with their own children. It is argued that parents who produce childhood narratives that are coherent and reliable have SEC infants; whereas, parents who describe their childhood relationship with parents in incomplete, inconsistent, and/or illogical ways have INSEC infants. Main further suggests that adults who engage in coherent discourse about their negative early attachment relationships, including multiple examples and explicit detail, are as likely to have SEC children as those who coherently discuss their positive upbringings. As an outcrop of Main's discourse theory, Pearson, Cohn, Cowan, and Cowan (1994) refer to adults who are able to develop SEC IWMs despite INSEC childhoods as *earned-secure* (ERN-SEC) and adults who experienced SEC in childhood and adulthood as *continuous-secure* (CONT-SEC). Despite these theoretical formulations, the process by which ERN-SEC develops has not been adequately explored in an empirical manner.

Research into ERN-SEC is in its infancy, as only five published articles exist (Moller et al., 2002; Paley, Cox, Burchinal, & Payne, 1999; Pearson et al., 1994; Phelps, Belsky, & Crnic, 1998; Roisman, Padrón, Sroufe, & Egeland, 2002). Estimates of the distribution of SEC in the general population have ranged from 15% to 55% for ERN-SEC adults and from 22% to 36% for CONT-SEC adults (Moller et al., 2002, Paley et al., 1999; Pearson et al., 1994; Phelps et al., 1998). Moller and colleagues (2002) took a pioneering step towards distinguishing INSEC adults

with positive childhoods (i.e., *currently-insecure* (CURR-INSEC)) from those with more negative upbringings (i.e., *continuously-insecure* (CONT-INSEC)); no other study to date has broken down the INSEC group in a similar manner. Seventeen percent of their undergraduate sample were found to be CURR-INSEC and 33% to 34% were reported to be CONT-INSEC. All together, these studies on ERN-SEC, SEC, and INSEC have mainly focused upon childhood relationships with parents, current well-being, romantic relationship functioning, and caregiving behaviors (see p.142 for a summary of earned-security research).

Studies on the quality of parent-child bonds have produced both expected and surprising results. Consistent with the definitional criteria of ERN-SEC, Pearson and colleagues (1994) reported that ERN-SEC adults described their mothers and fathers as loving them less, as more rejecting, and as more neglectful than the parents of CONT-SEC adults. When compared to CONT-INSECs, however, ERN-SECs have demonstrated both more positive and more negative parental experiences in childhood (Roisman et al., 2002). Specifically, Roisman and colleagues (2002) reported that although ERN-SECs were prospectively observed to have maternal relationships of higher quality at 24 months and 13 years of age when compared to CONT-INSECs, ERN-SEC adults retrospectively recalled paternal relationships in childhood that were more rejecting, more neglectful, and less loving than those of CONT-INSEC adults. Roisman and colleagues (2002) acknowledged that it is difficult to assert, given the infancy of the ERN-SEC literature, whether these discrepancies are due to methodological variability or, in fact, due to qualitative differences in the maternal and paternal relationships of ERN-SECs and CONT-INSECs in childhood. Additional studies would be important in clarifying these discrepancies.

Research on the emotional functioning of ERN-SEC adults is also inconclusive. For instance, Roisman and colleagues (2002) observed similar levels of distress among ERN-SEC,

CONT-SEC, and INSEC adults. On the other hand, Moller and colleagues (2002) documented that current adult security, regardless of the quality of childhood experiences, is associated with decreased hopelessness, loneliness, and perceived stress. Additionally, Pearson and colleagues (1994) reported greater depressive symptomatology among ERN-SEC adults that is similar to that found among INSEC adults. Specifically, 40% of ERN-SEC parents and 30% of INSEC parents of preschool children presented with clinical depression, while only 10% of CONT-SEC parents evidenced a comparable severity of depression (Pearson et al., 1994).

As a way of explaining these findings concerning relatively high levels of depression among ERN-SEC adults, Roisman and colleagues (2002) offer two hypotheses. First, it may be that current depression levels bias adults' retrospective reports of their childhood experiences with parents, such that more negative experiences during childhood are recalled. Depressive individuals may use a depressive schema when perceiving themselves and others and when interpreting past, present, and future events (Kuiper, MacDonald, Derry, 1983). As a result, negative thoughts and experiences may be focused upon, positive ideas and circumstances may be ignored, and ambiguous information may be interpreted in a negative manner. Second, the significant negative affect among ERN-SEC adults may also indicate that being INSEC with one's parents in childhood leads to a greater vulnerability to mental illness in adulthood, regardless of current SEC (Roisman et al., 2002). Thus, according to this hypothesis, the emotional damage sustained during childhood would have had permanent affects on well-being, despite ERN-SECs' ability to form SEC in adulthood.

In fact, Moller and colleagues (2002) suggest that the experience of INSEC relationships at any point in life may be related to an increased likelihood of developing stress during adulthood; however, being presently SEC may strengthen one's resilience to stress. Despite the

findings that ERN-SEC and CONT-SEC adults report positive self-beliefs, confidence in their coping abilities, comparable emotional expressions, and similar social support networks, ERN-SEC adults also appear to be similar to CURR-INSEC adults on multiple coping and negative mood factors. In their study, ERN-SEC adults were similar to CURR-INSEC adults on half of the stress and emotional functioning variables; whereas, CONT-SEC adults evidenced more adaptive cognitions and behaviors than CURR-INSEC adults on the majority of these variables. Nevertheless, ERN-SEC adults did evidence less loneliness and psychological symptomatology than CURR-INSEC adults when childhood attachment style depended upon paternal bonds. Further, ERN-SEC and CONT-SEC adults reported overall more adaptive coping skills and more healthy functioning than did CONT-INSEC adults.

Moller and colleagues (2002) additionally contributed to the ERN-SEC literature by simultaneously exploring INSEC adults with INSEC and SEC upbringings. By demarcating the insecure group into two distinctive categories, a greater understanding of the differences between the CURR-INSEC and CONT-INSEC groups is possible. Findings demonstrated that college students who were SEC to their mothers as children, but INSEC as adults were more hopeless and lonely than individuals who had always been INSEC (Moller et al., 2002). When groups were classified according to maternal attachment, CURR-INSEC adults felt that their social support was more dependable and were more inclined to engage in behaviors to minimize their negative affect than were CONT-INSEC adults; however, when paternal attachment classification was considered, the only significant difference was found on engagement in healthy behaviors, with CURR-INSEC adults evidencing higher participation than CONT-INSEC adults. Nevertheless, both INSEC groups were found to evidence similar emotional symptomatology and perceived stress levels.

Studies have also examined ERN-SEC romantic relationships, and findings suggest that ERN-SEC individuals have dating relationships of comparable quality to those of CONT-SEC adults and a higher quality than those of INSEC adults (Roisman et al., 2002). In couples that have been committed to each other for four months or longer, ERN-SEC partners are more likely than INSEC partners to be involved in romantic relationships where conflict resolution is frequent, positive affect is shared between partners, and partners are used as secure bases.

Partner-matching by ERN-SEC status does not appear to be common (Paley et al., 1999).

Additionally, ERN-SEC adults have been found to be no more likely than CONT-SEC,

DISMISS, or PREOCC adults to marry either SEC or INSEC partners. Further, no association has been demonstrated between spouses' own attachment styles and how they perceive their spouses and their marital relationship.

Regardless of the quality of early parental relationships, adults who are presently SEC behave similarly in romantic relationships. For instance, ERN-SEC and CONT-SEC wives appear to have similar control of their emotional functioning (Paley et al., 1999). Both groups of wives are able to manage their feelings better when problem-solving with their husbands than are PREOCC or DISMISS wives; these INSEC groups do not differ significantly in their management of affect. When interacting with their husbands, PREOCC wives exhibit less positive affect than ERN-SEC and CONT-SEC wives. DISMISS wives are additionally more likely than ERN-SEC and CONT-SEC wives to withdraw when problem-solving with their husbands. Regardless of husbands' current attachment style, similar demonstrations of positive and negative affect are observed among husbands when solving problems with their wives.

The attachment styles of some groups of husbands appear to be associated with their wives' behavior, although, a comparable connection between wives' attachment styles and

husbands' behavior has not been supported (Paley et al., 1999). Specifically, CONT-SEC husbands are more likely to have wives who exhibit positive affect during marital interactions than are ERN-SEC husbands. No differences in the expression of negative affect have been observed. Compared to CONT-SEC husbands, DISMISS husbands are more apt to have wives who express less positive and more negative affect when in discussion. Additionally, husbands' attachment is associated with wives' feelings towards their marriage; wives of DISMISS partners are less committed to their marital relationships than are wives of CONT-SEC partners. These findings that demonstrate a unidirectional influence of husbands' attachment on wives' relational behaviors and marital perceptions are perplexing and suggest an important need to further understand the interaction of spouses' attachment styles.

Another area within the budding ERN-SEC literature that has been explored involves the continuation of parenting behaviors across generations (Pearson et al., 1994; Phelps et al., 1998). Family researchers and therapists have demonstrated a tendency for adult children to repeat the caregiving behaviors of their parents, unless disruption to this cycle occurs (Phelps et al., 1998; Putallaz, Costanzo, Grimes, & Sherman, 1998). Since ERN-SEC adults experienced upbringings that inadequately met their needs, it is of interest to determine whether ERN-SEC adults develop new caregiving behaviors that are more consistent with their developed sense of security or if they repeat the negative caregiving they experienced from their parents. Despite the inner growth achieved through gaining perspective and resolution of their childhood, the question remains about whether ERN-SEC adults are able to parent their children in more positive ways without reverting to the childhood treatment they received from their own parents.

In order to document patterns of parenting behaviors, researchers have observed the caregiving of ERN-SEC adults when under low and high stress; this experimental set-up of

varying levels of stress was suggested by Ainsworth and colleagues (1978) in the strange situation procedure as a way of observing SEC and INSEC. Findings suggest that ERN-SEC adults appear to parent their children as well as CONT-SEC and INSEC adults under low levels of stress, despite the discrepant quality of caregiving they received as children (Pearson et al., 1994; Phelps et al., 1998). Both groups of SEC adults demonstrate warmth, pleasure, and responsiveness towards their children and appear confident in their parenting roles (Pearson et al., 1994). Additionally, they implement good structure and limit-setting with their children. Moreover, even at high levels of stress, ERN-SEC mothers demonstrate similar parenting styles to those of CONT-SEC mothers and both groups of mothers exhibit more positive parenting behaviors than those of INSEC mothers (Phelps et al., 1998).

Through the development of a coherent perspective on negative childhood experiences, ERN-SEC adults appear to have broken their familial pattern of negative parenting. This finding is promising and has important clinical implications. By helping clients to understand and work through their painful childhood experiences, therapists can help adults care for their children in more positive and adaptive ways. Thus, a pattern of INSEC parent-child relationships across generations does not appear to be predetermined. Through reflection and exploration of negative childhood experiences, the caregiving behaviors of future generations may be augmented in a positive and SEC direction.

### Measurement Issues

Within the budding ERN-SEC literature, concerns about the measurement of ERN-SEC have recently been put forth (Roisman et al., 2002). Traditionally, the Adult Attachment Interview (AAI; George et al., 1985) has been used to distinguish SEC adults with negative and positive childhoods from INSEC adults (Paley et al., 1999; Pearson et al., 1994; Phelps et al.,

1998; Roisman et al., 2002). Through using retrospective and current data obtained from the AAI, Pearson and colleagues (1994) developed a system for assessing changes in attachment over time.

Despite the predominant use of the AAI to determine ERN-SEC across four of five published articles (Paley et al., 1999; Pearson et al., 1994; Phelps et al., 1998; Roisman et al., 2002), its practicality for use on college campuses has been questioned (Moller et al., 2002). The AAI has numerous methodological strengths, including its remarkable ability to measure underlying representations of attachment by focusing upon discourse style, rather than content of attachment histories. Additionally, parental AAI attachment classifications appear to be highly concordant with parent-child attachments, as measured by the strange situation procedure, thus attesting to the AAI's construct validity (e.g., van IJzendoorn, 1992). For measuring attachment, the AAI is considered to be the "gold standard" (Manassis, Owens, Adam, West, & Sheldon-Keller, 1999; van IJzendoorn, 1992). Despite these advantages, however, the AAI is not an efficient measure of attachment. Administration takes about an hour, the interview must be transcribed verbatim from audio tape, and coding of the interview takes a minimum of four hours (de Haas et al., 1994). Further, in order to qualify as a coder, one must participate in a two-week training course and partake in considerable reliability testing (Manassis et al., 1999). The time commitment involved in using the AAI is thus substantial and impractical for many research pursuits. Understandably, self-report measures of attachment are appealing to both researchers and clinicians.

Interviews vs. Self-Reports

There are multiple questionnaires available for measuring attachment; however, substantial criticism has been put forth regarding their construct validity (see Crowell &

Treboux, 1995, for a review of attachment self-reports). Several researchers have concluded that attachment data obtained from the AAI is not significantly related to the attachment styles derived from self-reports (Crowell, Treboux, & Waters, 1999; de Haas et al., 1994). Crowell and Treboux (1995) suggest that the methodological differences between the AAI (George et al., 1985) and attachment self-reports are likely accounting for some of this discordance. A wellknown drawback of self-reports, that is likewise applicable to self-report measures of attachment, is the fact that only conscious thoughts, feelings, and perceptions are measured. Therefore, reporting will be colored by limited awareness, denial, and social desirability. In contrast, the AAI employs a narrative procedure that de-emphasizes the specific content of attachment histories and focuses upon discourse style, thus uncovering underlying mental representations of attachment. Hence, inherent in their methodological approaches, the AAI and attachment selfreports are eliciting information about attachment that vary in levels of awareness and complexity. Whereas the conscious information communicated though attachment self-reports is thought to reflect dialogue between parents and children, the unconscious information obtained from the AAI appears to be more telling of actual attachment experiences (de Haas et al., 1994).

Other researchers have argued that self-reports of attachment and the AAI (George et al., 1985) are measuring overlapping constructs. For instance, Manassis and colleagues (1999) reported concordant results across several of the Maternal subscales on the Parental Bonding Instrument, which is a self-report measure of childhood attachment (PBI; Parker, Tupling, & Brown, 1979), and the AAI in a clinical sample of adolescents. In fact, scores on the Maternal Involvement/ Role Reversal and Maternal Love scales on the AAI were able to significantly predict scores on the Maternal Overprotection and Care scales on the PBI. On the other hand, the limited inclusion of paternal experiences in determining the AAI State of Mind score, a set of

ratings concerning an adult's current representation of attachment experiences, may have contributed to the lack of association between paternal attachment on the PBI and AAI. Correlations between the AAI and PBI were found to be the highest among SEC adolescents. Among adolescents who idealized or harbored significant anger towards their mothers, AAI and PBI results were highly discordant. Thus, Manassis and colleagues (1999) cautioned the use of the PBI to determine attachment among INSEC individuals in clinical settings. In nonclinical settings, however, Manassis et al. (1999) stated that the PBI would be a useful measure for assessing the presence of attachment problems, especially when large samples were being surveyed (i.e.,  $\geq 130$ ).

A similar debate has been forged regarding the measurement of adult romantic attachment. Shaver, Belsky, and Brennan (2000) argue that the AAI and adult attachment self-reports are measuring different constructs with related components. Whereas the AAI measures parent-child relationships during childhood in order to determine one's current attachment state of mind, adult self-reports of attachment focus upon cognitions, behaviors, and feelings associated within romantic relationships in adulthood. The AAI is expected to predict future parenting, while adult attachment questionnaires are telling of experiences within adult romantic bonds. Thus, the types of attachment relationships focused upon (i.e., parental vs. romantic) are discrepant across these measures. Despite these differences, however, almost every AAI scale could be predicted by the Adult Attachment Scale, a self-report of romantic attachment (AAS; Collins & Read, 1990). Additionally, both the AAI and adult self-reports appear to be measuring similar feelings of comfort regarding being a caregiver to important others and depending on attachment figures for support and nurturance (Shaver et al., 2000). Regardless of the type of

attachment relationship, the experience of being cared for and meeting others' needs appear to be telling of underlying attachment status.

Moller and colleagues (2002) made the first attempt to use self-report measures to assess ERN-SEC. This is a methodological shift that is more practical for research and clinical assessment purposes. The Maternal and Paternal Care subscales from the PBI were used to determine child attachment status; the Overprotection subscale was not used due to questions about its factor structure (Cox, Enns, & Clara, 2000). The Confidence subscale (i.e., a scale that reflects SEC) from the Attachment Style Questionnaire (ASQ) was used to measure the quality of adult attachment. Individuals' scores were classified as falling either above or below the median on these subscales. Although this approach is comparable to the use of norms and cut-offs on numerous psychological measures, any instrument that utilizes cut-off scores runs the risk of misclassifying individuals or over-emphasizing differences between individuals whose scores fall around the cut-off. Additionally, the method used by Moller and colleagues (2002) to identify ERN-SEC adults has yet to be validated; however, the methodology appears to be promising given that the percentages of individuals identified as SEC and INSEC are comparable to those reported by AAI studies (van IJzendoorn & Bakermans-Kranenburg, 1996).

Using self-report measures, Moller and colleagues (2002) determined four categories of attachment styles: CONT-SEC, ERN-SEC, CONT-INSEC, and CURR-INSEC. It was found that CONT-SEC and ERN-SEC undergraduates evidenced similar emotional functioning and coping resources following the dissolution of a romantic relationship that tended to be less dysfunctional than those exhibited by CONT-INSEC. With regards to the CURR-INSEC group, a category overlooked by the vast majority of attachment studies, substantially poorer functioning was observed among CURR-INSEC undergraduates when compared to CONT-SEC

undergraduates. Although the ERN-SEC group reported less distress and better coping skills than the CURR-INSEC group on multiple dependent measures, fewer differences were observed between the ERN-SEC and CURR-INSEC groups than between the CONT-SEC and CURR-INSEC groups. This study suggests that despite the development of SEC at some point in life, the experience of being INSEC may have some negative affects on an individual's ability to cope effectively within stressful situations.

Given the preliminary investigation of the CURR-INSEC group by Moller and colleagues (2002), future research on those individuals who develop INSEC in adulthood is clearly needed. For instance, the development of current INSEC has not been explored empirically. Moller and colleagues theorize that psychological and/or physical trauma, rather than problematic childhood relationships with parents, may be responsible for the development of INSEC. It would be of research and clinical value to empirically explore the potential factors that may contribute to this shift in security.

# Retrospective vs. Prospective Data

Another major concern that has arisen concerning the measurement of ERN-SEC has to do with the validity of retrospective reporting to determine attachment styles, as all but one study on ERN-SEC (i.e., Roisman et al., 2002) has utilized retrospective accounts of childhood experiences (Moller et al., 2002; Paley et al., 1999; Pearson et al., 1994; Phelps et al., 1998). There are clearly significant drawbacks to gathering data from retrospective accounts. For instance, memories may be biased by current attitudes, moods, and recent experiences; memories are highly suggestible; and selective recall may occur, which can lead to the production of inaccurate memories (Kazdin, 1998). Due to these problems inherent in retrospective designs, Kazdin (1998) acknowledges that the determination of causality is usually not possible. Given

the retrospective trend in ERN-SEC research, it is of utmost importance to determine the accuracy of retrospective reporting of attachment experiences.

Using data from a 23-year longitudinal study, Roisman and colleagues (2002) assessed the validity of retrospective reporting in determining adult attachment. These authors compared childhood attachment as observed in the strange situation procedure (at both 12- and 18-months) with the quality of childhood experiences reported retrospectively by adults using the AAI. The trajectory of attachment was subsequently determined using both prospective and retrospective approaches. Findings demonstrated, however, that little convergence occurred between the prospective and retrospective data. Only between 24% and 38% of the time were ERN-SEC individuals identified as such by both retrospective and prospective approaches. All other individuals, who were identified as ERN-SEC by one of these approaches, were labeled CONT-SEC by the alternative approach.

In the Roisman and colleagues' (2002) study, surprising data was obtained about the maternal childhood relationships of ERN-SEC and CONT-SEC adults. Counter to expectations, retrospectively determined ERN-SEC adults were observed at 24 and 42 months in the strange situation procedure to be similarly supported by their mothers and to receive comparable structured parenting as were CONT-SEC adults. Both groups of SEC adults were also observed to experience maternal relationships of similarly positive quality. Neither of these findings are expected, given that the definitional criteria of ERN-SEC involves the presence of INSEC relations with parents during childhood. This apparent contradiction between research and theory argues for a closer examination of the methodology used in the Roisman and colleagues' study.

Several shortcomings of the Roisman and colleagues (2002) study must be emphasized. First, no observational information was obtained from father-child relationships. Thus, the nature

and impact of early paternal relationships on these children was not known. Second, the data was lacking observational information about the attachment behavior of children between the ages of four and 12, an age range that is emphasized on the AAI. Thus, negative experiences with parents that may have appeared later on in childhood development were not assessed. Therefore, reports of early experiences may differ between these retrospective and prospective approaches simply because of the ages that were focused upon. Roisman and his colleagues conclude from their overall findings that the Pearson and colleagues' (1994) system, which solely uses the AAI to determine ERN-SEC, is not psychometrically sound. This system was found to have extremely low specificity and sensitivity for accurately identifying CONT-SEC and ERN-SEC adults

Although the Roisman and colleagues' (2002) findings raise questions about using retrospective accounts of early experiences and symptomatology, retrospective reporting is clearly an useful, practical, and efficient approach towards gathering historical information in research and clinical settings. Kazdin (1998) points out that retrospective reporting provides valuable correlational information that can further knowledge in a field of research, even if the correlate proves to be the actual recall of past experiences. Retrospective data collection is less time-consuming and expensive than longitudinal designs, which makes this research design highly desirable across many research pursuits. Although retrospective reporting may not be ideal, the data obtained are still highly informative and can shed light on a field of attachment about which little is known.

### Secondary Attachment Theory

Given the limited number of studies thus far published on ERN-SEC, a number of questions clearly remain. Why do some individuals who had INSEC upbringings develop SEC in

adulthood, whereas others remain INSEC throughout their lives? One possibility is that other attachment relationships, external to primary attachment bonds, help to "correct" the injuries received from these early disruptive relationships. Ainsworth (1989) refers to the important roles that other attachment figures (i.e., "secondary or supplementary attachments") may play, especially when parental figures fail to create appropriate security within the parent-child relationship. These figures have been additionally referred to as "parent surrogates," "substitute parent figures," and "subordinate attachment figures" (Ainsworth, 1989; Ainsworth et al., 1978; Bowlby, 1969). A diverse group of figures may function as secondary attachment figures, including other older relatives (e.g., grandparents), older sisters or brothers, sports' coaches, teachers, religious leaders, therapists, mentors, and romantic partners (Ainsworth, 1989; Pearson et al., 1994). Ainsworth (1989) states that "As potential attachment figures, these deserve research attention" (p. 711).

Ainsworth (1989) discusses the significance of diverse relational bonds across one's lifetime, including those bonds between children and parents, as well as bonds with other family members, peers, and trusting non-familial adults. Ainsworth suggests that even a 6-month old's attachment system is of suitable development to foster attachment bonds with not only the primary caregiver, but also with other important figures. According to Ainsworth, the presence of multiple attachments at this age is not only possible, but "very likely" (p. 710). The attachment system is key to the protection of and thus survival of an organism and results in the individual being proximal to the primary attachment figure and several other secondary attachment figures. Aspects of attachment bonds with either primary or secondary attachment figures include feelings of distress when separation occurs suddenly, feelings of happiness and fulfillment upon reuniting with attachment figures, and grieving if attachment figures were to

die. Improved mobility permits a child to move away from her or his attachment figures, search the environment, and interact with peers and other adults (Ainsworth, 1989).

Secondary attachment figures appear to play a positive role in comforting children, especially when children are temporarily separated from primary attachment figures. Being cared for by a sibling or another individual acting as a "mother-substitute" will tend to decrease the intensity of a child's protest (Bowlby, 1969). These secondary attachment figures appear to reduce a child's distress and to increase feelings of safety despite maternal absence (Ainsworth et al., 1978; Bowlby, 1969). This behavior has been observed both within the strange situation procedure, as well as in naturally-occurring separation contexts at home (Ainsworth et al., 1978).

Attachment to other adults tends to become more prevalent during adolescence and the importance of these bonds may be of equal or greater weight to that of the maternal bond (Bowlby, 1969). Adolescents will frequently become attached not only to non-family members, but also to other institutions and groups. Bowlby (1969) goes as far to suggest that these organizations, such as school, work groups, and religious congregations can function as either "subordinate attachment-figure[s]" or as "principal attachment figure[s];" attachment may be formed with these groups as a whole or with particular figures associated with these groups. During adolescence, the intensity of attachment may vary dramatically across a group of adolescents with some severing ties with their parents, others who are highly dependent upon their parents, and others (who make up the majority of adolescents) who are able to maintain a strong attachment bond with their parents while fostering new attachment relationships with other figures. Bowlby (1969) suggests that most adults continue to feel bonded to their parents and this bond impacts their behavioral systems in adulthood.

## Monotropy

The contribution of secondary attachment figures to the development of IWMs is not fully understood. Bowlby (1958) put forth the theory of monotropism, which refers to the developmental process in which children form an attachment relationship with their primary attachment figure (i.e., the mother figure). This single caretaker is thought to be the only figure of importance with regards to the healthy development of a child. This consistent, continuous, and supportive relationship is thought to be key to the formation of a secure base (Smith, 1980). According to Bowlby (1969), the formation of secondary attachment bonds is restricted by a critical window of attachment that is predicted to occur within the first year following birth. Attachment relationships are argued to be formed less easily following this sensitive period, as attachment bonds with a primary figure are thought to inhibit the formation of attachment relationships with other figures.

Smith (1980) argues, however, that given the evolutionary root of attachment theory, bonding with a single adult figure goes counter to the promotion of survival. Additional figures contribute to the protection of an infant, which is clearly of evolutionary value. Since Bowlby's (1958) proposal of monotropy, numerous studies have reported findings that dispute the singular importance of the mother figure for attachment purposes. In fact, this body of literature has demonstrated the far-reaching positive affects of a variety of secondary attachment figures on later psychological and behavioral functioning (Crowell et al., 2002; Daniel, 1998; Howes, Rodning, Galluzzo, & Myers, 1988; Main & Weston, 1981; Mitchell-Copeland, Denham, & DeMulder, 1997; van IJzendoorn et al., 1992).

## Hierarchy

Several theorists have suggested that IWMs function within a hierarchy, whereby the mother figure functions as the primary attachment figure and the father figure and other attachment figures serve secondary roles (Bowlby, 1969; Bretherton, 1985; Main, Kaplan, & Cassidy, 1985). The infant-mother attachment relationship is expected to have the strongest impact on a child's development (van IJzendoorn et al., 1992). Although a child would prefer to seek out the mother figure when distressed, Bowlby (1969/1988b) argues that a child will turn to familiar others for comfort and safety if the mother figure is absent. Secondary attachment relationships are expected to be more tenuous and shorter-lasting, and to have a weaker influence on a child's later functioning than are the bonds with primary attachment figures (Ainsworth, 1989; van IJzendoorn et al., 1992). As an individual matures, the positions of parental figures may no longer be primary, but parental figures are expected to remain on the attachment hierarchy (Hazan & Zeifman, 1994). Over time, other secondary figures are likely to be added to or removed from the attachment hierarchy. In adulthood, romantic partners appear to replace parental figures as primary attachment figures (Bowlby, 1969).

There has been considerable research published on the presence of attachment relationships with secondary attachment figures. For instance, attachments to fathers, siblings, grandmothers, professional caregivers, teachers, and romantic partners have been demonstrated (Goossens & van IJzendoorn, 1990; Mitchell-Copeland et al., 1997; Myers, Jarvis, & Creasey, 1987; Pearson et al., 1994; Stewart & Marvin, 1984). These attachment relationships appear to be somewhat independent, however, as differing attachment quality has been observed between primary attachment bonds and relationships with fathers, professional caregivers, teachers, and romantic partners (Crowell et al., 2002; Goossens & van IJzendoorn, 1990; Main & Weston,

1981; Mitchell-Copeland et al., 1997). The fact that attachment bonds can be formed with other figures and that IWMs associated with these figures can be SEC, despite the presence of INSEC attachment to a mother figure, suggests that these relationships serve important roles with regards to mental representations of self and others. The organization and interplay of these attachment representations, however, are less clear.

Cross-cultural research has demonstrated conflicting findings regarding the validity of an attachment hierarchy. In Dutch and Israeli samples, van IJzendoorn and colleagues (1992) found little support for the hierarchy model of attachment as they observed fathers and professional caregivers having primary influences on children's socioemotional functioning and feelings of security. Given the important impact of these relationships on children's IWMs, van IJzendoorn and colleagues (1992) explained that, "it does not make sense to consider nonmaternal caregivers only as subsidiary attachment figures [italics added]" (p. 20), as their key roles in the development of children were largely demonstrated. The strongest associations between caregiver relationships and children's attachment were noted among Israeli children, all of whom lived in a kibbutz setting. The common integration of professional caregivers, or metaplots, in the rearing of these Israeli children may have strengthened the impact of these secondary attachment figures on these children's development. Nevertheless, these findings are still highly informative.

In an American sample, however, Mardell (1992) reported findings in support of the hierarchy model. Mardell observed that American children tend to seek out a secure base more frequently from primary attachment figures versus secondary attachment figures. Primary attachment bonds seemed to hold precedence over secondary attachment bonds; although, attachment relationships with secondary attachment figures were still considered to be important.

Mardell suggested that attachment bonds do not appear to have the capability to take the place of or ameliorate other attachment bonds, as the IWMs associated with different attachment relationships appear to be uniquely characteristic of specific relationships. Mardell does not argue for a complete independence of IWMs, as shared features across bonds are thought to exist, but Mardell does suggest that different attachment relationships are often distinctive in quality and function.

Additionally, Trinke and Bartholomew (1997) observed the presence of an attachment hierarchy among American undergraduates. Most of these students reported having three to six attachment relationships. They were more likely to use their romantic partners as attachment figures (if they currently had them) followed by mothers, fathers, siblings, and best friends; the order remained consistent regardless of relationship status. There was a greater tendency for romantic partners to be rated as primary attachment figures when relationships were of a longer duration. The finding that undergraduates tended to primarily orient towards romantic partners corroborates Hazan and Zeifman's (1994) research that demonstrated a shift towards using romantic partners as primary attachment figures in late adolescence and adulthood. Nevertheless, it appears that mothers have a prominent placement within attachment hierarchies, as they were consistently preferred over fathers for use as safe havens and secure bases (Trinke & Bartholomew, 1997). Likewise, a mother's death was rated as more emotionally significant and impacting than the death of other family members or peers. In fact, relationships with fathers were indicated to be less SEC than relationships with mothers, romantic partners, and best friends, despite the tendency for fathers to be used more frequently than best friends as attachment figures. Within all of these relationships, however, students experienced moderate to high levels of security.

## Independence

A third model of multiple attachments was offered by van IJzendoorn and colleagues (1992) that stresses the independent functions of different attachment relationships on a child's socioemotional development. According to the independence theory, attachment bonds are only pertinent in those domains in which frequent interaction with a caregiver has occurred. Attachment figures will only be used as secure bases within specific domains, thus determined by the history of a specific attachment relationship. For instance, the quality of a student-teacher attachment relationship would, according to this model, influence functioning within a school context, whereas the nature of maternal and paternal bonds would have greater influence on socioemotional development within the family context. Thus, each attachment figure is thought to be influential only in those areas of a child's development in which they "specialize." *Integration* 

The integration model of attachment was proposed by van IJzendoorn and colleagues (1992), whereby attachment is determined by the summation of multiple attachment bonds. In this model, the adverse effects of INSEC relationships may be minimized substantially by the existence of SEC relationships with other figures. It is expected that a higher number of SEC bonds with attachment figures will lead to more positive functioning. Thus, the attachment network in its entirety determines later emotional and interpersonal functioning.

The findings from van IJzendoorn and colleagues' (1992) study provide support for the integration model of multiple attachment. The developmental functioning of children was best predicted by the combination of infant attachment bonds with mothers and fathers, when compared to the weaker predictive capability of each individual relationship. The predictability of later psychological functioning increased upon the inclusion of the caregiver-child attachment

bond. Children who experienced SEC relationships with their fathers and caregivers, but INSEC bonds with their mothers, evidenced more positive development than those children who experienced INSEC across these relationships. Interestingly, children with three SEC bonds demonstrated better adjustment than children who had fewer SEC bonds. Thus, these results suggest that all attachment bonds are integral in guiding development.

Despite the lack of agreement on the organization and functional value of multiple attachment relationships, secondary attachment figures are understood to play a significant role in children's and adults' lives (Ainsworth, 1989). It appears that SEC relationships may be developed with these figures, regardless of the quality of primary attachment bonds. In contrast to Bowlby's (1958) theory of monotropism, research suggests that some of these SEC relationships may moderate the impact of negative parental experiences on later psychological functioning (Crowell et al., 2002; Daniel, 1998; Main & Weston, 1981; Mitchell-Copeland et al., 1997). Hence, it is important to obtain a thorough understanding of the scope of potential secondary attachment figures, as well as the psychological benefits that may result from these relationships.

## Secondary Attachment Figures

### **Fathers**

Relationships with both fathers and mothers appear to influence the behaviors of children, as young as infants, when in the presence of others (Main & Weston, 1981). Results suggest that when infant-mother bonds are INSEC, SEC relationships with fathers lead to more positive relations with strangers, than if both parental bonds are INSEC. Being SEC with mothers, however, seems to be more influential on positive interactional behaviors than being SEC with fathers. In fact, Main and Weston (1981) found that infants who were SEC to mothers,

but INSEC to fathers, were more interested in and responsive to strangers than were infants who were INSEC to mothers and SEC to fathers. Nevertheless, the more secure infants felt to each individual parent, the more willing they were to establish a positive relationship with a stranger.

Several studies have also focused upon the consistency of attachment styles across mother-child and father-child relationships; however, contradictory results have been reported. Goossens and van IJzendoorn (1990) reported significant, albeit weak, associations between parental attachment bonds with children. Lamb (1978) also observed a tendency, although not significant, for attachment styles to persist across mother-child and father-child bonds; however, this finding only appeared among SEC children. On the other hand, other studies have reported a tendency for independent attachment classifications between infants and their individual parents over time (Lamb, 1978; Main & Weston, 1981). As a result, two opposing conclusions have been offered by these researchers. Lamb (1978) suggests that a general interactional approach with others in social situations may be a combination of attachment styles with both mothers and fathers. In contrast, Main and Weston (1981) conclude that "it is a particular developed relationship, not an original invariant temperament, which is reflected in infant behavior in the Ainsworth Strange Situation" (p. 939). Thus, Main and Weston (1981) argue that the presence of a singular attachment style for infants is unsupported. Clearly, this issue needs further investigation.

### Siblings

Much of the secondary attachment research has examined the role of siblings as attachment figures. From an evolutionary standpoint, Ainsworth (1989) argues that older siblings may be more apt to function in caregiving roles to their younger siblings, because doing so promotes the survival of their family and by default, the survival of some of their genes.

Bowlby (1969) proposed that as children become increasingly capable of understanding what their attachment figures are thinking or planning, their attachment behavior towards others may become more secure. In fact, Stewart and Marvin (1984) found that three to five-year-old siblings, who were able to take on the perspective of others, were likely to act as caregivers to their infant siblings when their mothers departed from them during the strange situation procedure. These perspective-taking siblings experienced minimal distress upon being separated from their mothers, which allowed them to focus upon their younger siblings and attend to their needs. In contrast, children who were unable to understand the perspectives of others were preoccupied by their own emotionality in the absence of their mothers and, as a result, tended not to care for their distressed siblings. The majority of infants who had caregiving, perspectivetaking siblings used them as secure bases to explore the environment and seek comfort through proximity; whereas, infants with non-caregiving siblings tended not to turn towards their older siblings for comfort and instead withdrew, played by themselves, and tried to escape from a stranger's presence. An interesting finding is that age did not significantly influence which older siblings acted as caregivers to her or his younger siblings.

On the other hand, the gender of siblings may play a role in the initiation of caregiving behavior (Stewart & Marvin, 1984). Whereas older brothers tended to nurture and support their younger sisters, they tended not to act as caregivers towards their younger brothers. Society's expectations that boys are expected to be more strong, self-sufficient, and nonemotional than girls likely influence how parents treat their sons and subsequently how male children behave differentially towards their male and female siblings (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972). Females, on the other hand, are socialized to be more dependent on others and more needy of help. Thus, male children may be more apt to perceive their sisters as weaker,

more vulnerable, and in greater need of support. In line with gender role socialization, whereby females are raised to be nurturing and caretaking, older sisters' caregiving behaviors were not influenced by the gender of their younger siblings; older sisters were as likely to care for their younger brothers as for their younger sisters.

Furthermore, early sibling relationships may leave lasting impressions on internal representations of relationships (Coles, 1998; Daniel, 1998). Coles (1998), a psychoanalyst, states that "Sibling relationships can be positive and facilitate the capacity to socialize and cooperate with contemporaries, but equally sibling relationships can be negative and have a damaging effect upon the psyche" (p. 11). Given that siblings tend to be similar in age and congruent on power dimensions, sibling relations may provide a template for later peer relationships (Coles, 1998). Research has found that INSEC girls, who fulfill the caretaking role for their siblings, report deep trust in their best friends as adults (Daniel, 1998). Thus, at least for women, early relationships with siblings may counteract some of the effects of inadequate parenting.

Daniel (1998) identified specific behaviors engaged in by certain adults that seem to facilitate the internalization and impact of positive sibling relationships. For instance, these adults appear to mentally represent actual and fantasized experiences with their siblings, including conversations with siblings, contexts of interactions with siblings, emotional displays of siblings, and physical sensations linked to siblings. Individuals who experience sibling memories for lengthier periods of time also seem to have SEC relationships with romantic partners and best friends. On the other hand, FEAR adults internally represent their siblings for shorter durations. The experience of anxiety and fear observed in FEAR adult relationships may generalize to the avoidance of thinking about or engaging in other relationships as a way of

managing anxiety. In addition, Daniel's (1998) study found that adults who hold multidimensional representations of their siblings demonstrate global confidence in interpersonal situations, positive self-worth, increased competence, and confidence within romantic relationships. Thus, having an intimate relationship with one's sibling may foster positive connections with other important figures in adulthood.

Hence, the quality of sibling relationships seems to impact the relational and emotional functioning of adults. SEC in adulthood is associated with the recollection of sibling relationships that were warm, caring, and devoid of frequent rivalry (Daniel, 1998). Adults who demonstrate low levels of loneliness are likely to perceive their relationships with brothers and/or siblings as consisting of intimacy, admiration, companionship, and affection (Ponzetti & James, 1997). Adults who viewed their siblings as positive role models and caretakers during childhood tend to feel trusting of their existing best friends, secure within their current friendships, and confident with their interpersonal skills (Daniel, 1998). Additionally, these adults tend to demonstrate trust in their romantic partners and confidence within these relationships. Conversely, sibling attachments that were characterized as PREOCC or FEAR are associated with decreased social confidence, limited trust in romantic partners, and minimally reported trust and warmth in adult romantic relationships. Siblings who frequently quarreled and were antagonistic with each other in childhood often feel lonely in adulthood (Ponzetti & James, 1997). Ponzetti and James (1997) suggest that the experience of conflictual situations with siblings may increase the likelihood of expecting or exhibiting similar relational patterns in future relationships with nonfamily members.

As to the continuity of sibling attachment styles over time and across relationships,

Daniel (1998) found support for the consistency of SEC, PREOCC, and DISMISS sibling bonds

from childhood to adulthood. In contrast, consistency was not reported for FEAR. Rather, individuals who had FEAR bonds with their siblings were likely to experience PREOCC in adulthood. Surprisingly, having a PREOCC sibling bond was also positively correlated with having FEAR adult bonds. These findings suggest that the security of sibling relationships in childhood may persist across relationships and into adulthood; however, the exact quality of INSEC may change over time.

## **Grandparents**

Attachment behavior towards grandmothers has been explored using the strange situation procedure. Myers and colleagues (1987) assessed infants' responses to their grandmothers, mothers, and strangers when in the presence or absence of these figures. In their sample of middle-class families, in which the maternal grandmothers visited their grandchildren regularly, the infants behaved similarly in response to their mothers and grandmothers in multiple situations. In the sole presence of their mothers or maternal grandmothers, these infants played for equal amounts of time. Their play behavior was of a longer duration with either of these family members compared to that in the presence of a stranger. Additionally, no differences in exploratory play were noted when mothers or grandmothers separated from or reunited with the infants. The infants cried as often when left alone with, separated from, and reunited with their mothers and maternal grandmothers. Distress was demonstrated the most frequently by infants when alone with a stranger. Infants cried equally when separated from one family member and left with the other family member. Myers and colleagues' findings suggest that on multiple attachment dimensions, mothers and maternal grandmothers may be interchangeable as attachment figures. Surprisingly, the frequency of visits or the infants' age did not significantly affect the degree to which the infants were attached to their grandmothers.

Similar to infants, adult grandchildren appear to perceive their grandparents as significant attachment figures; however, adult grandchildren tend not to report feeling emotionally close to their grandparents (Creasey & Koblewski, 1991). Granddaughters, in comparison to grandsons, report stronger bonds with grandparents, specifically with regard to increased admiration, nurturance, and affection. Grandmothers were rated as more affectionate and respectful than grandfathers. Conflicting findings have been reported, though, concerning the impact of kinship lines on the quality of grandparent-grandchild bonds with Creasey and Koblewski (1991) finding no association and Hoffman (1979) reporting significant interactions. Specifically, Hoffman (1979) observed that adult grandchildren reported feeling emotionally closer to and interacting more frequently with their maternal grandparents versus their paternal grandparents. In particular, undergraduates rated their relationships with their maternal grandmothers as closer than their relationships with their other grandparents. Compared to their relationships with their paternal grandmothers, they were more likely to interact with their maternal grandfathers each year and on summer vacations, as well as more likely to feel emotionally close within these relationships. It should be noted, however, that 20% to 50% of adult grandchildren have reported infrequent contact with grandparents (Creasey & Koblewki, 1991; Hoffman, 1979). Thus, a sizeable portion of college-age grandchildren appear to interact with their grandparents on a minimal basis.

# Professional Caregivers

Infants appear able to develop SEC bonds with professional caregivers, despite the presence of INSEC to mothers and fathers (Goossens & van IJzendoorn, 1990). The frequency of INSEC infants forming SEC bonds with professional caregivers in daycare has ranged from 31% (Howes, Rodning, Galluzzo, & Myers, 1988) to 50% (Goossens & van IJzendoorn, 1990).

Conflicting findings have been reported on the consistency of attachment bonds to parents and professional caregivers with support being provided for both continuity and discontinuity (Goossens & van IJzendoorn, 1990; Howes et al., 1988). Howes and colleagues (1988) assessed infants attachment styles at 12-months and 18.5-months and found that 10% to 31% were INSEC to their mothers and SEC to their professional caregivers and 20% to 24% were SEC to their mothers and INSEC to their professional caregivers. The largest number of infants (i.e., 33% to 57%) were found to have SEC bonds with both mothers and professional caregivers; 12% of infants were INSEC to both figures. Goossens and van IJzendoorn (1990) reported that infants who were SEC to their professional caregivers spent more time each week in day-care and their professional caregivers were somewhat younger and behaved more sensitively to the infants during a period of free play, in comparison to those infants with INSEC bonds to their professional caregivers.

Infants' behaviors appear to be impacted by both their relationships with their mothers and professional caregivers. Infants that use their professional caregivers as secure bases appear to be more interested in and empathetic towards peers and to participate for longer periods of time in peer activities than are children who have INSEC relationships with professional caregivers (Howes et al., 1988; van IJzendoorn et al., 1992). Additionally, children who have SEC bonds with their professional caregivers exhibit increased independence and achievement-striving than their ANX-AMB peers (van IJzendoorn et al., 1992). The least amount of play with professional caregivers is demonstrated in infants who have INSEC bonds with both mothers and professional caregivers, when compared to infants who are SEC to either their professional caregivers or mothers (Howes et al., 1988). Regardless of the quality of attachment bonds to professional caregivers, however, infants who have INSEC relationships with their mothers play

the least often with their professional caregivers. At least for some infants, it appears that professional caregivers may be able to provide them with a sense of security outside of the home, even when their primary caregivers are unable to do so. This SEC secondary attachment relationship may improve the functioning of certain infants who experience INSEC bonds with parental figures.

### **Teachers**

Mitchell-Copeland and colleagues (1997) investigated the role that positive teacher-student relationships play in the emotions and behaviors of preschool children. Findings suggested that the ways in which preschoolers responded to their peer's emotions were related to the quality of teacher-child relationships. More caring behavior towards peers has been exhibited by preschoolers who have more SEC relationships with teachers (Fang & Hong, 1995; Mitchell-Copeland et al., 1997). Additionally, teachers rate those preschoolers who have more SEC bonds with teachers as behaving in more socially competent ways at school and being more popular among their peers. These children are better equipped to problem-solve in conflictual situations and are less likely to appear irritable or to be detached from peer relationships (Mitchell-Copeland et al., 1997).

Promising results suggest that the impact of INSEC maternal bonds on social functioning may be buffered by the presence of SEC bonds with teachers (Mitchell-Copeland et al., 1997). Preschoolers who had INSEC relationships with mothers, but SEC bonds with teachers, were observed to display more positive emotions when with peers, be more attentive to and caring of other preschooler's feelings, and evidence higher social competence than similar preschoolers with INSEC bonds with teachers. It is proposed that an alternative relationship model may be acquired through these SEC secondary bonds with teachers that positively influences behaviors

in future relationships, despite INSEC maternal relationships. This study suggests that individuals may have different IWMs for parent-child and peer relations. SEC secondary relationships, particularly with teachers, may have far reaching positive and unique effects on the development of SEC IWMs that impact behavior and expectations within peer relationships. *Friends* 

Ainsworth (1989) readily refers to peer relations as being affectional bonds; although, she acknowledges that friendships may demonstrate aspects of attachment. Those relationships that are close, long-lasting, and involve partners who serve unique functions, roles, and are not replaceable may be considered affectional relationships. Daniel (1998) suggests that important friendships in adulthood may, in fact, function as healing relationships for negative parent-child bonds, "Perhaps in their relationship with their best friend they attempt to make up for the parental absence depicted in their mental representations" (p. 87). On the other hand, friendships that are more temporary, less intimate, less security producing, and include figures that are more interchangeable would neither constitute affectional nor secondary attachment bonds (Ainsworth, 1989).

In citing ethological examples, Ainsworth (1989) discusses the survival advantage of being part of a group and remaining in proximity to group members. These members can provide individuals with protection from threatening agents in the environment. Interestingly, Ainsworth explains how attachment bonds to peers are especially likely in dangerous and/or threatening conditions, where partners are more dependent on each other for safety (e.g., army buddies). Thus, the phenomenon of humans developing into social beings may have been a survival mechanism. Peers may subsequently serve an adaptive function.

Armsden and Greenberg (1987) assessed attachment quality of parental and peer relationships using a measure they developed (i.e., Inventory of Parent and Peer Attachment; IPPA). The quality of attachment to parents and peers was highly similar with 72% of participants reporting that both types of relationships were either SEC or INSEC. This finding hints at the potential linkage between primary attachment experiences and secondary attachment quality.

### Romantic Partners

Pearson and colleagues (1994) suggest that secondary attachment figures, such as spouses, may help to promote SEC IWMs and SEC caregiving behaviors in adults who experienced negative upbringings. Through the establishment of a secure base, SEC partners may provide their INSEC partners with the support and skills needed to explore their negative pasts, gain insight and perspective on these experiences, restructure their childhood stories, and become more effective parents to their own children. According to Crowell and colleagues (2002):

The marital dyad creates a new caregiving environment and presents attachment experiences that may challenge previously held conceptions of attachment...marriage offers a physical and psychological distance from parents that may foster change in representations of early attachment experiences (p. 468).

In fact, romantic partners whose attachment statuses have changed following marriage are more likely to develop increased security (Crowell et al., 2002). Of the spouses who changed attachment styles following marriage (i.e., 36 of 218), Crowell and colleagues (2002) found that 58% developed SEC IWMs, 8% became INSEC, and 33% developed a different INSEC attachment style.

Perhaps counterintuitive, romantic partners who developed SEC were found to be no more likely than INSEC partners, although less likely than CONT-SEC adults, to have a SEC

spouse (Crowell et al., 2002). Thus, it does not appear necessary for a spouse to be SEC in order to help her or his spouse develop SEC IWMs of attachment. It does appear important, however, for the marital experience to be positive and fulfilling. Even prior to marriage, adults who would later develop SEC reported increased intimacy with their partners, dedication to the marriage, passion within the relationship, happiness, and less conflict than INSEC adults. After a year and a half of marriage, the quality of the marital dyad and the behaviors exhibited within the marriage were similar among adults who were CONT-SEC and those who developed SEC following marriage. For some INSEC adults, a SEC partnership appears to have the capacity to heal some of the intrapsychic injuries sustained early in childhood.

Attachment bonds to romantic partners also appear in dating relationships among adolescents. Hazan and Zeifman (1994) observed that the preferred source of security shifts between early adolescence (i.e., eight to 14 years old) and late adolescence (i.e., 15 to 17 years old). Whereas younger adolescents tend to seek out their parents for comfort and support, older adolescents frequently turn towards peers, especially romantic partners, for safety. Hazan and Zeifman found that many of these romantic relationships from adolescence constituted true attachment bonds.

# *Therapists*

Therapists may also function in roles similar to secondary attachment figures. Bowlby (1988a) suggests that attachment therapists should create SEC relationships with clients in order to help clients explore their IWMs and to work through their issues effectively. Therapists are to provide secure bases for their clients from which their clients can gain awareness of and discuss negative life circumstances. Similar to the parental figures of SEC children, therapists are to be supportive and trustworthy, so that clients feel encouraged and protected when exploring painful

experiences. As dependable, warm, and empathetic figures, therapists are able to provide clients with the sense of safety and support that is necessary for therapeutic change to occur (Whiston & Sexton, 1993).

Additionally, attachment therapists aim to use their relationships with clients in a manner similar to the psychoanalytic concept of transference. Clients are encouraged to explore their relationships with their therapists, as clients tend to transfer views, predictions, and explanations of parental figures' behaviors and emotions onto their therapists. Greater insight into the clients' IWMs in relation to their parental figures can be obtained through the exploration of the therapeutic relationship (Bowlby, 1988a).

A meta-analysis was conducted by van IJzendoorn, Juffer, and Duyvesteyn (1995) on attachment-focused interventions aimed to change and/or prevent the development of INSEC parent-child bonds. One approach that past studies have undertaken involves the use of a SEC therapeutic relationship to help parents process their childhood attachment experiences, gain awareness of their IWMs, and understand how their IWMs impact their present relationships with their children. Although improvements in the sensitivity of parenting have been observed as a result of attachment approaches, the degree to which security increases within parent-child bonds appears to be small. It seems that shorter-term interventions, that are solely focused upon changing parenting behaviors to promote security between infant and parent (e.g., carrying baby close to mother's body for extended periods of time), may in fact be more effective in promoting parenting sensitivity and maternal-infant security than are approaches focused upon IWMs. Due to the absence of longitudinal studies, however, van IJzendoorn and colleagues acknowledge that the lasting impact of attachment interventions on parents' IWMs is still unknown.

### Statement of Problem

A number of people may serve as secondary attachment figures throughout one's life. Although their exact role with regards to IWMs and later functioning is unclear, these figures have demonstrated far-reaching positive effects on children's and adults' self-perceptions, emotions, and behaviors. Few published studies have examined the role of current or past romantic partners on attachment (e.g., Crowell et al., 2002; Kirkpatrick & Hazan, 1994; Paley et al., 1999) or the impact of a variety of secondary attachment figures on adult functioning. This line of research, that examines secondary attachment relationships during development, is key to understanding adult relationships and functioning. Especially when changes in attachment occur over time, it would be informative to determine whether and to what capacity a variety of nonparental relationships contribute to increased security in adulthood. Past research would suggest that secondary attachment relationships could provide corrective and growth experiences for INSEC individuals that contribute to the development of SEC IWMs (Bowlby, 1988a; Crowell et al., 2002; Daniel, 1998; Mitchell-Copeland et al., 1997; Pearson et al., 1994; van IJzendoorn et al., 1992). The strong empirical and practical need for gaining an understanding of the mechanisms involved in the transformation from childhood INSEC to adult SEC is echoed by Shaver, Hazan, and Bradshaw (1988):

The process by which an insecure person becomes increasingly secure, probably by participating in relationships that disconfirm negative features of experience-based mental models and/or gaining insight into the workings of one's mental models, offers an extremely important topic for future research. (p. 85).

Thus, the current study took steps towards evaluating the relationships and relational factors that play significant roles in the development of ERN-SEC.

Following Shaver and colleagues' (1988) suggestion, the current study examined important past and current secondary attachment bonds in order to gather information about

relational histories that may have helped ERN-SEC individuals to gain coherent perspectives on their negative childhoods. Kirkpatrick and Hazan (1994) took a preliminary step towards exploring the ERN-SEC process and observed that the simple formation of new romantic relationships was unrelated to the development of SEC. Crowell and colleagues (2002) explored this issue further by examining the marital bond in relation to attachment change and suggested that spousal relations may, in fact, facilitate the development of SEC in adulthood. This study did not examine the function of other secondary attachment relationships, however, or other potential resources, such as therapy, on the development of SEC. Therefore, the current study addressed this limitation by exploring the potential impact of other important secondary attachment relationships on the acquisition of ERN-SEC. This study was largely exploratory in taking preliminary steps towards understanding the type, quantity, and quality of secondary attachment bonds throughout the lives of individuals with different attachment histories.

The current study also continued the work of Crowell and colleagues (2002) by exploring the qualitative aspects of these numerous relationships, in order to determine if qualitative differences occurred between the secondary attachment histories of adults with different attachment styles. Given that the current research question concerns the process of constructing SEC IWMs out of INSEC IWMs formed during childhood, this study exclusively focused upon ERN-SEC and CONT-INSEC individuals, as differences in their relationship histories would highlight key features of the ERN-SEC developmental process. Both qualitative and quantitative approaches were utilized, in order to gather detailed information about this new and exciting area of attachment.

Thus, the current study explored the relational histories of ERN-SEC and CONT-INSEC adults, in order to assess whether and how these groups differ with regards to their past and

current secondary attachment relationships. Information about the quantity and quality of past and current secondary attachment bonds were obtained along with data concerning the temporal occurrence of these relationships. It was hypothesized that ERN-SEC adults would be more likely than CONT-INSEC adults to have had and/or to have been positively influenced by SEC secondary attachment bonds. Based on Bowlby's (1988a) and Main's (1994) theoretical formulations, it was suggested that ERN-SEC adults were largely able to develop SEC IWMs due to their experiences with secondary attachment figures with whom they had SEC bonds. These nonparental attachment relationships were expected to have provided ERN-SEC adults with corrective emotional experiences, whereby trust, safety, and acceptance were demonstrated. In this supportive environment, it is possible that ERN-SEC adults were able to talk about their difficult upbringings, express their painful affect, and gain a coherent understanding of their formative experiences, thus helping them to develop SEC IWMs. These issues regarding the quantity and nature of secondary attachment histories were thus focused upon in the current study.

### **CHAPTER 2**

### **METHOD**

## **Participants**

A sample of 869 students at a large state university in the South Central United States was recruited to participate in a project on exploring the quality of important relationships throughout life. Women made up 67.9% of the sample. Ages ranged from 18 to 57 years, with the mean age being 22.3 years (SD = 4.8). In terms of racial/ethnic status, the sample was predominantly Caucasian (67.8%), but also consisted of African-Americans/Blacks (12.4%), Latinos/Latinas (10.2%), Asian Americans/Pacific Islanders (4.5%), Native Americans (.6%); 4.5% indicated "Other." The majority of participants self-identified as heterosexual (95.0%) with 2.6% self-identifying as bisexual and 2.3% self-identifying as gay/lesbian. Regarding the longest lifetime romantic relationship participants reported having, the median length was 1 to 2 years. Participants who have never been in a romantic relationship were excluded from Part 4 (i.e., the evaluation of secondary attachment relationships throughout life), as their adult attachment scores, which are based on real-life experiences in adult romantic relationships, were not considered to be valid. See Table 2 for descriptive statistics.

All participants were undergraduates: 14.4% were in their first year of college, 16.2% in their second year, 27.0% in their third year, 23.7% in their fourth year, 12.9% in their fifth year, and 5.7% in their sixth year or more. The majority of participants did not live with their parents throughout the year (65.8%). Most of the participants had never married (91.5%); 6.9% were currently married, 1.4% were divorced, and .2% were widowed. In terms of annual income, which was determined either for the student if s/he was financially independent or for the student's family if s/he was financially dependent on her/his family: 21.7% earned less than

\$10,000, 25.9% earned \$10,001-\$25,000, 15.2% earned \$25,001-\$50,000, 12.5% earned \$50,001-\$75,000, 11.5% earned \$75,001-\$100,000, and 13.2% earned more than \$100,001.

Regarding the sample's history of seeking mental health treatment, 47% attended counseling previously; the median length of time spent in counseling was 1 to 6 months over a lifetime and weekly sessions were most common. Considering the sample's lifetime history of mental health treatment, individual therapy was the primary mode of treatment (61.9%), followed by family therapy (23.6%), group therapy (9.1%), and couples therapy (5.4%). Thirtyone percent sought treatment for mood and/or anxiety disorders, 29% for family problems (e.g., parental divorce, familial conflict, death of a family member), 9% for non-familial stressful life events (e.g., non-familial abuse, non-familial accidents, issues of acculturation, death of a non-relative), 9% for acting out behaviors (e.g., getting into trouble at school, illegal activity, drug/alcohol use, problems with anger), 9% for personal growth and adjustment, 7% for romantic relationship problems, 3% for eating disorders with or without anxiety, depression, and/or substance use, and 2% for Attention Deficit/Hyperactivity Disorder. When asked about the importance of counseling experiences in their lives, participants on average reported that counseling did not play a significant role in their lives either positively or negatively. The majority of participants have not read self-help books (55.0%); 35.6% of participants, however, found them to be helpful, while 9.5% found them to be unhelpful.

### Measures

Demographics. A demographic questionnaire was used to obtain information regarding a participant's age, gender, grade level, ethnicity, sexual orientation, marital status, length of longest romantic relationship, annual income, household composition during different age

periods, time spent living away from home, participation in counseling, and experiences using self-help resources.

Social desirability. The 12-item Marlowe-Crowne Social Desirability Scale Form B (SDS; Reynolds, 1982) was used to assess participants' tendencies to respond in a socially desirable manner. Dichotomous responses are presented and participants rate items as 0, true, or 1, false. Total scores can range from 0, low social desirability, to 12, high social desirability. Reynolds (1982) reported adequate reliability (KR-20 = .75). In addition, Reynolds (1982) found that the Form B was significantly correlated with the Edwards Social Desirability Scale (r = .38). Crowne and Marlowe (1960) reported a test-retest reliability of the original Marlowe-Crowne Social Desirability Scale over a month period of .89.

Childhood Attachment. The Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987) was used to assess affective and cognitive qualities of attachment to parents. The IPPA is designed to evaluate the quality of current parental attachment; however, given the focus of the current study, the questionnaire was adapted to measure retrospective accounts of childhood relationships with parental figures. Similar to the Parental Bonding Instrument (PBI; Parker et al., 1979), participants were asked to respond to the statements, as they remember their parental figures during childhood until the age of 16. The IPPA consists of 28 Mother items, 28 Father items, and 25 Peer items: only the parent items were used in the current study. In order to accommodate diverse family compositions, items were reworded to refer to non-specific parental figures. For instance, "My mother helps me to talk about my difficulties" was changed to, "My parental figure helped me to talk about my difficulties." For each set of parental items, participants identified the specific parental figure they were evaluating. Each IPPA item is presented on a 5-point Likert type scale, ranging from 1, almost never or never true, to 5, almost

always or always true. The IPPA was originally designed for use with adolescents; however, given that the developmental sample solely consisted of college students (i.e., 16-20 years old), it was deemed appropriate for use in the current study with a sample of undergraduate students.

There are three parent subscales: Trust, Communication, and Alienation (Armsden & Greenberg, 1987). The Trust subscale consists of 10 items with scores ranging from 10, low degree of mutual trust, to 50, high degree of mutual trust. The Communication subscale includes 10 items, where a low score of 10 reflects low communication quality and a high score of 50 indicates high communication quality. Eight items comprise the Alienation subscale and scores range from 8, minimal feelings of anger towards and alienation from parental figure, to 40, prevalent feelings of anger towards and alienation from parental figure. Subscale scores are computed by reversing the reverse-scored items and summing together with the other subscale items. Parent subscales are highly correlated, ranging from -.70 (i.e., Communication and Alienation) to .76 (i.e., Trust and Communication) and -.76 (i.e., Trust and Alienation; Armsden & Greenberg, 1987). Females have been found to rate paternal attachment as significantly more SEC and to report greater Communication with parents than do males (Muris, Meesters, van Melick, & Zwambag, 2001; Papini, Roggman, & Anderson, 1991).

High security and low security classification is determined through evaluating score placement for each subscale within the distribution of scores from a given sample (Armsden & Greenberg, 1987). Scores that fall within the top third are considered "high," the middle third are "medium," and the low third are "low." To be classified into the High Security group, Trust or Communication scores must be medium or high and Alienation scores must be medium or low. An exception is if both Trust and Alienation scores fall within the medium range, then classification is not made into the High Security group. Individuals who are in the Low Security

group may evidence low scores on Trust and Communication and medium or high scores on Alienation. Low Security individuals would also be those with one Trust or Communication score as medium and the other score as low, and a high Alienation score.

High internal reliabilities for the IPPA were demonstrated for both the Mother and Father attachment measures ( $\alpha$  = .87, .89, respectively) and the Trust, Communication, and Alienation parent subscales ( $\alpha$  = .91, .91, .86, respectively; Armsden & Greenberg, 1989; Armsden & Greenberg, 1987). Over a 3-week period, test-retest reliabilities were .93 for attachment to both parental figures (Armsden & Greenberg, 1987). Convergent validity was demonstrated through moderate correlations between Trust, Alienation, and Communication and the Adult Attachment Scale (AAS) subscales (i.e., Anxiety, Close, Depend; Collins & Read, 1990), ranging from .49 (i.e., Trust, Communication and Close) to .66 (i.e., Trust and Depend; Brennan, Clark, & Shaver, 1998). IPPA security is correlated with higher scores on the Parental Attachment Questionnaire (PAQ; Kenny, 1990). Parental attachment with increased security was also related to family environment variables (i.e., Family Environment Scale; Moos, 1974), such as feeling accepted, supported, and free to express feelings, as well as decreased familial conflict and overcontrolling by family members (r = -.20 to .56; Armsden & Greenberg, 1987).

Armsden and Greenberg (1987) reported positive correlations between security of parental attachment and the Tennessee Self-Concept Scale (Fitts, 1965), with correlations ranging from .46 for Social Self-Concept to .78 for Family Self-Concept. Security in maternal and paternal attachment relationships is positively associated with feeling emotionally connected to family members and comfortable in expressing thoughts and feelings in the family environment, as well as increased life satisfaction and self-esteem (Armsden & Greenberg, 1987; Papini et al., 1991). Greater attachment insecurity with both parents was related to increased

depression (r = -.53), anxiety, and a history of suicidal ideation (Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990; Muris et al., 2001, Papini et al., 1991, Vivona, 2000). Additionally, the IPPA's discriminant validity was supported through correlations with the AAS (Collins & Read, 1990) subscales and ranged from -.39 (i.e., Alienation and Close) to -.62 (i.e., Alienation and Depend).

Romantic Adult Attachment. The 36-item Experiences in Close Relationships measure (ECR; Brennan et al., 1998) was used to assess adult attachment within romantic relationships. ECR items were drawn from every adult attachment multi-item measure known to the authors in 1996 (i.e., 14 attachment self-reports; Fraley, Waller, & Brennan, 2000). Items from popular attachment measures, such as Griffin and Bartholomew's (1994) Relationship Styles Questionnaire (RSQ), Collins and Read's (1990) Adult Attachment Scale (AAS), Armsden and Greenberg's (1987) Inventory of Parent and Peer Attachment (IPPA), and Simpson's (1990) attachment measure (unnamed), were included in the original item pool and factor analyzed.

Brennan and colleagues (1998) reported two orthogonal factors for the ECR: Avoidance (18 items), which is related to Bartholomew's (1990) self-model of attachment, and Anxiety (18 items), which reflects Bartholomew's attachment model of other. MacDonald (1999) replicated the ECR factor structure. ECR items were selected based on minimal redundancy and high absolute-value correlations with individual factors. The Avoidance factor reflects an avoidance of intimacy and distrust of others. High scores on Anxiety reflect feelings of unworthiness within relationships and worry about interpersonal rejection. When men and women are considered together, low correlations between these two factors have been reported (r = .11; Brennan et al., 1998). However, when classified by gender, MacDonald (1999) reported significant correlations

between Avoidance and Anxiety for women (r = .38), but not for men (r = .18). Additionally, men have been observed to score significantly higher on Avoidance than women.

Participants were asked to respond to each item concerning romantic relationship orientation on a 7-point Likert-type scale, ranging from 1, disagree strongly, to 7, agree strongly (Brennan et al., 1998). Continuous scores on the Avoidance and Anxiety factors are obtained by reversing the scores of the reverse scored items and summing items together. Additionally, attachment categories are determined by first multiplying the Avoidance and Anxiety scores by classification coefficients specific to each attachment style, that were derived from Fisher's linear discriminant functions based on the data from the standardization sample (N = 1082). The resulting scores are then summed and specified classification coefficients for each attachment category are subtracted from the totals. The participant is classified into one of four attachment categories (i.e., SEC, FEAR, PREOCC, DISMISS) based on the highest attachment classification score. Specifically, SEC adults demonstrate low Avoidance and low Anxiety scores, FEAR adults evidence high Avoidance and high Anxiety scores, PREOCC adults are low on Avoidance and high on Anxiety, and DISMISS adults have high scores on Avoidance and low scores on Anxiety. The latent structures of the ECR attachment classifications are similar to the descriptions of the 4 attachment prototypes put forth by Bartholomew (1990).

Brennan and colleagues (1998) reported high construct validity for the Avoidance factor. High positive correlations were demonstrated between the Avoidance factor and Carver's (1994) Avoidance subscale (r = .90), Rothbard, Roberts, Leonard, and Eiden's (1993) Avoidance of Intimacy subscale (r = .89), and Feeney, Noller, and Hanrahan (1994) Discomfort with Closeness subscale (r = .88). The Anxiety subscale was highly correlated with the Rothbard and colleagues' (1993) Fear of Rejection subscale (r = .88), Feeney and colleagues' (1994)

Preoccupation subscale (r = .88), and Brennan and Shaver's (1995) Jealousy/ Fear of Abandonment subscale (r = .82). High internal consistencies were demonstrated for Avoidance ( $\alpha = .94$ ) and Anxiety ( $\alpha = .91$ ). A test-retest reliability of .70 has been reported (Brennan, Shaver, & Clark, 2000, as cited in Swanson & Mallinckrodt, 2001).

Convergent validity for the ECR factors has been demonstrated, suggesting that the ECR is a valid measure for assessing attachment dimensions. ECR Avoidance and Anxiety factors were associated with retrospective accounts of contingent parenting, specifically with regards to the demonstration of approval, affection, and protection (Swanson & Mallinckrodt, 2001). Retrospective accounts of having an enmeshed family were related to increased Anxiety for women (r = .49), whereas memories of a disengaged family were associated with Avoidance and Anxiety for men (r = .34, r = .49). Anxiety and Avoidance are associated with increased emotional distress, as measured by the Symptom Checklist 90 (r = .41, r = .29, respectively; Derogatis, 1983; Weems, Berman, Silverman, & Rodriguez, 2002). Additionally, the Avoidance factor was negatively correlated with the Nurturance/ Love scale of the Interpersonal Adjective Scale—Revised (r = .29 to -.44; MacDonald, 1999, Trapnell & Wiggins, 1990).

Secondary Attachment Relationships. Card sorts were used to identify important secondary attachment figures during childhood, adolescence and adulthood. The Q-sort (Stephenson, 1953), a popular card-sorting technique, was developed to provide ipsative information about a single person or group and is frequently used to explore self-concepts (Anastasi, 1988). Card sorts have been used extensively in diverse fields of psychology, such as to assess attachment, vocational, feminist, occupational therapy, and educational concepts (Corr, 2001; Kobak & Hazan, 1991; Slaney & MacKinnon-Slaney, 2000; Snelling, 1999; Truscott, Paulson, & Everall, 1999).

In the current study, card sorts were utilized to organize the names of secondary attachment figures by importance. Through sorting of the name cards, participants identified their three most important secondary attachment figures for later use on the secondary attachment questionnaires. See Part 4 for a more detailed explanation of the procedure.

The 24-item Questionnaire About Secondary Attachment Figures (Q-SAF; Kaminski, Wiley, Cohen, Anton, & Bednar, 2004; Wiley, 2004), a semantic differential questionnaire, was created for this study (see Appendix A). The Q-SAF will be used to assess the qualities of diverse secondary attachment relationships during childhood, adolescence, and adulthood. Osgood, Suci, and Tannenbaum (1957) suggest that the semantic differential is a versatile method that is highly adaptable to a wide variety of research projects. Past studies have used the semantic differential method to measure a diversity of research areas, including perceptions of childhood relationships with parents, attitudes towards the disabled, and romantic jealousy (Blatt, Wein, Chevron, & Quinlan, 1979; Dolan, Sawyer, & Allen, 1983; Hawkins, 1987).

Using 6-point scales, anchored by bipolar adjectives (e.g., caring, uncaring), participants indicated the quality of their secondary attachment figures and the degree to which the qualities were true of their secondary attachment figures. Participants were asked to rate the degree to which these adjectives described each of their secondary attachment figures by marking an "X" on the appropriate place on the scales. The placement of negative and positive adjectives differed across dimensions. For example, positive adjectives were left anchors for some dimensions and right anchors for other dimensions. Each rating was assigned a numerical value from –3 to +3. Reverse scored items (i.e., those dimensions with the positive adjective as the left anchor) were reversed, such that +3 represents the highest rating of each positive adjective and -3, represents the highest rating of each negative adjective. Two summary scores were obtained: 1) Positive

Subscale Total and 2) Negative Subscale Total. The Q-SAF also yields 8 subscale scores, as explained below.

The Q-SAF assesses qualities of secondary attachment relationships on eight specific subscales (4 Positive Subscales and 4 Negative Subscales): Warm (Caring-Uncaring, Hateful-Loving, Emotionally Closed-Emotionally Open), Empathic (Good Listener-Bad Listener, Patient-Impatient, Understanding-Close-minded/ Judgmental), Altruistic (Dependable-Undependable, Supportive-Unsupportive, Unhelpful-Helpful), Attractive Personality (Funny-Serious, Boring-Fun, Unfriendly-Friendly), Mean (Mean-Nice, Abusive-Compassionate), Insensitive (Rude-Kind/ Polite, Insensitive-Sensitive), Dishonest (Disloyal-Loyal, Trustworthy-Untrustworthy, Lying-Truthful, Honest-Dishonest), and Unattractive Personality (Selfish-Giving, Lazy-Hardworking, Easy-going/ Flexible- Stubborn, Poor Communicator-Good Communicator). Internal consistencies for the summary scores and subscales were computed for each time period individually, and ranged from .80 to .96 in childhood, from .68 to .93 in adolescence, and from .70 to .95 in adulthood. Specific internal consistencies and correlations are listed in Table 3 and 4.

The 5-item Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) is a categorical and continuous measure of attachment that was used to measure participants' relationship orientation within important secondary attachment relationships. Adapted from Hazan and Shaver's (1987) measure of adult attachment, the RQ incorporates prototypical descriptions of the four attachment styles identified by Bartholomew (1990; i.e., SEC, PREOCC, DISMISS, FEAR). The dimensions underlying Bartholomew's (1990) and Hazan and Shaver's (1987) adult attachment categories appear to be highly similar (Brennan, Shaver, & Tobey, 1991). In order to assess the attachment quality of specific attachment bonds, the wording of the

prototypical descriptions was changed in order to refer to specific past and current secondary attachment figures, who were identified during the card sorts (Trinke & Bartholomew, 1997).

Participants rated the extent to which each attachment prototype characterized their thoughts, feelings, and behaviors within specific secondary attachment relationships. Likert-type scales were used, anchored at 1, *not at all like me*, to 7, *very much like me*. Next, participants identified the attachment prototype that was the most characteristic of their relationship orientation within a particular secondary attachment relationship.

Gender differences have appeared on the RQ (Brennan et al., 1991). Compared to women, men have been found to be about four times as likely to be DISMISS and significantly more likely to be PREOCC. On the other hand, women were about one-and-a-half times more likely to be classified as FEAR and significantly more likely to be labeled SEC, in comparison to men.

Despite the methodological and conceptual discrepancies between self-report and interview assessments of attachment styles (Griffin & Bartholomew, 1994), the RQ has been found to have moderate convergent validity with both ratings from the Peer Attachment Interview (r = .27-.45; Bartholomew & Shaver, 1998) and with combined ratings from the Peer Attachment Interview and Family Attachment Interview (r = .22-.50; Griffin & Bartholomew, 1994). Convergent validity has also been demonstrated with a semi-structured interview of attachment bonds with romantic partners, friends, and close others (Bartholomew & Horowitz, 1991). Attachment styles as assessed by the RQ were significantly associated with interview ratings of multiple relationship factors, including involvement in past romantic relationships (r = .34- .40 (PREOCC, SEC), r = -.35 to -.36 (DISMISS, FEAR)), intimacy within friendships (r = .77 (SEC), r = -.33 to -.52 (DISMISS, FEAR)), self-confidence in interpersonal situations

(r = .41-.52 (SEC, DISMISS), -.33 to -.70 (PREOCC, FEAR)), and tendency to seek others for safety and comfort when upset (r = .60 (PREOCC), r = -.33 to -.57 (DISMISS, FEAR)). Additionally, Blain, Thompson, and Whiffen (1993) found that adults identified by the RQ to be SEC reported higher security within friendships (i.e., IPPA- Peer scale; Armsden & Greenberg, 1987) and greater social support from friends and family members than did PREOCC, FEAR, and DISMISS adults.

Construct validity of the four RQ attachment styles has been supported (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994). For each attachment category, significant correlations with self-report measures of self-concept, anxiety, and sociability, which are consistent with Bartholomew's (1990) theoretical models of self and others, were demonstrated. Scharfe and Bartholomew (1994) reported that the four attachment categories of the RQ have an eight month test-retest reliability of .56 to .63. Over the same eight-month period, the RQ identified 61% to 71% of participants as SEC or INSEC at both testing sessions. Attachment ratings were found to be moderately stable over the eight month period (r = .39-.58).

## Procedure

#### Part 1

A sample of 49 undergraduates at the University of North Texas, who were 18 years and older, were recruited for a pilot study that evaluated the readability of the attachment self-reports and the comprehensibility of the items. Potentially ambiguous items on the attachment self-reports were identified and only these items were tested during the pilot study. Participants were presented with an open-ended questionnaire, in which the selected items from the IPPA and ECR were listed and participants were asked to provide their interpretations of each item. Participants also completed the demographics questionnaire. Upon completion of both questionnaires,

participants received an extra credit card that could be applied to their undergraduate psychology classes.

Four independent judges evaluated the participants' responses to each item, determined if the majority of responses accurately reflected the items' content, and, if necessary, revised the items to clarify their meanings. Inter-judge disagreements were resolved by consensus. The revised attachment measures were used in Part 3 to determine childhood and adult romantic attachment.

#### Part 2

A sample of 167 University of North Texas undergraduates, ages 18 years and older, filled out questionnaires about the qualities of secondary attachment relationships. Volunteers from undergraduate psychology classes were recruited to fill out the questionnaires by offering extra credit. This was done by recruiting in individual classes and posting the study on an online website, which was used to advertise psychology research studies at the university.

Questionnaires were distributed either at a designated break during class, at the end of class, or during scheduled times outside of class. A consent form was given to each participant prior to filling out the questionnaires. Participants completed one of three different questionnaires (Questionnaire A, B, or C; see Appendix A) depending upon the phase of the study, along with the demographics questionnaire.

Questionnaire A was created to elicit adjectives that describe positive secondary attachment figures. A description of positive secondary attachment figures, adapted from Trinke and Bartholomew (1997), was provided and participants were asked to identify specific relationships in their lives that fit this description. If participants were able to identify at least one past or present positive secondary attachment relationship, they were asked to list all of the positive adjectives that they would use to describe each of their secondary attachment figures. Through focusing on actual secondary attachment relationships, versus fantasized ones, it was expected that the validity of the responses would improve. For those participants who were unable to think of a positive secondary attachment figure, they were directed to complete questionnaire B, instead.

Questionnaire B was created to elicit adjectives that describe negative secondary attachment figures. A description of negative secondary attachment figures (adapted from Trinke & Bartholomew, 1997) was provided and participants were asked to identify those negative secondary attachment relationships that they have experienced. Next, participants were asked to focus on each of these relationships individually and list all of the negative adjectives they would use to describe these secondary attachment figures. Those participants who were unable to think of any negative secondary attachment figures were asked to complete questionnaire A.

Given the large pool of different adjectives provided by the participants, several reduction steps were taken. First, those words or phrases that were not adjectives (e. g., no bueno, sperm donor), were physical characteristics (e. g., beautiful, pretty), or were descriptions of the participants' relational experiences (e.g., I was used.), were removed from the list. Second, those adjectives that were listed multiple times by the same participant were counted only once in the overall frequency total. Third, four independent judges narrowed the list of adjectives

further by removing non-words and low frequency words, and by grouping synonyms together. Inter-judge disagreements were resolved by consensus. Adjectives were included in questionnaire C only if the adjective itself, or the synonym group it was included in, was listed by participants at least 5 or more times.

Questionnaire C was developed from Questionnaires A and B, and its purpose was to elicit antonyms associated with the highest frequency adjectives given for positive and negative secondary attachment figures. Participants were asked to write the antonym of each of the 70 adjectives listed, which described positive and negative secondary attachment figures. The bipolar pairs that resulted from this administration were reduced based on frequency and whether they were English words or inaccurate antonyms of the specified adjectives (as determined by a thesaurus). Those antonyms that were listed the most frequently for a particular adjective, were the most accurate (as determined by a thesaurus), and had the clearest meaning were subsequently included in the Questionnaire About Secondary Attachment Figures (Q-SAF). In the event that two antonyms were listed the same number of times for a given adjective, a thesaurus was referenced in order to determine which antonym was the most appropriate.

To reduce the number of bipolar dimensions on the Q-SAF, the independent judges selected a subgroup of adjective pairs based on frequency of listing, semantic accuracy, and simplicity of vocabulary and resolved discrepancies through consensus. To prevent fatigue and shorten administration time when giving the semantic differential, the adjectives were further reduced based upon the frequency of listing on Questionnaires A and B. Adjectives and their bipolar opposites were included in the Q-SAF only if they were listed by at least 14% of the participants on Questionnaire A and by at least 8% of the participants on Questionnaire B.

#### Part 3

In order to assess attachment stability, four hundred and ninety-eight students, ages 18 and older, were recruited from undergraduate psychology classes at the University of North Texas (a small number of education, rehabilitation, and anthropology classes were also surveyed). In addition, some participants signed up for the study on the university's website for research studies. The study was briefly described to the students, as being a brief evaluation of past and current relationships. The students were told that a second part of the study would be conducted at a later date and they were asked to provide their contact information at the appropriate place in the questionnaire packet if interested. For those students who were selected to participate in the second part of the study, it was explained that their participation would make them eligible to win one of two \$50 cash prizes.

Students that chose to participate in the attachment stability screening were instructed to read and sign a consent form and complete the self-reports in the order in which they were given. Questionnaires were counterbalanced in order to control for ordering effects. Participants completed the demographics questionnaire, Social Desirability Scale (SDS; Reynolds, 1982), Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987), and the Experiences in Close Relationships measure (ECR; Brennan et al., 1998) during a class break, immediately after class, or at a scheduled appointment time. Participants responded to questions concerning attachment to parents during childhood and adult romantic attachment, in order to identify participants who were ERN-SEC and CONT-INSEC. Each questionnaire packet had an identifying number at the bottom of each page, which was used to identify each participant. Upon completion of the questionnaire packet, participants were given extra credit, which could be used in either their psychology, education, rehabilitation, or anthropology classes.

#### Part 4

A sample of 33 ERN-SEC and 42 CONT-INSEC undergraduates participated in the assessment of secondary attachment relationships. ERN-SEC and CONT-INSEC individuals were identified by the quality of their current attachment in adulthood and their parental attachment bond(s) during childhood. Participants were asked to participate in Part 4 if they had one of the following sets of primary attachment bonds in childhood and adolescence: two parents with two INSEC bonds, two parents with one INSEC bond and one unclassifiable bond (i.e., not clearly SEC or INSEC), or one parent with one INSEC bond. Given that it has yet to be established if having one INSEC and one SEC parental bond in childhood result in INSEC or SEC, participants who had at least one SEC attachment bond during childhood were not recruited for Part 4.

Each participant was met with individually in order to administer the card sort, Q-SAF, and RQ. The study was briefly explained to the participants in the consent form and participants were asked to sign their names, indicating their consent to participate in the study. First, participants were asked to list their positive and negative secondary attachment figures from childhood, adolescence, and adulthood. To control for ordering effects, some participants were asked to list positive secondary attachment figures first, whereas other participants were asked to list negative secondary attachment figures first. For instance, participants were presented with the following description of secondary attachment figures, as well as a brief description of negative secondary attachment figures (adapted from Trinke & Bartholomew, 1997):

Now, what I want you to do is think about those people in your life who, for better or for worse, have been important to you. These are the people who have played significant roles in your childhood, adolescence, and/or adulthood. These people may have been important to you in the past and/or they may be important to you in the present. Specifically, we are interested in only those people who you do not consider to have been your parents.

There are two groups of important people that I want you to think of. Remember, I am interested in those people who, for better or for worse, have played significant roles in your life during childhood, adolescence, and/or adulthood.

First, think about those relationships that were dissatisfying and/or led you to feel badly about yourself. In these relationships, these people have not cared about you in the ways you would have wanted during the good and/or bad times. These people have not been as dependable as you would have liked and have not been supportive enough when you needed them to be. In addition, these people have had the ability to upset you at times. However, if your relationships with these people have already ended or were to end, the loss of these relationships would elicit strong emotions inside of you.

After the concept of negative secondary attachment figures was explained, participants were given a pile of note cards and asked to list on separate note cards those people they thought of that fit the description above (i.e., negative secondary attachment figure) during early childhood (i.e., from birth until the end of sixth grade), adolescence (summer after sixth grade until the end of high school) and adulthood (summer after high school until present); participants filled out the index cards for the different time periods separately. Participants were told that they could use as many or as few note cards as they needed. On each note card, they also indicated the relationship of each figure to them (e.g., sister, therapist).

Next, the description of the other type of secondary attachment figure was presented (e.g., positive secondary attachment figure). Participants were told the following (adapted from Trinke & Bartholomew, 1997):

Remember before how I said there were two groups of important people that I wanted you to think about. Well, now I want you to think about another group of people who may have played significant roles in your life during childhood, adolescence, and/or adulthood.

Think about those people with whom you have experienced a positive relationship during any period in your life. In these relationships, these people have cared about you during the good and the bad times. You have been able to depend upon these people and they have supported you when you have felt upset. At times, however, these people have had the ability to upset you. If your relationships with these people have already ended or were to end, the loss of these relationships would elicit strong emotions inside you.

Similar to the procedure for identifying negative secondary attachment figures, participants listed on separate note cards the names and types of relationships (e.g., brother, cousin) associated with their positive secondary attachment figures from each time period.

Once all of the attachment figures were listed on separate note cards for each time period, the card sort, Q-SAF, and RQ were administered. Each time period was focused upon separately and the order of time periods was randomized across participants. For instance, the card sort for secondary attachment figures from Adulthood might be first conducted. During the card sort, the participants sat at a table with a meter-stick lying about one foot in front of them, which represented a Likert scale anchored at "most important," and "least important." In the middle of the meter-stick, a slim vertical piece of paper was attached, indicating the half-way point on the meter-stick. In addition, two slim vertical pieces of paper were attached on both the left and right sides of the meter-stick, at equal distances apart, in order to further discriminate placement along the meter-stick. For a single time period (e.g. Adulthood), participants were asked to indicate the importance of each secondary attachment figure by placing the name cards into piles alongside the meter-stick. The top three secondary attachment figures from the specified time period were determined by counting the number of figures listed in the most important piles. If more than three secondary attachment figures were grouped into the top piles, participants were asked to resort only those cards in the most important piles in order of importance. This procedure continued to be implemented until three secondary attachment figures were identified as being of highest importance.

After the card sorting procedure, the placement of each pile of cards was graphed on a data recording sheet (see Appendix B) in alphabetical order (e.g., A, most important, F, least important). In addition, the number of cards in each pile was recorded (e.g., A (4)). Next, these

letters were written on the backs of the corresponding cards, in order that information about the ordering of secondary attachment figures along the importance dimension could be derived. In order to keep the time periods separate, different pen colors were used to mark placement on the backs of these cards (i.e., black pen for childhood, red pen for adolescence, green pen for adulthood).

Following the card sort, the Q-SAF and RQ were completed for the most important secondary attachment figures from a specified time period. The index cards that represented the most important secondary attachment figures were shuffled, in order to randomize the order of attachment figures about which the questionnaires were completed. Additionally, in order to minimize ordering effects across time periods, the sequence of administering the Q-SAF and RQ was varied. On the Q-SAF, participants rated the quality of each secondary attachment figure on the 24 bipolar dimensions. Participants were also presented with the RQ and asked to assess the attachment quality of each attachment relationship. The Q-SAF and RQ were completed for each of the top three secondary attachment figures within a given time period. This procedure of administering the card sorts, Q-SAF, and RQ was repeated for the other two time periods separately. Upon completion of the card sort, Q-SAF, and RQ, participants were given extra credit, which could be used in either their psychology, education, rehabilitation, or anthropology classes. Further, each participant filled out a raffle ticket, making them eligible to win one of two \$50 cash prizes.

## Design and Statistical Analysis

The demographic, SDS, IPPA, ECR, card sort, Q-SAF, and RQ data were examined using SPSS (1999) programs. Descriptive information was determined, including means, standard deviations, and frequencies. Chi squares and *t* tests were computed to evaluate

differences between ERN-SECs and CONT-INSECs on the demographic variables. Pearson correlations were used to measure levels of association between social desirability and both parent-child and adult attachment. Next, univariate analyses of variance (ANOVAs) were employed to compare ERN-SECs and CONT-INSECs on the quantities of positive, negative, and total secondary attachment figures identified from childhood, adolescence, and adulthood.

Further, the quality of secondary attachment figures from the three time periods was evaluated and compared between the attachment groups. Univariate analyses of variance (ANOVAs) were employed to determine differences on the Positive and Negative Subscale Totals from the Q-SAF and on the attachment scores from the RQ (i.e., continuous ratings of SEC, PREOCC, DISMISS, FEAR) for positive and negative secondary attachment figures, and for the most frequently mentioned relationship types (i.e., peers, grandparents, siblings, significant others) and groups (usually older relatives, usually same-age non-relatives, usually same-age relatives, significant others) within each time period. Using separate multivariate analyses of variance (MANOVAs) for each time period, scores on the Q-SAF Positive Subscales (i.e., Warm, Empathic, Altruistic, Attractive Personality) and Negative Subscales (i.e., Mean, Insensitive, Dishonest, Unattractive Personality) were compared between ERN-SECs and CONT-INSECs for positive and negative secondary attachment figures, as well as for the most frequently listed relationship types and groups. For significant MANOVAs, univariate analyses of variance (ANOVAs) were computed to determine on which variables on a specific subscale were groups significantly different. Partial eta-squared  $(\eta_p^2)$  was used to evaluate the magnitude of effects for the Q-SAF and RQ analyses.

#### CHAPTER 3

## RESULTS

# **Group Composition**

Based on IPPA and ECR responses for the whole sample, 157 participants (25.6%) were categorized as CONT-INSEC and 58 (9.5%) as ERN-SEC. Of this sample, 42 CONT-INSECs and 33 ERN-SECs participated in Part 4. CONT-INSECs and ERN-SECs did not differ significantly on age (see Table 5). Additionally, no differences in gender, year in college, ethnicity, or annual income were observed between those ERN-SECs and CONT-INSECs who participated in Part 4. This subsample of ERN-SECs and CONT-INSECS also did not differ significantly on marital status, length of longest romantic relationship, residence with or away from parents, or participation in counseling (See Table 6).

# Social Desirability and Measures of Attachment

Pearson correlations were used to evaluate degrees of association for ERN-SECs and CONT-INSECs separately between social desirability (i.e., SDS) and measures of parent-child attachment (i.e., IPPA) and adult attachment (i.e., ECR). From the IPPA, two childhood attachment scores were derived (i.e., for the first parental figure identified and for the second parental figure identified). For both ERN-SECs and CONT-INSECs, the majority of parental figures listed first were maternal figures (n = 30, n = 36, respectively) and the majority of those listed second were paternal figures (n = 22, n = 32, respectively). In addition, the ECR produced scores for two factors (i.e., Anxiety, Avoidance). For ERN-SECs, social desirability was significantly and negatively correlated with both childhood attachment with the second parental figure (r = -.425, p < .05) and with Anxiety (r = -.408, p < .05). No significant correlations were observed between social desirability and childhood attachment with the first parental figure (r = -.425, p < .05) and with Anxiety (p = -.408, p < .05). No significant correlations were

.076, p = .680) and Avoidance (r = .181, p = .321). Regarding the CONT-INSEC group, no significant correlations were found between social desirability and childhood attachment with the first parental figure (r = .229, p = .145), with the second parental figure (r = .060, p = .720), or with Anxiety (r = .146, p = .356) or Avoidance (r = .118, p = .456).

## Hypotheses and Results

Research Question 1: Do the frequencies of positive and negative secondary attachment figures in childhood, adolescence, and adulthood differ between ERN-SECs and CONT-INSECs?

Univariate analyses of variance (ANOVAs) were used to test for differences in frequencies of secondary attachment figures during the three time periods. Extreme values were removed for frequency analyses. Results indicated no significant differences between ERN-SECs and CONT-INSECs on frequency of positive secondary attachment figures by time period: childhood, F(1, 70) = .587, p = .446 ( $\eta_p^2 = .008$ ); adolescence, F(1, 71) = .053, p = .818 ( $\eta_p^2 = .001$ ); adulthood, F(1, 73) = 3.231, p = .076 ( $\eta_p^2 = .042$ ). Further, the ANOVAs were not significant for frequencies of negative secondary attachment figures from childhood, F(1, 73) = 3.934, p = .051 ( $\eta_p^2 = .051$ ), adolescence, F(1, 72) = 1.974, p = .164 ( $\eta_p^2 = .027$ ), and adulthood, F(1, 70) = .476, p = .492 ( $\eta_p^2 = .007$ ). See Table 7 for means, standard deviations, and univariate analyses of variance F ratios.

Research Question 2: Do ERN-SECs rate their most important secondary attachment figures from childhood, adolescence, and adulthood as more positive on Positive Subscales and less negative on Negative Subscales, when compared to CONT-INSECs?

Univariate analyses of variance (ANOVAs) were computed on the Positive Subscale

Total from the Q-SAF for positive secondary attachment figures from childhood, adolescence,
and adulthood. Results suggested no significant differences between ERN-SECs' and CONT-

INSECs' ratings of positive secondary attachment figures on the Positive Subscale Total from childhood, F(1, 73) = .829, p = .366 ( $\eta_p^2 = .011$ ), adolescence, F(1, 68) = .744, p = .391 ( $\eta_p^2 = .011$ ), and adulthood, F(1, 72) = .005, p = .944 ( $\eta_p^2 = .000$ ). Further, ERN-SECs and CONT-INSECs did not differ significantly on their ratings of negative secondary attachment figures on the Negative Subscale Total during childhood, F(1, 44) = .495, p = .486 ( $\eta_p^2 = .011$ ), adolescence, F(1, 48) = 3.753, p = .059 ( $\eta_p^2 = .073$ ), and adulthood, F(1, 26) = .982, p = .331 ( $\eta_p^2 = .036$ ) (see Table 8).

Results of a between subjects multivariate analysis of variance (MANOVA) revealed no significant differences on Positive Subscales for positive secondary attachment figures in childhood, F(4,70) = .938, p = .447 ( $\eta_p^2 = .051$ ). The MANOVA for positive secondary attachment figures from adolescence on Positive Subscales was also not significant, F(4,65) = .706, p = .591 ( $\eta_p^2 = .042$ ). In adulthood, the MANOVA revealed no significant differences, F(4,69) = .046, p = .996 ( $\eta_p^2 = .003$ ). Means, standard deviations, and univariate analyses of variance F ratios are presented in Table 9.

Multivariate analyses of variance (MANOVAs) were used to test for differences between ERN-SECs and CONT-INSECs on Negative Subscales for negative secondary attachment figures during the three time periods. In childhood, the MANOVA was not significant, F(4, 41) = .493, p = .741 ( $\eta_p^2 = .046$ ). Significant differences were observed, however, for negative secondary attachment figures from adolescence, F(4, 45) = 3.356, p < .05 ( $\eta_p^2 = .230$ ). Follow-up univariate of analyses revealed a significant difference on Mean, F(1, 48) = 10.560, p < .005 ( $\eta_p^2 = .180$ ). Specifically, CONT-INSECs rated their negative secondary attachment figures from adolescence as being more Mean than did ERN-SECs. No significant differences in adolescence were observed for Insensitive, Dishonest, and Unattractive Personality. In

adulthood, the MANOVA for negative secondary attachment figures on Negative Subscales was not significant, F(4, 23) = .545, p = .704 ( $\eta_p^2 = .087$ ). See Table 10 for means, standard deviations, and univariate analyses of variance F ratios.

Research Question 3: Do ERN-SECs rate their relationships with positive and negative secondary attachment figures from childhood, adolescence, and adulthood as higher on SEC and lower on PREOCC, DISMISS, and FEAR, when compared to CONT-INSECs?

Univariate analyses of variance (ANOVAs) were used to test for differences between ERN-SECs and CONT-INSECs on ratings of attachment in positive secondary attachment relationships from childhood, adolescence, and adulthood. The ANOVA revealed a significant difference on FEAR in adulthood, F(1, 72) = 4.892, p < .05 ( $\eta_p^2 = .064$ ). Compared to ERN-SECs, CONT-INSECs reported thinking, feeling, and behaving in more FEAR ways in their relationships with positive secondary attachment figures during adulthood. No significant differences were observed on FEAR during childhood, F(1, 73) = .374, p = .543 ( $\eta_p^2 = .005$ ) and adolescence, F(1, 68) = .471, p = .495 ( $\eta_p^2 = .007$ ). The ANOVAs were not significant for SEC in childhood, F(1, 73) = .114, p = .737 ( $\eta_p^2 = .002$ ), adolescence, F(1, 68) = 3.151,  $p = .080 (\eta_p^2 = .044)$ , and adulthood, F(1, 72) = 2.690,  $p = .105 (\eta_p^2 = .036)$ . Likewise, no significant differences were observed for PREOCC in any of the three time periods: childhood,  $F(1, 73) = 1.723, p = .193 (\eta_p^2 = .023), \text{ adolescence}, F(1, 68) = 2.867, p = .095 (\eta_p^2 = .040),$ adulthood, F(1, 72) = 2.410, p = .125 ( $\eta_p^2 = .032$ ). ERN-SECs and CONT-INSECs also did not differ on how DISMISS they reported to be in their relationships with positive secondary attachment figures in childhood, F(1, 73) = .041, p = .840 ( $\eta_p^2 = .001$ ), adolescence, F(1, 68) = .001.337, p = .564 ( $\eta_p^2 = .005$ ), and adulthood, F(1, 72) = 2.837, p = .096 ( $\eta_p^2 = .038$ ). See Table 11 for descriptive statistics and univariate analyses of variance F ratios.

Univariate analyses of variance (ANOVAs) were also used to explore differences on attachment for relationships with negative secondary attachment figures during the three time periods. The ANOVA for SEC was significant in adolescence, F(1, 48) = 4.500, p < .05 $(\eta_p^2 = .086)$ . In particular, ERN-SECs reported to be more SEC than CONT-INSECs in their relationships with negative secondary attachment figures during adolescence. No significant differences on SEC were observed for childhood, F(1, 44) = 1.032, p = .315 ( $\eta_p^2 = .023$ ) and adulthood, F(1, 26) = .161, p = .691 ( $\eta_p^2 = .006$ ). For PREOCC, the ANOVA was significant in childhood, F(1, 44) = 4.995, p < .05 ( $\eta_p^2 = .102$ ). CONT-INSECs reported thinking, feeling, and behaving in more PREOCC ways in their relationships with negative secondary attachment figures during childhood, when compared to ERN-SECs. The ANOVAs for PREOCC, however, were not significant for adolescence, F(1, 48) = 2.589, p = .114 ( $\eta_p^2 = .051$ ) and adulthood, F(1, 26) = 2.490, p = .127 ( $\eta_p^2 = .087$ ). Further, no significant differences were observed on DISMISS in childhood, F(1, 44) = .000,  $p = .997 (\eta_p^2 = .000)$ , adolescence, F(1, 48) = .632,  $p = .431 \ (\eta_p^2 = .013)$ , and adulthood, F(1, 26) = .680,  $p = .417 \ (\eta_p^2 = .025)$ . In addition, the ANOVAs for FEAR were not significant in any of the three time periods: childhood, F(1, 44) =.341, p = .562 ( $\eta_p^2 = .008$ ), adolescence, F(1, 48) = 1.691, p = .200 ( $\eta_p^2 = .034$ ), and adulthood,  $F(1, 26) = .004, p = .953 (\eta_p^2 = .000)$ . See Table 12 for means, standard deviations, and univariate analyses of variance F ratios.

Research Question 4: Which secondary attachment figures do ERN-SECs and CONT-INSECs list the most frequently as being the most important (i.e., in the top 3)?

Frequencies and percentages of the most important (top 3) secondary attachment figures are listed in Tables 13, 14, 15 by time period. In childhood, grandparents (34.4%) were listed the most frequently by ERN-SECs, followed by peers (23.7%), and siblings (22.6%). For CONT-

INSECs, the most important secondary attachment figures from childhood that were listed the most frequently were peers (29.8%), siblings (24.2%), and then grandparents (16.9%). In adolescence, ERN-SECs and CONT-INSECs listed peers the most frequently (36.7%, 44.0%; respectively), followed by significant others (18.4%, 21.6%; respectively), and siblings (16.3%, 9.6%, respectively). Lastly for ERN-SECs in adulthood, the highest frequency of important secondary attachment figures was for significant others (32.3%) and the next highest frequencies were for peers (30.2%) and siblings (13.5%). For CONT-INSECs in adulthood, on the other hand, peers (41.5%) were listed the most often, followed by significant others (24.4%) and siblings (16.3%). Those secondary attachment figures with frequencies of 15 or higher (multiple listings possible per participant) were included in subsequent analyses for each time period.

See Tables 16, 17, and 18 for frequencies and percentages of top 3 positive secondary attachment figures for childhood, adolescence, and adulthood. For ERN-SECs, the most frequently mentioned positive secondary attachment figures from childhood were grandparents (30.1%), followed by peers (17.2%), and siblings (16.1%). CONT-INSECs identified peers the most frequently as important positive secondary attachment figures (20.2%), with siblings (14.5%) and grandparents (13.7%) being listed the next most frequently. In adolescence, both ERN-SECs and CONT-INSECs listed peers the most frequently (26.5%; 32.8%; respectively). For ERN-SECs, siblings (11.2%) and grandparents (7.1%) were listed the next most often as being important positive secondary attachment figures; whereas for CONT-INSEC, significant others (8.8%) were listed the next most frequently, followed by siblings (8.0%). In adulthood, both ERN-SECs and CONT-INSECs listed peers the most frequently as important positive secondary attachment figures (28.1%, 37.4%; respectively), followed by significant others (25%, 14.6%; respectively), and siblings (10.4%, 13.0%; respectively).

See Tables 19, 20, and 21 for frequencies and percentages of most important (top 3) negative secondary attachment figures for the three time periods. In childhood, both ERN-SECs and CONT-INSECs listed peers (6.5%, 9.7%; respectively) and siblings (6.5%, 9.7%; respectively) the most frequently as important negative secondary attachment figures. The next most frequently listed negative secondary attachment figures for ERN-SECs were grandparents (4.3%); whereas for CONT-INSECs, the next highest frequency was for aunts and uncles (4.0%). For both ERN-SECs and CONT-INSECs, the most frequently listed negative secondary attachment figures in adolescence were significant others (12.2%, 12.8%; respectively) and peers (10.2%, 11.2; respectively). ERN-SECs listed siblings (5.1%) the next most often as important negative secondary attachment figures from adolescence and CONT-INSECs listed both siblings (1.6%) and aunts and uncles (1.6%) the next most frequently. Finally in adulthood, both ERN-SECs and CONT-INSECs listed significant others the most frequently as important negative secondary attachment figures (7.3%, 9.8%; respectively). ERN-SECs identified siblings (3.1%) from adulthood the next most often, followed by peers (2.1%) and aunts and uncles (2.1%). For CONT-INSECs, peers were listed the second most frequently (4.1%), followed by siblings (3.3%).

Research Question 5: Do ERN-SECs and CONT-INSECs rate specific secondary attachment figures differently on summary scores from the Q-SAF and attachment scores from the RQ?

Peers

Peer secondary attachment figures will also be referred to as usually same-age non-relatives when discussing secondary attachment groups.

## Childhood

Univariate analyses of variance (ANOVAs) were used to test for differences between ERN-SECs and CONT-INSECs on ratings of peers from childhood on the Positive and Negative Subscale Totals. Findings revealed no significant differences on the Positive Subscale Total, F(1, 35) = 1.263, p = .269 ( $\eta_p^2 = .035$ ). Further, the ANOVA was not significant for the Negative Subscale Total for peers from childhood, F(1, 35) = .760, p = .389 ( $\eta_p^2 = .021$ ).

To evaluate group differences on Positive Subscales from the Q-SAF, a multivariate analysis of variance (MANOVA) was computed for peer secondary attachment figures in childhood. Results revealed significant differences, F(4, 32) = 2.704, p < .05 ( $\eta_p^2 = .253$ ). Follow-up univariate analyses of variance, however, demonstrated no significant differences on individual Positive Subscales. For Negative Subscales, the MANOVA was not significant, F(4, 32) = .286, p = .885 ( $\eta_p^2 = .035$ ), demonstrating no significant differences in how ERN-SECs and CONT-INSECs rated their peer secondary attachment figures from childhood on Negative Subscales from the Q-SAF.

Further, findings from univariate analyses of variance (ANOVAs) revealed no significant differences between ERN-SECs and CONT-INSECs on attachment of peer secondary attachment relationships from childhood: SEC, F(1, 35) = .778, p = .384 ( $\eta_p^2 = .022$ ); PREOCC, F(1, 35) = 3.059, p = .089 ( $\eta_p^2 = .080$ ); DISMISS, F(1, 35) = .877, p = .355 ( $\eta_p^2 = .024$ ); and FEAR, F(1, 35) = .406, p = .528 ( $\eta_p^2 = .011$ ). See Tables 22, 23, 24, and 25 for descriptive statistics and univariate analyses of variance F ratios for all time periods.

## Adolescence

To evaluate differences between ERN-SECs and CONT-INSECs on summary and subscale scores from the Q-SAF, univariate and multivariate analyses of variance (ANOVAs,

MANOVAs) were used. Findings from a between-subjects ANOVA suggest no significant differences on the Positive Subscale Total from the Q-SAF for ratings of peers from adolescence, F(1, 57) = 2.450, p = .123 ( $\eta_p^2 = .041$ ). Likewise, the ANOVA for the Negative Subscale Total was also not significant, F(1, 57) = 1.142, p = .290 ( $\eta_p^2 = .020$ ). The MANOVA additionally demonstrated no significant differences between ERN-SECs and CONT-INSECs on ratings of peer secondary attachment figures from adolescence on Positive Subscales from the Q-SAF, F(54, 4) = 1.132, p = .351 ( $\eta_p^2 = .077$ ). Further, the MANOVA for Negative Subscales was also not significant, F(54, 4) = .396, p = .811 ( $\eta_p^2 = .028$ ).

Univariate analyses of variance (ANOVAs) were used to test for differences between ERN-SECs and CONT-INSECs on the quality of their attachment with peer secondary figures from adolescence. Results were significant for PREOCC, F(1, 57) = 6.168, p < .05 ( $\eta_p^2 = .098$ ), and FEAR, F(1, 57) = 4.398, p < .05 ( $\eta_p^2 = .072$ ). CONT-INSECs reported thinking, feeling, and behaving in more PREOCC and FEAR ways in peer secondary attachment relationships during adolescence, in comparison to ERN-SECs. However, findings demonstrated no significant differences on SEC, F(1, 57) = 2.556, p = .115 ( $\eta_p^2 = .043$ ), and DISMISS, F(1, 57) = .930, p = .339 ( $\eta_p^2 = .016$ ).

#### Adulthood

Univariate and multivariate analyses of variance (ANOVAs, MANOVAs) were used to test for differences on Q-SAF summary scores and subscales for peers in adulthood. The ANOVAs revealed no significant differences on either the Positive Subscale Total, F(1, 50) = .858, p = .359 ( $\eta_p^2 = .017$ ), or the Negative Subscale Total, F(1, 50) = .036, p = .851 ( $\eta_p^2 = .001$ ). Further, findings from a between-subjects MANOVA demonstrated no significant differences on Positive Subscales from the Q-SAF for peer secondary attachment figures in

adulthood, F(4, 47) = .537, p = .709 ( $\eta_p^2 = .044$ ). Likewise, the MANOVA for Negative Subscales did not reveal significant differences between ERN-SECs and CONT-INSECs on ratings of peer secondary attachment figures from adulthood, F(4, 47) = .840, p = .507 ( $\eta_p^2 = .067$ ).

For attachment quality from the RQ, univariate analyses of variance (ANOVAs) were used to test for differences between ERN-SECs and CONT-INSECs in their peer secondary attachment relationships from adulthood. Results were not significant: SEC, F(1, 50) = 1.109,  $p = .297 (\eta_p^2 = .022)$ ; PREOCC, F(1, 50) = 1.649,  $p = .205 (\eta_p^2 = .032)$ ; DISMISS, F(1, 50) = 1.152,  $p = .288 (\eta_p^2 = .023)$ ; FEAR, F(1, 50) = .343,  $p = .561 (\eta_p^2 = .007)$ .

# Grandparents

# Childhood

Univariate and multivariate analyses of variance (ANOVAs, MANOVAs) were used to compare ERN-SECs and CONT-INSECs on ratings of grandparent secondary attachment figures in childhood. The ANOVAs demonstrated no significant difference on the Positive Subscale Total, F(1, 29) = 1.075, p = .308 ( $\eta_p^2 = .036$ ), and the Negative Subscale Total from the Q-SAF, F(1, 29) = .557, F(1, 29) =

Means, standard deviations, and univariate analyses of variance *F* ratios are presented in Tables 26, 27, 28, and 29.

#### Adolescence

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 6; ERN-SEC, n = 8).

## Adulthood

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 6; ERN-SEC, n = 6).

# Siblings

## Childhood

Between-subject univariate and multivariate analyses of variance (ANOVAs, MANOVAs) were used to test for differences between ERN-SECs and CONT-INSECs on Q-SAF summary, Q-SAF subscales, and RQ scores. The ANOVAs revealed no significant differences on either the Positive Subscale Total, F(1, 33) = 1.206, p = .280 ( $\eta_p^2 = .035$ ), or the Negative Subscale Total, F(1, 33) = .423, p = .520 ( $\eta_p^2 = .013$ ). The MANOVA found no significant difference on Positive Subscales from the Q-SAF for siblings from childhood, F(4, 30) = .639, p = .638 ( $\eta_p^2 = .079$ ). Additionally, ERN-SECs and CONT-INSECs did not differ in their ratings of siblings from childhood on Negative Subscales from the Q-SAF, F(4, 30) = .344, p = .846 ( $\eta_p^2 = .044$ ). Further, the ANOVAs for RQ scores revealed no significant differences on attachment quality of secondary attachment relationships with siblings in childhood: SEC, F(1, 33) = .287, p = .596 ( $\eta_p^2 = .009$ ); PREOCC, F(1, 33) = .954, p = .336 ( $\eta_p^2 = .028$ ); DISMISS, F(1, 33) = 1.620, p = .212 ( $\eta_p^2 = .047$ ); FEAR, F(1, 33) = .017,

 $p = .897 (\eta_p^2 = .001)$ . See Tables 30, 31, 32, and 33 for means, standard deviations, and univariate analyses of variance F ratios.

## Adolescence

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 10; ERN-SEC, n = 12).

#### Adulthood

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 17; ERN-SEC, n = 10).

# Significant Others

# Childhood

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 0; ERN-SEC, n = 0).

# Adolescence

Differences on Q-SAF and RQ scores for significant others from adolescence were evaluated using univariate and multivariate analyses of variance (ANOVAs, MANOVAs). Results from the ANOVAs demonstrated no significant differences on the Positive Subscale Total, F(1, 36) = .238, p = .629 ( $\eta_p^2 = .007$ ) and on the Negative Subscale Total, F(1, 36) = .588, p = .448 ( $\eta_p^2 = .016$ ). A between-subjects MANOVA revealed no significant differences on Positive Subscales from the Q-SAF, F(4, 33) = .377, p = .823 ( $\eta_p^2 = .044$ ). For Negative Subscales, the MANOVA was also not significant, F(4, 33) = 1.379, p = .262 ( $\eta_p^2 = .143$ ). ANOVAs were run on the four attachment styles from the RQ, yielding no significant differences: SEC, F(1, 36) = 3.112, p = .086 ( $\eta_p^2 = .080$ ), PREOCC, F(1, 36) = .004, p = .948 ( $\eta_p^2 = .000$ ), DISMISS, F(1, 36) = .000, p = .991 ( $\eta_p^2 = .000$ ), and FEAR, F(1, 36) = 1.644,

 $p = .208 \ (\eta_p^2 = .044)$ . See Tables 34, 35, 36, and 37 for means, standard deviations, and univariate analyses of variance F ratios for significant others from adolescence and adulthood. Adulthood

Univariate and multivariate analyses of variance (ANOVAs, MANOVAs) were used to test for differences on the Q-SAF and RQ for significant others in adulthood. The ANOVA was not significant for Positive Subscale Total, F(1, 52) = .177, p = .675 ( $\eta_p^2 = .003$ ). No significant differences were revealed by the ANOVA for Negative Subscale Total, F(1, 52) = 1.102, p = .299 ( $\eta_p^2 = .021$ ). Additionally, the MANOVA demonstrated no significant differences between ERN-SECs and CONT-INSECs in their ratings of significant others from adulthood on Positive Subscales from the Q-SAF, F(4, 49) = .606, p = .660 ( $\eta_p^2 = .047$ ). Further, the MANOVA yielded no significant differences on Negative Subscales, F(4, 49) = 1.094, p = .370 ( $\eta_p^2 = .082$ ).

Univariate analyses of variance (ANOVAs) were conducted on attachment scores from the RQ. Results revealed significant differences on SEC, F(1, 52) = 5.024, p < .05 ( $\eta_p^2 = .088$ ), PREOCC, F(1, 52) = 11.919, p < .005 ( $\eta_p^2 = .186$ ), and DISMISS, F(1, 52) = 5.070, p < .05 ( $\eta_p^2 = .089$ ). Specifically, ERN-SECs reported being more SEC, less PREOCC, and less DISMISS in their secondary attachment relationships with significant others in adulthood, when compared to CONT-INSECs. No significant difference was demonstrated for FEAR, F(1, 52) = 2.695, p = .107 ( $\eta_p^2 = .049$ ).

Research Question 6: Which groups of most important secondary attachment figures do ERN-SECs and CONT-INSECs list the most frequently from childhood, adolescence, and adulthood?

Frequencies and percentages of the most important (top 3) secondary attachment figures by relationship group are listed in Tables 38, 39, and 40 by time period. In childhood, usually

older relatives were listed the most frequently by ERN-SECs (40.9%), followed by usually sameage non-relatives (23.7%), and usually same-age relatives (23.7%). For CONT-INSECs, the most important secondary attachment figures from childhood that were listed the most frequently were usually same-age non-relatives (29.8%), usually older relatives (28.2%), and then usually sameage relatives (25.0%). In adolescence, ERN-SECs and CONT-INSECs listed usually same-age non-relatives the most frequently (36.7%, 44.0%; respectively). For ERN-SECs, the next highest frequencies for secondary attachment groups from adolescence was for significant others (18.4%) and usually same-age relatives (18.4%). CONT-INSECs also listed significant others (21.6%) the next most often, followed by usually older, paid for time with respondent, nonrelatives (12.0%). Lastly for ERN-SECs in adulthood, the highest frequency of important secondary attachment figures was for significant others (32.3%) and the next highest frequencies were for usually same-age non-relatives (30.2%) and usually same-age relatives (15.6%). For CONT-INSECs in adulthood, on the other hand, usually same-age non-relatives (41.5%) were listed the most often, followed by significant others (24.4%) and usually same-age relatives (17.9%). Those secondary attachment groups with frequencies of 15 or higher (multiple listings possible per participant) were included in subsequent analyses for each time period.

See Tables 41, 42, and 43 for frequencies and percentages of top 3 positive secondary attachment figures by relationship group for childhood, adolescence, and adulthood. For ERN-SECs, the most frequently mentioned positive secondary attachment figures from childhood were usually older relatives (34.4%), followed by usually same-age non-relatives (17.2%), and usually same-age relatives (16.1%). CONT-INSECs identified usually older relatives (21.0%) the most frequently as important positive secondary attachment figures, with usually same-age non-relatives (20.2%) and usually same-age relatives (15.3%) being listed the next most frequently.

In adolescence, both ERN-SECs and CONT-INSECs listed usually same-age non-relatives the most frequently (26.5%; 32.8%; respectively). For ERN-SECs, usually same-age relatives (12.2%) and usually older relatives (10.2%) were listed the next most often as being important positive secondary attachment figures; whereas for CONT-INSECs, usually older, paid for time with respondent, non-relatives (11.2%) were listed the next most frequently, followed by significant others (8.8%). In adulthood, both ERN-SECs and CONT-INSECs listed usually same-age non-relatives (28.1%, 37.4%; respectively) the most frequently as important positive secondary attachment figures. For ERN-SECs, the second highest frequency was for significant others (25%) from adulthood, followed by usually older relatives (11.5%) and usually same-age relatives (11.5%). For CONT-INSECs, significant others (14.6%) and usually same-age relatives (14.6%) were the next most common positive relationship groups listed for adulthood.

See Tables 44, 45, and 46 for frequencies and percentages of most important (top 3) negative secondary attachment figures by relationship group for the three time periods. In childhood, ERN-SECs listed usually same-age relatives the most frequently as important negative secondary attachment figures, followed by usually older relatives (6.5%), and usually same-age non-relatives (6.5%). On the other hand, usually same-age non-relatives (9.7%) and usually same-age relatives (9.7%) were the negative relationship groups listed the most frequently by CONT-INSECs, followed by usually older relatives (7.3%). For both ERN-SECs and CONT-INSECs in adolescence, the highest frequencies were for significant others (12.2%, 12.8%; respectively) and usually same-age non-relatives (10.2%, 11.2; respectively). ERN-SECs listed usually same-age relatives (6.1%) the next most often as important negative secondary attachment figures from adolescence and CONT-INSECs listed both usually same-age relatives (2.4%) and usually older relatives (2.4%) the next most frequently. Finally in adulthood, both

ERN-SECs and CONT-INSECs listed significant others (7.3%, 9.8%; respectively) the most frequently as important negative secondary attachment figures. ERN-SECs identified usually same-age relatives (4.2%) from adulthood the next most often, followed by usually same-age non-relatives (2.1%) and usually older relatives (2.1%). For CONT-INSECs, usually same-age non-relatives were listed the second most frequently (4.1%), followed by usually same-age relatives (3.3%).

Research Question 7: Do ERN-SECs and CONT-INSECs rate specific groups of secondary attachment figures differently on summary scores from the Q-SAF and attachment scores from the RQ?

# **Usually Older Relatives**

This group of usually older relatives consists of the following persons (i.e., grandparents, step-grandparents, great-grandparents, aunts/uncles, step-aunts/uncles, great-aunts/uncles).

Childhood

Between-subjects univariate and multivariate analyses of variance (ANOVAs, MANOVAs) were used to test for differences between ERN-SECs and CONT-INSECs on Q-SAF ratings of usually older relatives from childhood. Results from the ANOVAs were not significant for either of the Q-SAF summary scores: Positive Subscale Total, F(1, 36) = .181, p = .673 ( $\eta_p^2 = .005$ ); Negative Subscale Total, F(1, 36) = .548, p = .464 ( $\eta_p^2 = .015$ ). The MANOVA for the Positive Subscales from the Q-SAF demonstrated no significant differences between the two groups, F(4, 33) = .960, p = .443 ( $\eta_p^2 = .104$ ). In addition, the MANOVA for the Negative Subscales was also not significant, F(4, 33) = .615, p = .655 ( $\eta_p^2 = .069$ ).

To explore differences between ERN-SECs and CONT-INSECs on attachment scores, univariate analyses of variance (ANOVAs) were computed. A significant difference was

observed for PREOCC, F(1, 36) = 5.171, p < .05 ( $\eta_p^2 = .126$ ). CONT-INSECs reported thinking, feeling, and behaving in more PREOCC ways in their secondary attachment relationships with usually older relatives in childhood, when compared to ERN-SECs. The results demonstrated no significant differences on SEC, F(1, 36) = 1.183, p = .284 ( $\eta_p^2 = .032$ ), DISMISS, F(1, 36) = 1.268, p = .268 ( $\eta_p^2 = .034$ ), and FEAR, F(1, 36) = .074, p = .788 ( $\eta_p^2 = .002$ ). See Tables 47, 48, 49, and 50 for means, standard deviations, and univariate analyses of variance F ratios.

## Adolescence

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 9; ERN-SEC, n = 11).

# Adulthood

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 8; ERN-SEC, n = 8).

# Usually Same-Age Non-Relatives

This group of usually same-age non-relatives, also referred to as peers, consists of the following persons (i.e., friends, enemies, co-workers). See Peers section.

# Usually Same-Age Relatives

This group of usually same-age relatives consists of the following persons (i.e., siblings, half-siblings, step-siblings, cousins, sisters/brothers-in-law).

# Childhood

To test for differences on Q-SAF and RQ scores, univariate and multivariate analyses of variance (ANOVAs, MANOVAs) were used. Findings from the ANOVAs demonstrated no significant difference between ERN-SECs and CONT-INSECs on the Positive Subscale Total,

F(1, 35) = .632, p = .432 ( $\eta_p^2 = .018$ ) and the Negative Subscale Total, F(1, 35) = .115, p = .737 ( $\eta_p^2 = .003$ ) for usually same-age relatives from childhood. The MANOVA revealed no significant differences on Positive Subscales from the Q-SAF, F(4, 32) = .614, p = .656 ( $\eta_p^2 = .071$ ). Likewise, the MANOVA for Negative Subscales was also not significant, F(4, 32) = .248, p = .909 ( $\eta_p^2 = .030$ ). ANOVAS were run on attachment scores from the RQ and none of the analyses were significant: SEC, F(1, 35) = .220, p = .642 ( $\eta_p^2 = .006$ ); PREOCC, F(1, 35) = .561, p = .459 ( $\eta_p^2 = .016$ ); DISMISS, F(1, 35) = 2.228, p = .145 ( $\eta_p^2 = .060$ ); FEAR, F(1, 35) = .057, p = .813 ( $\eta_p^2 = .002$ ). See Tables 51, 52, 53, and 54 for descriptive statistics and univariate analyses of variance F ratios.

### Adolescence

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 11; ERN-SEC, n = 14).

## Adulthood

Sample size is not sufficient to warrant further analyses (CONT-INSEC, n = 18; ERN-SEC, n = 12).

# Significant Others

This group of significant others consists of the following persons (i.e., boyfriends, girlfriends, spouses). See Significant Others section.

#### **CHAPTER 4**

### **DISCUSSION**

## Purpose

This study was largely exploratory in taking a preliminary step towards understanding the developmental process by which INSEC individuals develop security. Due to the infancy of this area of study, it is unclear which factors, in particular, contribute to the development of ERN-SEC. Attachment theorists, including Bowlby (1988a; 1969) and Ainsworth (1989), have suggested that secondary attachment relationships external to the primary parental bond may serve integral functions in the development of the self. Although explored theoretically, no study to date has empirically examined the diverse lifetime relational experiences of those individuals whose internal working models (IWMs) have been modified over time, so as to evidence SEC by adulthood. The goal of this study, therefore, was to shed light on this important area of empirical inquiry.

Given the exploratory nature of the current study, both qualitative and quantitative measures were used to derive information about the secondary attachment histories of ERN-SECs and CONT-INSECs. As no published measure of secondary attachment quality existed, a qualitative assessment was pursued, which produced a wealth of information regarding college students' perceptions of various negative and positive secondary attachment figures from their childhood, adolescence, and adulthood. From this data, a new measure of secondary attachment quality, the Q-SAF (Kaminski et al., 2004; Wiley, 2004), was created and subsequently used in the current research project. Further, as a way of identifying secondary attachment figures, a card sorting procedure was used to facilitate decision-making regarding the relative importance of secondary attachment figures from different time periods. In addition, the Q-SAF and other pre-

established measures of attachment (i.e., IPPA, ECR, RQ) were utilized to obtain empirical information regarding the attachment quality of multiple relationships over the lifespan. As little is known empirically about the ERN-SEC developmental process, the fact that the current study employed both qualitative and quantitative measures of data collection constitutes a methodological strength of this research project.

As minimal research was available from which to derive hypotheses, several research questions were put forth based upon the theoretical formulations of Bowlby (1988a) and Main (1994). In general, we postulated that within SEC secondary attachment relationships, ERN-SEC adults were able to obtain needed support, safety, and validation that allowed them to explore their emotional experiences related to their difficult childhoods. It is suggested that these SEC secondary attachment relationships facilitated not only the development of a coherent understanding of formative experiences, but also provided ERN-SEC adults with corrective emotional experiences that occurred within fundamentally different attachment environments from what they were accustomed to. Through these significant relational experiences, it is theorized that ERN-SECs were able to revise their INSEC IWMs and develop a more SEC sense of self. The following discussion will start to explore this important area of study.

When interpreting the findings below it is important to note that 1) although many of the analyses that will be discussed were not statistically significant, effect sizes are medium to large and therefore practically meaningful and 2) that the majority of power analyses were notably less than .80. While a larger sample would increase power and yield more statistically significant findings, the relatively low base rate of occurrence of ERN-SEC (i.e., 9.5%) precluded a larger sample in the current study.

## Summary of Findings

Social Desirability and Attachment

In order to determine if social desirability was associated with retrospective reporting of parent-child and adult attachment, correlations were computed between the SDS and both the IPPA and ECR. Although no significant correlations among the variables were observed for CONT-INSECs, significant and negative correlations between the social desirability and attachment variables were found for ERN-SECs. Specifically, *higher social desirability* was associated with retrospectively reported *greater insecurity* in parent-child relationships with a second parent (i.e., vast majority of second parents were paternal figures (22 paternal vs. 7 maternal)) and with *less anxiety* in adult romantic relationships. Given the expectation that positive impression management would involve a downplaying of personal problems, it follows that individuals who are concerned about presenting themselves in a socially desirable manner might minimize the levels of their anxiety. It is less obvious, however, why greater social desirability among ERN-SECs would be associated with *less reported security* within particular parent-child relationships in childhood, that consisted mainly of paternal attachment figures. A study by Roisman and colleagues (2002) may shed light on this counterintuitive finding.

In the Roisman et al. (2002) study, retrospectively and prospectively defined groups of ERN-SECs and INSECs were compared on various developmental variables. Of particular interest is the finding that although ERN-SECS retrospectively described their maternal figures in childhood as being similar to those of INSECs, ERN-SECs were observed to have had better maternal support and structure at 24 months and better mother-child relationship quality at age 13 than did INSECs. This finding suggests that perhaps some other variable may be contributing to ERN-SECs' reporting of past parental bonds, thus leading them to magnify the negativity of

these relationships. Given the expected difficulty involved in achieving security and the pride that may come with this accomplishment, it may be that ERN-SECs exaggerate the negative aspects of their parental relationships in childhood and their positive functioning in romantic relationships in adulthood, so as to demonstrate to themselves and others the adversity they were able to withstand and overcome.

Unfortunately, father-child observational data was lacking from the Roisman and colleagues' study (2002), which precluded a comparison of actual and retrospectively reported father-child relationship quality for ERN-SECs and INSECs from childhood. Nevertheless, startling results appeared from Roisman et al.'s retrospective assessment revealing that ERN-SECs described their fathers during childhood as the least loving, most rejecting, and most neglectful of all of the INSEC and SEC groups. Although the observational data was not available for comparison, it is possible that ERN-SECs' paternal figures in childhood, in fact, treated them worse than those of the other attachment groups. Yet, it is also possible that these findings are simply the products of errors in reporting (e.g., social desirability, retrospective bias). Results from the current study would suggest that higher social desirability among ERN-SECs is related, in some way, to the retrospective reporting of greater insecurity in paternal-child relationships. It is important to note that the ERN-SEC group in the current study consisted primarily of females (i.e., almost three times that of males). Given that this finding appeared for the second parent, who in the majority of cases was a paternal figure, it is possible that the opposite-sex pairing of these parent-child bonds played some role in the relationship between social desirability and the retrospective reporting of these childhood relationships. Future research would be helpful in clarifying how these variables are related.

Frequencies of Secondary Attachment Figures

In following van IJzendoorn's and colleagues' (1992) attachment model of integration, which postulated that a higher number of SEC bonds would lead to more positive functioning, this study examined the frequencies of positive secondary attachment figures among ERN-SECs and CONT-INSECs. Positive secondary attachment figures in the current study were those described as being caring, dependable, and supportive- qualities one might assume to find within a SEC relationship. In contrast to the integration model, however, the present study found that ERN-SECs and CONT-INSECs reported similar frequencies of positive secondary attachment figures from childhood, adolescence, and adulthood. Further, no differences appeared for frequencies of negative secondary attachment figures, as well as for the total number of secondary attachment figures, for each time period.

As a way of understanding these unexpected findings, it is important to consider the specifics of van IJzendoorn and colleagues' (1992) study. Towards formulating the integration model, van IJzendoorn and colleagues (1992) examined attachment relationships with only mothers, fathers, and caregivers. Findings from their study suggested that for children, later psychological functioning could be predicted by the total number of SEC bonds with these three attachment figures during childhood (i.e., three SEC bonds led to the most positive socioemotional development). In contrast to van IJzendoorn and colleagues' research, however, the current study examined a greater diversity and larger frequency of secondary attachment figures across the lifespan. For instance, as many as thirteen types of secondary attachment figures were listed per time period in the current study with mean frequencies ranging from 1.55 for total negative secondary attachment figures to 11.49 for total number of all secondary attachment figures.

In considering these discrepant results, the hierarchy model (Bowlby, 1969; Bretherton, 1985; Main et al., 1985) provides a potential explanation. According to the hierarchy model, specific types of attachment relationships are thought to vary in their impact on psychosocial functioning. Thus, it may be that establishing SEC with mothers, fathers, and caregivers is more important for later development, possibly due to the caregiving system (Bowlby, 1969), than SEC with other secondary attachment figures (e.g., friends, teachers, siblings). Further research in this area is clearly needed to further elaborate on these discrepancies.

Positivity and Negativity Ratings of Most Important Secondary Attachment Figures

Although ERN-SECs and CONT-INSECs did not differ on how positively they perceived their secondary attachment figures during childhood and adulthood, ERN-SECs viewed their negative secondary attachment figures from adolescence as being *less mean* than those of CONT-INSECs. Bowlby (1969) noted that during adolescence, attachment goals begin to shift from that of proximity to parental figures for security and comfort to that of peer bonding and experiences outside of the home. As the developing adolescent is engaging in these additional relational experiences and struggling with the stresses of puberty, s/he must separate from her/his child identity and begin to construct a new identity as an adult (Bee, 1997). During this formative time of adolescence, secondary attachment relationships may play key roles in the developing sense of self, as they provide opportunities for the confirmation, disconfirmation, and/or potential restructuring of self- and other- models.

Thus, for INSEC adolescents who will later become CONT-INSEC in adulthood, relational experiences with secondary attachment figures who they perceive to be mean may serve to confirm negative self- and other-views formed previously in relationships with primary attachment figures (e.g., I am not worthy of being treated well. Others are not nice and cause you

pain.). For ERN-SECs, on the other hand, repeated experiences with negative secondary attachment figures whom they view as being less mean may serve to modify previously established thoughts, feelings, and behaviors relevant to intrapersonal and interpersonal relationships.

Another possible explanation of this finding and other results that demonstrate more positive relational histories among ERN-SECs versus CONT-INSECs concerns the potential influence of the ERN-SEC process on ERN-SECs' perceptions of past and current secondary attachment relationships. With regards to the previously mentioned finding, which demonstrated that ERN-SECs viewed their negative secondary attachment figures from adolescence as less mean than those of CONT-INSECs, one possibility is that ERN-SECs remember these figures as affecting them in less negative ways, given that ERN-SECs were able to overcome their negative primary relationships and develop SEC bonds in adulthood. CONT-INSECs, on the other hand, may remember their past negative secondary attachment figures as being more mean and abusive towards them, and thus having a more adverse impact on their lives, given that CONT-INSECs continue to find themselves in dissatisfying relationships in adulthood. It is worth noting, however, that if the ERN-SEC process did indeed influence ERN-SECs' responding in the positive direction, it might be expected that across most of the quality and attachment variables, meaningful differences between ERN-SECs and CONT-INSECs would have appeared. Yet, for negative secondary attachment figures in adolescence, ERN-SECs differed from CONT-INSECs on only one quality variable out of 24. If the ERN-SEC process provides ERN-SECs with a different perspective on how their past secondary attachment figures influenced them, it is not known why this would be reflected only in select variables.

Attachment Quality of Most Important Secondary Attachment Relationships

Although ERN-SECs and CONT-INSECs did not differ in how secure, preoccupied, and dismissing they reported being in their relationships with positive secondary attachment figures, ERN-SECs were found to describe their thoughts, feelings, and behaviors as *less fearful* (i.e., fearful attachment scale) than those of CONT-INSECs' in adulthood. By being lower on reported fearful attachment, ERN-SECs demonstrated a greater capacity to trust and establish intimacy with positive secondary attachment figures, as well as a greater tendency to perceive others in adulthood as warm, supportive, and available (Bartholomew, 1990).

As we originally hypothesized, if ERN-SECs develop their security within positive secondary attachment relationships, then being able to trust another person and feel comfortable being close to them is likely very important in establishing needed corrective emotional experiences. As Bartholomew (1990) stated, "...[fearfully attached individuals] undermine the possibility of establishing satisfying social relations which could serve to modify early attachment representations" (p. 164). With CONT-INSECs being less able to establish emotional intimacy with positive secondary attachment figures in adulthood, CONT-INSECs may miss opportunities for transformative adult experiences that could potentially facilitate the development of security. For psychotherapists working with CONT-INSECs, it would be helpful for them to be mindful of the difficulties that their CONT-INSEC patients experience with regards to trust, disclosure of emotions, and feeling supported by others. Although establishing a positive therapeutic alliance is universally important within the clinical setting, the development of a secure base within the therapeutic relationship may be particularly vital towards helping

CONT-INSECs to feel comfortable to explore and revise their INSEC IWMs (Bowlby, 1988a; Whiston & Sexton, 1993).

The attachment quality of relationships with negative secondary attachment figures was also explored for childhood, adolescence, and adulthood. Whereas no differences were observed on dismissing and fearful attachment, ERN-SECs were found to describe their thoughts, feelings, and behaviors while in relationships with negative secondary attachment figures as being *less* preoccupied in childhood and adulthood, and more secure in adolescence, than those of CONT-INSECs.

The finding that ERN-SECs reported being *less preoccupied* with their negative secondary attachment figures in childhood suggests that even as children, ERN-SECs held self-views that were more positive and displayed coping skills that were more effective in handling experiences with negative secondary attachment figures, when compared to CONT-INSECs. According to their reporting, ERN-SECs were less concerned with being accepted by their negative secondary attachment figures and ERN-SECs' sense of self-worth was less dependent upon these figures' approval of them. Although this finding may, in part, be influenced by the SEC IWMs that ERN-SECs currently hold in adulthood, this finding does hint at the possibility that the ERN-SEC process may start as early as childhood.

Many important questions arise from this finding. First, why do some INSEC children (i.e., those that will become ERN-SEC) appear to be less concerned with how their negative secondary attachment figures view them and more capable of developing a sense of worthiness that is independent of these relationships? In particular, what drives these behaviors of self-protection? Are ERN-SECs born with and/or develop early in development specific psychological processes that facilitate this self-protection? Is there something fundamentally

different about these negative secondary attachment relationships in childhood that are less damaging to ERN-SECs' psyche when compared to those of CONT-INSECs? Clearly, these questions are clinically important and deserve further investigation.

Additionally, ERN-SECs reported being *more secure* in their relationships with negative secondary attachment figures in adolescence than did CONT-INSECs. As was previously mentioned, ERN-SECs described their negative secondary attachment figures in adolescence as being *less mean* than those of CONT-INSECs. Thus, if ERN-SECs' negative secondary attachment figures in adolescence were minimally mean, there may be an increased likelihood that ERN-SECs could develop SEC relationships with them, as the negativity of these relationships would be reduced.

It may also be that ERN-SEC adolescents are more capable of establishing closeness with negative secondary attachment figures, in part due to the natural dismissive process that occurs with parental figures during adolescence (Ammaniti, van IJzendoorn, Speranza, & Tambelli, 2000; Bee, 1997). Perhaps, ERN-SEC adolescents are more consciously or unconsciously aware of a need to distance themselves psychically from negative attachment figures, in order to protect their self and relieve intense negative affect. Although not to the extreme of dismissive attachment, this distancing process may allow ERN-SECs to maintain emotional intimacy with negative secondary attachment figures, while protecting themselves from further intrapsychic damage.

The current study also found that in adulthood, ERN-SECs were *less preoccupied* than CONT-INSECs in their relationships with negative secondary attachment figures. Given that ERN-SECs have achieved security by adulthood, it follows that their positive self-worth may be more internally driven and less dependent upon approval from others, including negative

secondary attachment figures. Being less preoccupied in attachment allows ERN-SEC adults to benefit from closeness with negative secondary attachment figures, while protecting their sense of self from further potential damage. For CONT-INSEC adults, on the other hand, continued adulthood relationships that are invalidating, unfulfilling, abusive, neglectful, and/or inconsistent (i.e., relational experiences that mirror characteristics of early parental experiences) may impede the augmentation of negative self- and other-views, as aspects of these negative experiences continue to be internalized.

Frequency of Most Important Secondary Attachment Figures

Frequencies of the top three most important secondary attachment figures from childhood, adolescence, and adulthood were examined. A particularly noteworthy finding is that ERN-SECs reported having more than double the number of grandparents as positive secondary attachment figures during childhood, when compared to CONT-INSECs (30.1% vs. 13.7%). In fact, for ERN-SECs, grandparents were the most frequently listed positive secondary attachment figures from childhood, followed by peers (17.2%) and siblings (16.1%). As secondary attachment figures, grandparents may play key roles in children's socioemotional development, given their many similarities to primary attachment figures (e.g., older, relative, parent). Ainsworth (1989) referred to grandparents, and other older secondary attachment figures, as "attachment figures cast in the parental mold..." (p. 711). Given that they are similar on many dimensions to parental figures, grandparents who are positive secondary attachment figures may be particularly influential in providing corrective emotional experiences and shaping the IWMs of their INSEC grandchildren.

Also of interest is that CONT-INSECs were found to have a higher frequency of positive secondary attachment relationships with peers across all three time periods, when compared to

ERN-SECs; whereas, ERN-SECs reported having a greater number of positive secondary attachment relationships with grandparents and siblings in childhood and adolescence, and with significant others in adulthood, than did CONT-INSECs. Perhaps, the closeness of positive secondary attachment relationships with relatives during early development and the intimacy of SEC bonds with significant others in adulthood create unique, transformative, relational experiences not present in typical friendships that facilitate the exploration, challenging, and revision of IWMs. Grandparents may function as parental-like secondary attachment figures, siblings may act as peer relatives who live at home and can be consulted on family matters, and significant others may provide mutual attachment and caregiving (Ainsworth, 1989). The potential impact of these unique relational qualities on the ERN-SEC process deserves further investigation.

Regarding negative secondary attachment figures, the frequencies for both ERN-SECs and CONT-INSECs for the three time periods were small. For instance, of all of the relationship types listed across the time periods, the highest frequency of negative secondary attachment figures was found for significant others in adolescence (ERN-SEC, 12.2%; CONT-INSEC, 12.8%). Even in adulthood, where it would be expected that a high number of CONT-INSECs' significant others would be identified as negative secondary attachment figures, given how the attachment groups were formed, only 9.8% were identified by CONT-INSECs as being negative, compared to 7.3% by ERN-SECs. Although it is possible that negative secondary attachment figures are simply not well-represented in the actual secondary attachment networks of ERN-SECs and CONT-INSECs, it appears more likely that this finding was biased by limitations in objective responding.

There are several reasons why CONT-INSECs may have been less forth-coming about their negative experiences with secondary attachment figures in the current study. It is possible that in an effort to psychologically protect the self, CONT-INSECs have learned to deny the reality of their negative relational experiences. Perhaps, the sense of self would be threatened if the scope of these experiences were realized and, thus, keeping these experiences at a distance and/or ignoring certain aspects of these relationships provides a psychological defense against further self-disruption. Another possibility for explaining CONT-INSECs' positive responding may be connected to their relationship standards not being very high. Given that CONT-INSECs have experienced many if not all INSEC relationships throughout their lifetimes, CONT-INSECs may expect and/or have a higher tolerance for negative treatment from others and may consequently view these relationships more positively than would SEC individuals. Further, it may be that the characteristics of CONT-INSEC impair one's ability to assess relationships accurately. For instance, an individual with avoidant attachment, who characteristically denies both the need for relationships with others and the fact that s/he is impacted by them, may report that all of her/his relationships are fine and without any problems (Bartholomew, 1990). Thus, there are multiple reasons why CONT-INSECs may have not been accurate in their responding concerning their secondary attachment histories, which may explain, in part, some of the lack of meaningful findings in the present study.

Quality of Secondary Attachment Relationships with Peers or Usually Same-Age Non-Relatives

Specific types of secondary attachment figures were next considered on the quality

dimensions. For peers or usually same-age non-relatives, no differences appeared on reported

negative characteristics; however, ERN-SECs described these secondary attachment figures as

being more empathic and more altruistic during childhood and more warm during adolescence,

when compared to CONT-INSECs. As children age, peers take on increasingly important roles in their daily lives (Bee, 1997). Between eight and 14 years old, children and adolescents appear to prefer their peers for emotional support and comfort over their parents (Hazan & Zeifman, 1994). Further, more than half of an adolescent's waking hours are spent with other adolescents and less than five percent of the time is spent with parental figures (Bee, 1997). Although some researchers question whether friendships are actual attachment relationships or are best described as affiliative bonds (e.g., Hazan & Zeifman, 1994), peer bonds appear to serve important functions in the lives of children and adolescents.

The findings from childhood suggest that ERN-SECs experienced their peers as being more altruistic (i.e., dependable, supportive, helpful) and more empathic (i.e., good listeners, patient, understanding) than those of CONT-INSECs. Researchers have observed that altruism and empathy appear to be important in relationships with peers during different stages in childhood (Bigelow, 1977; Bigelow & LaGaipa, 1975; Youniss, 1980). For instance, altruistic behaviors, in the form of giving and sharing during play, appear to characterize the views of six to eight year old children for what constitutes peer kindness (Youniss, 1980). Additionally, children in grade two appear to hold expectations that their friends will provide them with help and this expectation has been found to increase with age (Bigelow & LaGaipa, 1975; Youniss, 1980). On the other hand, empathy seems to be more characteristic of later childhood friendships, emerging at about grades six and seven, and continues to be an important aspect of peer relationships into adolescence and adulthood (Bigelow, 1977). At this point in later childhood, friendships begin to consist of self-disclosure, understanding, and trust (Bigelow, 1977; Youniss, 1980).

For the INSEC child who will later become ERN-SEC, having peers that are dependable, supportive, and empathic provide her/him with external support and opportunities to potentially discuss negative parental experiences. In fact, Hazan and Zeifman (1994) found that children as young as six years old tend to be peer-oriented for proximity-seeking (i.e., like to spend time with peers the most) and safe haven behaviors (i.e., seek peers for comfort when upset), and parent-oriented for separation protest (i.e., miss parent most during separations) and secure base behaviors (i.e., know parent will be available when needed). Having peers that are altruistic and empathic may be expected to increase both proximity-seeking and safe haven behaviors, as they are indicative of dependability and understanding. As the majority of the school day is spent with peers, INSEC children who have peer bonds that are altruistic and empathic likely have many opportunities each day for relational experiences that are more positive than those experienced at home. Although more research is needed, these positive peer bonds may provide the INSEC child who will later become ERN-SEC with invaluable relational experiences, that may shed insight on their upsetting relationships with their parents.

Regarding adolescence, ERN-SECs reported perceiving their peers as being more emotionally warm than did CONT-INSECs. ERN-SECs felt that their peers were more caring, more loving, and more open to their feelings. Youniss (1980) found that for adolescents, the presence of emotional support was a main expectation of friendship. For INSEC adolescents, however, having supportive friendships may create very different relational experiences than they are accustomed to, given their negative upbringings. As ERN-SECs view their peers as caring and warm during adolescence, these peers may provide emotionally for them in ways that their parental figures have not.

For the maturing adolescent, many developmental and relational stressors appear during this time period that are difficult to cope with and understand. Having peers that are not only going through similar experiences themselves and thus can relate, but having peers that are emotionally warm and open, would likely provide the INSEC child with much relief and support in helping them to survive this difficult time. Through having peer relationships in adolescence that ERN-SECs perceive to be emotionally supportive, ERN-SECs may learn that their emotional needs are worthy of being met and are able to be met by important figures external to the family. As Youniss (1980) stated, adolescents learn through friendships "how to admit their weaknesses, present their ideas and feelings openly, and "talk things out" together" (p. 185). These lessons will likely be very important, as they may guide thoughts, feelings, and behaviors in future relationships.

Regarding attachment quality, findings from the current study suggest no differences between ERN-SECs and CONT-INSECs on how secure and dismissing they were with peers or usually same-age non-relatives during the three time periods. ERN-SECs, however, reported being *less preoccupied* in childhood and *less fearful* and *less preoccupied* in adolescence in their relationships with peers or usually same-age non-relatives.

The findings that ERN-SECs reported thinking, feeling, and behaving in less preoccupied ways in peer secondary attachment relationships in childhood and adolescence, when compared to CONT-INSECs, suggest that early in development, ERN-SECs were less concerned with being accepted by their peers and thus less reliant on their peers for their sense of worth. This is a fascinating finding, especially given how important it is for adolescents to obtain social approval from peers and how important a role peer relationships play in both of these time periods.

Perhaps, ERN-SECs begin the process of developing security during childhood and adolescence,

such that self-acceptance and worthiness are already stronger than that of CONT-INSECs during these early times. Future studies should explore this process, which is currently unclear, that appears to allow ERN-SECs to keep their sense of self less enmeshed with that of peer secondary attachment relationships during childhood and adolescence. This area of study may provide important insight into the development of ERN-SEC.

Another interesting finding about peer secondary attachment relationships in adolescence is that ERN-SECs reported being *less fearful* than CONT-INSECs. Specifically, ERN-SECs were less afraid of developing intimacy with and being rejected by their peers. ERN-SECs reported being more trusting of their peers in adolescence and feeling more worthy of their affection and support. By being able to get emotionally close to their peers and feel accepted by them, ERN-SECs may have been more able to explore their difficult upbringings within supportive environments. Intimacy and trust are integral to SEC romantic relationships (Collins & Read, 1990; Hazan & Shaver, 1987); thus, ERN-SEC's ability to form these intimate bonds with peers in adolescence may provide them with relational models that may guide their future romantic experiences.

Quality of Secondary Attachment Relationships with Grandparents

Results from the current study revealed no differences between ERN-SECs and CONT-INSECs on perceived negative characteristics of grandparents in childhood; however, ERN-SECs rated their grandparents from childhood as *more altruistic* than those of CONT-INSECs. As discussed previously, it may be that with grandparents being similar to parental figures on many dimensions (i.e., older, immediate relative, parent), grandparents may have unique influence on correcting early parental experiences with primary attachment figures. Having grandparents who are more dependable, supportive, and helpful might meet important primary

needs that are being ignored by parental figures. Altruistic grandparents may help the INSEC child who will later become ERN-SEC, by providing advice and assistance for dealing with parental experiences. Perhaps the pain of negative experiences with parental figures is eased by secondary attachment bonds with grandparents, as ERN-SECs know that they can depend upon their grandparents to provide them with support even during the difficult times. CONT-INSECs may not have such resources, which may ultimately be detrimental to their development.

For attachment quality, ERN-SECs and CONT-INSECs did not differ in how secure, dismissing, and fearful they reported being in their secondary attachment relationships with grandparents in childhood, although ERN-SECs reported thinking, feeling, and behaving in less preoccupied ways within these relationships. Given the similarities between grandparents and parental figures, it may be that certain INSEC children (i.e., those who will later become CONT-INSEC) become overly reliant on grandparents for sense of worth, as they feel unaccepted and/or unsupported by their primary parental figures. INSEC relationships with parental figures likely raise intrapersonal and interpersonal anxiety, which may motivate some INSEC children to become overly dependent on grandparents for meeting their needs. ERN-SECs, on the other hand, for reasons currently unclear, appear to be more able than CONT-INSECs to hold positive self-views as children that are more independent of their secondary attachment relationships with their grandparents. Rutter (1987) stressed that in understanding psychosocial resilience, what is of utmost importance is gaining an understanding of the protective processes or mechanisms involved. Thus, an important area of research will involve studying the intrapsychic processes that lead certain INSEC children to be more vulnerable to certain INSEC relationships than others.

Quality of Secondary Attachment Relationships with Siblings

For siblings from childhood, results revealed no differences between ERN-SECs and CONT-INSECs on negative characteristics and attachment quality. ERN-SECs were found, however, to describe their siblings from childhood as *more empathic* than did CONT-INSECs. It may be that having important relationships with siblings who are better listeners and are more patient and understanding help INSEC children (i.e., those who will become ERN-SEC) to talk about their thoughts and feelings related to their parental experiences. Sibling bonds have the potential for providing great support and validation for INSEC children, given that siblings tend to be similar on age, may have similar experiences with parental figures, and frequently live together. In fact, Daniel (1998) found that adults who viewed their siblings as positive role models and caretakers during childhood tended to experience trust and confidence within adult romantic relationships. Thus, it seems as though for the INSEC child, the opportunity to have a sibling to whom s/he can come and share her/his experiences with may contribute to the ERN-SEC process, as issues related to early negative experiences are able to be processed with a relative within a validating interpersonal context.

To be empathic implies, "A cognitive awareness and understanding of the emotions and feelings of another person" (p. 249; Reber, 1995). Of interest is a study conducted by Stewart and Marvin (1984), whereby perspective-taking ability in three to five year old children was found to be highly related to caregiving behaviors towards younger siblings of 10 months to two years in age. In an experimental set-up similar to the strange situation procedure, perspective-taking older siblings tended not to be distressed by their mother's departure or the stranger's entrance. In turn, they approached their distressed younger sibling and/or tried to comfort her/him, consequently leading their younger siblings to use them as secure bases. In contrast,

non-perspective taking older siblings tended to become fearful and wary at their mother's departure and the stranger's arrival and provided no caregiving to their younger siblings, resulting in no attachment behavior directed towards the older siblings. As an extension to the current study, perhaps ERN-SEC siblings were better able to understand their siblings' internal experiences due to their ability to take their siblings' perspective during childhood. Alternatively, ERN-SECs may have been more capable of communicating their thoughts and feelings to their siblings during childhood, so that their siblings could behave more empathically towards them. *Quality of Secondary Attachment Relationships with Significant Others* 

The next type of secondary attachment figures that was examined was significant others. Findings from the current study revealed no differences on positive characteristics for both adolescence and adulthood; however, ERN-SECs were found to describe significant others from adolescence as *less mean* than did CONT-INSECs. It may be that aspects of negative romantic experiences during adolescence also influence the development of self and relational functioning.

Adolescence is thought to be a critical time in development, especially in the context of identity development and interpersonal relationships. With interpersonal activity being more directed towards peers and away from the nuclear family (Bee, 1997), adolescents utilize these relationships as a way of understanding themselves better within their interpersonal and intrapersonal worlds. For the INSEC adolescent who has experienced a lifetime full of negative experiences with parental figures, the experience of having significant others that are more mean and abusive may further solidify not only their negative self-views, but also their negative expectations of others and the world in general. With having these abusive experiences with significant others in adolescence, along with INSEC bonds with parental figures since childhood, it would likely be quite difficult to establish trust, mutual support, and intimacy within adult

romantic relationships. Thus, for CONT-INSECs, it may be that secondary attachment relationships mostly confirm their negative models of self and other, thus not providing them with opportunities to modify and rebuild their internal relational models.

Data from the RQ for significant others in adulthood supports the convergent validity of the ECR and thus the adult attachment groupings used in the current study. As would be expected by the nature of the groups, ERN-SECs reported more security and less preoccupation and less dismissiveness on the RQ for significant other relationships in adulthood. It is interesting, however, that no meaningful differences were observed for fearful attachment (i.e., effect size was small-medium) whereas the other three attachment styles meaningfully differentiated ERN-SECs and CONT-INSECs in the ways that would be expected. Unlike the other adult attachment styles, fearful attachment is characterized by both a negative model of self (i.e., not worthy or lovable) and a negative model of other (i.e., rejecting and not trustworthy); the three other attachment styles consist of at least one positive model of self or other. Among this undergraduate sample of CONT-INSECs, the possibility of endorsing the fearful attachment description may have felt threatening to their sense of self and/or may have felt inconsistent with their conscious relational experiences, due to limited insight and awareness. Thus, to gain a fuller understanding of the role of fearful attachment in the romantic relationships of INSEC adults, it would be important to assess the presence of similar findings among other populations of CONT-INSECs (e.g., older, married), as well as other groups of INSECs (i.e., CURR-INSECs).

Regarding secondary attachment relationships with significant others in adolescence, no differences on fearful, dismissing, or preoccupied attachment were observed. A meaningful difference was observed, however, for security with ERN-SECs reporting *greater security* with significant others in adolescence, when compared to CONT-INSECs. Trinke and Bartholomew

(1997) found that among late adolescents and adults, significant others were ranked higher on safe haven use (i.e., who you go to or want to go to for comfort when feeling upset) and desired secure base use (i.e., who you want to be able to depend upon to care for you no matter what), than were mothers, fathers, best friends, and siblings. Significant other relationships clearly play key roles in the relational lives of individuals during these time periods.

For adolescence, the findings that ERN-SECs not only viewed their significant others as less mean, but also were more secure with them, when compared to CONT-INSECs, suggests that possibly the establishment of security with significant others in adolescence is more likely to occur when significant others are perceived to be less mean. For INSEC adolescents who have experienced parental figures who are invalidating, neglectful, abusive, and/or unsupportive, the task of developing security would likely be even more challenging with significant others who are perceived to be more mean, as interactions with these secondary attachment figures might resemble those with their parental figures. Thus, for the INSEC adolescent who would later become ERN-SEC, these findings suggest that security in thoughts, feelings, and behaviors is present within romantic relationships in adolescence to a larger extent than is the case for INSEC adolescents, who will remain INSEC into adulthood.

Frequency of Most Important Secondary Attachment Figures by Groups

Frequencies of the top three most important secondary attachment figures from childhood, adolescence, and adulthood were examined by relationship groups. Overall, the ordering of the top three positive secondary attachment groups for both ERN-SECs and CONT-INSECs was quite similar to that for relationship types across the time periods. An interesting difference, however, was that usually older relatives were listed the most frequently as positive secondary attachment figures by *both* groups in childhood; positive grandparents, on the other

hand, were listed the most frequently by ERN-SECs, but the third most frequently by CONT-INSECs in childhood, behind peers and siblings. Although ERN-SECS still listed more usually older relatives as positive secondary attachment figures (34.4%) in childhood than did CONT-INSECs (21.0%), the discrepancy is smaller than that for grandparents. This finding highlights the fact that usually older relatives who are positive secondary attachment figures seem to form very important relationships with INSEC children and seem to be even more present in the lives of ERN-SECs, compared to CONT-INSECs during childhood. Clearly, the role of usually older relatives in the lives of ERN-SECs needs to be better understood.

Another striking finding regarding the positive and negative secondary attachment groups for both ERN-SECs and CONT-INSECs is the predominance of usually same-age secondary attachment figures in the top three frequency positions (i.e., usually same-age relatives, usually same-age non-relatives, significant others). Although this may be a by-product of participants not differentiating well between bona-fide attachment figures and other supports in their networks, this finding does demonstrate the importance that relationships with others of similar age appear to play throughout development. Especially in late childhood and adolescence, individuals spend considerable amounts of time with similar-age others during school and after-school activities, where considerable influence may occur and support may be provided. How attachment figures of similar versus older age contribute to the earned-security process is an important area for further exploration.

Quality of Secondary Attachment Relationships with Usually Older Relatives

For the majority of quality variables, no differences appeared between ERN-SECs and CONT-INSECs on ratings of usually older relatives. Specifically, both attachment groups described their usually older relatives from childhood as being similar on positive and negative

characteristics. Additionally, ERN-SECs recalled being as secure, dismissing, and fearful in attachment within these secondary attachment relationships in childhood as were CONT-INSECs. The one meaningful difference that appeared was on preoccupied attachment, whereby ERN-SECS reported thinking, feeling, and behaving in *less preoccupied* ways with their usually older relatives in childhood, compared to CONT-INSECs. This same finding was also observed when the attachment quality of secondary attachment relationships with grandparents from childhood was evaluated separately from that of other older relatives (i.e., aunts, uncles).

With usually older relatives having many similar qualities to those of parental figures (e.g., older, family member, parent), it may be that those INSEC children who will later become CONT-INSEC become more preoccupied within these relationships, as they desperately make efforts to have their primary needs met by parental-type figures. Their sense of self-worth may become intertwined with the outcomes of these relationships, similar to the process that may occur with their primary parental figures. The reasons why ERN-SECs do not fall into this same trap as CONT-INSECs in childhood is unclear. However, this finding suggests that ERN-SECs are able to utilize other resources for establishing their sense of self and for having their needs met while in childhood. It is theorized that these additional coping skills may prove to be quite beneficial as the child matures and develops intimate relationships in the future *Quality of Secondary Attachment Relationships with Usually Same-Age Relatives* 

In considering usually same-age relatives from childhood, no differences between ERN-SECs and CONT-INSECs were observed on ratings of positive and negative characteristics and on the majority of attachment dimensions. Dismissing attachment, however, was the only quality variable that was found to differentiate ERN-SECs from CONT-INSECs, with ERN-SECs reporting *more dismissiveness* in their secondary attachment relationships with usually same-age

relatives during childhood. Initially this finding is surprising, given that ERN-SECs rated their siblings from childhood as more empathic than those of CONT-INSECs and given that siblings made up the largest percentage of the usually same-age relative category. Thus, this dismissing attachment finding might appear counterintuitive. If a meaningful difference was to appear for usually same-age relatives for dismissing attachment, it might be predicted that less dismissiveness, rather than more dismissiveness would characterize ERN-SECs' relationships with siblings and cousins during childhood.

One interpretation of these results comes from a study by Ammaniti and colleagues (2000), who found increased dismissiveness to parental figures among older children and early adolescents. Ammaniti and colleagues (2000) argue that these dismissive defense mechanisms might serve to facilitate the development of a personal identity by distancing the child or adolescent from her/his parental figures. At the same time, these dismissing behaviors may also minimize some of the anxiety and anger that naturally exists during these time periods, thus allowing the child or adolescent to continue having close relationships with her/his parental figures (Main & Hesse, 1990). If security is to develop in individuals with INSEC parental bonds, agents that may stimulate the modification and revision of INSEC IWMs (e.g., acquisition of personal insight, alternative perspectives, resolution) might be expected to appear in relational contexts that disconfirm old IWMs (Bowlby, 1988a; Collins & Read, 1994; Main, 1991). Thus, this distancing process that appears to take place in late childhood and adolescence may be particularly important for INSECs, as it may provide them with additional relational experiences external to the primary attachment bonds that may challenge their old models of self and others and may allow them to begin processing their feelings connected to their negative childhoods.

By being more dismissing, INSEC children would see themselves as more self-sufficient, less affected by negative experiences with usually same-age relatives, and less needing of social connections with usually same-age relatives. ERN-SECs who were dismissing in attachment to their usually same-age relatives in childhood may have been better able to emotionally and physically distance themselves from negative familial relations, engage in alternative relationships that challenge their intrapersonal and interpersonal models, and gain alternative perspectives on these dissatisfying familial experiences. Although being dismissing implies a level of denial about the need for social relations and leads to decreased interpersonal intimacy, these attachment behaviors may, in fact, serve important differentiation roles during this time period that are particularly adaptive for certain INSEC children (Bartholomew, 1990; Crowell et al., 2002). Why these behaviors were not employed by both sets of INSEC children is not yet known, although quite worthy of further study.

# Implications of Findings

## Theoretical Implications

In the five published articles on ERN-SEC (Moller et al., 2002; Paley et al., 1999; Pearson et al., 1994; Phelps et al., 1998; Roisman et al., 2002), ERN-SEC has been discussed as an attachment style present by adulthood and only apparent through the examination of adult romantic relationships. Findings from the current study suggest, however, that the ERN-SEC process may in fact begin as early as childhood. In particular, ERN-SECs reported that their sense of self-worth in childhood was less dependent upon receiving approval from their negative secondary attachment figures and they reported being less concerned than CONT-INSECs about being accepted by their negative secondary attachment figures. A similar finding was also observed for relationships with peers and usually older relatives in childhood. Further, ERN-

SECs were found to be more SEC than CONT-INSECs in their relationships with significant others by adolescence. Thus, relational differences were observed between ERN-SECs and CONT-INSECs earlier than might be expected, given the current conceptualization of ERN-SEC as an adult attachment phenomenon.

One interpretation of these findings is that, perhaps, INSEC children who will become ERN-SEC evidence certain dispositional qualities as children that facilitate resilience over their INSEC upbringings. In fact, personality features apparent by childhood (e.g., self-esteem) is one area that researchers have frequently examined as potentially contributing to the development of resilience (Luthar, Cicchetti, & Becker, 2000). In the current study, ERN-SECs reported being less preoccupied than CONT-INSECs with their negative secondary attachment figures from childhood. Given that feedback from negative secondary attachment figures about sense of worth might be quite harsh, critical, and/or rejecting, for the INSEC child who may receive similar messages from her/his parental figures, being dependent upon this negative feedback might be particularly damaging, as it may confirm her/his pre-existing negative self-concept. Whereas, if a child is more SEC about her/his self-worth, perhaps due to feedback from positive attachment figures or due to inherent personality traits, this child might be more able to protect her/himself from the potential damaging repercussions of treatment by negative secondary attachment figures.

It is important to acknowledge, however, that a second interpretation of these findings from childhood and adolescence involves a potential retrospective bias motivated by current levels of security. For instance, ERN-SECs may recall their experiences within secondary attachment relationships in childhood and adolescence as more positive than they actual were, due to the influence of their current security on their recall of past relationships. For CONT-

INSECs, who continue to have models of self and/or other that are negative (Bartholomew, 1990), there may be a tendency to view their long-standing low self-esteem and low self-worth as being more connected to their negative relational histories than do ERN-SECs, given that CONT-INSECs continue to think, feel, and behave in INSEC ways in their current relationships.

The second important theoretical implication from the current study is that it may be both the presence *and* absence of particular secondary attachment figures during childhood and adolescence that may play important roles in the earned-security process. For instance, during childhood, ERN-SECs' peers and siblings were rated as more empathic and their peers and grandparents were described as being more altruistic than the secondary attachment figures of CONT-INSECs. Further, in adolescence, the negative secondary attachment figures and significant others of ERN-SECs were rated as less mean than those of CONT-INSECs, while ERN-SECs' peers were rated as more warm. Although a similar retrospective bias, as discussed previously, may explain these findings, it may also be that the process of security development is both encouraged by positive experiences with certain secondary attachment figures and hindered by negative experiences with others. Thus, examining the totality of attachment relational experiences may be key in understanding the earned-security process.

In conceptualizing how earned-security develops, an interesting finding from the current study suggests that ERN-SECs may demonstrate certain attachment behaviors in childhood that are *more* deficient than those of CONT-INSECs. Although it might be predicted that ERN-SECs would evidence greater security and more positive relationships throughout development, the finding that ERN-SECs were the most dismissing with their usually same-age relatives in childhood lends some initial support for the notion that security development is a nonlinear process. As discussed previously, ERN-SECs may have distanced themselves emotionally and

physically from usually same age relatives in childhood, as a way of protecting themselves from further maltreatment by family of origin relatives. Despite this attachment behavior being more characteristic of INSEC, this extreme dismissiveness, at the time, may have been adaptive in creating necessary distance for identity development, independent of adverse childhood relationships. Although counter-intuitive, greater INSEC attachment at specific times in development may have been key in helping the INSEC child to develop SEC models of self and other.

It would appear from the current study that although secondary attachment relationships seem to play important roles in the resilience process, these relationships are likely only accounting for part of the variance in the developmental histories of ERN-SECs and CONT-INSECs. Although key differences in the secondary attachment histories of the two attachment groups were observed, many variables that were expected to differentiate the two groups did not appear (e.g., positive characteristics of positive secondary attachment figures, frequencies of positive and negative secondary attachment figures). Therefore, it is quite likely that the etiology of earned-security has multiple contributing factors.

Luthar and colleagues (2000) identified three sets of factors that are frequently examined in resiliency research. One factor, which corresponds to the focus of the current study, involves the quality, availability, and use of external support systems by children and parents. For instance, Egeland, Jacobvitz, and Sroufe (1988) found that abused mothers who did not abuse their own children, compared to those that did, were significantly more likely to have received emotional support from a non-abusive parental figure or other older secondary attachment figure during childhood. These abused mothers that broke the abusive cycle were also the most likely to

have experienced non-abusive and supportive significant other relationships, as well as to have participated in extensive therapy at some point in their lives.

In addition, resilience studies have explored the dispositional characteristics of resilient children. One of the most well-known resiliency studies is the Rochester Child Resilience Project (RCRP), a longitudinal study of at least a decade that explored the developmental histories of young, inner-city, children who had experienced multiple stressful events throughout childhood. Along with environmental variables, this study examined the personality and cognitive characteristics of stress-resistant and stress-affected children. Findings suggested that stress-resilient children exhibit greater empathy, global self-worth, and perceived competencies in behavioral conduct, as well as an easier temperament in infancy and preschool than did stress-affected children (Cowen, Work, & Wyman, 1997). Further, stress-resistant children were found to achieve basic developmental milestones the earliest, exhibit the best social problem-solving skills, and demonstrate the highest intelligence quotients. This area of examination is missing in the ERN-SEC literature and is necessary not only to further comprehension of the ERN-SEC process, but also to facilitate the development of preventive interventions for treating at-risk children.

The third common area focused on by resilience studies concerns characteristics of families, such as the degree of family cohesion and discord present. In the one published study that has examined the characteristics of ERN-SECs' family relationships in childhood, ERN-SECs were observed to have maternal relationships of higher quality at 24 months and 13 years of age than those of CONT-INSECs' and CURR-INSECs' (Roisman et al., 2002). ERN-SECs were also found to recall paternal relationships that were the most rejecting, neglectful, and lacking in love of all of the attachment groups. Some of these differences in early familial

relationships, along with exploration of dispositional qualities of children and external support systems, may further shed light on the differing attachment outcomes of ERN-SECs and CONT-INSECs.

# Clinical Implications

There are several clinical implications that can be drawn from this study. First, there appears to be value in having INSEC individuals pursue positive secondary attachment relationships both inside of the family (e.g., grandparents, siblings) and outside of the family (e.g., peers, significant others). It seems to be especially crucial that these relational experiences start early in development, given that elements of earned security may be underway as early as childhood. Outings with extended family and extracurricular activities (e.g., school clubs and sports, Big Brother/Big Sister, church functions) with peers and non-familial adults should be encouraged for INSEC children and adolescents. Having some emotional and physical distance away from parental figures, along with experiencing relationships that disconfirm negative models of self and/or other, may be important in helping INSEC children to develop security.

Of all of the positive secondary attachment figures, grandparents may play particularly key roles in the development of earned-security, especially during the years of childhood. ERN-SECs reported grandparents the most frequently as positive secondary attachment figures during childhood and this frequency was more than double that of CONT-INSECs. Additionally, ERN-SECs described their grandparents as more altruistic than those of CONT-INSECs. Although additional research is needed to understand the specific roles grandparents may play in the earned security process, these findings suggest that positive relationships with grandparents during childhood may help to correct attachment wounds sustained from INSEC parental bonds. INSEC children should be encouraged to develop their relationships with grandparents who are

positive secondary attachment figures, as these positive attachment bonds may be particularly influential in altering pre-existing INSEC IWMs. In conceptualizing secondary attachment relationships using the hierarchy model (Bowlby, 1969; Bretherton, 1985; Main et al., 1985), it may be that grandparents who are positive secondary attachment figures have a greater impact on the psychosocial functioning of INSEC children than some of the other types of secondary attachment figures. Perhaps IWMs can be revised within relationships with grandparents, in part due to the relational qualities they share with those of primary attachment figures (e.g., older, relatives, parents, caregivers).

In addition, findings from the current study suggest that ERN-SECs' sense of self-worth was less dependent upon their secondary attachment figures' approval and was more positive than that of CONT-INSECs' throughout development. Although it is unclear what led to this increase in self-esteem, it appears important for INSEC individuals to utilize other resources, in addition to secondary attachment relationships, to create more positive self-concepts. Research on self-concept suggests that global self-concept is a composite of multiple self-concept domains, such that a child may demonstrate a poor self-concept within parental relationships, but may exhibit a positive self-concept when it comes to Math, Reading, peer relationships, physical abilities, and/or physical appearance (Bracken, 1992; Byrne & Shavelson, 1996; Harter, 1999; Marsh & Shavelson, 1985). Thus, children and adolescents should be encouraged to participate in extracurricular activities and to excel in school, so as to build their self-worth in other domains external to the family of origin environment.

Results from the current study also indicate that CONT-INSEC adults have difficulty trusting and being emotionally close to positive secondary attachment figures. These attributes may make it difficult for CONT-INSEC adults to feel comfortable within a therapeutic

relationship and may prevent them from exploring difficult issues and expressing painful feelings. As therapists work to build a therapeutic alliance with CONT-INSECs, they should be mindful of CONT-INSECs' difficulties with trust and intimacy. It may be helpful for therapists to incorporate qualities of ERN-SECs' secondary attachment figures (e.g., empathic, altruistic, warm) into the therapeutic relationship, in order to foster the development of security.

### Methodological Limitations

External Validity and Generalizability

Several major limitations become apparent when the issues of external validity and generalizability are considered. The first major limitation, thus limiting the generalizability of these results, involves the age of the participants. Although efforts were made to recruit older adults from the university for participation in the study, the sample was predominantly young (average age was 24 years old) with average length of longest romantic relationship lasting between one and two years. If ERN-SEC does develop within the context of an intimate, supportive, and validating SEC secondary attachment relationship, it might be expected that ERN-SEC would be more prevalent among older adults, who have spent a significant period of time away from their family of origins and who have experienced committed, long-lasting secondary attachment relationships (e.g., marriage), thus facilitating psychological growth.

In fact, in the current study, a smaller than expected sample of ERN-SECs were identified (11.6%); distributions of ERN-SECs have ranged from 15% to 55% in previous studies (Moller et al., 2002, Paley et al., 1999; Pearson et al., 1994; Phelps et al., 1998). Due to the small numbers of ERN-SECs in the current sample, the population was over-sampled in order to obtain large enough sample sizes for subsequent analyses. For example, out of the original sample of

498 undergraduates who participated in the initial attachment screening, 11.6% qualified for ERN-SEC, and 56.9% of those who qualified for ERN-SEC volunteered for Part 4.

Second, external validity was limited by gender, educational background, and racial/ethnic diversity. Of those ERN-SEC and CONT-INSEC participants who volunteered for Part 4, seventy-three percent were female. This skewed gender distribution may be due, in part, to the fact that participants were recruited primarily from psychology classes, with a smaller minority being recruited from education, rehabilitation, and anthropology courses. It is well known in psychology departments that the majority of students who major in psychology are female; thus, it is likely that this sampling method skewed the gender distribution. In addition, all participants were currently undergraduate university students. Further, the sample was predominantly Caucasian (69%). Thus, no definitive conclusions can be drawn regarding the possible differences in secondary attachment histories between ERN-SECs and CONT-INSECs that may be present in other populations.

A fourth major limitation of the current study is related to the methodology used to create the attachment classifications. From the IPPA, up to two childhood attachment scores are derived (i.e., for two parental figures) and attachment styles are based on the distribution of attachment scores in the whole sample. For instance, in the current sample, the top third of scores were considered SEC and the bottom third of scores were considered INSEC; the middle third of scores were considered unclassifiable. As there is no clear agreement within the attachment field regarding the number of parental bonds needed for a particular attachment style (e.g., Lamb, 1978; Main & Weston, 1981), participants in the current study were selected for Part 4 if they had one of the following sets of parental attachment bonds in childhood: INSEC to two parental figures, INSEC to one parental figure and no other parental figure listed, INSEC to one parental

figure and unclassifiable in attachment to a second parental figure. Of those participants who volunteered for Part 4, fifty-two percent were INSEC to both parental figures in childhood, 16% to one parent, and 32% to one classifiable parent and one unclassifiable parent. Although four out of the five published ERN-SEC studies have not considered differentiating multiple attachment styles to parental figures in childhood when identifying ERN-SEC participants (i.e., Paley et al., 1999; Pearson et al., 1994; Phelps et al., 1998; Roisman et al., 2002; see Moller et al., 2002 for the exception), it is possible that the ERN-SEC and CONT-INSEC groups in the current study were more heterogeneous due to the classification criteria used. It is also possible that the ERN-SEC group, in particular, was less representative of the true ERN-SEC population, given the negative correlations between social desirability and the retrospective reporting of childhood attachment with a second parental figure, who in most cases was a paternal figure. Thus, some of their childhood attachment bonds may have been, in reality, more SEC that what they actually reported. Results may have been more generalizable to true CONT-INSEC and ERN-SEC populations if a prospective study was used and if only those participants who were INSEC to both parental figures or to one parental figure (if raised in a single-parent home) were selected for the present study.

#### Statistical Power

An obvious limitation in the present study is the lack of power that diminished the chances of finding significant effects when true effects might have existed. Future studies should strive to achieve adequate levels of power to assess the secondary attachment histories of ERN-SECs and CONT-INSECs, especially by recruiting more participants who are ERN-SEC. Greater prevalence rates of ERN-SECs may be present in an older and married population, as it is theorized that ERN-SEC is more likely to be evident among adults who have lived a significant

amount of time away from their family of origins and who have been in committed romantic relationships (e.g., marriage) for a substantial time period, thus allowing for the revision of INSEC internal working models.

Another way of improving power is to limit the types of secondary attachment figures that participants describe, so as to increase the frequency of a select group of secondary attachment figures. In the current study, for instance, participants were allowed to list any type of secondary attachment figure that played an important positive or negative attachment role during their lives. Consequently, as many as 13 types of secondary attachment figures were listed in any given time period. By reducing the diversity of secondary attachment figures to the key theorized secondary attachment figures during a particular time period (e.g., for childhood: sibling, grandparent, peer, aunt/uncle, school teacher), the frequency of each relationship type might increase. Clearly, this method would limit the breadth of information obtained and would not provide an accurate portrayal of the diversity of secondary attachment relationships experienced during a lifetime. However, especially if overall sample size is small, this method would likely increase the power for analyses regarding specific secondary attachment relationships.

## Measurement Limitations

There were several measurement limitations present in the current study. First, unlike four of five published articles on ERN-SEC (i.e., Paley et al., 1999; Pearson et al., 1994; Phelps et al., 1998; Roisman et al., 2002; see Moller et al., 2002 for the exception), the current study utilized self-report instruments instead of the AAI (George et al., 1985) to measure ERN-SEC and CONT-INSEC. Although the AAI is considered to be the "gold standard" for measuring attachment (Manassis et al., 1999; van IJzendoorn, 1992), the administration and scoring of the

AAI is cumbersome and thus impractical for many research pursuits (de Haas et al., 1994).

Questionnaires for measuring child and adult attachment are frequently used in research (see Crowell & Treboux, 1995, for a review of attachment self-reports); however, some researchers argue that attachment self-reports measure different constructs from that of the AAI, due to differences in measurement (Crowell et al., 1999; de Haas et al., 1994). Whereas the AAI is thought to reveal underlying mental representations of attachment, self-report attachment instruments appear to measure conscious thoughts, feelings, and behaviors related to attachment. Consequently, a downside of using self-reports is the potential error due to social desirability, denial, and limited awareness.

The second group of measurement limitations concerns the assessment of secondary attachment relationships. During Part 4, participants individually completed the card sort and multiple questionnaires in front of an examiner. Given this individualized set-up, participants may have described their attachment history in more positive terms due to social desirability. Additionally, limited awareness of how the roles of secondary attachment figures differ from those of non-attachment figures may have interfered with the total frequency of secondary attachment figures listed during each time period. For example, one participant identified 50 secondary attachment figures during adolescence (42 peers, six school teachers, one aunt, one cousin); it might be assumed that many of these relationships were more representative of this participant's social network, rather than this participant's secondary attachment group. Likewise, it may have also been difficult for participants to differentiate the qualities of different secondary attachment relationships, as multiple participants described all of their secondary attachment relationships as equally good or equally bad. Further, participants may have been hesitant to

identify secondary attachment figures as negative, due to social desirability reasons or shame related to labeling the gestalt of an important secondary attachment figure as negative.

In addition, several other procedures aimed at increasing the practicality of the data collection may have resulted in additional measurement limitations. First, only the top three secondary attachment figures were rated on the Q-SAF and RQ. Clearly, quality data regarding the totality of secondary attachment relationships from each time period was not obtained. However, by focusing on the top three secondary attachment figures for each time period, important data concerning the most important secondary attachment figures was elicited and achieved, while minimizing fatigue due to filling out multiple questionnaires per attachment figure per time period. Nevertheless, despite our efforts to reduce the number of questionnaires participants completed and to shorten the experimental time, participants demonstrated fatigue and needed to be frequently reminded to be conscientious in filling out the questionnaires. Given the increasing fatigue during the test administration, both the ordering of questionnaires administered and time periods focused upon were randomized, in order to reduce ordering effects. Second, the retrospective nature of the current study may have led to a retrospective bias of past relational experiences due to current attachment status (e.g., ERN-SECs viewing their secondary attachment figures positively due to current security). Although a longitudinal study from childhood into adulthood was not possible due to the constraints of the current project, such a design would have minimized retrospective bias.

## Directions for Future Research

The results of the present study indicate a further need to explore the role of secondary attachment relationships in the development of ERN-SEC. Consistent with Roisman and colleagues' suggestions (2002), the relationship between secondary attachment histories and the

development of ERN-SEC should be investigated through a prospective, longitudinal study based on observational data. Roisman and his colleagues (2002) found that using a retrospective system to measure ERN-SEC (i.e., Pearson et al.'s system, 1994) resulted in extremely low sensitivity and specificity for differentiating ERN-SECs and CONT-SECs. Thus, a prospective study that incorporates observational data may demonstrate greater accuracy for identifying ERN-SECs, as well as minimize retrospective bias, social desirability, and error due to limited insight. Additionally, research questions concerning when and in what situations does ERN-SEC develop could also be studied using a longitudinal design. Although a prospective, longitudinal study may be ideal for many research pursuits related to the development of ERN-SEC, other research projects are worth discussing, that would help to broaden our understanding of the developmental process of ERN-SEC.

Regarding samples of ERN-SEC adults, the following criteria are suggested to improve the quality of the ERN-SEC group. Considering the current theoretical hypothesis regarding the etiology of ERN-SEC (i.e., develops within relationships that disconfirm negative self- and other-models; Belsky & Pensky, 1988; Collins & Read, 1994), it is suggested that a higher frequency of ERN-SECs may be found among older individuals, who have lived a substantial period of time away from their family of origin and who have experienced long-lasting, committed romantic relationships (i.e., marriage). This may minimize the need to over-sample, in order to obtain a sufficient sample size with adequate power. Additionally, in future studies, ERN-SECs and CONT-INSECs should be matched on the number of INSEC parental bonds in childhood (i.e., two parents with two INSEC bonds, two parents with one INSEC bond and one unclassifiable bond, one parent with one INSEC bond), so as to increase homogeneity of the

attachment groups and to explore the impact of different frequencies of childhood INSEC bonds on later functioning.

Findings from the present study suggest multiple variables that appear to differentiate the secondary attachment histories of ERN-SECs and CONT-INSECs; however, it not known if or why these variables lead to the development of security. As Rutter (1987) argues, it is important to understand the processes or mechanisms by which certain variables facilitate resilience. For instance, ERN-SECs in the current study were found to be less preoccupied with usually older relatives in childhood than were CONT-INSECs. What is not understood from this finding, however, is how less preoccupation with usually older relatives during childhood is related to the development of ERN-SEC. Thus, future studies should examine the process by which different developmental variables change the life course of certain INSEC children.

As few studies have explored the impact of secondary attachment relationships on changes in attachment security, numerous other areas of study are worth future investigation. To assess the relationship between romantic dyads and attachment functioning, ERN-SEC and CONT-INSEC adults who have been in romantic relationships for varying lengths of time (i.e., 1-5 years, 5-10 years, 10-15 years, 20+ years) could be compared on the quality of romantic relationships, other secondary attachment relationships, and attachment behaviors within these diverse relationships. In addition, researchers should consider issues of gender matching between secondary attachment figures and individuals who become ERN-SEC or CONT-INSEC, to investigate the impact of same-gender vs. opposite-gender secondary attachment relationships on later functioning. Also worth exploring is the impact of having a secondary attachment figure who matches an INSEC parental figure on gender and age on the development of ERN-SEC.

Further, differences in secondary attachment histories between heterosexual and homosexual or bisexual ERN-SECs is another important area of study.

Future studies should also explore the developmental process of ERN-SEC using alternative modes of measurement. For instance, the current study could be replicated using the AAI to identify adult attachment status, instead of using parent-child and adult romantic attachment self-reports. Given the controversy over the appropriateness of using the AAI and self-reports to measure attachment (e.g., Crowell et al., 1999; de Haas et al., 1994), it would be interesting to compare the secondary attachment histories of ERN-SEC and CONT-INSEC participants identified as such by self-reports and the AAI. Additionally, other relational measures, such as the Thematic Apperception Test (TAT; Morgan & Murray, 1935) and the Adult Attachment Projective (AAP; George & West, 2001), could be utilized to measure unconscious relational models. This data may be used, for instance, to predict future attachment behavior or to discriminate current attachment functioning from that of others' with similar adult attachment styles, but different childhood attachment styles (i.e., ERN-SEC vs. CONT-SEC, CONT-INSEC vs. CURR-INSEC). Further, it is imperative that future studies utilize qualitative methodology, in addition to quantitative measures, not only to investigate past and current secondary attachment relationships, but also to openly explore the many and varied factors that may be contributing to the development of ERN-SEC. As little is known about the etiology of ERN-SEC, the use of qualitative methodology would provide depth and breadth of information concerning the resiliency process that may not be achievable through solely quantitative means.

Table 1

Summary of Earned-Security Research: A Comparison of Other Attachment Groups to Earned-Secures on Affect and Relationship

Variables

	Negative Emotionality	Romantic Relationship Quality	Emotional Coping During Partner Interactions	Quality of Caregiving Towards Own Children
Continuously-Secure	Similar (Moller et al., 2002; Roisman et al., 1994), Less (Pearson et al., 1999)	Similar (Roisman et al., 2002)	Similar (for both husbands and wives, Paley et al., 1999)	Similar (under high and low stress; Pearson et al., 1994; Phelps et al., 1998
Insecure (Preoccupied, Dismissing, Unresolved with Preoccupied or Dismissing secondary classification)	Similar (Pearson et al., 1999; Roisman et al., 1994)	More Negative (Roisman et al., 2002)	Unknown	Similar (under low stress; Pearson et al., 1994; Phelps et al., 1998), More Negative (under high stress; Phelps et al., 1998)
Currently-Insecure	Greater (10 of 24 variables; Moller et al., 2002), Similar (14 of 24 variables; Moller et al., 2002)	Unknown	Unknown	Unknown
Continuously-Insecure	Greater (Moller et al., 2002)	Unknown	Unknown	Unknown
Dismissing	Unknown	Unknown	Less Adaptive (for wives), Similar (for husbands; Paley et al., 1999)	Unknown
Preoccupied	Unknown	Unknown	Less Adaptive (for wives), Similar (for husbands; Paley et al., 1999)	Unknown

Note. All cells correspond to how similar or different other adult attachment groups are to earned-secures on each variable.

Table 2

Descriptive Statistics for Whole Sample

Variable	Whole Sample $(N = 869)$			
	n	%		
Gender				
Male	278	32.0		
Female	591	67.9		
Current Year in College				
1 <sup>st</sup>	125	14.4		
2 <sup>nd</sup>	141	16.2		
$3^{\mathrm{rd}}$	234	27.0		
4 <sup>th</sup>	206	23.7		
5 <sup>th</sup>	112	12.9		
6 <sup>th</sup> and Beyond	50	5.7		
Ethnicity				
Caucasian/White	589	67.8		
African-American/Black	108	12.4		
Latino/Latina	89	10.2		
Asian American/Pacific Islander	39	4.5		
Native American	5	.6		
Other	39	4.5		
Annual Income (self or parents)				
Under \$10,000	188	21.7		
\$10,001-\$25,000	224	25.9		
\$25,001-\$50,000	132	15.2		
\$50,001-\$75,000	108	12.5		
\$75,001-\$100,000	100	11.5		
\$100,001 and Above	114	13.2		
Sexual Orientation				
Heterosexual/Straight	825	95.0		
Gay/Lesbian	20	2.3		
Bisexual	23	2.6		

Table 2 (continued)

Variable		e Sample = 869)
	n	9/0
Current Marital Status		
Single/Never Been Married	795	91.5
Married	60	6.9
Divorced	12	1.4
Widowed	2	.2
Length of Longest Romantic Relationship		
Never Been in a Romantic Relationship	40	4.6
Less Than 1 Month	16	1.8
1-3 Months	47	5.4
3-6 Months	64	7.4
6-12 Months	101	11.6
1-2 Years	169	19.5
2-3 Years	196	22.6
More Than 3 Years	235	27.1
Current Residence		
With Parents	125	14.4
Live Away From Parents,		
But Stay with Parents During Summers and Holidays	172	19.8
Live Away From Parents All Year	571	65.8
Ever Gone to Counseling		
Yes	408	47.0
No	460	53.0
Duration in Counseling Over Lifetime		
Less Than 1 Month	99	24.2
1-6 Months	128	31.3
6 Months-1 Year	56	13.7
1-2 Years	57	13.9
2-5 Years	46	11.2
More Than 5 Years	23	5.6

Table 2 (continued)

Variable		e Sample = 869)
	n	%
Average Frequency of Counseling		
Sessions/Week		
1 x /Week	351	88.4
2 x /Week	34	8.6
3 or More x /Week	12	3.0
Type of Therapy <sup>a</sup>		
Individual Therapy	354	61.9
Couples Therapy	31	5.4
Family Therapy	135	23.6
Group Therapy	52	9.1
Self-Help Books Usage		
"I have read self-help books and they were helpful."	308	35.6
"I have read self-help books, but they were not helpful."	82	9.5
"I have never read self-help books."	476	55.0

<sup>&</sup>lt;sup>a</sup>Participants listed all of the treatment modalities experienced throughout life. Multiple listings were possible per participant.

Table 3

Internal Consistencies for the Questionnaire About Secondary Attachment Figures (Q-SAF) by

Time Period

α       α         Positive Subscale Total       .94       .92         Negative Subscale Total       .96       .93         Warm       .86       .78         Empathic       .81       .79         Altruistic       .86       .87         Attractive Personality       .80       .68         Dishonest       .95       .91	Earned-Secure and Continuous-Insecure Groups Combined $(n = 75)$					
Negative Subscale Total .96 .93  Warm .86 .78  Empathic .81 .79  Altruistic .86 .87  Attractive Personality .80 .68  Dishonest .95 .91	Adulthood α					
Warm       .86       .78         Empathic       .81       .79         Altruistic       .86       .87         Attractive Personality       .80       .68         Dishonest       .95       .91	.90					
Empathic .81 .79  Altruistic .86 .87  Attractive Personality .80 .68  Dishonest .95 .91	.93					
Altruistic .86 .87 Attractive Personality .80 .68 Dishonest .95 .91	.78					
Attractive Personality .80 .68  Dishonest .95 .91	.70					
Dishonest .95 .91	.88					
	.81					
	.95					
Unattractive Personality .83 .71	.74					

Table 4

Correlations for 2-Item Scales on the Questionnaire About Secondary Attachment Figures

(Q-SAF) by Time Period

Scale	Earned-Secur	Earned-Secure and Continuous-Insecure Groups Combined $(n = 75)$					
	r	r	r				
Mean	.80**	.72**	.68**				
Insensitive	.71**	.50**	.56**				

*Note.* \*\*p < .01

Table 5

Group Comparison and Descriptive Statistics on Age of the Sub-Sample From Part 4

Variable	Earned- Gro	oup	Continuou Gro (n =	up	t
	M	SD	M	SD	
Age	24.94	7.14	23.90	7.17	622

*Note.* t value was not significant.

Table 6 Group Comparisons and Descriptive Statistics for Participants in the Earned-Secure and Continuous-Insecure Groups (Part 4)

Variable	Earned-Secure Group $(n = 33)$		Continuou Gro (n =	$\chi^2$	
	n	%	$\overline{n}$	%	
Gender					.011
Male	9	27.3	11	26.2	
Female	24	72.7	31	73.8	
Current Year in College					$1.045^{a}$
1 <sup>st</sup>	2	6.1	7	16.7	
2 <sup>nd</sup>	5	15.2	6	14.3	
$3^{\rm rd}$	10	30.3	12	28.6	
4 <sup>th</sup>	10	30.3	9	21.4	
5 <sup>th</sup>	3	9.1	5	11.9	
6 <sup>th</sup> and Beyond	3	9.1	3	7.1	
Ethnicity					$.004^{b}$
Caucasian/White	23	69.7	29	69.0	
African-American/Black	6	18.2	4	9.5	
Latino/Latina	3	9.1	8	19.0	
Asian American/Pacific Islander	0	0	1	2.4	
Native American	1	3.0	0	0	
Other	0	0	0	0	

Note.  $\chi^2$  = Pearson chi square. All  $\chi^2$  values are not significant.

 $^{a}$ Chi Square run with three groups,  $1^{st}$  and  $2^{nd}$  year vs.  $3^{rd}$  and  $4^{th}$  year vs.  $5^{th}$  and  $6^{th}$  year and Beyond, due to low n.

 $<sup>^{</sup>b}$ Chi Square run with two groups, Caucasian/White vs. Minority, due to low n.

Table 6 (continued)

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$		$\chi^2$
	n	%	n	%	
Annual Income (for self or					4.829 <sup>a</sup>
parents)	4	12.1	E	11.0	
Under \$10,000 \$10,001-\$25,000	4 10	12.1	5 15	11.9	
\$25,001-\$25,000	_	30.3 27.3	_	35.7	
	9 6	18.2	4 8	9.5 19.0	
\$50,001-\$75,000		6.1	8 6	19.0	
\$75,001-\$100,000	2 2	6.1	4	9.5	
\$100,001 and Above Sexual Orientation <sup>b</sup>	2	0.1	4	9.3	
Heterosexual/Straight	30	90.9	38	90.5	
Gay/Lesbian	0	90.9	2	4.8	
Bisexual	3	9.1	2	4.8	
Current Marital Status	3	7.1	2	4.0	1.963 <sup>c</sup>
Single/Never Been					1.703
Married	25	75.8	37	88.1	
Married	7	21.2	4	9.5	
Divorced	1	3.0	1	2.4	
Widowed	0	0	0	0	

All  $\chi^2$  values are not significant.

<sup>&</sup>lt;sup>a</sup>Chi Square run with 4 groups, under \$25,000 vs. \$25,001-\$50,000 vs. \$50,001-\$75,000 vs. \$75,001 and Above, due to low n.

<sup>&</sup>lt;sup>b</sup>Chi Square not run due to greater than 20% of cells with expected values of less than 5.

<sup>&</sup>lt;sup>c</sup>Chi Square run with two groups, Single/Never Been Married vs. Previously or Currently Married, due to low n.

Table 6 (continued)

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$		Group		$\chi^2$
	$\overline{n}$	%	$\overline{n}$	%			
Length of Longest Romantic Relationship					8.446 <sup>a</sup>		
Never Been in a	_	_		_			
Romantic Relationship	0	0	0	0			
Less Than 1 Month	0	0	4	9.5			
1-3 Months	0	0	3	7.1			
3-6 Months	2	6.1	2	4.8			
6-12 Months	2	6.1	6	14.3			
1-2 Years	8	24.2	8	19.0			
2-3 Years	11	33.3	7	16.7			
More Than 3 Years	10	30.3	12	28.6			
Current Residence					$2.477^{b}$		
With Parents	1	3.0	6	14.3			
Live Away From Parents, But Stay with Parents During	6	18.2	10	23.8			
Summers and Holidays Live Away From Parents All Year	26	78.8	26	61.9			

All  $\chi^2$  values are not significant.

<sup>&</sup>lt;sup>a</sup>Chi Square run with 5 categories, Less than 3 Months vs. 3-12 Months vs. 1-2 Years vs. 2-3 Years vs. More than 3 Years, due to low n.

<sup>&</sup>lt;sup>b</sup>Chi Square run with 2 categories, Live with Parents for Some-All of the Year vs. Live Away from Parents All Year, due to low n.

Table 6 (continued)

Variable	Earned-Secure Group $(n = 33)$		Continuou Gro (n =	$\chi^2$	
	n	%	n	0/0	
Ever Gone to Counseling					.325
Yes	21	63.6	24	57.1	
No	12	36.4	18	42.9	
Duration in Counseling					
Over Lifetime <sup>a</sup>					
Less Than 1 Month	4	19.0	2	8.3	
1-6 Months	11	52.4	8	33.3	
6 Months-1 Year	1	4.8	5	20.8	
1-2 Years	1	4.8	2	8.3	
2-5 Years	1	4.8	6	25.0	
More Than 5 Years	3	14.3	1	4.2	
Average Frequency of Counseling Sessions/ Week <sup>a</sup>					
1 x /Week	17	81.0	22	91.7	
2 x /Week	4	19.0	1	4.2	
3 or More x /Week	0	0	1	4.2	

All  $\chi^2$  values are not significant.

<sup>&</sup>lt;sup>a</sup>Chi Square not run due to greater than 20% of cells with expected values of less than 5.

Table 6 (continued)

Variable	Earned-Secure Group $(n = 33)$		Continuou Gro (n =	$\chi^2$	
		%	$\overline{n}$	%	
Type of Therapy <sup>a</sup>					
Individual Therapy	18	56.3	21	67.7	
Couples Therapy	2	6.3	4	12.9	
Family Therapy	8	25.0	3	9.7	
Group Therapy	4	12.5	3	9.7	
Self-Help Books Usage					$.000^{b}$
"I have read self-help					
books and they were helpful."	16	50.0	16	38.1	
"I have read self-help					
books, but they were not helpful."	0	0	5	11.9	
"I have never read self- help books."	16	50.0	21	50.0	

All  $\chi^2$  values are not significant.

<sup>&</sup>lt;sup>a</sup>Participants listed all of the treatment modalities experienced throughout life. Multiple listings were possible per participant; thus, chi square was not run.

 $<sup>^{\</sup>rm b}$ Chi Square run with 2 groups, Read Self-Help Books Before vs. Never Read Self-Help Books Before, due to low n.

Table 7  $\label{eq:Frequencies} Frequencies\ of\ Positive\ and\ Negative\ Secondary\ Attachment\ Figures\ by\ Time\ Period^a$ 

Variable	Ea	Earned-Secure Group		Conti	Continuous-Insecure Group			
	n	M	SD	n	М	SD		
Childhood								
Positive	31	3.94	2.99	41	3.49	1.96	.587	
Negative	33	1.55	1.09	42	2.19	1.60	3.934	
Adolescence								
Positive	31	5.16	3.15	42	5.33	3.15	.053	
Negative	32	2.81	1.64	42	3.36	1.67	1.974	
Adulthood								
Positive	33	7.85	6.09	42	5.93	2.93	3.231	
Negative	31	3.00	2.27	41	2.68	1.64	.476	

<sup>&</sup>lt;sup>a</sup>Extreme frequencies removed from analyses.

Table 8

Means, Standard Deviations, and Univariate Analyses of Variance F Ratios for Most Important

Positive Secondary Attachment Figures on Positive Subscale Totals and Most Important

Negative Secondary Attachment Figures on Negative Subscale Totals on the Q-SAF By Time

Period<sup>a</sup>

Variable	Е	Earned-Secure Group		Cont	inuous-In Group	F	
	n	M	SD	n	М	SD	
Childhood							
Positive	33	24.23	6.96	42	22.77	6.83	.829
Negative	18	-2.00	17.40	28	-5.55	16.29	.495
Adolescence							
Positive	32	25.39	6.07	38	24.23	5.12	.744
Negative	24	5.94	14.04	26	-2.92	17.87	3.753
Adulthood							
Positive	33	25.38	6.52	41	25.29	5.12	.005
Negative	12	2.13	16.27	16	-3.92	15.74	.982

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 9

Descriptives and Univariate Analyses of Variance F Ratios for Most Important Positive

Secondary Attachment Figures on Positive Subscales on the Questionnaire About Secondary

Attachment Figures (Q-SAF)<sup>a</sup> by Time Period

Variable	Earned-Secure Group			Continuous-Insecure Group			F
	n	M	SD	n	M	SD	
Childhood	33			42			
Warm		6.07	2.10		5.74	2.23	.423
Empathic		5.45	2.23		4.48	3.03	2.369
Altruistic		6.43	2.18		5.88	2.50	1.009
Attractive Personality		6.28	2.10		6.67	2.20	.615
Adolescence	32			38			
Warm		6.18	2.31		5.97	1.77	.174
Empathic		5.60	2.05		5.12	2.14	.916
Altruistic		7.04	1.63		6.37	1.94	2.390
Attractive Personality		6.56	2.40		6.76	1.59	.175
Adulthood	33			41			
Warm		6.33	2.51		6.25	1.92	.022
Empathic		4.84	2.78		4.76	3.10	.014
Altruistic		7.24	1.78		7.31	1.33	.039
Attractive Personality		6.98	1.32		6.97	1.21	.001

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 10

Descriptives and Univariate Analyses of Variance F Ratios for Most Important Negative

Secondary Attachment Figures on Negative Subscales on the Questionnaire About Secondary

Attachment Figures (Q-SAF)<sup>a</sup> by Time Period

Variable	Earned-Secure Group		Cont	inuous-In Group	secure	F	
	n	M	SD	n	M	SD	
Childhood	18			28			
Mean		25	3.54		66	3.37	.157
Insensitive		-1.00	3.53		-1.36	3.64	.108
Dishonest		.80	6.81		-1.46	6.14	1.375
<b>Unattractive Personality</b>		-1.56	6.06		-2.07	5.77	.084
Adolescence	24			26			
Mean		2.54	2.57		33	3.55	10.560***
Insensitive		1.13	3.04		36	3.51	2.540
Dishonest		1.84	6.99		-1.14	7.14	2.211
<b>Unattractive Personality</b>		.44	4.64		-1.09	6.40	.920
Adulthood	12			16			
Mean		.63	2.60		08	3.12	.406
Insensitive		08	2.84		43	3.12	.090
Dishonest		2.50	7.50		21	7.56	.887
<b>Unattractive Personality</b>		92	4.96		-3.20	4.69	1.545

*Note.* \*\*\*p < .005

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 11

Descriptives and Univariate Analyses of Variance F Ratios for Positive Secondary Attachment

Figures by Time Period on the Relationship Questionnaire

Variable	Ea	Earned-Secure Group		Continuous-Insecure Group			F
	n	M	SD	n	М	SD	
Childhood	33			42			
Secure		5.78	1.19		5.88	1.21	.114
Preoccupied		1.70	.71		2.00	1.17	1.723
Dismissing		2.30	1.21		2.25	1.21	.041
Fearful		3.06	1.60		2.83	1.53	.374
Adolescence	32			38			
Secure		5.75	1.23		5.23	1.38	3.151
Preoccupied		2.04	1.15		2.55	1.35	2.867
Dismissing		2.20	1.39		2.39	1.38	.337
Fearful		2.87	1.42		3.11	1.59	.471
Adulthood	33			41			
Secure		5.93	1.25		5.48	1.11	2.690
Preoccupied		1.86	1.37		2.35	1.29	2.410
Dismissing		1.90	1.42		2.49	1.57	2.837
Fearful		2.39	1.16		3.18	1.76	4.892

*Note.* \*p < .05

Table 12

Descriptives and Univariate Analyses of Variance F Ratios for Negative Secondary Attachment

Figures by Time Period on the Relationship Questionnaire

Variable	Е	Earned-Secure Group			Continuous-Insecure Group		
	n	M	SD	n	M	SD	
Childhood	18			28			
Secure		3.22	2.27		2.61	1.82	1.032
Preoccupied		2.56	1.77		3.75	1.77	4.995*
Dismissing		2.81	1.74		2.80	1.96	.000
Fearful		3.72	2.05		4.11	2.26	.341
Adolescence	24			26			
Secure		4.43	1.76		3.38	1.75	4.500*
Preoccupied		3.42	1.76		4.26	1.92	2.589
Dismissing		3.32	1.80		3.74	1.96	.632
Fearful		2.50	1.50		3.14	1.94	1.691
Adulthood	12			16			
Secure		3.42	2.11		3.13	1.74	.161
Preoccupied		3.71	1.60		4.77	1.87	2.490
Dismissing		4.29	1.88		3.63	2.28	.680
Fearful		3.63	1.61		3.67	1.99	.004

*Note.* \*p < .05

Table 13

Frequencies of Most Important Secondary Attachment Figures from Childhood for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>a</sup>

Variable	Gr	-Secure roup = 33)	Continuous-Insecure Group $(n = 42)$		
	n	%	n	%	
Aunt/Uncle/Great Uncle	6	6.5	14	11.3	
Babysitter	2	2.2	0	0	
Boss	0	0	0	0	
Coach/Music Instructor/Dance Teacher	2	2.2	3	2.4	
Cousin	1	1.1	1	0.8	
Grandparent/Great- Grandparent/Step-Grandparent	32	34.4	21	16.9	
Niece/Nephew	0	0	0	0	
Others' Parents	0	0	0	0	
Parents' Friends/Parents' Significant Others (unmarried)	2	2.2	5	4.0	
Peer	22	23.7	37	29.8	
Religious Leader	0	0	0	0	
School Teacher	3	3.2	12	9.7	
Sibling/Step-Sibling	21	22.6	30	24.2	
Significant Other	0	0	0	0	
Son/Daughter/God-Child	0	0	0	0	
Therapist	2	2.2	0	0	
Other (i.e., Surrogate Father)	0	0	1	0.8	

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

Table 14

Frequencies of Most Important Secondary Attachment Figures from Adolescence for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>a</sup>

Variable	Gr	-Secure roup = 33)	Continuous-Insecure Group $(n = 42)$		
	n	%	n	%	
Aunt/Uncle/Great Uncle	4	4.1	3	2.4	
Babysitter	0	0	0	0	
Boss	4	4.1	0	0	
Coach/Music Instructor/Dance Teacher	2	2.0	5	4.0	
Cousin	2	2.0	1	0.8	
Grandparent/Great- Grandparent/Step-Grandparent	9	9.2	7	5.6	
Niece/Nephew	0	0	0	0	
Others' Parents	2	2.0	2		
Parents' Friends/Parents' Significant Others (unmarried)	0	0	3	2.4	
Peer	36	36.7	55	44.0	
Religious Leader	0	0	1	0.8	
School Teacher	4	4.1	9	7.2	
Sibling/Step-Sibling	16	16.3	12	9.6	
Significant Other	18	18.4	27	21.6	
Son/Daughter/God-Child	0	0	0	0	
Therapist	1	1.0	0	0	

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

Table 15

Frequencies of Most Important Secondary Attachment Figures from Adulthood for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>a</sup>

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecur Group $(n = 42)$	
	n	%	n	%
Aunt/Uncle/Great Uncle	4	4.2	2	1.6
Babysitter	0	0	0	0
Boss	1	1.0	1	0.8
Coach/Music Instructor/Dance Teacher	0	0	0	0
Cousin	2	2.1	2	1.6
Grandparent/Great- Grandparent/Step-Grandparent	9	9.4	8	6.5
Niece/Nephew	1	1.0	0	0
Others' Parents	0	0	1	0.8
Parents' Friends/Parents' Significant Others (unmarried)	1	1.0	2	1.6
Peer	29	30.2	51	41.5
Religious Leader	0	0	1	0.8
School Teacher	0	0	3	2.4
Sibling/Step-Sibling	13	13.5	20	16.3
Significant Other	31	32.3	30	24.4
Son/Daughter/God-Child	5	5.2	2	1.6
Therapist	0	0	0	0

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

Table 16

Frequencies of Most Important Positive Secondary Attachment Figures from Childhood for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>ab</sup>

Variable	Gr	-Secure oup = 33)	Continuous-Insecure Group $(n = 42)$		
	n	0/0	n	%	
Aunt/Uncle/Great Uncle	4	4.3	9	7.3	
Babysitter	2	2.2	0	0	
Boss	0	0	0	0	
Coach/Music Instructor/Dance Teacher	2	2.2	1	.8	
Cousin	0	0	1	.8	
Grandparent/Great- Grandparent/Step-Grandparent	28	30.1	17	13.7	
Niece/Nephew	0	0	0	0	
Others' Parents	0	0	0	0	
Parents' Friends/Parents' Significant Others (unmarried)	2	2.2	5	4.0	
Peer	16	17.2	25	20.2	
Religious Leader	0	0	0	0	
School Teacher	2	2.2	9	7.3	
Sibling/Step-Sibling	15	16.1	18	14.5	
Significant Other	0	0	0	0	
Son/Daughter/God-Child	0	0	0	0	
Therapist	2	2.2	0	0	
Other (i.e., Surrogate Father)	0	0	1	.8	

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

Table 17

Frequencies of Most Important Positive Secondary Attachment Figures from Adolescence for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>ab</sup>

Variable	Gı	-Secure roup = 33)	Continuous-Insecure Group $(n = 42)$		
	n	%	n	%	
Aunt/Uncle/Great Uncle	3	3.1	1	.8	
Babysitter	0	0	0	0	
Boss	3	3.1	0	0	
Coach/Music Instructor/Dance Teacher	1	1.0	5	4.0	
Cousin	1	1.0	0	0	
Grandparent/Great- Grandparent/Step-Grandparent	7	7.1	6	4.8	
Niece/Nephew	0	0	0	0	
Others' Parents	2	2.0	2	1.6	
Parents' Friends/Parents' Significant Others (unmarried)	0	0	2	1.6	
Peer	26	26.5	41	32.8	
Religious Leader	0	0	1	.8	
School Teacher	3	3.1	8	6.4	
Sibling/Step-Sibling	11	11.2	10	8.0	
Significant Other	6	6.1	11	8.8	
Son/Daughter/God-Child	0	0	0	0	
Therapist	1	1.0	0	0	

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

Table 18

Frequencies of Most Important Positive Secondary Attachment Figures from Adulthood for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>ab</sup>

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group (n = 42)		
	n	0/0	n	%	
Aunt/Uncle/Great Uncle	2	2.1	2	1.6	
Babysitter	0	0	0	0	
Boss	0	0	0	0	
Coach/Music Instructor/Dance Teacher	0	0	0	0	
Cousin	1	1.0	2	1.6	
Grandparent/Great- Grandparent/Step-Grandparent	9	9.4	7	5.7	
Niece/Nephew	1	1.0	0	0	
Others' Parents	0	0	1	.8	
Parents' Friends/Parents' Significant Others (unmarried)	1	1.0	1	.8	
Peer	27	28.1	46	37.4	
Religious Leader	0	0	1	.8	
School Teacher	0	0	3	2.4	
Sibling/Step-Sibling	10	10.4	16	13.0	
Significant Other	24	25.0	18	14.6	
Son/Daughter/God-Child	5	5.2	2	1.6	
Therapist	0	0	0	0	

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

Table 19

Frequencies of Most Important Negative Secondary Attachment Figures from Childhood for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>ab</sup>

Variable		Secure oup = 33)	Continuous-Insecure Group $(n = 42)$		
	n	%	$\overline{n}$	%	
Aunt/Uncle/Great Uncle	2	2.2	5	4.0	
Babysitter	0	0	0	0	
Boss	0	0	0	0	
Coach/Music Instructor/Dance Teacher	0	0	2	1.6	
Cousin	1	1.1	0	0	
Grandparent/Great- Grandparent/Step-Grandparent	4	4.3	4	3.2	
Niece/Nephew	0	0	0	0	
Others' Parents	0	0	0	0	
Parents' Friends/Parents' Significant Others (unmarried)	0	0	0	0	
Peer	6	6.5	12	9.7	
Religious Leader	0	0	0	0	
School Teacher	1	1.1	3	2.4	
Sibling/Step-Sibling	6	6.5	12	9.7	
Significant Other	0	0	0	0	
Son/Daughter/God-Child	0	0	0	0	
Therapist	0	0	0	0	
Other (i.e., Surrogate Father)	0	0	0	0	

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

Table 20

Frequencies of Most Important Negative Secondary Attachment Figures from Adolescence for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>ab</sup>

Variable	Gr	-Secure roup = 33)	Continuous-Insecure Group $(n = 42)$		
	n	%	n	%	
Aunt/Uncle/Great Uncle	1	1.0	2	1.6	
Babysitter	0	0	0	0	
Boss	1	1.0	0	0	
Coach/Music Instructor/Dance Teacher	1	1.0	0	0	
Cousin	1	1.0	1	.8	
Grandparent/Great- Grandparent/Step-Grandparent	2	2.0	1	.8	
Niece/Nephew	0	0	0	0	
Others' Parents	0	0	0	0	
Parents' Friends/Parents' Significant Others (unmarried)	0	0	1	.8	
Peer	10	10.2	14	11.2	
Religious Leader	0	0	0	0	
School Teacher	1	1.0	1	.8	
Sibling/Step-Sibling	5	5.1	2	1.6	
Significant Other	12	12.2	16	12.8	
Son/Daughter/God-Child	0	0	0	0	
Therapist	0	0	0	0	

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

Table 21

Frequencies of Most Important Negative Secondary Attachment Figures from Adulthood for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>ab</sup>

Variable	Earned- Gro (n =		Continuous-Insecure Group $(n = 42)$		
	n	%	$\overline{n}$	%	
Aunt/Uncle/Great Uncle	2	2.1	0	0	
Babysitter	0	0	0	0	
Boss	1	1.0	1	.8	
Coach/Music Instructor/Dance Teacher	0	0	0	0	
Cousin	1	1.0	0	0	
Grandparent/Great- Grandparent/Step-Grandparent	0	0	1	.8	
Niece/Nephew	0	0	0	0	
Others' Parents	0	0	0	0	
Parents' Friends/Parents' Significant Others (unmarried)	0	0	1	.8	
Peer	2	2.1	5	4.1	
Religious Leader	0	0	0	0	
School Teacher	0	0	0	0	
Sibling/Step-Sibling	3	3.1	4	3.3	
Significant Other	7	7.3	12	9.8	
Son/Daughter/God-Child	0	0	0	0	
Therapist	0	0	0	0	

<sup>&</sup>lt;sup>a</sup>Frequencies include multiple secondary attachment figures (up to 3) per participant.

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

Table 22

Mean Scores, Standard Deviations, and Univariate of Analyses F Ratios for Peers /Usually

Same-Age Non-Relatives on the Questionnaire About Secondary Attachment Figures (Q-SAF) By

Time Period<sup>a</sup>

Variable	Earned-Secure Group			Continuous-Insecure Group			F
	n	М	SD	n	М	SD	
Childhood	14			23			
Positive Subscale Total		20.85	9.63		16.88	10.86	1.263
Negative Subscale Total		18.55	11.02		15.08	12.13	.760
Adolescence	23			36			
Positive Subscale Total		24.08	8.41		18.76	14.82	2.450
Negative Subscale Total		20.09	12.14		15.63	17.53	1.142
Adulthood	19			33			
Positive Subscale Total		25.83	9.34		22.60	13.38	.858
Negative Subscale Total		23.18	12.06		22.48	13.47	.036

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 23

Descriptives and Univariate Analyses of Variance F Ratios for Peers /Usually Same-Age Non-Relatives on Positive Subscales from the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup> by Time Period

Variable	Ea	Earned-Secure Group			Continuous-Insecure Group			
	n	M	SD	n	M	SD		
Childhood	14			23				
Warm		4.89	2.76		4.02	2.77	.863	
Empathic		4.81	3.23		2.56	3.88	3.313	
Altruistic		5.26	2.77		3.41	3.96	2.343	
Attractive Personality		5.88	2.14		6.88	2.41	1.637	
Adolescence	23			36				
Warm		6.01	2.79		4.01	4.65	3.441	
Empathic		5.32	2.54		3.93	4.10	2.109	
Altruistic		5.83	3.17		4.06	4.39	2.785	
Attractive Personality		6.93	2.21		6.76	3.66	.039	
Adulthood	19			33				
Warm		6.05	3.13		5.35	3.82	.458	
Empathic		5.84	3.48		4.38	4.40	1.544	
Altruistic		6.70	3.11		6.24	4.08	.184	
Attractive Personality		7.23	1.77		6.63	2.70	.741	

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 24

Descriptives and Univariate Analyses of Variance F Ratios for Peers /Usually Same-Age Non-Relatives on Negative Subscales from the Questionnaire About Secondary Attachment Figures  $(Q\text{-SAF})^a$ 

Variable	Earned-Secure Group			Continuous-Insecure Group			F
	n	M	SD	$\overline{n}$	M	SD	
Childhood	14			23			
Mean		4.02	2.02		3.59	1.89	.441
Insensitive		3.46	1.88		2.70	2.61	.902
Dishonest		7.01	4.03		5.73	4.55	.757
<b>Unattractive Personality</b>		4.05	4.33		3.07	4.97	.373
Adolescence	23			36			
Mean		4.22	1.88		3.40	3.23	1.197
Insensitive		3.39	2.28		2.51	3.26	1.283
Dishonest		7.33	5.94		6.00	7.01	.567
<b>Unattractive Personality</b>		5.16	4.11		3.72	5.64	1.120
Adulthood	19			33			
Mean		4.71	1.54		4.17	2.67	.647
Insensitive		4.08	2.09		3.48	2.43	.821
Dishonest		8.70	5.96		9.39	4.94	.200
<b>Unattractive Personality</b>		5.69	5.05		5.44	5.36	.027

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 25

Descriptives and Univariate of Analyses F Ratios for Secondary Attachment Relationships with 
Peers /Usually Same-Age Non-Relatives by Time Period on the Relationship Questionnaire

Variable	Е	arned-Sect Group	ure	Con	Continuous-Insecure Group			
	n	M	SD	n	M	SD		
Childhood	14			23				
Secure		5.35	1.49		4.89	1.54	.778	
Preoccupied		1.92	1.32		2.78	1.54	3.059	
Dismissing		2.49	1.47		2.08	1.17	.877	
Fearful		2.82	1.48		3.17	1.72	.406	
Adolescence	23			36				
Secure		5.86	1.06		5.19	1.82	2.556	
Preoccupied		2.01	1.29		3.12	1.87	6.168*	
Dismissing		2.20	1.63		2.66	1.89	.930	
Fearful		2.41	1.25		3.29	1.76	4.398*	
Adulthood	19			33				
Secure		6.11	2.13		5.53	1.78	1.109	
Preoccupied		1.87	1.42		2.49	1.79	1.649	
Dismissing		1.90	1.60		2.41	1.73	1.152	
Fearful		3.08	1.68		3.36	1.65	.343	

*Note.* \*p < .05

Table 26

Mean Scores, Standard Deviations, and Univariate Analyses of Variance F Ratios for

Grandparents from Childhood on the Questionnaire About Secondary Attachment Figures

(Q-SAF)<sup>a</sup>

Variable		-Secure oup 17)	Gr	ns-Insecure oup = 14)	F
	M	SD		SD	
Positive Subscale Total Negative Subscale Total	21.48 25.03	9.14 8.49	16.52 22.21	16.99 12.45	1.075 .557

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 27

Descriptives and Univariate Analyses of Variance F Ratios for Grandparents from Childhood on Positive Subscales from the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup>

Variable	Earned- Gro (n =	oup	Continuou Gro (n =	oup	F
_	M	SD	M	SD	
Warm	5.57	2.69	4.63	4.46	.523
Empathic	3.84	3.84	3.21	5.38	.144
Altruistic	6.92	2.11	5.39	3.88	1.948
Attractive Personality	5.15	3.24	3.29	4.90	1.606

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 28

Descriptives and Univariate Analyses of Variance F Ratios for Grandparents from Childhood on Negative Subscales from the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup>

Variable	Gr	l-Secure oup = 17)	Gr	Continuous-Insecure Group $(n = 14)$	
	M	SD	M	SD	
Mean	4.79	1.41	4.04	3.05	.836
Insensitive	3.66	2.19	3.19	3.18	.233
Dishonest	9.31	3.53	8.98	3.91	.064
Unattractive Personality	7.27	3.39	6.01	4.82	.719

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 29

Descriptives and Univariate Analyses of Variance F Ratios for Secondary Attachment

Relationships with Grandparents in Childhood on the Relationship Questionnaire

Variable	Gr	d-Secure roup = 17)	Gre	us-Insecure oup = 14)	F
	M	SD	M	SD	
Secure	5.97	.97	5.41	1.97	1.084
Preoccupied	1.34	.57	2.16	1.53	4.119
Dismissing	1.90	1.34	2.41	1.73	.833
Fearful	2.62	1.09	2.85	1.67	.209

Table 30

Mean Scores, Standard Deviations, and Univariate Analyses of Variance F Ratios for Siblings
from Childhood on the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup>

Variable	Gı	d-Secure roup = 16)	G	Continuous-Insecure Group $(n = 19)$		
	<i>M</i>	SD	M	SD		
Positive Subscale Total Negative Subscale Total	12.16 7.66	13.08 15.54	6.56 3.94	16.46 17.85	1.206 .423	

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 31

Descriptives and Univariate Analyses of Variance F Ratios for Siblings from Childhood on Positive Subscales from the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup>

Variable	Gı	I-Secure roup = 16)	Gı	us-Insecure roup = 19)	F
	M	SD	M	SD	
Warm	3.28	4.43	1.92	4.99	.714
Empathic	1.47	3.29	40	4.16	2.102
Altruistic	2.25	3.49	.99	5.19	.681
Attractive Personality	5.16	3.78	4.04	3.79	.751

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 32

Descriptives and Univariate Analyses of Variance F Ratios for Siblings from Childhood on

Negative Subscales from the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup>

Variable	Earned-Secure $(n = 16)$			Continuous-Insecure $(n = 19)$		
	M	SD		SD		
Mean	1.59	2.38	1.47	3.33	.017	
Insensitive	.75	3.14	.06	2.96	.445	
Dishonest	4.19	5.92	2.85	7.70	.322	
Unattractive Personality	1.13	5.97	44	5.96	.59	

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 33

Descriptives and Univariate Analyses of Variance F Ratios for Secondary Attachment

Relationships with Siblings in Childhood on the Relationship Questionnaire

Variable	Gre	I-Secure oup = 16)	Gro	s-Insecure oup = 19)	F
	M	SD	M	SD	
Secure	4.72	1.87	4.33	2.31	.287
Preoccupied	2.16	1.12	2.67	1.82	.954
Dismissing	3.66	2.20	2.74	2.07	1.620
Fearful	3.50	1.72	3.41	2.19	.017

Table 34

Mean Scores, Standard Deviations, and Univariate Analyses of Variance F Ratios for Significant

Others on the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup> by Time Period

Variable	Earned-Secure Continuous Group Group				F		
	n	M	SD	$\overline{n}$	М	SD	
Adolescence	16			22			
Positive Subscale Total		14.88	12.25		12.25	18.80	.238
Negative Subscale Total		10.47	15.24		5.91	19.90	.588
Adulthood	27			27			
Positive Subscale Total		21.78	12.62		20.44	10.56	.177
Negative Subscale Total		21.00	12.83		17.04	14.83	1.102

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 35

Descriptives and Univariate Analyses of Variance F Ratios for Significant Others on Positive Subscales from the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup> by Time Period

Variable	Е	Earned-Secure Group			Continuous-Insecure Group		
	n	M	SD	n	M	SD	
Adolescence	16			22			
Warm		3.78	3.23		3.02	4.86	.294
Empathic		1.66	5.28		1.50	5.62	.008
Altruistic		2.97	3.88		2.66	5.33	.039
<b>Attractive Personality</b>		6.47	2.94		5.07	4.57	1.150
Adulthood	27			27			
Warm		5.72	3.74		5.33	3.20	.168
Empathic		3.82	4.86		3.74	4.86	.003
Altruistic		6.22	3.40		5.07	3.88	1.336
Attractive Personality		6.31	2.67		6.54	2.29	.114

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 36

Descriptives and Univariate Analyses of Variance F Ratios for Significant Others on Negative Subscales from the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup> by Time Period

Variable	Earned-Secure Group			Continuous-Insecure Group			F
	n	M	SD	n	М	SD	
Adolescence	16			22			
Mean		3.47	2.47		1.57	3.80	3.054
Insensitive		2.63	3.10		1.73	3.59	.649
Dishonest		3.56	8.04		2.14	8.03	.292
<b>Unattractive Personality</b>		.81	5.90		.48	7.21	.023
Adulthood	27			27			
Mean		4.08	2.42		4.06	2.36	.001
Insensitive		3.83	2.15		3.33	2.43	.626
Dishonest		8.12	5.10		6.70	6.76	.759
Unattractive Personality		4.97	4.76		2.94	6.11	1.844

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 37

Descriptives and Univariate Analyses of Variance F Ratios for Secondary Attachment

Relationships with Significant Others by Time Period on the Relationship Questionnaire

Variable E	E	Carned-Sec Group	ned-Secure Group		tinuous-Ii Group	F	
	М	SD	n	М	SD		
Adolescence	16			22			
Secure		5.06	1.61		3.86	2.34	3.112
Preoccupied		3.34	1.58		3.39	2.24	.004
Dismissing		3.53	1.89		3.52	2.35	.000
Fearful		1.63	.83		2.34	2.11	1.644
Adulthood	27			27			
Secure		5.88	1.78		4.67	2.17	5.024*
Preoccupied		1.97	1.63		3.96	2.52	11.919***
Dismissing		2.22	1.64		3.44	2.29	5.070*
Fearful		1.98	1.36		2.70	1.84	2.695

*Note.* \*p < .05 \*\*\*p < .005

Table 38

Frequencies of Most Important Secondary Attachment Figures from Childhood by Group for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>a</sup>

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$	
	$\overline{n}$	%	n	%
Significant Other <sup>b</sup>	0	0	0	0
Usually Older Relative <sup>c</sup>	38	40.9	35	28.2
Usually Same-Age Relative <sup>d</sup>	22	23.7	31	25.0
Usually Younger Relative <sup>e</sup>	0	0	0	0
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>f</sup>	2	2.2	6	4.8
Usually Older, Paid for Time with Respondent, Non-Relative <sup>g</sup>	9	9.7	15	12.1
Usually Same-Age, Non-Relative <sup>h</sup>	22	23.7	37	29.8

<sup>&</sup>lt;sup>b</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>c</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>d</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>e</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

<sup>&</sup>lt;sup>f</sup>Includes Boss, Other's Parent, Parent's Friend/ Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>g</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>h</sup>Includes Co-worker, Peer

Table 39

Frequencies of Most Important Secondary Attachment Figures from Adolescence by Group for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>a</sup>

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$	
	n	%	n	%
Significant Other <sup>b</sup>	18	18.4	27	21.6
Usually Older Relative <sup>c</sup>	13	13.3	10	8.0
Usually Same-Age Relative <sup>d</sup>	18	18.4	13	10.4
Usually Younger Relative <sup>e</sup>	0	0	0	0
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>f</sup>	6	6.1	5	4.0
Usually Older, Paid for Time with Respondent, Non-Relative <sup>g</sup>	7	7.1	15	12.0
Usually Same-Age, Non-Relative <sup>h</sup>	36	36.7	55	44.0

<sup>&</sup>lt;sup>b</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>c</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>d</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>e</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

<sup>&</sup>lt;sup>f</sup>Includes Boss, Other's Parent, Parent's Friend/ Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>g</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>h</sup>Includes Co-worker, Peer

Table 40

Frequencies of Most Important Secondary Attachment Figures from Adulthood by Group for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>a</sup>

Variable	Gr	d-Secure roup = 33)	Continuous-Insecure Group $(n = 42)$	
	n	%	n	%
Significant Other <sup>b</sup>	31	32.3	30	24.4
Usually Older Relative <sup>c</sup>	13	13.5	10	8.1
Usually Same-Age Relative <sup>d</sup>	15	15.6	22	17.9
Usually Younger Relative <sup>e</sup>	6	6.3	2	1.6
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>f</sup>	2	2.1	4	3.3
Usually Older, Paid for Time with Respondent, Non-Relative <sup>g</sup>	0	0	4	3.3
Usually Same-Age, Non-Relative <sup>h</sup>	29	30.2	51	41.5

<sup>&</sup>lt;sup>b</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>c</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>d</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>e</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

<sup>&</sup>lt;sup>f</sup>Includes Boss, Other's Parent, Parent's Friend/ Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>g</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>h</sup>Includes Co-worker, Peer

Table 41

Frequencies of Most Important Positive Secondary Attachment Figures from Childhood by

Group for Participants in the Earned-Secure and Continuous-Insecure Groups<sup>ab</sup>

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$	
	$\overline{n}$	%	n	%
Significant Other <sup>c</sup>	0	0	0	0
Usually Older Relative <sup>d</sup>	32	34.4	26	21.0
Usually Same-Age Relative <sup>e</sup>	15	16.1	19	15.3
Usually Younger Relative <sup>f</sup>	0	0	0	0
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>g</sup>	2	2.2	6	4.8
Usually Older, Paid for Time with Respondent, Non-Relative <sup>h</sup>	8	8.6	10	8.1
Usually Same-Age, Non-Relative <sup>i</sup>	16	17.2	25	20.2

<sup>&</sup>lt;sup>b</sup>Percentages are out of total number of secondary attachment figures (positive and negative secondary attachment figures combined).

<sup>&</sup>lt;sup>c</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>d</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>e</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>f</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

gIncludes Boss, Other's Parent, Parent's Friend/Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>h</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>i</sup>Includes Co-worker, Peer

Table 42

Frequencies of Most Important Positive Secondary Attachment Figures from Adolescence by

Group for Participants in the Earned-Secure and Continuous-Insecure Groups ab

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$	
	n	%	n	%
Significant Other <sup>c</sup>	6	6.1	11	8.8
Usually Older Relative <sup>d</sup>	10	10.2	7	5.6
Usually Same-Age Relative <sup>e</sup>	12	12.2	10	8.0
Usually Younger Relative <sup>f</sup>	0	0	0	0
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>g</sup>	5	5.1	4	3.2
Usually Older, Paid for Time with Respondent, Non-Relative <sup>h</sup>	5	5.1	14	11.2
Usually Same-Age, Non-Relative <sup>i</sup>	26	26.5	41	32.8

<sup>&</sup>lt;sup>b</sup>Percentages are out of total number of secondary attachment figures (positive and negative secondary attachment figures combined).

<sup>&</sup>lt;sup>c</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>d</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>e</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>f</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

gIncludes Boss, Other's Parent, Parent's Friend/Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>h</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>i</sup>Includes Co-worker, Peer

Table 43

Frequencies of Most Important Positive Secondary Attachment Figures from Adulthood by

Group for Participants in the Earned-Secure and Continuous-Insecure Groups ab

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$	
	n	%	n	%
Significant Other <sup>c</sup>	24	25.0	18	14.6
Usually Older Relative <sup>d</sup>	11	11.5	9	7.3
Usually Same-Age Relative <sup>e</sup>	11	11.5	18	14.6
Usually Younger Relative <sup>f</sup>	6	6.3	2	1.6
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>g</sup>	1	1.0	2	1.6
Usually Older, Paid for Time with Respondent, Non-Relative <sup>h</sup>	0	0	4	3.3
Usually Same-Age, Non-Relative <sup>i</sup>	27	28.1	46	37.4

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

<sup>&</sup>lt;sup>c</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>d</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>e</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>f</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

gIncludes Boss, Other's Parent, Parent's Friend/Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>h</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>i</sup>Includes Co-worker, Peer

Table 44

Frequencies of Most Important Negative Secondary Attachment Figures from Childhood by

Group for Participants in the Earned-Secure and Continuous-Insecure Groups ab

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$	
	n	%	$\overline{n}$	%
Significant Other <sup>c</sup>	0	0	0	0
Usually Older Relative <sup>d</sup>	6	6.5	9	7.3
Usually Same-Age Relative <sup>e</sup>	7	7.5	12	9.7
Usually Younger Relative <sup>f</sup>	0	0	0	0
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>g</sup>	0	0	0	0
Usually Older, Paid for Time with Respondent, Non-Relative <sup>h</sup>	1	1.1	5	4.0
Usually Same-Age, Non-Relative <sup>i</sup>	6	6.5	12	9.7

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

<sup>&</sup>lt;sup>c</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>d</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>e</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>f</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

gIncludes Boss, Other's Parent, Parent's Friend/Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>h</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>i</sup>Includes Co-worker, Peer

Table 45

Frequencies of Most Important Negative Secondary Attachment Figures from Adolescence by

Group for Participants in the Earned-Secure and Continuous-Insecure Groups ab

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$	
	n	%	n	%
Significant Other <sup>c</sup>	12	12.2	16	12.8
Usually Older Relative <sup>d</sup>	3	3.1	3	2.4
Usually Same-Age Relative <sup>e</sup>	6	6.1	3	2.4
Usually Younger Relative <sup>f</sup>	0	0	0	0
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>g</sup>	1	1.0	1	.8
Usually Older, Paid for Time with Respondent, Non-Relative <sup>h</sup>	2	2.0	1	.8
Usually Same-Age, Non-Relative <sup>i</sup>	10	10.2	14	11.2

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

<sup>&</sup>lt;sup>c</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>d</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>e</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>f</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

gIncludes Boss, Other's Parent, Parent's Friend/Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>h</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>i</sup>Includes Co-worker, Peer

Table 46

Frequencies of Most Important Negative Secondary Attachment Figures from Adulthood by

Group for Participants in the Earned-Secure and Continuous-Insecure Groups ab

Variable	Earned-Secure Group $(n = 33)$		Continuous-Insecure Group $(n = 42)$	
	n	%	$\overline{n}$	%
Significant Other <sup>c</sup>	7	7.3	12	9.8
Usually Older Relative <sup>d</sup>	2	2.1	1	.8
Usually Same-Age Relative <sup>e</sup>	4	4.2	4	3.3
Usually Younger Relative <sup>f</sup>	0	0	0	0
Usually Older, Unpaid for Time with Respondent, Non-Relative <sup>g</sup>	1	1.0	2	1.6
Usually Older, Paid for Time with Respondent, Non-Relative <sup>h</sup>	0	0	0	0
Usually Same-Age, Non-Relative <sup>i</sup>	2	2.1	5	4.1

<sup>&</sup>lt;sup>b</sup>Percentages are out of the total number of secondary attachment figures (positive and negative secondary attachment figures combined).

<sup>&</sup>lt;sup>c</sup>Includes Boyfriend, Girlfriend, Spouse

<sup>&</sup>lt;sup>d</sup>Includes Grandparent, Step-Grandparent, Great-Grandparent, Aunt, Uncle, Great-Aunt, Great-Uncle

<sup>&</sup>lt;sup>e</sup>Includes Sibling, Step-Sibling, Cousin

<sup>&</sup>lt;sup>f</sup>Includes Son, Daughter, God-Son, God-Daughter, Niece, Nephew

gIncludes Boss, Other's Parent, Parent's Friend/Parent's Significant Other (unmarried)

<sup>&</sup>lt;sup>h</sup>Includes Therapist, Religious Leader, Babysitter, School Teacher, Coach/Music Instructor/Dance Teacher

<sup>&</sup>lt;sup>h</sup>Includes Co-worker, Peer

Table 47

Mean Scores, Standard Deviations, and Univariate Analyses of Variance F Ratios for Usually

Older Relatives from Childhood on the Questionnaire About Secondary Attachment Figures (Q-SAF)<sup>a</sup>

Variable	Earned-Secure Group $(n = 18)$		Continuous-Insecure Group $(n = 20)$		F
		SD	M	SD	
Positive Subscale Total Negative Subscale Total	19.23 22.14	11.86 11.32	17.32 18.66	15.44 16.81	.181 .548

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 48

Descriptives and Univariate Analyses of Variance F Ratios for Usually Older Relatives from Childhood on Positive Subscales from the Questionnaire About Secondary Attachment Figures  $(Q\text{-}SAF)^a$ 

Variable	Earned-Secure Group $(n = 18)$		Continuous-Insecure Group $(n = 20)$		F
		SD	M	SD	
Warm	4.85	2.97	4.63	4.25	.033
Empathic	3.52	3.65	3.06	5.01	.103
Altruistic	6.21	2.96	5.10	4.16	.884
Attractive Personality	4.65	3.78	4.53	3.92	.010

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 49

Descriptives and Univariate Analyses of Variance F Ratios for Usually Older Relatives from

Childhood on Negative Subscales from the Questionnaire About Secondary Attachment Figures

(Q-SAF)<sup>a</sup>

Variable	Earned-Secure Group $(n = 18)$		Gro	us-Insecure oup (20)	F
	M	SD	M	SD	
Mean	4.23	2.23	3.69	3.16	.362
Insensitive	3.24	2.49	3.38	2.97	.023
Dishonest	8.64	3.82	5.79	7.78	1.977
Unattractive Personality	6.03	4.03	5.80	5.58	.020

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 50

Descriptives and Univariate Analyses of Variance F Ratios for Secondary Attachment

Relationships with Usually Older Relatives in Childhood on the Relationship Questionnaire

Variable	Gre	Earned-Secure Group $(n = 18)$		Continuous-Insecure Group $(n = 20)$	
	M	SD	M	SD	
Secure	5.63	1.52	4.99	2.03	1.183
Preoccupied	1.51	.70	2.40	1.52	5.171*
Dismissing	2.03	1.26	2.60	1.79	1.268
Fearful	2.86	1.35	3.00	1.75	.074

*Note.* \*p < .05

Table 51

Mean Scores, Standard Deviations, and Univariate Analyses of Variance F Ratios for Usually

Same-Age Relatives from Childhood on the Questionnaire About Secondary Attachment Figures

(Q-SAF)<sup>a</sup>

Variable	Gre	Earned-Secure Con- Group $(n = 17)$		Continuous-Insecure Group $(n = 20)$	
	M	SD	M	SD	
Positive Subscale Total	11.91	12.70	7.83	17.60	.632
Negative Subscale Total	7.15	15.19	5.24	18.50	.115

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 52

Descriptives and Univariate Analyses of Variance F Ratios for Usually Same-Age Relatives from Childhood on Positive Subscales from the Questionnaire About Secondary Attachment Figures  $(Q\text{-}SAF)^a$ 

Variable	Earned-Secure Group $(n = 17)$		Continuous-Insecure Group $(n = 20)$		F
	M	SD	M	SD	
Warm	3.15	4.33	2.23	5.21	.336
Empathic	1.62	3.24	.03	4.46	1.493
Altruistic	2.12	3.42	1.39	5.36	.231
Attractive Personality	5.03	3.69	4.19	4.12	.417

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 53

Descriptives and Univariate Analyses of Variance F Ratios for Usually Same-Age Relatives from Childhood on Negative Subscales from the Questionnaire About Secondary Attachment Figures  $(Q\text{-}SAF)^a$ 

Variable	Earned-Secure Group $(n = 17)$		Continuous-Insecure Group $(n = 20)$		F
	M	SD	M	SD	
Mean	1.44	2.38	1.62	3.52	.030
Insensitive	.53	3.17	.28	3.27	.053
Dishonest	4.41	5.80	3.31	7.61	.239
Unattractive Personality	.77	5.97	.03	6.00	.137

<sup>&</sup>lt;sup>a</sup>On all Q-SAF scales, higher scores are more positive and lower scores are more negative.

Table 54

Descriptives and Univariate Analyses of Variance F Ratios for Secondary Attachment

Relationships with Usually Same-Age Relatives in Childhood on the Relationship Questionnaire

Variable Earned-Secure Group $(n = 17)$		oup	Gre	as-Insecure oup = 20)	F
	M	SD	M	SD	
Secure	4.79	1.84	4.47	2.32	.220
Preoccupied	2.21	1.11	2.58	1.81	.561
Dismissing	3.74	2.15	2.73	1.96	2.228
Fearful	3.47	1.67	3.32	2.17	.057

# APPENDIX A QUESTIONNAIRE ABOUT SECONDARY ATTACHMENT FIGURES (Q-SAF)

## Questionnaire A

1.	Think of those people who have played significant roles in your life (excluding the people you consider to be your parents), during childhood, adolescence, and/or adulthood.
2.	Of these people, think of those with whom you have experienced a positive relationship.
3.	Of these people, think of those people who:  . Have cared about you during the good and bad times.  . Have been dependable.  . Have been supportive when you have felt upset.  . Have had the power to upset you at times.
4.	If your relationships with these people have already ended or were to end, the loss of these relationships would elicit strong emotions inside you.
	Now, list those people you thought of that meet the above criteria (example: sibling, significant other, teacher, etc.). Remember, we are interested in only those people who you do not consider to be your parents.

#### Questionnaire A (continued)

In each of the following sections, make a list of all of the positive adjectives that you would use to describe each person you listed on the previous page. Please list the type of relationship you are describing (example: sibling, significant other, teacher, etc.). If you think of more relationships than the space provides, please ask the researcher for additional pages.

Туре	of relationship:			
	Positive adjective	es associated wit	th this person	
Туре	of relationship:			
	Positive adjective	es associated wit	th this person	

## Questionnaire A (continued)

Type o	of relationship:			
	Positive adjectives assoc	iated with th	is person	
		_		
		_		
		_		
		_		
т	C 1 .: 1:			
Type	of relationship:			
	Positive adjectives assoc	iated with th	is person	
		_		
		_		
		_		
		_		
		_		
Type o	of relationship:			
	Positive adjectives assoc	iated with th	is person	
		_		
		_		
		_		
		_		

## Questionnaire B

1.	Think of those people who have played significant roles in your life (excluding the people you consider to be your parents), during childhood, adolescence, and/or adulthood.
2.	Of these people, think of those relationships that were dissatisfying and/or led you to feel badly about yourself.
3.	Of these people, think of those people who:  . Have not cared about you in the ways you would have wanted during the good and/or bad times.
	<ul><li>Have not been as dependable as you would have liked.</li><li>Have not been supportive enough when you needed them to be.</li><li>Have had the ability to upset you at times.</li></ul>
1.	If your relationships with these people have already ended or were to end, the loss of these relationships would elicit strong emotions inside you.
	Now, list those people you thought of that meet the above criteria (example: sibling, significant other, teacher, etc.). Remember, we are interested in only those people who you do not consider to be your parents.

#### Questionnaire B (continued)

In each of the following sections, make a list of all of the negative adjectives that you would use to describe each person you listed on the previous page. Please list the type of relationship you are describing (example: sibling, significant other, teacher, etc.). If you think of more relationships than the space provides, please ask the researcher for additional pages.

Туре	of relationship:		
	Negative adjectives	associated with t	this person
Type o	of relationship:		
	Negative adjectives	associated with t	this person

Type o	of relationship:		
	Negative adjectives associ	iated with th	nis person
		-	
		-	
		-	
		-	
		-	
Type of	of relationship:		
	Negative adjectives associ	iated with th	nis person
		-	
		-	
		-	
		-	
		-	
Type o	of relationship:		
	Negative adjectives associ	iated with the	nis person
		-	
		-	
		_	
		-	

#### Questionnaire C

The following words can be used to describe people in different types of important relationships. In the space provided, please write the **opposite (antonym)** of each word listed below. Think of these words, as though they were describing people in a variety of relationships. Remember, list the **opposite (antonym)** of each of the following words.

Compatible:
Self-Absorbed:
Dishonest:
Moody:
Happy:
Helpful:
Irresponsible:
Considerate:
Irrational:
Poor Communicator:
Dependent:
Betraying:

Lazy:
Closed-Minded:
Manipulative:
Stubborn:
Unpredictable:
Understanding:
Critical:
Generous:
Jealous:
Loyal:
Selfish:
Rude:
Stupid:
Uncaring:
Good Listener

Strong:
Inspiring:
Violent:
Disloyal:
Supportive:
Accepting:
Liar:
Loving:
Confident:
Compassionate:
Insensitive:
Optimistic:
Inconsiderate:
Creative:
Mean:

Emotionally Open:
Judgmental:
Loud:
Comforting:
Honest:
Funny:
Friendly:
Affectionate:
Determined:
Overbearing:
Arrogant:
Forgiving:
Deceitful:
Kind:
Carina:

Gives Me Advice:
Energetic:
Motivating:
Patient:
Abusive:
Untrustworthy:
Encouraging:
Dependable:
Intelligent:
Fun:
Hardworking:
Beautiful:
Outgoing:

# Questionnaire About Secondary Attachment Figures (Q-SAF)- Adulthood Relation: \_\_\_\_\_ This person's name: \_\_\_\_\_ What age(s) were you close to this person? How often did you talk and/or spend time with this person?\_\_\_\_\_ Did this primarily occur in person, over the phone, over e-mail, through letters, or other means of contact (if so, explain)?\_\_\_\_\_ Please place an "X" on each of the scales below indicating how you perceive this person or your relationship with this person during adulthood. Caring Uncaring Kind/ Rude Polite Selfish Giving Emotionally Emotionally Closed Open Patient **Impatient** Easy-going/ Stubborn Flexible

: : : : :

Nice

Unsupportive

Mean

Supportive

# Q-SAF (continued)

Insensitive _	<u> </u>	<u> </u>	:	:	 :	Sensitive
Funny _	:	:	:	:	:	Serious
Unhelpful _	:	:	;	:	:	Helpful
Disloyal _	:	:	:	:	:	Loyal
Poor Communicator	::	:	:	:	 :	Good Communicator
Dependable _	<u>:</u>	;	:	:	:	Undependable
Unfriendly _	<u>:</u>	<u>:</u>	;	;	 :	Friendly
Honest _	::	:	:	:	:	Dishonest
Hateful _	:	<u>:</u>	:	:	;	Loving
Lying _	<u></u> :	<u>:</u>	:	:	 ;	Truthful
Trustworthy _	:	;	:	:	:	Untrustworthy
Good Listener _	:	:	:	:	:	Bad Listener
Lazy _	:	:	;	:	:	Hardworking
Understanding_	:_	:	;	:		Closed Minded/ Judgmental

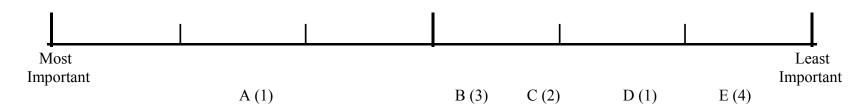
# Q-SAF (continued)

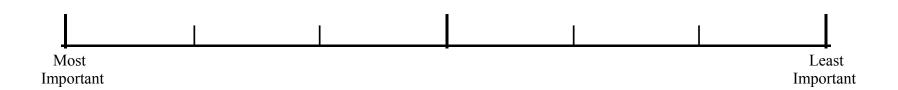
<u> </u>	:	:	:	:	Fun
::	:	::	::	::	Compassionate/ Kind-hearted
	<del>-</del>	: :	: :		

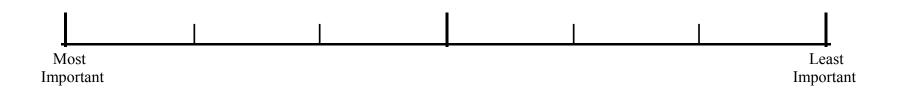
# APPENDIX B DATA COLLECTION FORM

#### Card Sort Data Collection Form- Childhood

## Example:







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