

HIERARCHIES OF ATTACHMENT RELATIONSHIPS IN ADULTHOOD

by

Shanna J. Trinke

B.A. University of Manitoba, 1993

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Department

of

Psychology

© Shanna J. Trinke 1995

SIMON FRASER UNIVERSITY

October 1995

All rights reserved. This work may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.

## APPROVAL

NAME: Shanna J. Trinke  
DEGREE: Master of Arts  
TITLE OF THESIS: Hierarchies of Attachment Relationships in Adulthood

### EXAMINING COMMITTEE:

Chair: Ralph Mistlberger

---

Kim Bartholomew  
Senior Supervisor

---

Marlene Moretti

---

Daniel Perlman  
External Examiner  
Department of Family Studies  
University of British Columbia

Date Approved: 3 October 1995

## PARTIAL COPYRIGHT LICENSE

I hereby grant to Simon Fraser University the right to lend my thesis, project or extended essay (the title of which is shown below) to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users. I further agree that permission for multiple copying of this work for scholarly purposes may be granted by me or the Dean of Graduate Studies. It is understood that copying or publication of this work for financial gain shall not be allowed without my written permission.

### **Title of Thesis/Project/Extended Essay**

Hierarchies of Attachment Relationships in Adulthood

---

---

---

---

**Author:** \_\_\_\_\_

(signature)

\_\_\_\_\_  
(name)

Nov. 27 / 95  
\_\_\_\_\_  
(date)

## Abstract

This study examined the characteristics of attachment hierarchies in adulthood. Four components were used to define an attachment bond: orienting towards the attachment figure as a safe haven in times of distress, a secure base from which to venture out independently, a strong emotional tie, and an object to be mourned if lost. The Attachment Network Questionnaire (ANQ) was created to measure multiple adult attachment relationships and to examine the characteristics of attachment hierarchies. 200 university students completed the ANQ by listing their significant relationships and then ranking these persons in terms of whom they would use or would like to use to meet the attachment needs listed above. A subset of the participants were followed up to examine the one month test-retest reliability of the ANQ. Adult participants were found, on average, to have 5.3 attachment figures, only some of whom were sexual partners. The figures identified included both secure and insecure attachments. In addition, the ANQ demonstrated adequate test-retest reliability over the period of one month.

## Table of Contents

Approval Page	ii
Abstract	iii
Table of Contents	iv
List of Tables	v
Introduction	1
Method	10
Results	14
Discussion	26
References	35
Appendix A (Attachment Network Questionnaire)	38
Appendix B (Tables)	41

## List of Tables

Table 1: Frequency of Relationships Listed by Participants on the ANQ	41
Table 2: Mean Rankings of Various Relationships	42
Table 3: Subscale Mean Ranks for Mothers, Fathers, Partners, Siblings, and Best Friends	43
Table 4: Safe Haven and Secure Base Mean Rank Comparisons for Partners, Mothers, Fathers, Siblings, and Best Friends	44
Table 5: Proportion of Participants Judged to Have Various Persons as Attachment Figures	45
Table 6: Comparison of Means from Time 1 to Time 2	46
Table 7: Test-Retest Reliability Correlations	47
Table 8: Correlations Between Attachment Security and Attachment Functions	48

## Hierarchies of Attachment Relationships in Adulthood

How can attachment relationships be empirically defined? This is an important question that remains largely unexplored in attachment research. Throughout Bowlby's work, four components are considered to be crucial in constituting an attachment bond: using the attachment figure as a safe haven in times of distress, using him or her as a secure base from which to venture out independently, having a strong emotional tie with the person regardless of whether the tie is positive, negative, or mixed, and mourning the loss of the person (e.g., 1979/1977, 1980, 1988/1982). These categories overlap with components identified by other researchers as well (e.g., Hazan & Shaver, 1994; Weiss, 1982).

Whereas some prominent adult attachment researchers (such as Hazan & Zeifman, 1994) have postulated that adult attachments are formed almost exclusively with a romantic partner, I endeavored to show that many adults have more than one attachment relationship and that attachments need not involve a sexual component. Therefore, in the present study, I developed and validated a measure to assess multiple adult attachments and to examine the characteristics of attachment hierarchies.

### Attachment Figures in Childhood and Adulthood

Bowlby (1980) first proposed that attachment is a "class of behavior with its own dynamic" (p. 39), distinct from, yet equally as important as, feeding and sexual mating. Much of his early theorizing was focused on parent-child relationships, but he maintained that attachment behaviors and bonds are "present and active throughout the life cycle" (1979/1977, p. 39) and continue "from the cradle to the grave" (1979/1977, p. 129). Attachment research was first carried out with infants and children (e.g., Ainsworth, Blehar, Waters, & Wall, 1978), and was subsequently extended to cover adults as well (e.g. Hazan

& Shaver, 1987).

Childhood Attachment Figures. It is generally accepted that children have multiple attachment figures (Ainsworth, 1989; Bretherton, 1985). Intuitively, it would seem to be adaptive to have several figures who could fulfill various attachment needs in different situations. Research has shown that it is, in fact, beneficial for children to have multiple attachment bonds (Howes, Rodning, Galluzzo, & Myers, 1988; Main & Weston, 1981; Oppenheim, Sagi, & Lamb, 1988; Sagi, Lamb, Lewkowicz, Shoham, Dvir, & Estes, 1985). For example, Howes and colleagues (1988) demonstrated that having a secure attachment to at least one caregiver can compensate for other insecure attachments in terms of the child's ability to interact with peers and other caregivers. Furthermore, Oppenheim and colleagues (1988) suggested that different attachment figures may be important in different areas of development and may have specific areas of influence for a child.

Early research restricted its focus to mothers as children's attachment figures (e.g., Ainsworth et al., 1978). Shortly thereafter, researchers began routinely assessing both mothers and fathers (e.g., Main & Weston, 1981). More recently, other adults such as daycare workers and caregivers on a kibbutz have also been included as possible members of the attachment network (e.g., Oppenheim et al., 1988). Although no research has been done examining the characteristics of children's attachments networks, these attachments have been postulated by some to be arranged in a hierarchy (e.g., Ainsworth, 1982; Kobak, 1994; Main, Kaplan, & Cassidy, 1985). An attachment hierarchy is one's collection of others that are looked upon to fulfill various attachment needs. These figures are presumably arranged in a preference hierarchy according to whom the individual would most like to meet his or her attachment needs.



Adult Attachment Figures. Although the general characteristics of attachment bonds are assumed to continue from infancy and childhood to adulthood, Weiss (1982) identified three major differences between child and adult attachments. The first is that adult attachments are reciprocal and formed between peers whereas parent-child attachments are unbalanced in terms of caregiving and care-receiving. Second, in adulthood, attachment behavior cannot as easily overwhelm other behavioral systems as it does in infancy. Adults can survive longer separations from their attachment figures and suppress overt attachment behaviors to a greater extent. This makes the accurate observation and measurement of attachment behaviors in adults much more difficult than in children. Finally, Weiss states that adult attachments are often directed toward a sexual partner. In healthy parent-child bonds, this is obviously not the case.

When considering adults' attachment figures, two separate but related issues need to be addressed. First, do adults have primarily one attachment figure and if so, is that person a sexual partner? While romantic partners may tend to become key attachment figures in adulthood (Hazan & Shaver, 1994), Hazan and Zeifman (1994) take this position even further to postulate that adults generally have only one attachment figure and "in the course of normative development, sex becomes an integral part of attachment" (p. 154). Weiss (1982), on the other hand, recognizes that while adults may often have romantic partners as primary attachment figures, "there is no necessary connection [between sexual contact and attachment] and attachments may well be unaccompanied by either manifest or latent sexual desire" (p. 180). Given these theorized contradictions, the issue of sexual behavior as a necessary component of adult attachment needs empirical investigation.

Second, if adult attachment figures are not necessarily romantic partners, the question

remains: Who constitutes these attachment relationships? When Bowlby (1979/1977) wrote about possible adult attachment figures, he realized that although they may often be spouses, they could also include parents and, surprisingly frequently, could be children. It can logically be assumed that repeated contact with appropriate others at any time during the life cycle could lead to the formation of many different attachments. Furthermore, if a child grows up with multiple attachment figures, it is reasonable to expect this pattern to be maintained into adulthood. However, the presence of multiple attachment figures for adults still requires empirical validation.

If adults have multiple figures, are they arranged in a hierarchy? Does this hierarchy change over time? Hazan and Zeifman (1994) recently examined the characteristics of adult attachment bonds by focusing on primary attachment figures and how individuals' orientation toward various persons shifts over time. In their study of 120 adults who responded to notices posted around the community, they found that "full-blown attachments are almost exclusively limited to parents or romantic partners" (p. 161). The researchers observed that when participants were either not in relationships or were in short-term relationships, their primary attachment figures were usually parents. However, by 2 years nearly all romantic relationships had the characteristics of full-blown reciprocal attachments. From this they concluded that the only attachment figures for adults in romantic relationships of at least 2 years' duration are their romantic partners. Their statements regarding the possibility of multiple attachment figures are contradictory. On the one hand, they state that multiple attachments are hypothesized to be arranged in a hierarchical manner and that parents tend to be permanent figures of the hierarchy. On the other hand, they claim that, beyond infancy, attachments are almost exclusively with sexual

partners.

In addition to the contradictions in their paper, there are two major problems with the study. First, the researchers asked participants to name only one person who fulfilled various attachment needs, thus implicitly assuming that adults have only one attachment relationship. In doing so, they shed light on the characteristics of primary attachment figures, but neglected to gather information about the rest of the attachment hierarchy. Second, their measurement of attachment confounds the security of the possible attachment bond (making effective use of the attachment figure) with the actual presence of an attachment. Their questions probed for individuals who actually met the participants' needs on a regular basis, for example, "Whom do you turn to for comfort when you're upset, feeling down, etc.?" By wording the questions as such, the measure may not have identified insecure attachment relationships. For example, their measure may have missed figures that the participants would have wanted to approach to meet their needs but were afraid to. In fact, Hazan and Zeifman reported in the same paper that when children and adolescents were classified as insecurely attached to their parents, they were more likely to list peers over parents as their primary attachment figures. This should not necessarily be interpreted to indicate that the children are no longer attached to their parents, but that their primary secure attachment figure is a peer. As a result, the conclusions they reached were, at best, incomplete.

### Present Study

The present study was an attempt to clarify the characteristics of adult attachment hierarchies. By theoretically defining the components of attachment, I measured the number and relative position of attachment relationships, regardless of the security of any given

attachment bond. In addition, I clarified, to some extent, the distinction between attachment bonds and other close relationships.

I created the Attachment Network Questionnaire (ANQ; see Appendix) to measure multiple attachment relationships. The ANQ defines an attachment bond as being composed of the components that Bowlby deemed essential: safe haven, secure base, emotional tie, and potential object of mourning. Participants list the important relationships in their lives and rank these individuals in the order that they would use them (or wish they could use them) for various attachment functions. Two of these functions, safe haven behavior and secure base behavior, comprise two distinct subscales.

In contrast to Hazan and Zeifman's (1994) measure in which one person was named as an attachment figure, here the participants are asked to list as many people as they feel are important to them. Hazan and Zeifman looked specifically at attachment behaviors that were actually carried out with the named attachment figure, whereas the ANQ also asks about attachment behaviors that are not necessarily followed through, such that an individual may be oriented toward a figure even if the figure does not meet the individual's needs. Several "approach" attachment items overlap on Hazan and Zeifman's measure and the ANQ, such as whom participants can count on, and whom they go to when upset. Other items, such as whom would you like to be able to count on, and who can make you upset, are unique to the ANQ. For this reason, two additional subscales are distinguishable on the basis of "wanting to" versus "actually" using the attachment figure to meet needs.

Predictions Regarding the Psychometric Properties of the ANQ. I examined several characteristics of the ANQ. First, I tested its internal consistency in terms of how the items group together on a general scale for attachment and also how they cluster on various

subscales. It was expected that the ANQ items would be correlated with each other and with the overall scale. On the other hand, several of the items (such as the hypothetical impact of a person's death and being made upset) were more exploratory in terms of content and specific wording, and therefore, the expected degree of correlation of these items with the rest was not as clear. I also expected to find confirmation of two attachment behavior subscales, "safe haven" and "secure base", as well as two subscales differentiating use of attachment figures, "wanting to" and "actually" using the individuals.

Second, the one-month test-retest reliability of the ANQ was examined. Analyses focused on the composition of the attachment network in terms of size, typical figures, and the ordering of the hierarchy. Considering that major relationship-related life events occurring in the intervening period could affect individuals' responses at Time 2, participants were asked to report such changes. Participants reporting substantial changes in the intervening month were removed from test-retest analyses, and I predicted that, for the remaining individuals, the ANQ would demonstrate quite high test-retest reliability.

Method of Identifying Attachment Figures. I devised a method to decide cut-offs for attachment figure inclusion. A coder judged which of the listed figures fulfilled the definitional criteria for attachment bonds, generally meaning they met all four attachment needs. This judgment was then compared with empirical methods for identifying attachment relationships.

Predictions Regarding Attachment Hierarchy Characteristics and Influencing Factors. The characteristics of the attachment hierarchies were examined. I expected that most university participants would have more than one attachment figure and that attachments would not be limited to sexual partners. To make a prediction regarding the number of

attachments expected, I looked to social networks research, particularly focusing on networks of significant others (as compared to exchange, interactive, or global networks). Extrapolating from this literature (e.g., Kim & Stiff, 1991; Milardo, 1992), I predicted that the average number of attachments would be between three and six.

Hazan and Zeifman (1994) found that most adults in romantic relationships of approximately 2 years or longer tend to list their partners as their primary attachment figure. Similarly, I expected that partners would be ranked at the top of attachment hierarchies for adults in longterm relationships. On the other hand, I predicted that parents would play a more prominent role in fulfilling the attachment needs of younger and/or single individuals and therefore would typically be at the top of these participants' hierarchies. Nevertheless, regardless of age or romantic status, I expected that parents would be present as attachment figures for most participants.

Predictions Regarding Attachment Security and the ANQ. In regards to attachment style, I predicted that security of attachment would be more strongly related to actually using attachment figures than to merely wanting to be able to use them. Theoretically, one would not expect wanting to use someone for attachment functions to correlate with degree of attachment security because individuals exhibiting different insecure attachment patterns would report different levels of wanting to use their attachment figures. For example, persons who manifest a fearful-avoidant attachment pattern would be likely to want their attachment figures to fulfill their needs, but would not be apt to approach these figures for fear of rejection. On the other hand, persons manifesting a dismissing-avoidant pattern would likely report a low level of wanting to use their attachment figures (Bartholomew, 1990). Therefore, the expected correlation between attachment security and the "want to"

subscale was somewhat unclear.

Social Networks, Social Support, and Attachment. A construct related to attachment, but with theoretical and methodological differences, is that of social networks. Social networks may be defined in a variety of ways ranging from broad (the total number of people with whom one interacts) to narrow (a network of significant others or intimates) (Milardo, 1992). Broad definitions of social networks are very different from networks of attachment bonds in that attachments are defined according to a particular theoretical perspective and are more specific than simple social contacts. Networks of intimates, on the other hand, likely overlap with attachment networks and may at times be even less inclusive than networks of attachments.

The area of social support is tied into the field of social networks. Social support measures can be categorized according to three different models: (a) the network model which focuses on social integration and interconnectedness of individuals, (b) the received support model which focuses on support actually received, and (c) the perceived support model which looks at support believed to be available to the individual if it is needed (Sarason, Sarason, & Pierce, 1990). In the present study, a measure of perceived close emotional support, the SSQ (Sarason, Sarason, Shearin, & Pierce, 1987), was included in order to compare social support and attachment networks. The Sarasons' questionnaire assesses the perceived number of available social supports as well as the overall satisfaction one feels with these supports. This social support measure focuses on successful or satisfying relationships and is less inclusive than the ANQ measurement of attachment which allows for the identification of figures that may leave support needs unfulfilled. Given the theoretical differences between the two constructs as well as the methodological

differences in the way the two measures are designed, I expected that social support and attachment would be shown to be somewhat related but not equivalent. More specifically, I expected that the number of attachment figures would be moderately but not highly correlated with the number of social supports perceived to be available. Furthermore, exploratory analyses were planned to examine the role of potential mediating factors (such as security of attachment) in distinguishing social support and attachment.

## Method

### Participants

The sample consisted of 214 psychology students from Simon Fraser University who volunteered to participate in partial fulfilment of course requirements. Questionnaires from 14 participants were eliminated because the participants failed to follow experimental instructions and included ties in their rankings or listed multiple individuals on one line on the ANQ. The final sample consisted of 86 male and 114 female participants. Their mean age was 21.0 years ( $SD = 3.88$ ). Participants' ages ranged from 17 to 45 years; however, 76% of them were between 18 and 22 years of age. Of the total sample, 49% reported being in a current romantic relationship. The average relationship length for participants currently in relationships was 22 months ( $SD = 17.11$ ). Relationships ranged in length from one to 96 months. A subset of 57 individuals was followed up about one month after the initial testing.

### Procedure

The Attachment Network Questionnaire was piloted on 73 university students to standardize administration and instruction procedures. In the current study, participants were tested in groups of 7 to 15. They completed a questionnaire package which began with the



Attachment Network Questionnaire (ANQ). The experimenter guided the participants as a group through a standard set of verbal instructions and examples pertaining to the ANQ. In front of the group, the experimenter filled in a sample ANQ listing her mother, father, partner, and a friend before demonstrating how she would answer the questions: (1) From whom could you borrow money if he or she had it? and (2) With whom do you get into the most arguments?

Following this, participants were allowed to complete the rest of the questionnaire and the remaining components of the package at their own pace. At the end of the booklet, participants were given the choice to volunteer for a follow-up study by writing down their names and phone numbers. Of the total sample of 214 participants, 71% volunteered to return for future research. No differences in demographic characteristics were found between those who volunteered for the follow-up study and those who did not. A random sample of interested participants was contacted by phone to schedule a second session a month later. At the follow-up session, they first completed the ANQ a second time to measure its test-retest reliability. Following that, they were given Family and Peer Attachment Interviews (Bartholomew & Horowitz, 1991) which were used for other research purposes.

### Measures

Attachment Network Questionnaire (ANQ). The ANQ (see Appendix) allows for the measurement of multiple attachment figures. Participants list the "significant people in your life, those people that you currently feel a strong emotional tie to, regardless of whether that tie is positive, negative, or mixed." After providing demographic information about these individuals, participants rank them in the order that they would use them (or would like to

use them) for various attachment functions.

Six specific aspects of attachment are assessed: (a) safe haven (see Items A and B in Appendix), (b) secure base (see Items C and D), (c) proximity-seeking (see Item E), (d) mourning after hypothetical loss (see Item F), (e) conflict and strong emotion (see Item G), and (f) degree of emotional connection felt toward each person listed (see Item H). The inclusion of an item dealing with conflictual emotion was an attempt to override defenses that may cause participants to deny the importance of insecure attachments.

After listing their important relationships, participants rank in order of importance only the individuals relevant to each item. They are told they do not need to rank everyone for any of the items except Item H, the degree of emotional connection. By using cutoff rules for attachment figure inclusion into the hierarchy (which will be discussed later in this paper), the ANQ may be used to tease out attachment figures who are looked upon to fulfill one's complete range of attachment needs. These figures can be distinguished from those persons who may provide specific benefits such as companionship or support and thus satisfy only selected needs without actually being attachment figures.

Relationship Questionnaire (RQ). Participants' attachment styles were assessed using the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) which is based on Bartholomew's (1990; Bartholomew & Horowitz, 1991) four-category model. The RQ is made up of four brief descriptions of prototypical attachment patterns as they relate to close relationships in general. Participants are asked to rate on a 7-point scale the degree of correspondence between each prototype and their own style. For example, the secure prototype reads as follows "It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being

alone or having others not accept me." Participants are then asked to what degree each style is similar to the way they are in their relationships with their mother, their father, their closest platonic friend, and their romantic partner if they have one. While ratings of each of the four prototypes were obtained, only the general and specific ratings of security were used in the present study. Self-reported attachment patterns identified by the RQ are moderately correlated with interview ratings of corresponding attachment styles; correlations range from .22 to .50 (Griffin & Bartholomew, 1994). See Griffin and Bartholomew (1994) for more information regarding the psychometric properties of the RQ.

Social Support Questionnaire - Short Form (SSQ-Short Form). The SSQ-Short Form is an adaptation of Sarason and colleagues' (1987) measure of perceived close emotional support. It elicits information about the number of supportive relationships available to the individual in six different contexts as well as the extent to which they feel satisfied with each component of this support on a 7-point scale. Examples of items include "How many people can you really count on to distract you from your worries when you feel under stress? How satisfied are you with this support?" and "How many people can you really count on to console you when you are very upset? How satisfied are you with this support?" Responses yield scores on two scales, SSQ-N (number) and SSQ-S (satisfaction). The SSQ-N score is the average number of people listed across the six items. The SSQ-S score is the average satisfaction rating across the six items.

The SSQ-Short Form correlates highly with the complete 27-item SSQ, indicating it is an acceptable substitute for the complete version. Reliabilities (coefficient alpha) for the current sample were .87 for the SSQ-S and .85 for the SSQ-N. These results are comparable to those found in studies using the complete SSQ (Sarason, Levine, Basham, &

Sarason, 1983).

### Life Changes

After completing the ANQ at the one month follow up session, participants were asked if they had experienced any major life changes in the past month that may have influenced their responses to the questionnaire. They were asked specifically about the occurrence of any deaths, moves, or relationship break-ups or start-ups. Major changes such as these were coded as 2; minor events, such as change in the amount of involvement with friends, were coded as 1; and no reported change was coded as 0. Changes coded as 2 included starting or ending a romantic relationship, moving out of one's parents' home, parents moving to a new city, having a friend die, and having a major fight with a close friend.

## Results

### Analyses

Before discussing that results of data analyses, several issues warrant mention. Data were analyzed separately for male and female participants and very few statistically significant sex differences were found. Unless particular discrepancies between males and females are addressed in the text, it can be assumed that the results are similar for both sexes. Second, four participants stated they were not in romantic relationships but went on to list boyfriends or girlfriends on the ANQ. These individuals' data were discarded from relevant analyses. Third, one outlying data point (approximately nine standard deviations above the mean) was discovered for the variable representing the number of people listed as being available for social support (SSQ-N). Data were analyzed with and without this participant and the pattern of results was similar. The outlier was discarded from relevant

analyses. Fourth, Pearson correlation coefficients were calculated on the ranked data. Spearman rho coefficients (for ordinal data) and Pearson correlation coefficients result in the same values if there are no ties in the rankings (Myers & Well, 1991). Finally, whenever paired t-tests were conducted to compare rankings across relationships, only participants with data present for both variables were included in the analyses. Therefore, means presented in tables based on the entire sample may at times be slightly different from means used for t-tests presented in the text.

### Attachment Network Questionnaire Characteristics

Psychometric Properties. The internal consistency of the ANQ was examined using an item analysis. Reliability analyses on all eight items had to be conducted separately by relationship. Responses on items across relationships were not expected to be consistent and could not be combined to produce appropriate reliability coefficients. Reliability was analyzed for each of five important relationships listed on the ANQ: mother, father, partner, best friend, and sibling. As predicted, scale reliabilities were fairly high; alpha coefficients ranged from 0.69 (partner) to 0.93 (sibling). Subscale reliability analyses were conducted on the "safe haven," "secure base," "want to go to," and "actually go to" subscales, again, within relationships. Alpha coefficients were generally somewhat lower, but still ranged from moderate (0.40 for dad "want to go to," "dad actually go to") to quite high (0.86 for mom "safe haven," sibling "safe haven" and sibling "secure base").

Inspection of the correlations between each item and the total scale excluding the chosen item demonstrated that in general, all items were correlated with the total scale. As predicted, moderate (0.30) to relatively high (0.82) correlations were found between the items and the total scale. One exception was the more exploratory item measuring the

participant's tendency to become upset (Item G) with the listed individuals. For mothers ( $r = .06$ ) and partners ( $r = -.06$ ) of participants, no correlation was found with the total scale. Mean ranks across questionnaire items were calculated with and without the inclusion of Item G and the two sets of rankings were highly similar. Furthermore, rankings on Item G were not correlated with participants' ratings of attachment security for the relationship with the person in question. However, mean ranks for fathers and siblings were slightly but significantly higher when considering means including Item G as compared to not including Item G ( $t(164) = -4.34, p < .001$ ; and  $t(166) = -3.82, p < .001$  respectively). This indicates that fathers and siblings are ranked slightly closer to the top of individuals' attachment hierarchies if the "upset" item is included in the calculation of mean ranks.

The subscales measuring two types of attachment behaviors, "safe haven" and "secure base," were significantly correlated with each other for the previously mentioned five relationships;  $r$ 's ranged from .32 ( $df = 98; p < .001$  for fathers) to .72 ( $df = 90; p < .001$  for siblings). This is not surprising because these persons are likely to be attachment figures for many of the participants and, therefore, could be expected in many cases to fulfill both safe haven and secure base functions in a somewhat similar order of preference. Furthermore, individuals reported a fairly high degree of correspondence between wanting to and actually using individuals for attachment functions;  $r$ 's ranged from .45 ( $df = 113; p < .001$  for fathers) to .77 ( $df = 111; p < .001$  for siblings). Nevertheless, most of the correlations were only moderate, suggesting that the subscales were still somewhat distinct.

General Descriptives. The mean number of persons listed on the ANQ was 9.75 ( $SD = 3.23$ ) with a range from 2 to 18. As will be discussed further, not all of the individuals listed on the ANQ qualify as attachment figures. Overall, participants listed a mean of 4.36

relatives ( $SD = 2.23$ ), 5.48 non-relatives ( $SD = 2.86$ ), 1.45 siblings ( $SD = 1.21$ ), and 4.48 friends ( $SD = 2.59$ ). Table 1 shows commonly listed relationships.

---

Insert Table 1 about here

---

### Ordering of the Attachment Hierarchy

Rankings were assigned by the participants to the various relationships they listed, indicating the order in which they were oriented toward the figures for various attachment functions. Lower numbers reflect a greater tendency to use an individual as an attachment figure and will be referred to as higher rankings. On average, participants would most readily use partners (if they had them;  $M = 2.1$ ,  $SD = 1.42$ ) and mothers ( $M = 2.3$ ,  $SD = .97$ ) as attachment figures, followed by fathers ( $M = 3.2$ ,  $SD = 1.24$ ), siblings ( $M = 3.7$ ,  $SD = 1.57$ ), and best friends ( $M = 4.0$ ,  $SD = 1.89$ ; see Table 2). Means among family members were somewhat correlated; the correlation between mean ranks for mothers and fathers was .22 ( $df = 161$ ;  $p < .01$ ) and between fathers and siblings was .21 ( $df = 145$ ;  $p < .05$ ).

---

Insert Table 2 about here

---

The order in which participants would, on average, use these specific figures as attachments was the same (excluding partners) regardless of whether participants were or were not currently in romantic relationships. Nevertheless, the various mean rankings were somewhat different for the two groups in that individuals not in relationships ranked fathers ( $t(163) = -3.93$ ,  $p < .001$ ), siblings ( $t(165) = -3.04$ ,  $p .01$ ), and best friends ( $t(192) = -4.00$ ,  $p$

< .001) more highly than did individuals who were in relationships (see Table 2). In contrast, relationship status had no effect on the use (mean rank) of mothers ( $t(183) = -1.23$ , ns).

### Factors Influencing the Attachment Hierarchy

Not surprisingly, length of time a participant had known his or her romantic partner was significantly correlated with the partner's overall mean rank ( $r(94) = .22$ ;  $p < .05$ ) and specifically with the partner's "secure base" subscale rank ( $r(92) = .25$ ;  $p < .05$ ). In other words, the longer the individual had known his or her partner, the more readily the individual used the partner over others as an attachment figure, particularly to fulfill secure base functions. These data support Hazan and Zeifman's (1994) work suggesting that over time, peers (including partners) increasingly serve secure base as well as safe haven attachment functions. A further finding was that males ( $M = 1.2$ ,  $SD = .71$ ) used their partners more readily for safe haven functions than did females ( $M = 1.8$ ,  $SD = 1.78$ ) ( $t(93) = 3.08$ ,  $p < .01$ ).

The age of the participant did not correlate significantly with mean rankings for mothers ( $r(183) = .07$ , ns), fathers ( $r(159) = .09$ , ns), or partners ( $r(89) = .17$ , ns). That is, older individuals did not, for example, use parents less and partners more than younger individuals. On the other hand, for partners, fathers, siblings, and best friends, but not mothers ( $r(183) = .06$ , ns), greater frequency of contact was moderately associated with more readily using the person as an attachment figure ( $r$ 's ranged from .16,  $p < .05$  for best friends to .41,  $p < .001$  for partners). Thus, for figures others than mothers, being in contact with the person more frequently was related to ranking the person more highly on various attachment functions. Residing further away from the parental home was not significantly



correlated with the number of attachments participants were judged to have ( $t(183) = .00$ , ns) or with the mean ranks of mothers, fathers, or partners as attachment figures ( $r$ 's ranged from .01 to -.13, ns).

### Attachment Functions

Table 3 shows the means and numbers of participants ranking various persons on the four subscales: "safe haven," "secure base," "want to go to," and "actually go to." One way to examine the results is to compare the actual numbers of participants who oriented themselves toward the various figures to fulfill the different attachment needs (see Table 3). There was a greater number of individuals oriented towards fathers for secure base needs ( $n = 146$ ) than for safe haven needs ( $n = 102$ ;  $z = 6.35$ ,  $p < .01$ ). The same pattern of results was found for mothers and siblings in that they were listed more often for secure base than for safe haven functions ( $z = 2.68$ ,  $p < .01$ ; and  $z = 5.01$ ,  $p < .01$  respectively). Partners and best friends, on the other hand, were listed equally often for safe haven and secure base functions ( $z = .886$ , ns; and  $z = 1.71$ , ns respectively).

---

Insert Table 3 about here

---

When examining mean rank differences for the attachment functions, samples used in t-test calculations included only participants with data present for both variables of interest (see Table 4). First, ranks were examined within the specific relationships across attachment functions. One can see that peers were ranked more highly for safe haven functions than secure base functions ( $t(93) = -4.25$ ,  $p < .001$  for partners;  $t(143) = -8.13$ ,  $p < .001$  for best friends). In contrast, parents were ranked more highly for secure base than safe haven

functions ( $t(158) = 6.78, p < .001$  for mothers;  $t(99) = 6.74, p < .001$  for fathers). No significant differences were found between sibling safe haven and sibling secure base mean ranks. The only relationship in which differences were found between wanting to ( $M = 3.31, SD = 1.77$ ) and actually ( $M = 2.96$ ) using an attachment figure was with best friends ( $t(145) = 2.91, p < .01$ ).

---

Insert Table 4 about here

---

Second, ranks were examined for the specific attachment functions across relationships. Interesting to note is that mothers were ranked more highly than fathers for both safe haven ( $t(96) = -6.76, p < .001$ ) and secure base ( $t(139) = -6.35, p < .001$ ) functions. Safe haven mean ranks were 2.53 ( $SD = 1.36$ ) for mothers and 3.81 ( $SD = 1.95$ ) for fathers; secure base mean ranks were 2.00 ( $SD = 1.01$ ) for mothers and 2.68 ( $SD = 1.17$ ) for fathers. Furthermore, partners were looked upon more readily than parents to fulfill safe haven needs. The findings are consistent with Hazan and Zeifman's (1994) research demonstrating that, over time, young adults shift from using family members (parents in particular) to using peers as safe havens.

#### Attachment Judgments

Theoretical judgments were made to determine whether the relationships listed on the ANQ were attachment bonds. The decisions were based primarily on the number of functions in which participants were oriented toward the various individuals listed on his or her questionnaire. As a general rule, to be considered attachment figures, individuals had to be ranked on a safe haven item (Item A and/or B), a secure base item (Item C and/or D),

the hypothetical mourning item (Item F), as well as the emotional connection item (Item H). However, individual differences in ANQ responding were taken into account and occasionally led to a more complicated application of the simple general rule. For example, if an individual listed one person that met all four criteria, two persons that met only the last three criteria, and six that were only ranked on the emotional connection item, the first three persons would likely be judged to be attachment figures. This type of judgment might be made in such a case because it would display the clearest distinction between attachment and non-attachment relationships for that particular participant. Out of 845 separate judgments of attachment status, 101 judgments (12.0 %) were made applying more complicated criteria for inclusion of the individual as an attachment figure.

The attachment judgments for the relationships listed on 48 questionnaires were tested for interrater reliability. Proportion of agreement between the two raters' attachment judgments was examined for six relationships and was found to be high. Interrater agreement for mothers was 93% ( $\kappa=.54$ ), fathers 83% ( $\kappa=.57$ ), partners 100% ( $\kappa=1.0$ ), siblings 89% ( $\kappa=.78$ ), grandparents 100% ( $\kappa=1.0$ ), and best friends 95% ( $\kappa=.87$ ). The correlation between the two judges' number of attachments for participants was also high ( $r = .87, p < .001$ ).

In most cases, several persons were clearly identifiable as attachment figures, several were ambiguous because they fulfilled a few attachment functions, and the rest were clearly not attachments. Confirming the prediction that participants would generally have between three and six attachment bonds, the mean number of judged attachment figures was 5.33 ( $SD = 2.14$ ). The number ranged from one to 12, and 71% of individuals were judged to have between three and six attachment bonds. Participants not in romantic relationships had

a mean of 5.2 ( $SD = 2.19$ ) attachment figures, and participants in relationships had a mean of 5.5 ( $SD = 2.09$ ) attachment figures. No significant differences were found according to relationship status in the number of attachments participants had ( $t(171) = -.88, ns$ ) or in the likelihood of being attached to various persons ( $z$ 's ranged from .60 to 1.76, ns; see Table 5).

---

Insert Table 5 about here

---

Analyses were conducted to determine whether an attachment status predicted by an empirically-derived method could parallel the results obtained by a theoretical judgment. The general simple rule for attachment figure inclusion (outlined earlier) was used. In other words, in order to be identified as an attachment figure, an individual had to be listed on either Item A or B, either Item C or D, Item F, and Item H. The obtained attachment status predictions were tested for proportion of agreement with attachment judgments. Results indicate that agreement was high for the relationships examined: mothers 91% ( $kappa=.56$ ), fathers 77% ( $kappa=.48$ ), partners 94% ( $kappa=.24$ ), siblings 87% ( $kappa=.73$ ), grandparents 97% ( $kappa=.93$ ), and best friends 91% ( $kappa=.76$ ). Any discrepancies between the two methods of determining attachment status were a result of judgments being made on the basis of a more complicated rule for attachment figure inclusion. These results suggest that the simple decision rule is roughly equivalent to the individual judgments and may be used in their place in the future.

Of the five important attachments listed earlier (partners, mothers, fathers, siblings, and best friends), a high proportion sufficiently fulfilled attachment functions so as to be

judged as attachment bonds for many of the participants. When considering all 200 participants, 86% were judged to be attached to their mothers, 68% to their fathers, 57% to at least one sibling, 76% to their best friends, and 91% to their partners if they reported being in a current romantic relationship. A further finding was that a higher proportion of females (83%) than males (66%) were judged to be attached to their best friends ( $z = 2.79$ ,  $p < .01$ ).

### Test-Retest Reliability

A subset of 57 participants was retested on the ANQ one month after the initial session. The degree of relationship-related life change in the intervening period was taken into account and test-retest reliabilities were calculated with and without the 10 individuals who reported significant change. The pattern of results was similar and data are presented for the participants not reporting major life changes. Reliabilities were examined for the following variables: number of relationships listed (separated also into number of family members and number of non-relatives), number of attachments, mean rankings for various relationships, and mean rankings on the four subscales.

---

Insert Table 6 about here

---

Samples used in the calculation of t-tests only included participants for which data were present at both Time 1 and Time 2. There were no mean differences from Time 1 to Time 2 found in the number of relationships listed ( $t(45) = .23$ , ns), number of relatives listed ( $t(45) = -.13$ , ns), number of non-relatives listed ( $t(45) = .27$ , ns), or number of attachments ( $t(45) = -1.80$ , ns) for the subset of participants who were followed up (see

Table 6). Furthermore, moderate to high stability was found from Time 1 to Time 2 for the number of relationships listed on the ANQ ( $r(46) = .83, p < .001$ ), number of relatives listed ( $r(46) = .88, p < .001$ ), number of non-relatives listed ( $r(46) = .81, p < .001$ ) and for the number of attachments ( $r(46) = .51, p < .001$ ; see Table 7).

In two cases (fathers and siblings), mean rankings for the relationships were slightly lower at Time 2 than at Time 1 (in other words, figures were reported to be used less at Time 2; see Table 6). Nevertheless, correlations between the two sets of mean ranks were high for every relationship:  $r(41) = .74 (p < .001)$  for mothers,  $r(34) = .87 (p < .001)$  for fathers,  $r(18) = .92 (p < .001)$  for partners,  $r(35) = .81 (p < .001)$  for siblings, and  $r(41) = .86 (p < .001)$  for best friends (see Table 7).

---

Insert Table 7 about here

---

### Attachment Behaviors and Attachment Security

Participants rated their attachment patterns with their mothers, fathers, romantic partners, and closest platonic friends on the RQ. Ratings for secure attachments ranged from 1 to 7; higher values reflect a greater degree of reported attachment security. In general, participants reported being less securely attached to their fathers ( $M = 4.34$ ) than to their mothers ( $M = 5.40$ ;  $t(163) = 5.22, p < .001$ ), best friends ( $M = 5.63$ ;  $t(162) = -7.45, p < .001$ ), or partners ( $M = 5.87$ ;  $t(82) = -5.47, p < .001$ ), although moderate to high levels of security were reported on average with all four relationships. None of the other security ratings were significantly different.

---

Insert Table 8 about here

---

With moms, dads, and partners (but not best friends) a positive relationship was found between being securely attached to someone and being likely to rank that person more highly for safe haven and secure base attachment functions (see Table 8). Furthermore, self-reports of security were consistently more highly correlated with actually using mothers ( $t(158) = 1.93, p < .05$ ), fathers ( $t(112) = 1.67, p < .05$ ), and partners ( $t(87) = 1.69, p < .05$ ) but again, not best friends ( $t(137) = .70, ns$ ), than wanting to use the same individuals as attachment figures. General ratings of self-reported security were not, however, correlated with the number of individuals participants listed on the ANQ ( $r(175) = .11, ns$ ) or with the number of attachment figures they were judged to have ( $r(175) = .04, ns$ ).

#### Social Support and the ANQ

The availability of and satisfaction with perceived close emotional social support, as measured by the SSQ-Short Form, were compared to the orientation toward individuals as attachment figures, as measured by the ANQ. The relationship between the number of attachment figures and the number of social supports was only moderate ( $r(175) = .30, p < .001$ ), indicating that the two measures target different constructs to some degree. As mentioned earlier, perceived social support as measured by the SSQ-Short Form is a narrower construct than is attachment as measured by the ANQ, thus accounting for part of the difference between the two.

Comparing the correlations of the two constructs with attachment security provides further evidence for the difference between social support and attachment. The degree of

self-reported security of attachment was positively correlated with the number of persons listed as available supports on the SSQ ( $r(175) = .34, p < .001$ ) and with the degree of satisfaction the participants felt with their available supports ( $r(171) = .44, p < .001$ ). In contrast, security of attachment was not correlated with the number of people listed on the ANQ ( $r(175) = .11, ns$ ) or with the number of attachments individuals were judged to have ( $r(175) = .04, ns$ ). These findings suggest that the SSQ is more likely to target secure or successful attachments, whereas the ANQ examines attachments that may or may not satisfactorily meet an individual's needs.

## Discussion

### Psychometric Properties of the ANQ

In this study, I created a measure, the Attachment Network Questionnaire, to characterize hierarchies of attachment in adulthood. The overall scale proved to have adequate internal consistency. The four hypothesized subscales ("safe haven," "secure base," "want to go to," and "actually go to") were somewhat less reliable than the eight-item total scale. This is likely due to the small number of items composing the subscales. Although the "want to go to" and "actually go to" subscales were not as distinguishable as those for "safe haven" and "secure base," their different patterns of correlating with attachment security suggest that the distinction may still be useful.

In general, all eight items correlated moderately well to very well with the rest of the total scale. The only exception was the item measuring being upset, and this anomaly was only found with mothers and partners. That is, no consistent pattern was found between a participant's ranking of becoming upset with his or her mother or partner and with his or her overall ranking of the relationship. Because rankings rather than ratings of degree are used



in the ANQ, it is inappropriate to imply that participants become more or less upset with these figures. However, these results suggest that becoming upset plays a smaller role in individuals' rankings of mothers and partners than other individuals. For example, overall rankings for fathers and siblings were slightly but significantly lower when Item G was removed from analyses. At this point, it is unclear how the item actually relates to the presence of an attachment bond and therefore it should be reworded to more specifically target attachment figures or should be excluded from the ANQ in the future.

The ANQ proved to be reliable when participants were retested one month after the initial session. Similar numbers of attachment bonds were found at Time 1 and Time 2. In addition, the same pattern of means was found, indicating that participants reported going to the same figures in the same order at both times. An interesting finding was that mean ranks for the various relationships were lower (meaning that reported use decreased) at Time 2. This finding was unexpected and needs replication before any conclusions may be reached.

Unfortunately, the ANQ is a fairly complex questionnaire, a fact highlighted by the number of participants who failed to adequately follow instructions. Nevertheless, the complexity was necessary, first, because of the exploratory nature of the present study, and second, because measurement of attachment is not simple or one-dimensional. Future developments to the ANQ could include further clarification of the instructions and the rewording or exclusion of the item regarding becoming upset. In addition, participants should be reminded that they are free to indicate that there may be items for which they may not be oriented toward anyone. When considering possible improvements to a questionnaire, it is necessary to recognize the inherent limitations of any self-report measure.

It may be impossible for any self-report measure to perfectly prompt participants to identify all of their possible attachment figures. For example, in the present study, some participants did not list their parents on the ANQ as being significant relationships. This seems rather surprising, especially given the priming effect of using parents in the instructional examples.

### Characteristics of the Attachment Hierarchy

I originally hypothesized that most participants would have between three and six attachments. Individuals reported having approximately 10 significant relationships, of which about five were attachment bonds. Furthermore, about three-quarters of the participants were judged to have three to six attachment bonds. Overall, participants ranked partners (if they had them) and mothers most highly as attachment figures, followed by fathers, siblings, and best friends. The relative order in which individuals would, on average, use these specific figures as attachments was the same (excluding partners) regardless of whether individuals were or were not currently in romantic relationships.

An interesting finding was that the mean rankings for fathers, siblings, and best friends were somewhat different according to relationship status. When partners become attachment figures, it appears as though they bump the others to lower places on the hierarchy, but leave the relative positions of these other bonds unaltered. Mothers, however, seem to maintain a privileged position and are excluded from the bumping process. Results from the present study do not show any significant differences in the number of attachment figures for individuals in or out of romantic relationships. Future longitudinal research could examine the way in which adding a partner to one's existing group of attachment bonds influences the structure of the attachment hierarchy.

### Factors Influencing the Hierarchy

One of the factors that was related to a figure's rank as an attachment bond was the frequency with which the participant kept in contact with him or her. This was not the case, however, for mothers. Mothers were ranked at or near the top of attachment hierarchies whether or not individuals kept in touch with them often. Mothers appear to be used to satisfy attachment needs regardless of physical distance and frequency of contact. In the present sample, mothers were likely the primary caregivers for many years. With the prevalence of daycare and the increase in multiple caregivers, it would be interesting to observe whether mothers continue to hold this distinct position for future generations.

Partners' positions on attachment hierarchies were related to the length of time an individual had known his or her partner. As would be expected, the longer one knows one's partner, the more likely it is that the partner will be looked upon first to fulfill attachment needs. More specifically, over time, adults come to look upon their partners not only to meet safe haven needs, but also to always be there for them and thus meet their secure base needs.

Age did not seem to affect the order in which adults used various persons for attachment functions. It is possible, however, that with a sample of participants more diverse in terms of life cycle stages, age differences might be found. Finally, distance away from the parental home did not influence the relative readiness to use parents or partners as attachment figures.

### Attachment Functions

In their study, Hazan and Zeifman (1994) found that older individuals and individuals in longer romantic relationships were more likely to shift the focus of their

primary attachments from parents to peers, first for safe haven and then for secure base functions. Results from the present study were consistent in indicating that college students tend to orient toward peers more readily for safe haven than for secure base needs and toward parents in the opposite manner.

Parents were almost always part of the attachment hierarchy, but it is interesting to highlight the differences between mothers and fathers. Mothers outranked fathers for safe haven and secure base attachment behaviors, not only in the readiness of individuals, on average, to use them as attachments, but also in terms of the overall number of participants who used mothers versus fathers. It appears as though mothers occupy a distinctively important role in the attachment hierarchies of young adults.

### Attachment Judgments

The attachment judgments that were made regarding the listed relationships were based on theoretical criteria. For an individual to be included as an attachment figure, a participant had to orient toward the figure to fulfill safe haven and secure base functions, acknowledge that the loss of the figure would have some sort of impact on him or her, and report an emotional connection with the figure. Attachment judgments proved to be highly consistent across raters. Proportion of agreement was very high between the two judges, even though kappa values did not always reflect this. Kappas were lower because the base rate of certain figures (like mothers and partners) being attachments was very high.

Overall, the general rule and the empirical approach to judging attachment status worked well in most cases to define attachment bonds. However, in a few cases, the simple rule may have been too restrictive to identify certain persons that, in reality, do act as attachments to the participant. Therefore, exceptions were occasionally made, especially in

the case of parents, in which the inclusion criteria became more complicated. Real-life relationships cannot be categorically defined according to a strict set of rules. In the same way, the process of defining attachment bonds probably should not be forced to adhere to inflexible criteria, even though general guidelines can usually be applied. Nevertheless, the overall conclusion is that attachments are clearly not restricted to parents or sexual partners, but also include a host of other relationships such as siblings, friends, and grandparents.

### Security of Attachment

Attachment relationships identified by the ANQ ran the full range for attachment security. Security of attachment to a specific figure was more highly related to actually using than wanting to use that figure as an attachment. This shows support for the hypothesis that being more securely attached to an individual allows for more actual use of the individual to fulfill attachment needs rather than merely wanting the individual to do so. Although the "want to" subscale was somewhat correlated with security, this finding is not surprising given the positive relationship between what people report they want and what they report they actually do. After examining the pattern of responses on questionnaires, it was apparent that many participants listed wanting to use those individuals that they actually did use for safe haven and secure base functions.

It was interesting that no correlation was found between attachment security and any of the four best friend subscales. Examination of the demographic information about best friends revealed that diverse characteristics are used to determine the status of someone as a best friend. For some individuals, a best friend is someone whom one has known since childhood even if there is infrequent contact, whereas for others he or she is someone who has only been known for a few months but with whom one interacts daily. In sum, perhaps

best friends are a more heterogeneous group than are parents or partners, and therefore, no consistent patterns emerge.

### Attachments, Social Networks and Social Support

Social support networks, and specifically perceived social supports, are different from attachments as measured by the ANQ. Although there is some degree of overlap, the constructs of perceived social support and attachment are not the same. The specific definition of social support in this study as measured by the SSQ-Short Form is similar to attachment in that both constructs target persons with whom the individual has a close emotional tie. Differences, however, may likely be explained in terms of variations in the two constructs' comparative relationships with attachment security. More specifically, greater security of attachment was associated with a greater number of successful or satisfying social supports perceived to be available. In contrast, degree of general attachment security had no relation to the number of attachments participants had. These findings suggest that this social support measure tends to target secure and satisfying relationships, whereas the ANQ identifies attachment bonds that are more varied in terms of security.

To test this idea, I examined the attachment pattern ratings on the RQ of attachment relationships with partners, mothers, fathers, and best friends listed by participants on the ANQ. While the majority of attachment figures identified on the ANQ represented secure attachments for participants, I found that a large minority of participants reported being insecure in one or more of the key relationships identified on the ANQ: 28% were insecure with mothers, 49% with fathers, 27% with best friends, and 31% with partners (for individuals currently in a romantic relationship). Unfortunately, because the responses on

the SSQ-Short Form did not include identifying specific persons, a match between individuals used as social supports and as attachments was not possible. Thus, the data do not actually address the question of secure versus insecure attachments to persons considered to be social supports. However, correlations with attachment security provide an indication of the trend toward greater patterns of security with social supports than with attachments.

### General Conclusions

Most adults have multiple attachment figures and do not rely on a partner or a parent as the only attachment bond. Clearly, the measurement of attachment is complicated and a narrow focus on partners or parents is too limited. Adult attachment research needs to allow for the listing of multiple persons as possible attachment bonds as well as take into account the full range of attachment security for attachment figure inclusion.

Results from the present study indicate that young adults place a heavy emphasis on family members as attachment figures. In particular, mothers seem to be given special status in terms of satisfying a variety of attachment needs. It should be kept in mind, however, that the importance placed on the use of parents and siblings may be partly a function of the age of the sample.

When young adults become involved in romantic relationships, their partners seem to slip into the top of the individuals' existing attachment hierarchies. Besides the addition of a partner, the same relative ordering is maintained for the other relationships in terms of satisfying attachment needs. In the future, it would be fascinating to look at the evolution of attachment hierarchies over the course of the development of a romantic relationship and throughout the life cycle.

It was interesting to note the absence of meaningful sex differences in attachment

hierarchy characteristics. This, too, could change according to one's stage in the developmental life cycle. For example, when adults become parents, it is possible that mothers and fathers may exhibit different patterns in terms of the relative ordering of their hierarchies. It should be kept in mind that the sample used in the present study was from a college population, and the results are not necessarily generalizable to older adults or to participants in longer term relationships. Future research should include the administration of the ANQ to a more diverse population in terms of age and life cycle stage.

Unfortunately, one of the limitations of a self-report measure is that it is difficult to control for certain response styles, such as a defensive nature of responding. For example, individuals with a dismissing attachment style may not list the persons they are attached to (like parents) because they do not realize the significance of their attachment relationships until a major separation (such as death) occurs. Future research could decrease the problem of defensiveness by comparing attachment hierarchy results from the ANQ with an interview measure in which consideration of participants' interview styles and attachment patterns would add to the interpretation of the participants' discussion of attachment figures. In addition, interviews may shed light on the differences between wanting to (but not actually going to) and actually using persons as attachment figures, as well as clarify the impact on attachment figure status of becoming upset with different persons.

Despite limitations, the present study was an important first step in the measurement of hierarchies of attachment figures. In addition to highlighting differences in the usage of various persons as attachment figures, the results of this study have identified issues to be dealt with in further research. Finally, the present study is a reminder for researchers not to underestimate the complexity of human attachment relationships.



## References

Ainsworth, M. D. S. (1982). Attachment: Retrospect and prospect. In C. M. Parkes & J. Stevenson-Hinde (Eds.), The Place of Attachment in Human Behavior (pp. 3-30). New York: Basic Books.

Ainsworth, M. D. S. (1989). Attachment beyond infancy. American Psychologist, 44, 709-716.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of Attachment: Assessed in the Strange Situation and at Home. Hillsdale, NJ: Erlbaum.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. Journal of Social and Personal Relationships, 7, 147-178.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. Journal of Personality and Social Psychology, 61, 226-244.

Bowlby, J. (1979/1977). The making and breaking of affectional bonds (Lecture 7). In The making and breaking of affectional bonds. London: Tavistock Press.

Bowlby, J. (1980). Attachment and loss: Vol. 3. Sadness and depression. New York: Basic Books.

Bowlby, J. (1988/1982). The origins of attachment theory (Lecture 2). In A Secure Base. New York: Basic Books.

Bretherton, I. (1985). Attachment theory, retrospect and prospect. In I. Bretherton & E. Waters (Eds.), Growing points in attachment theory and research, Monographs of the Society for Research in Child Development, 50, 3-38.

Griffin, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman (Eds.), Advances in Personal Relationships: Vol. 5. Attachment Processes in Adulthood (pp. 17-52). London: Jessica Kingsley.

Hazan, C., & Shaver, P. (1987). Conceptualizing romantic love as an attachment process. Journal of Personality and Social Psychology, 52, 511-524.

Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. Psychological Inquiry, 5, 1-22.

Hazan, C., & Zeifman, D. (1994). Sex and the psychological tether. In K. Bartholomew & D. Perlman (Eds.), Advances in Personal Relationships: Vol. 5. Attachment Processes in Adulthood (pp. 151-177). London: Jessica Kingsley.

Howes, C., Rodning, C., Galluzzo, D. C., & Myers, L. (1988). Attachment and child care: Relationships with mother and caregiver. Early Childhood Research Quarterly, 3, 403-416.

Kim, H. J., & Stiff, J. B. (1991). Social networks and the development of close relationships. Human Communication Research, 18, 70-91.

Kobak, R. (1994). Adult attachment: A personality or relationship construct? Psychological Inquiry, 5, 42-44.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), Growing points in attachment theory and research, Monographs of the Society for Research in Child Development, 50, 66-106.

Main, M., & Weston, D. R. (1981). The quality of the toddler's relationship to mother and to father: Related to conflict behavior and the readiness to establish new relationships. Child Development, 52, 932-940.

Milardo, R. M. (1992). Comparative methods for delineating social networks. Journal of Social and Personal Relationships, 9, 447-461.

Myers, J. L., & Well, A. D. (1991). Research design and statistical analysis. New York: Harper-Collins.

Oppenheim, D., Sagi, A., & Lamb, M. E. (1988). Infant-adult attachments on the kibbutz and their relation to socioemotional development four years later. Developmental Psychology, 24, 427-433.

Sagi, A., Lamb, M. E., Lewkowicz, K. S., Shoham, R., Dvir, R., & Estes, D. (1985). Security of infant-mother, -father, and -metapelet attachments among kibbutz-reared Israeli children. In I. Bretherton & E. Waters (Eds.), Growing points in attachment theory and research, Monographs of the Society for Research in Child Development, 50, 257-275.

Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: The Social Support Questionnaire. Journal of Personality and Social Psychology, 44, 127-139.

Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). Traditional views of social support and their impact on assessment. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), Social Support: An Interactional View (1st ed., pp. 9-25). New York: John Wiley & Sons.

Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G. R. (1987). A brief measure of social support: Practical and theoretical implications. Journal of Social and Personal Relationships, 4, 497-510.

Weiss, R. S. (1982). Attachment in adult life. In C. M Parkes & J. Stevenson-Hinde (Eds.), The Place of Attachment in Human Behavior (pp. 171-184). New York: Basic Books.

Appendix A

Attachment Networks Questionnaire

List the **significant people** in your life, those people that you **currently** feel a strong emotional tie to, regardless of whether that tie is positive, negative or mixed. List as many or as few people as you feel necessary. These individuals can be listed in any order. In addition, please fill in the other information requested about these individuals.

Name/ Initials	Relationship (e.g. friend, brother)	Sex M/F	Age (years)	Distance From You 1=same house 2=within 10 min drive 3=within 1 hour drive 4=within 1 day drive 5=more than 1 day drive	Frequency of Contact (visit, phone, write) 1=daily/almost daily 2=at least once/week 3=at least once/month 4=3 to 4 times/year 5=approx. once/year 6=less than once/year	Amount of Time You Have Known Each Other (years)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						

**REMINDER:**

1. For each question, only rank those individuals that apply.
2. The individuals listed should be those with whom you have a personal relationship.

Name/ Initials	A. Want to go to	B. Actually go to	C. Like to count on	D. Actually count on	E. See/talk regularly	F. Impact of death	G. Makes you upset	H. Emotional connection
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

## RANKING QUESTIONS

- A. Whom would you want to go to, to help you feel better when something bad happens to you or you feel upset, whether or not you actually go to them?
- B. Whom do you actually go to, to help you feel better when something bad happens to you or you feel upset?
- C. Whom would you like to be able to count on to always be there for you and care about you no matter what?
- D. Whom do you feel you can actually count on to always be there for you and care about you no matter what?
- E. Whom is it important for you to see or talk with regularly?
- F. Whose death would have the greatest impact or effect on you, regardless of what the effect may be?
- G. Who can make you feel upset? (Remember that these are people with whom you have a personal relationship.)
- H. Rank order all of the people on your list in terms of whom you feel most emotionally connected to, regardless of whether that connection is positive, negative, or mixed. **PLEASE RANK EVERYONE FOR THIS QUESTION.**

Appendix B

Table 1

Frequency of Relationships Listed by Participants on the ANQ

	Total Sample	Participants in Relationships	Participants not in Relationships
Partner	48%	94%	0%
Mother	93%	97%	91%
Father	82%	88%	77%
Sibling (at least one)	83%	85%	80%
Second Sibling	38%	44%	32%
Grandparent (at least one)	20%	27%	16%
Other Adult Family Member	26%	26%	26%
Best Friend	97%	97%	98%
Second Friend	89%	85%	92%
Third Friend	72%	64%	82%

Table 2

Mean Rankings of Various Relationships

	Overall	Participants in Relationships	Participants not in Relationships
Partner:	2.1 (1.42, 96)	2.1 (1.42, 92)	Missing
Mom:	2.3 (.97, 185)	2.4 (.89, 93)	2.2 (1.05, 90)
Dad:	3.2 (1.24, 165)	3.5 (1.30, 85)	2.8 (1.04, 78)
Sibling:	3.7 (1.57, 167)	4.1 (1.57, 84)	3.4 (1.50, 81)
Best Friend:	4.0 (1.89, 194)	4.6 (1.72, 93)	3.5 (1.93, 99)

Note. Lower numbers reflect a **greater** tendency to use these people as attachment figures. Standard deviations are in parentheses, followed by n's.



Table 3

Subscale Mean Ranks for Mothers, Fathers, Partners, Siblings, and Best Friends

	Safe Haven	Secure Base	Want to go to	Actually go
Partner	1.56	2.11	1.76	2.03
Mean Rank	(.95, 95)	(1.60, 94)	(1.26, 94)	(1.60, 92)
Mom	2.63	1.95	2.37	2.14
Mean Rank	(1.55, 163)	(1.04, 175)	(1.35, 174)	(1.15, 166)
Dad	3.76	2.64	3.01	3.04
Mean Rank	(1.95, 102)	(1.17, 146)	(1.46, 140)	(1.49, 123)
Sibling	3.63	3.52	3.65	3.46
Mean Rank	(1.93, 98)	(3.52, 132)	(1.76, 131)	(1.72, 120)
Best Friend	2.68	3.83	3.55	2.99
Mean Rank	(1.49, 156)	(1.96, 166)	(1.93, 171)	(1.66, 153)

Note. Lower numbers reflect a **greater** tendency to use these people as attachment figures. Standard deviations are shown in parentheses, followed by n's.

Table 4

Safe Haven and Secure Base Mean Rank Comparisons for Partners, Mothers, Fathers, Siblings, and Best Friends

	Safe Haven	Secure Base
Partner Mean Rank	1.54 (.94, 94)	2.11 (1.61, 94)
Mom Mean Rank	2.62 (1.54, 159)	1.90 (1.00, 159)
Dad Mean Rank	3.78 (1.97, 100)	2.49 (1.09, 100)
Sibling Mean Rank	3.67 (1.96, 92)	3.50 (1.76, 92)
Best Friend Mean Rank	2.59 (1.42, 144)	3.57 (1.77, 144)

Note. Standard deviations are shown in parentheses, followed by  $n$ 's. For mean rankings, lower values indicate that participants more readily use the attachment figure for the particular function. Samples for t-test comparisons included only the participants who had data listed for both variables of interest.

Table 5

Proportion of Participants Judged to have Various Persons as Attachment Figures

---

	Participants in romantic relationships (n=86)	Participants not in romantic relationships (n=87)
Partner:	93%	Missing
Mom:	91%	84%
Dad:	70%	66%
Sibling:	62%	48%
Best friend:	74%	83%
Second friend	45%	56%

---

Table 6

Comparison of Means from Time 1 to Time 2

	Time 1	Time 2
Number of Relationships Listed on ANQ	9.94 (3.33, 47)	9.83 (3.13, 47)
Number of Relatives Listed	4.36 (2.31, 47)	4.38 (2.19, 47)
Number of Non-relatives Listed	5.57 (2.76, 47)	5.47 (2.51, 47)
Number of Attachments	5.66 (2.13, 47)	6.30 (2.57, 47)
Partner Mean Rank	2.0 (.83, 20)	2.0 (.83, 20)
Mom Mean Rank	2.2 (.93, 44)	2.4 (1.11, 44)
Dad Mean Rank	3.3 (1.40, 37)	3.7 (1.62, 37)
Sibling Mean Rank	3.7 (1.42, 38)	4.0 (1.85, 38)
Best friend Mean Rank	3.9 (2.21, 44)	4.1 (2.07, 44)

Note. For mean rankings, lower values indicate that participants more readily use the attachment figure for the particular function. Standard deviations are in parentheses, followed by  $n$ 's.

Table 7

Test-Retest Reliability Correlations


---

Number of Listed Relationships	.83***	(n = 47)
Number of Relatives Listed	.88***	(n=47)
Number of Non-relatives Listed	.81***	(n=47)
Number of Attachments	.51***	(n = 47)
Partner Mean Rank	.92***	(n = 20)
Mom Mean Rank	.74***	(n = 44)
Dad Mean Rank	.87***	(n = 37)
Sibling Mean Rank	.81***	(n = 38)
Best Friend Mean Rank	.87***	(n = 42)

---

\*\*\*p < .001.

Table 8

Correlations between Attachment Security and Attachment Functions

	Safe Haven	Secure Base	Want to go to	Actually go
Partners	.35*** (90)	.39*** (89)	.29** (89)	.46*** (87)
Mothers	.30*** (162)	.37*** (174)	.28** (173)	.41*** (165)
Fathers	.34*** (100)	.34*** (144)	.27*** (138)	.42*** (122)
Best Friend	.09 (145)	-.05 (146)	-.03 (144)	.02 (140)

Note. n's are in parentheses.

\*p < .05. \*\* p < .01. \*\*\*p < .001.