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Assessing Adolescents' Attachment Hierarchies: Differences Across Developmental Periods and Associations With Individual Adaptation

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Abstract

Adolescents' attachment hierarchies were assessed in a sample of 212 high school and 198 college students. The Important People Interview (IPI) differentiated attachment bonds from other supportive or affiliative relationships and indicated that adolescents show a hierarchical ordering of preferences for multiple attachment figures. Differences in the composition and structure of adolescents' attachment hierarchies were found between the early high school (9th and 10th grades), later high school (11th and 12th grades), and college samples. In the college sample, romantic partners were placed in higher positions in adolescents' hierarchies, fathers were placed in lower positions, and the structure of adolescents' hierarchies were less differentiated than in the high school samples. Individual differences in the composition of adolescents' hierarchies were associated with adjustment outcomes. Friends' placement in higher positions and fathers' exclusion from or placement in quaternary positions was associated with increased behavior problems. Findings demonstrate that the IPI provides a measure of adolescents' attachment hierarchies that is sensitive to developmental stage and individual differences.

Assessing Adolescent Hierarchies: Developmental and Individual Differences

During adolescence, peer relationships provide increasing levels of intimacy, companionship, and instrumental support (Furman & Buhrmester, 1992). As adolescents develop close relationships with peers, they begin seeking out these peers for support and reassurance (Fraley & Davis, 1997; Hazan & Zeifman, 1994). These support seeking behaviors in peer relationships prepare adolescents to eventually form a peer attachment bond (Ainsworth, 1989). Yet, the process of forming an attachment bond to a friend or romantic partner occurs in the context of more enduring bonds with caregivers that date back to infancy and early childhood. As a result, the formation of new attachment bonds requires a complex reorganization of multiple attachment relationships. Bowlby's (1969/1982) concept of an attachment hierarchy provides a way of conceptualizing how adolescents manage the maintenance of attachment bonds with parents as they begin to form new attachment bonds with peers. The current study develops and tests a measure that identifies adolescents' attachment figures and measures the degree to which adolescents' preferences for these figures are hierarchically organized. Differences across developmental

periods and individual differences in adolescents' hierarchies and their implications for adaptation are then examined.

Distinguishing Attachment Bonds From Support-Seeking Behaviors

Activation of the attachment behavioral system typically motivates contact-seeking behaviors designed to seek comfort, support, or protection from a “differentiated and preferred individual” (Bowlby, 1969/1982, p. 40). Yet, in addition to this primary attachment figure, there is substantial evidence that infants form bonds to secondary or subsidiary figures including mothers, fathers, and foster parents (Colin, 1996). These bonds form through repeated contact between the infant and the caregiver and this process of bond formation typically occurs between 6 and 12 months of age (Ainsworth, Blehar, Waters, & Wall, 1978). Once formed, “an attachment bond endures” while “the various forms of attachment behavior that contribute to it are active only when required... by conditions such as fatigue, anything frightening, or the unavailability or unresponsiveness of an attachment figure.” (Bowlby, 1980, p. 39). As a result, the attachment bonds maintained by older children and adults can be most readily identified by observing the individual's preferences for contact in emergency situations such as danger (Goldberg Grusec, & Jenkins, 1999) or threat to the availability of the attachment figure (Kobak, 1999).

Although bonds with parents endure, early adolescents increase their engagement with peers in ways that may support the eventual formation of peer attachment bonds. Adolescents face a variety of daily social and school related challenges that increase the likelihood that they will seek support from peers or other adults who are more readily accessible and knowledgeable than their parents. These support-seeking behaviors directed toward peers work in tandem with the affiliation system to increase time spent in proximity to friends. This increased proximity to peers further increases the likelihood that peers will be sought out in contexts involving daily stressors or non-emergency challenge that occur when parents are physically inaccessible (Kobak, Rosenthal, Zajac, & Madsen, 2007). Puberty and the activation of the sexual system also contribute to increased involvement with peers and mark the beginning of a search for dating partners and the possibility of forming a peer attachment bond (Ainsworth, 1989). The formation of a romantic pair bond is the product of a developmental process that begins with interactions in mixed gender peer groups and progresses in mid and late adolescence with dating and involvement in a romantic relationship (Ainsworth, 1989; Connolly, Craig, Goldberg, & Poplar, 2004; Carver, Joyner, & Udry, 2003; Montgomery & Sorell, 1998). Establishing and maintaining an enduring bond with a romantic partner who has demonstrated commitment and availability represents an important aspect of successful adult adaptation (Crowell & Waters, 1994; Fraley & Shaver, 2000; Weiss, 1991).

The process through which adolescents maintain attachment bonds with caregivers while forming a new peer attachment bond has received relatively little attention in attachment research. Initial efforts to study this developmental process began with Hazan and Zeifman's (1994, 1999) pioneering effort. They developed the WHOTO Interview, in which participants were asked to name an individual they would prefer in several situations. Initially, attachment bonds were defined by meeting four criteria: proximity seeking (*Who do you like to spend time with?*), safe haven (*Who do you turn to when you are feeling down?*), secure base (*Who do you feel you can always count on?*), and separation distress (*Who do you miss most during separations?*). “Full blown attachment” to a peer was considered to have occurred when the participant nominated a peer for all four components. In contrast, attachment bonds to parents were identified primarily from the secure base and separation distress items.

Although the WHOTO introduced a nomination procedure for identifying attachment figures, questions remain about the conceptualization and psychometric status of the four attachment components. For instance, the *proximity seeking* items defined as who the participant “wants to spend time with,” can elicit nominations that result from the affiliative and sexual systems that are distinct from the attachment system (Kerns et al. 2006). These affiliative and sexual systems increase the likelihood that peers will be sought out for attachment functions. However, proximity seeking should not necessarily be identified as a component of an attachment bond. Similarly the WHOTO *safe haven* items provide useful criteria for identifying individuals who are preferred for comfort in non-emergency situations, but these are not the kind of dangerous situations that activate the attachment system at high levels or yield a strong test of preferences for attachment figures. In contrast to the safe haven and proximity seeking items, the WHOTO’s *secure base items* such as “someone you can always count on” and *separation distress* defined as “who you would miss” come closer to capturing Bowlby’s definition of an enduring bond.

The distinction between emergency and non-emergency situations (Waters & Cummings, 2000) provides a useful way of distinguishing attachments from other supportive relationships. In older children and adults, the presence of an attachment bond is best tested in relatively infrequent emergency situations such as danger to self or threats to an attachment figure’s availability that result in high levels of attachment system activation. In contrast, non-emergency situations involving distress or challenge are likely to elicit preferences that are influenced by more immediate contextual factors including who is physically accessible and likely to be supportive or helpful. This distinction between situations that test the presence of an attachment bond and situations that elicit support-seeking behavior can account for the main findings of the studies that use variations of Hazan and Zeifman’s nomination procedure with children (Kerns, Tomich, & Kim, 2006; Nickerson & Nagle, 2005) and young adults (Feeney, 2004; Fraley & Davis, 1997; Trinke & Bartholomew, 1997). These studies suggest a developmental shift in early adolescence, during which peers are preferred over parents for emotional support in non-emergency situations (Hazan & Zeifman, 1994).

Although Bowlby (1969/1982) and Ainsworth (1989) clearly conceived of relationships with romantic partners as possible attachment bonds, research has been less conclusive about whether adolescents’ friends can serve as attachment figures. In contrast to romantic relationships, friendships are non-exclusive, not motivated by the sexual system, and do not serve the biological function of reproduction (Hazan & Zeifman, 1999). Using Hazan and Zeifman’s (1994, 1999) components, Furman (2001) suggested that friendships are characterized by proximity seeking and safe haven functions, but not by separation distress or enduring commitment. While most adolescents seek support and encouragement from friends (Allen, 2007; Waters & Cummings, 2000), relatively few of these relationships become attachment bonds. Friendships do provide extremely valuable opportunities to develop skills in cooperation and reciprocal altruism and these skills may play an important role in the formation of romantic relationships (Furman, 1999, 2001). Furthermore, adolescent friendships offer emotional support, instrumental support, and aid in gaining developmentally appropriate autonomy from caregivers (Furman & Buhrmester, 1992). Given the distinctive roles of romantic partners and friends, establishing an enduring bond with a friend may represent a maladaptive pattern during adolescence.

Measuring the Attachment Hierarchy

The attachment hierarchy provides a framework for conceptualizing how adolescents organize multiple attachment bonds with parents, romantic partners, and friends (Ainsworth, 1989; Bowlby, 1969/1982; Howes, 1999). The hierarchical model posits that while individuals maintain bonds with multiple attachment figures, they will have a consistent

order of preference for whom they would seek out when the attachment system is activated (Bowlby, 1969/1982). A primary attachment figure can be identified from a child's preferences for that person in situations that test the presence of an attachment bond. However, if the primary figure is inaccessible, children will often show selective preferences for a secondary figure (Cassidy, 1999). In her observational study of infants in Uganda, Ainsworth (1967) found that most children organized their attachment behavior around a primary caregiver. Subsequent studies have demonstrated that infants show clear discrimination and consistent preferences for a primary caregiver over subsidiary caregivers (Cummings, 1980; Farran & Ramey, 1977). As new peer bonds are formed during adolescence, it may be useful to consider the possibility of *tertiary* and *quaternary* attachment bonds. Bowlby (1969/1982) hypothesized that during adolescence "other adults may come to assume an importance equal to or greater than that of parents and sexual attraction to age-mates begins to extend the picture" (p. 207).

Hypothetical situations that are designed to activate high intensity attachment behavior can distinguish attachment figures from other supportive individuals in adolescents' social networks. Attachment situations include: threats to the accessibility of an attachment figure (whom an adolescent would miss the most), emergency situations involving danger (whom the adolescent would contact following a life threatening event), and situations that elicit feelings of closeness (whom the adolescent feels closest to). Conversely, contexts that elicit non-emergency support-seeking behavior derive from more commonly occurring sources of distress or challenge (whom the adolescent would go to when having a bad day, or experiencing a social rejection or anxiety provoking challenge). These daily events are likely to motivate support-seeking behaviors. In addition to situations that elicit attachment and support-seeking preferences, it is also important to consider social contact seeking that is independent of these concerns. The affiliative behavioral system accounts for a large proportion of adolescents' social proximity seeking (whom does the adolescent prefer to spend time with) that promotes contact with others and inclusion in social groups.

Adolescents' preferences for different individuals in each of these contexts provide a test of the validity of attachment, support-seeking, and affiliative situations. Because attachment bonds are highly selective, situations that activate the attachment system should elicit selective preferences for only few individuals. In contrast, adolescents' preferences for whom they would prefer for support or affiliation are likely to incorporate a wider range of adults and peers. Most important, the same individuals who are preferred in attachment situations (i.e. attachment figures) should not necessarily be the same individuals who are preferred in support seeking or affiliative contexts.

If attachment figures can be distinguished from other individuals in adolescents' social networks, the consistency with which adolescents rank attachment figures can test the hierarchy construct. By using a ranking paradigm in which participants identify who they prefer first, second, third, and fourth in particular situations, it becomes possible to measure the consistency of adolescents' preferences in attachment bond, support-seeking and affiliative contexts. That is, a person who was preferred first in an emergency situation would also be preferred first in a situation designed to elicit separation distress. Similarly, a person preferred second in one attachment bond situation would be more likely to be preferred second in another situation designed to test the presence of an attachment bond. Thus, the consistency of rankings tests the degree to which individuals maintain a hierarchy of preferences for attachment figures.

A measure of the composition and structure of adolescents' attachment hierarchies opens new questions about how individual differences in these hierarchies are associated with adjustment. Bowlby (1969/1982) introduced the possibility of individual differences in

adolescents' attachment hierarchies, writing that "At one extreme are adolescents who cut themselves off from parents; at the other are those who remain intensely attached and are unwilling to direct attachment behavior to others; between these extremes lie the great majority of adolescents whose attachments to parents remain strong but whose ties to others are of much importance also" (p. 207). From this perspective, prematurely supplanting parents with a peer attachment may represent a maladaptive process. Numerous studies have identified adolescents who generally disengage from parents during early adolescence and as a result are increasingly susceptible to peer influence (Bronfenbrenner, 1967; Silverberg & Steinberg, 1987; Fuligni & Eccles, 1993). Premature Autonomy has been described as adolescents' detachment from parents and early engagement with peers and has been shown to be a risk factor in the development of problem behavior (Dishion, Poulin, & Medici Skagges, 2000). These adolescents are at increased risk for associating with deviant peers and engaging in aggressive and delinquent behaviors (Dishion, Nelson, & Bullock, 2004). Further, when adolescents make decisions without any parental input, they are at greater risk for poorer academic achievement, deviance, and problem behavior (Dornbusch, Ritter, Mont-Raynaud, & Chen, 1990; Lamborn, Dornbusch, & Steinberg, 1996). Adolescents' maladaptive reliance on peers may be more systematically examined by considering the extent to which they have relinquished parents and prematurely promoted peers in their attachment hierarchies.

The Present Study

The initial goal of this study was to test the validity of the Important People Interview (IPI) as a measure of adolescents' attachment hierarchies. The IPI was designed first, to distinguish adolescents' attachment figures from other supportive individuals that compose adolescents' social networks and second, to measure the extent to which adolescents' preferences for their attachment figures were hierarchically organized. We expected that adolescents would a) show selective preferences for particular individuals in attachment bond versus support-seeking or affiliation contexts and b) that adolescents would show hierarchical organization of preferences for their attachment figures through the consistency of their rankings. After testing these initial hypotheses, we used adolescents' preferences in attachment bond situations to identify the composition of adolescents' attachment hierarchies (who occupies primary through quaternary positions).

The cross-sectional study was designed to test differences between adolescents in the first years of high school (9th and 10th grades), the last half of high school (11th and 12th grades) and during the first two years of college. We expected developmental differences between these groups with increased identification of peers as attachment figures in the college sample. The transition to college involves a major shift away from time spent with parents toward time spent in close proximity to peers. As a result, while we anticipated that most adolescents would continue to identify parents as primary and secondary attachment figures from early high school through college, we hypothesized that peers would enter tertiary and quaternary positions in adolescents' hierarchies by college. We also expected that a parent's position as a primary or secondary figure would be influenced by adolescents' perceptions of their acceptance and frequency of contact. Similarly, since attachment bonds are enduring relationships, the entry and movement of romantic partners into the attachment hierarchy was expected to be positively associated with length of the romantic relationship. Finally, we anticipated that adolescents who identified non-romantic peers as attachment figures could be a greater risk for problems in adaptation.

Method

Participants and Procedures

Two samples were recruited from the mid-Atlantic region of the U.S. The first sample was recruited from a private high school and the second from a college introductory psychology class. High school students were contacted through mailings to parents, and parent and adolescent consent forms were returned via mail. In total, 257 high school families agreed to participate in the study, and 212 students completed online surveys (82.49%). In addition, 194 parents of high school students (81.8% biological mothers, 14.0% biological fathers, 4.2% legal guardians or step-parents) completed a brief online demographic survey. The college sample consisted of 198 students, who were recruited during the spring semester from the psychology department subject pool and who received course credit for their participation in online surveys. Both college and high school surveys were administered in a web-based format.

High school students ranged in age from 13.86 years to 18.36 years ($M = 15.94$, $SD = 1.08$), and college students ranged in age from 18.22 years to 22.93 years ($M = 19.29$, $SD = .81$). Ninety-three percent of the college students were living away from home, either on or off campus. Sixty-two percent of the high school and 60.0% of the college students were female. The high school sample was evenly distributed across grades: ninth grade (26.5%), tenth grade (29.1%), eleventh grade (24.2%), and twelfth grade (20.2%). College students were predominantly freshmen (72.7%). The majority of both high school (73.2%) and college (75.3%) students were European American. African American (2.3%, 4.0%), Hispanic (1.8%, 5.6%), Asian (2.7%, 4.5%), and other/mixed ethnicities (20.0%, 10.6%) were reported in high school and college, respectively. Eight-two percent of the high school sample and 76% of the college sample reported that their biological parents were married and living together. The modal family income for high school students' (40.6%) and college students' families (32.8%) was \$100,000 to \$199,999; however, in both samples, reports on family income ranged from less than \$10,000 to more than \$200,000.

Measures

Demographics—Both high school and college students provided background information such as grade (9–16), gender (male=0, female= 1), ethnicity (European-American, African-American, Hispanic, Asian, Other), family structure (1=both biological parents, 2 = biological mother/step-father, 3 = biological father/step-mother, 4= Biological mother, single parent, 5 = biological father, single parent, 5 = relative or legal guardian), and the length of a current romantic relationship (1= less than two weeks, 2 = Two to four weeks, One to three months, 4 = Three to six months, 5 = Six months to a year, 6 = More than 1 year). In the high school sample, 21.9% endorsed current involvement in a dating relationship, while 37.8% of college students reported involvement. In the high school sample, parents reported on family income by typing in their income level. In the college sample, college students reported family income by selecting from the following options: (1 = under \$10000, 2 = \$10,000–\$49,999, 3 = \$50K–\$99,999, 4 = \$100,000– \$149,999, 5 = \$150,000–\$199,999, 6 = \$200,000 and above).

The Important People Interview (IPI) (Kobak & Rosenthal, 2004; Kobak, Rosenthal, & Serwik, 2005)—The IPI is designed to assess adolescents' attachment hierarchies. It has two major sections, the first in which eight nominees are identified and the second in which preferences for nominees are rank-ordered in attachment bond, support seeking, and affiliative contexts. The online version of the IPI paralleled the interview format piloted with other samples (Kobak et al., 2004). In the web-based format, participants

typed nominees' names during the first section, and these names were subsequently presented in random order to assess participants' rankings in each of the nine contexts.

The first section began by asking participants to nominate the four most important people in their lives, followed by their four most important peers. Any peers included in the first set of nominations were not repeated in the second set, resulting in a total of eight nominees. Follow-up questions asked participants to provide the following information about each of the eight nominees: a) the type of relationship, b) nominee's age in years, c) nominee living in participant's household (yes = 1, no = 0), d) number of days per week that participant sees nominee (1–7), and e) nominee's gender (male = 0, female = 1).

The second section of the interview asked the participants to rank order their preferences for nominees in each of nine contexts intended to measure one of three constructs: Attachment bond (*closeness, separation distress and an emergency situation*), Support-seeking (*comfort or support in daily contexts*) and Affiliative proximity seeking (*enjoyable social contact*). Using a randomly ordered list of their eight nominees (and a "nobody" option), participants were asked to choose which nominee they would go to first in each situation followed by who they would go to next if that person was unavailable. This question was repeated until preferences for four individuals were rank ordered in each context.

Behavior problems—High school students completed five subscales from the Youth Self Report (YSR, Achenbach & Rescorla, 2001), a measure of childhood behavioral and emotional problems. Participants rated their behavior using a scale of 0 (*not true*), 1 (*somewhat true*), and 2 (*very true*). Achenbach and Rescorla (2001) report adequate levels of inter-rater reliability and test-retest reliability. The YSR has well-established criterion, convergent, and discriminate validity (Achenbach & Rescorla, 2001). An internalizing composite was formed by aggregating the Anxiety/Depression ($\alpha = .81$), Withdrawn Behavior ($\alpha = .76$), and Somatic Complaints ($\alpha = .78$) subscales, and externalizing behavior was measured by aggregating the Aggression ($\alpha = .83$) and Rule-Breaking Behavior ($\alpha = .82$) subscales. College students completed six parallel subscales from the Adult Self Report (ASR, Achenbach & Rescorla, 2001). The college student internalizing composite was created by aggregating the Anxious/Depressed ($\alpha = .89$), Withdrawn Behavior ($\alpha = .68$), and Somatic Complaints ($\alpha = .75$) subscales. The college student externalizing composite was created by aggregating Aggression ($\alpha = .78$), Rule-Breaking Behavior ($\alpha = .73$). Fourteen percent of participants had T scores above the clinical cut-off of 65 on the externalizing scale and 14% of participants had T scores above 65 on the internalizing scale.

Parent-teen relationship—Parental Acceptance, or the degree to which children view parents as responsive and supportive, was measured using the Mother and Father Acceptance Scale on the Shortened Child Report of Parental Behavior Inventory (CRPBI-30; Schludermann & Schludermann, 1979). Participants responded to 10 items for each parent, by choosing whether the statement was "not like my parent," "somewhat like my parent," or "a lot like my parent." The CRPBI is a widely used measure of parenting and the reliability and validity of the subscales have been repeatedly established (Schwarz, Barton-Henry, Pruzinsky, 1985; Schaefer, 1965; Schludermann, 1988). Cronbach's alpha was .91 in the high school sample and .94 in the college sample.

Results

Overview of Analyses

First, convergent and discriminant validity of the three constructs (*attachment bond, support-seeking, and affiliation*) was tested by examining the degree to which participants preferred particular nominees in the three situations. On the basis of participants' rankings of

nominees in attachment bond contexts, primary through quaternary attachment figures were identified for each participant. This step allowed us to provide descriptive information on the composition of adolescents' attachment hierarchies. Second, by determining the consistency of participants' rankings of attachment figures across the three attachment bond contexts, the hierarchy construct was tested. Next, factors such as family structure, living arrangements, frequency of contact, and relationship quality that might influence mother, father, friend, and romantic partner placement in the hierarchy were explored. Finally, we examined whether the entry of peers into adolescents' attachment hierarchies is uniquely associated with maladjustment, as compared to utilizing peers for daily support-seeking and affiliative functions. In all analyses, friends and romantic partners are differentiated in order to also assess whether bond formation to friends is more problematic than bond formation to romantic partners.

Descriptive Data

Table 1 presents the means, standard deviations, and bivariate correlations among relationship and behavior problem variables for the high school and college samples. T-tests were used to examine differences between the high school and college samples. High school students reported more daily contact with mothers ($t(355) = 13.76, p < .001$) and fathers ($t(273) = 13.54, p < .001$). College students reported higher rates of internalizing ($t(415) = -3.15, p = .002$) and externalizing ($t(415) = -6.37, p < .001$) behaviors.

Convergent and Discriminant Validity of Attachment Bond, Support-seeking, and Affiliation Contexts

Adolescents' rankings for each of the eight nominees were examined across the nine contexts to determine whether preferences for nominees differed in attachment bond, support-seeking, and affiliation situations. Each of the eight nominees received a score for each of the nine contexts, ranging from 0 to 4 (0 = not ranked at all, 1 = ranked fourth, 2 = ranked third, 3 = ranked second, and 4 = ranked first). If the three attachment bond contexts assess a common construct, a particular nominee should receive consistently high or low rankings across these three situations (convergent validity) and this nominee's ranking on the attachment bond questions should be relatively independent of his or her rankings in support-seeking and affiliation contexts (discriminant validity).

The two Principal Components Analyses presented in Table 2 support the convergent and discriminant validity of the situations used to assess attachment bond, support-seeking, and affiliation contexts. The eight nominees were stacked within subject, so that each subject had eight rows of nominee data with scores on each of the nine situations (ranging from 0 to 4). Separate Principal Components Analyses were conducted for the high school and college samples, specifying promax rotation. Examination of the scree plots for both samples indicated a three-component solution with a very small reduction in the eigenvalues between the third and fourth components. These analyses produced the expected component loadings for the three types of situations with no major cross-loadings in either sample. Cumulatively, the three components explained 74.94% of the variance among high school students and 70.84% of the variance among college students. The first component, Affiliation, accounted for 43.61% (Eigenvalue = 3.93) of the variance in high school students and 40.76% (Eigenvalue = 3.67) in college. The second component, Attachment Bond, accounted for 22.94% (Eigenvalue = 2.07) of the variance in the high school sample and 21.74% (Eigenvalue = 1.96) in college. Finally, the third component, Support-seeking, accounted for 8.39% of the variance (Eigenvalue = .76) in the high school sample and 8.33% (Eigenvalue = .75) in college. The correlations between the Attachment Bond and Affiliation components were quite modest in high school and college, .14 and .14 respectively. In contrast, the Support-seeking component evidenced a stronger association with both the

Affiliation and Attachment Bond components. The correlation between Affiliation and Support Seeking was .54 in high school and .40 in college. The correlation between Attachment Bond and Support-Seeking was .47 in high school and .52 in college.

Hierarchical Ordering of Attachment Bonds

The rankings for each of the eight nominees in the three attachment bond, three support-seeking, and three affiliation contexts were summed to create a composite score for each construct (sums ranged from 0 to 12 for each construct, as there were three contexts for each construct with scores ranging from 0 to 4). Figure 1 shows each of the nominee's scores on these three measures, based on the order in which they were nominated in response to the initial important person and peer nomination questions. Attachment bonds are thought to be highly selective and hierarchically ordered. As a result, the order of nominations in response to "who are the important people in your life?" is thought to reflect the cognitive accessibility of possible attachment figures and as a result, should be strongly associated with high attachment bond scores derived from the ranking portion of the IPI. A linear trend between attachment bond scores and order of nomination provided strong support for this assumption. A substantial linear association between attachment bond scores and order of nomination in high school was evident in high school ($F_{lin}(1) = 1670.87, p < .001$) and college ($F_{lin}(1) = 1043.32, p < .001$), such that attachment bond scores decreased linearly from the first person nominated to the eighth person nominated. When examining only the first four important people, a quadratic function fit the college data ($F_{quad}(1) = 22.44, p < .001$), suggesting that differentiation levels off after the third person nominated. There was not a significant quadratic effect in the high school sample.

Factors Associated With the Composition of Adolescents' Attachment Hierarchies

Adolescents' attachment figures were identified based on the participants' ranking of each nominee in the three attachment bond contexts. Specifically, primary through quaternary attachment figures were identified based on each nominee's total Attachment Bond score. A nominee who was ranked first in all three contexts would receive a score of 12, while a nominee who was ranked second in all three contexts would receive a score of 9. The nominee with the highest Bond score was designated primary, followed by the next highest score as secondary. If two nominees received the same attachment score, the nominee who was named first in response to the important person question was assigned to the higher position in the hierarchy (i.e., primary vs. secondary, or secondary vs. tertiary). In the high school sample, 11.1% of participants had equivalent scores for primary attachment figure, 12.0% for secondary, 15.1% for tertiary, and 19.6% for quaternary. In the college sample, 7.5% of participants had equivalent scores for primary attachment figure, 20.1% for secondary, 16.7% for tertiary, and 14.1% for quaternary attachment figures.

Figure 2 depicts the percentages of biological mothers, biological fathers, friends, and romantic partners that were identified as primary through quaternary attachment figures in high school and college. As expected, biological parents (predominately mothers) continued to be identified as primary or secondary attachment figures in both high school and college, and peers entered the hierarchy in quaternary or tertiary positions. While 74.64% of high school students and 68.24% of college students nominated other relatives or siblings as attachment figures, the majority of these were in the tertiary and quaternary positions.

Independent sample t-tests indicated that gender and demographic variables were associated with the composition of adolescents' attachment hierarchies in the combined high school and college samples. Whereas, females placed mothers higher in their attachment hierarchies than did males ($t(408) = -2.69, p = .008$), males placed fathers higher in their attachment hierarchies than did females ($t(409) = 3.22, p = .001$). Adolescents from intact families

tended to place both mothers ($t(410) = -2.84, p = .005$), and fathers ($t(411) = -4.88, p < .001$) higher in their attachment hierarchies than did adolescents from non-intact families. Predictably, romantic relationship status influenced the composition of the hierarchy. Adolescents involved in a romantic relationship placed mothers ($t(375) = 2.83, p = .005$), fathers ($t(376) = 2.70, p = .007$), and friends lower in their attachment hierarchies ($t(379) = 4.31, p < .001$) than did adolescents who were not involved in a romantic relationship.

Developmental Differences in Attachment Hierarchies

Some differences across developmental periods in the composition and structure of adolescents' attachment hierarchies were expected as adolescents mature and physically move away from parents. Three groups were formed to examine developmental differences across three developmental periods: ninth and tenth graders formed an early high school group ($n = 124$), eleventh and twelfth graders formed a late high school group ($n = 99$), and college students comprised a third group ($n = 198$). Four ANCOVAs examined the effect of developmental period on mother, father, friend, and romantic partner placements with gender and family structure as covariates. Father placement varied across developmental period ($F(2,402) = 4.56, p = .011$). Early high school students placed biological fathers higher in their attachment hierarchies than college students ($p = .004$). Placement of a romantic partner also varied across developmental periods ($F(2,406) = 17.34, p < .001$), such that early high school students placed romantic partners lower in their hierarchy compared to late high school students ($p < .001$) and college students ($p < .001$). Mother and friend placements did not differ across the three developmental periods.

The hierarchical structure of adolescents' attachment relationships was indexed by calculating the variance among the four attachment figures' (primary through quaternary) attachment bond scores. The variance of the four attachment figures' scores reflects the consistency of participants' rankings of their four attachment figures across the three attachment bond contexts. Maximum variance would result if the primary figure received 12 points, the secondary figure nine points, the tertiary figure six points and the quaternary figure three points. However, an adolescent whose attachment figures were less consistently ranked across attachment contexts would have less differentiated scores and less variance in the attachment bond scores across the four attachment figures. Thus, larger variances indexed greater hierarchical differentiation. This variable was tested as the dependent variable in an ANCOVA, with gender and family structure entered as covariates and developmental period entered as the independent variable. Results indicated that hierarchical organization was less evident in later developmental periods ($F(2,404) = 6.67, p = .004$). Follow up contrasts revealed that college students' hierarchies were less differentiated than both early high school students' hierarchies ($p = .003$) and late high school students' ($p = .011$).

Factors Associated With Parents' and Romantic Partners' Positions in the Attachment Hierarchy

While the composition and structure of adolescents' attachment hierarchies are conceptually independent of the quality or security of attachment relationships, we expected that parents' placement in the hierarchy would be associated with the adolescents' perceptions of their parents' accessibility and responsiveness. Since the formation of a peer attachment bond is a developmental process that requires the perception that it is an enduring relationship, we expected that romantic partners' placement in adolescents' hierarchies would increase with the length of the relationship. Table 3 shows the partial correlations between mother, father, friend, and romantic partners' placements and adolescents' reports of parental acceptance, daily contact, and length of romantic relationship, controlling for developmental period. Partial correlations indicated that mother and father placement were significantly associated

with mother and father level of acceptance and mother and father daily contact. Romantic partner placement was positively related to the length of the dating relationship. However, friend placement in the attachment hierarchy showed negative associations with parental acceptance and romantic relationship length.

Reliance on Friends as Attachment Figures and Problems in Adaptation

Our final hypothesis focused on whether individual differences in the composition of adolescents' attachment hierarchies are associated with problems in adaptation. More specifically, we expected that higher levels of reliance on peers as attachment figures would be associated with adjustment difficulties. The correlations between hierarchy placements and internalizing and externalizing symptoms in Table 3 support and further specify this hypothesis by demonstrating that higher friend placements and lower father placements were associated with both internalizing and externalizing behavior.

Follow-up ANCOVA's examined friend placement and gender effects on behavior problems, with developmental period and family structure as covariates. Friend's placement was associated with internalizing ($F(4,398) = 4.29, p = .002$) and externalizing symptoms ($F(4,398) = 3.22, p = .013$) (Figure 3). Pairwise comparisons indicated that placing a friend as secondary increased risk for internalizing, as compared to placing a friend as quaternary ($p = .036$) or not at all ($p = .026$). Similarly, placing a friend as tertiary was associated with increased risk for internalizing problems, as compared to placing a friend as quaternary ($p = .036$) or not at all ($p = .026$). Furthermore, a significant placement by gender interaction ($F(4,398) = 2.86, p = .023$) indicated that the association between friend placement and internalizing symptoms was evident for girls ($r = .23, p < .001$) but not for boys ($r = .09, p = .283$). With respect to externalizing symptoms, placing a friend in the tertiary position increased risk for externalizing problems as compared to not placing a friend at all ($p = .024$). Additionally, placing a friend as primary ($p = .022$), secondary ($p = .020$), or tertiary ($p = .006$), as compared to quaternary was associated with increased risk for externalizing symptoms.

Internalizing ($F(4,395) = 3.50, p = .008$) and externalizing symptoms ($F(4,398) = 3.77, p = .005$) also varied with fathers' placements in adolescents' hierarchies (Figure 4). Pairwise comparisons revealed that participants who did not place a father were at greater risk for internalizing symptoms than participants who placed a father second ($p = .013$), and participants who placed a father as quaternary were at greater risk than participants who placed a father as primary ($p = .009$) or secondary ($p = .001$). Not placing a father increased risk for externalizing problems, as compared to placing a father primary ($p = .013$), secondary ($p < .001$), or tertiary ($p = .031$).

Post Hoc Analyses

We compared utilization of peers for attachment functions with utilization of peers for daily support-seeking and affiliative purposes across the three developmental periods. Utilization of friends or romantic partners was indexed by computing friends and romantic partners total rankings in attachment bond, support-seeking, and affiliation contexts. Since participants could nominate multiple friends for each composite, points were summed for a total of 30 possible friend points per construct (e.g., 12 possible for primary, 9 for secondary, 6 tertiary and 3 quaternary). Since a romantic partner was only listed once per context, points were only summed across situations, for a total of 12 possible romantic partner points per construct. Correlations between developmental period (coded 0 for early high school, 1 for late high school, and 2 for college) and utilization of friends and romantic partners for attachment, support-seeking, and affiliative functions differed dramatically across these three developmental stages. Whereas romantic partners were relied upon more

at later developmental periods for all three functions, attachment bond ($r = .27, p < .001$), support-seeking ($r = .26, p < .001$), and affiliation ($r = .27, p < .001$), friends were relied on less for support-seeking behavior ($r = -.14, p = .004$) and affiliation ($r = -.14, p = .021$) at later developmental periods.

Since reliance on friends as primary, secondary, or tertiary attachment figures was associated with increased behavior problems, we explored factors that were associated with friends' placement in the hierarchy. The index of reliance on friends in attachment contexts was regressed on the utilization of friends for support-seeking and affiliative functions, parental acceptance, and adjustment. Age and gender were entered in the first block as controls, ($R^2 = .02, F = 3.00, p = .051$). Adolescents' use of friends for support-seeking and affiliative functions added significantly to the model ($\Delta R^2 = .40, \Delta F = 128.310, p < .001$) suggesting that utilizing friends for these daily functions supports the formation of attachment bonds to friends. Mother and father acceptance were entered as the third block. Lack of acceptance further added to the model ($\Delta R^2 = .04, \Delta F = 12.20, p < .001$). Finally, the fourth block, containing internalizing and externalizing behaviors, accounted for additional variance in attachment to friends ($\Delta R^2 = .02, \Delta F = 5.35, p = .005$). In the final model, friend support-seeking behavior ($\beta = .41, t = 10.83, p < .001$), friend affiliation ($\beta = .15, t = 3.61, p < .001$), lack of mother acceptance ($\beta = -.11, t = -2.06, p = .040$), lack of father acceptance ($\beta = -.10, t = -2.19, p = .029$), and externalizing behavior ($\beta = .08, t = 2.28, p = .023$) were significantly associated with reliance on friends as attachment figures.

Discussion

The Important People Interview was designed to assess adolescents' attachment hierarchies. Initial validation of the IPI required three steps. First, we had to demonstrate that adolescents showed consistent preferences for particular individuals in the three situations designed to assess each of the major constructs: attachment, support-seeking, and affiliation. Second, we needed to show that adolescents' ranking of individuals whom they preferred in attachment situations differed from their preferences for the individuals whom they preferred in support-seeking or affiliative contexts. Finally, it was necessary to show that adolescents show a hierarchical ordering of preferences for attachment figures in situations designed to test the presence of an attachment bond.

The results provide strong support for all three steps. Principal component analyses of the nine situations indicated consistency in adolescents' preferences for particular individuals within each of the three major constructs and clear differentiation between the individuals whom adolescents preferred in attachment, support-seeking, and affiliative situations. Contact seeking has often been identified as an attachment behavior. However, the current findings suggest these proximity-seeking behaviors can also be motivated by affiliative and support-seeking concerns. By focusing on danger and separation distress as situations that elicit preferences for attachment figures, we validated a major premise of Bowlby's theory. The findings demonstrate that during adolescence, attachment bonds remain highly selective relationships that serve unique functions and can be differentiated from other supportive social relationships.

The findings also illustrate the role of adolescents' support-seeking behaviors in daily non-emergency situations. These support-seeking behaviors are directed toward a range of individuals in adolescents' social networks many of whom are not attachment figures. As a result, they are less likely to be a product of an enduring relationship and more likely to be influenced by a host of more immediate factors such as instrumental needs, expertise, and physical proximity. The correlations between the affiliative, support-seeking, and attachment components derived from the PCA analyses suggest that support-seeking may be

a necessary but not sufficient condition for the formation of an attachment bond. Preferences for individuals in support-seeking situations were associated with both affiliative and attachment bond rankings. Thus, while some affiliative relationships may create the opportunity for supportive contact, only some of these supportive relationships may eventually become attachment bonds. Supportive relationships with non-attachment figures are likely to provide both a context and opportunity to develop the type of commitment that eventually leads to the formation of a peer attachment bond.

In addition to forming highly selective attachment bonds, Bowlby posited that individuals demonstrate a hierarchy of preferences for multiple attachment figures. The current findings represent one of the first empirical tests of the hierarchy construct and lend substantial support to this aspect of Bowlby's theory. In situations designed to test the presence of an attachment bond, adolescents restricted their attachment preferences to only a few individuals and maintained consistent preferences across three hypothetical situations for one attachment figure over another. In addition, attachment preferences became less differentiated between the third and fourth individuals nominated as important people, as well as in later developmental periods (i.e. college level). The leveling off of hierarchical ordering between the third and fourth individuals nominated could be interpreted as evidence that most adolescents identify three rather than four attachment figures.

The IPI's nomination procedure lends further support to the validity of the hierarchy construct. The order in which individuals nominated "the four most important people in their life" was strongly associated with who adolescents preferred in the attachment bond situations. Since the eight nominees were randomly sorted prior to each context, the association between order of nomination and attachment preferences cannot be attributed to a method artifact. The order in which individuals are nominated may index enhanced cognitive accessibility to attachment figures compared to other individuals in their social networks. Support for this interpretation comes from experimental studies, which indicate that in threat situations adult minds quickly and unconsciously call upon mental representations of attachment figures (Mikulincer et al., 2000; Mikulincer, Gillath, & Shaver, 2002; Mikulincer & Shaver, 2007).

The Composition of Adolescents' Attachment Hierarchies

The validity of the IPI situations and the hierarchy construct made it possible to reliably identify and assign attachment figures to primary through quaternary positions in adolescents' attachment hierarchies. The percentages of mothers, fathers, romantic partners and friends who were identified as primary attachment figures is largely consistent with previous studies of college samples (Hazan & Zeifman, 1994; Trinke & Bartholomew, 1997) and high school samples (Freeman & Brown, 2001). Overall, biological mothers were the most frequently identified primary attachment figures (53%), followed by friends (13%), romantic partners (12%), fathers (11%), and siblings (7%). However by incorporating up to four attachment figures in our assessment, the IPI made it possible to examine factors that influence an individual's placement in adolescents' hierarchies. Parents' positions in the hierarchy were associated with adolescents' perceptions of parental acceptance and frequency of contact. Parental acceptance and accessibility are relationship specific measures that differ from the more commonly used assessments of adolescent personality that are assumed to remain constant across different relationships. However, these relationship measures do support the notion that adolescents' preferences for a parent as an attachment figure are influenced by their perceptions of that parent's availability and responsiveness.

While both parents and peers were identified as attachment figures, peer attachment bonds differed from attachment bonds to parents in several respects. Whereas adolescents'

perceptions of parent's availability and responsiveness influenced parents' positions in adolescents' hierarchies, the length of the relationship influenced romantic partners' placements (see Mikulincer & Shaver, 2007 for review). This is consistent with the notion that the formation of a new attachment bond is a developmental process that requires time and the emergence of mutual commitment (Duemmler & Kobak, 2001). The role of support-seeking and affiliation also differed in parent and peer attachments. Attachment bonds with parents were relatively independent of adolescents' preferences for affiliating or seeking support from them in non-emergency situations. In contrast, both romantic and friend attachment preferences were strongly associated with affiliative and support seeking preferences. These differences suggest that while attachment bonds with parents endure, affiliative and support-seeking preferences create an important motivational context for the formation of peer attachment bonds. As a result, when a peer attachment bond is established, it is likely to serve the daily non-emergency needs for support and enjoyment that characterize non-attachment aspects of adolescents' peer relationships.

Differences Across Developmental Periods in the Composition of Adolescents' Hierarchies

The IPI provided a measure that was sensitive to the complexities and developmental differences in adolescents' attachment hierarchies. Across the developmental periods under investigation, three differences were evident. First, fathers occupied lower positions in adolescents' hierarchies at later developmental periods. Second, romantic partners occupied higher positions in adolescents' hierarchies at later developmental periods. Not only did adolescents' preferences for romantic partners in attachment situations increase at later developmental periods, but there were clear differences between early and later developmental periods toward increased preferences for romantic partners in affiliative and support-seeking contexts. These findings are largely consistent with another major normative study of attachment to parents and peers (Markiewicz, Lawford, Doyle, & Haggart, 2006). Third, the hierarchical ordering of adolescents' preferences for attachment figures was significantly lower in later developmental periods. These developmental differences support the view that adolescents' attachment hierarchies undergo a transformation between adolescence and early adulthood. The inverse movement of fathers and romantic partners between mid and late adolescence supports Weiss' (1991) hypothesis that the simultaneous appearance of pair bonds and relinquishing of parents as attachment figures is likely to involve the same behavioral system. By demonstrating that mother placement was not influenced by development, our results further specify this process and suggest that fathers are more likely than mothers to be "relinquished" as attachment figures.

The hierarchical ordering of adolescents' bonds with attachment figures was evident across developmental periods and samples in this study. Notably, results demonstrated a pattern of decreased differentiation in the group of college students living away from home. This decreased hierarchical differentiation may persist throughout adulthood or may be unique to this developmental transition. Three-quarters of our college sample were freshmen, who were likely acclimating to new academic demands, living arrangements, and personal-social changes (Baker & Siryk, 1984). As these students adjust to college and form more stable relationships, hierarchies may once again become more differentiated or reorganized.

Individual Differences in Adolescents' Attachment Hierarchies

The movement of romantic partners into adolescents' attachment hierarchies supported a developmental trend that is consistent with the role of the sexual system in motivating the formation of adult attachment bonds (Hazan & Zeifman, 1999). This developmental trend was not associated with any indices of problems with parents or behavioral difficulties. However, the movement of friends into adolescents' hierarchies was associated with

negative factors, including lower levels of parental acceptance and romantic relationships that were shorter in length. These associations suggest that forming attachment bonds to friends during mid to late adolescence may result from efforts to compensate for poor or nonexistent relationships with mothers, fathers, and romantic partners. In addition, adolescents who identified a friend as a primary, secondary, or tertiary attachment figure were at increased risk for internalizing and externalizing problems. It is possible that poorly adjusted children have difficulty forming attachment bonds with parents and romantic partners. Notably, risk for behavior problems was not limited to adolescents who identified friends as primary attachment figures, but also included adolescents who identified friends as secondary and tertiary attachment figures.

It is also important to note that the nearly fifty percent of adolescents who identified a friend in the quaternary position were not at increased risk for behavior problems. This may indicate that quaternary figures make a more limited contribution to adolescents' adjustment or that having a friend as a quaternary or "ad hoc" attachment figure is normative during adolescence (Waters & Cummings, 2000). It is also notable that while identifying a friend as a primary, secondary, or tertiary attachment figure was implicated in increased risk for behavior problems, reliance on friends for support-seeking or affiliative functions was not problematic. While adult romantic partners are commonly identified as attachment figures (Crowell & Waters, 1994; Fraley & Shaver, 2000; Weiss, 1991), the current findings support the notion that romantic relationships may develop into attachment bonds among a minority of mid to late adolescents and primarily in romantic relationships that endure for longer periods of time.

Although there was evidence for fathers occupying lower hierarchy positions in later developmental periods, only adolescents who failed to identify their father as an attachment figure or whose father occupied the quaternary position in their attachment hierarchy were at increased risk for internalizing and externalizing problems. In these cases, it is possible that failure to identify the father as a primary, secondary or tertiary attachment figure indicates lack of father involvement. Father involvement has been shown to produce positive outcomes for infants, children, and adolescents (Flouri & Buchanan, 2003; Yogman, Kindlon, Earls, 1995). In some cases, the absence of father involvement is associated with increased risk for behavioral problems (Lamb, 1997), early menarche and promiscuity in females (Ellis, et al., 2003), and increased bio-behavioral sensitivity to social contexts (Boyce, Essex, Alcon, Goldsmith, Kraemer, & Kupfer, 2006). The strong negative correlation between friend placement and father placement ($r = -.45, p < .001$) suggests the non-independence of these variables and may indicate a general maladaptive pattern characterized by low father/high friend placement.

Limitations and Future Directions

The study of parent-infant attachment bonds yielded the construct of security or confidence in the availability of an attachment figure in a specific relationship with a biological mother or father (Ainsworth et al., 1978). The security of one relationship was relatively independent of security in a second relationship. In the adolescent and adult attachment literature, this relational construct has been transformed into a relatively stable aspect of adolescents' or adults' personality with measures of "attachment styles" or "states of mind." By measuring adolescents' attachment hierarchies, the current study moves back in the direction of studying specific attachment relationships and the way in which multiple attachments are organized as adolescents and young adults form new pair bonds. While adolescents' perceptions of mothers' and fathers' acceptance likely measures an aspect of adolescents' security in each of these relationships, it does not specifically measure the security of these relationships or more precisely, the adolescents' confidence in the parent's availability and responsiveness. The current study also has little to say about how

attachment related aspects of personality relate to individual differences in adolescents' attachment hierarchies. This is an important topic that should be pursued in future investigations.

The cross sectional design of this study creates several limitations in the interpretation of the findings. First, the relation between friend and father placement in adolescents' hierarchies and problems in adaptation cannot be clearly determined. For instance, an adolescent's behavior problems may increase reliance on friends for attachment bond functions and reduce reliance on fathers. We also cannot determine the relative stability of adolescents' preferences for attachment figures or how these change over short period times. Longitudinal research is needed to address these questions and provide a better understanding of how an individual reorganizes his or her hierarchy over time. Parental behavior may also play a role in influencing adolescents' preferences for attachment figures. Variables such as parental psychopathology (Murray & Johnston, 2006) and marital conflict (Buehler & Gerard, 2002) have been shown to affect parents' level of involvement and investment in the parent-child relationship. Perhaps as a parent disengages, an adolescent looks towards peers to supplement this loss.

The current samples also limit the generalizability of the findings to fairly homogeneous samples of middle-income European American high school and college students. We expect that the composition and structure of adolescents' attachment hierarchies may be quite different in economically disadvantaged or more ethnically diverse samples. The findings also are limited to the developmental period under investigation. The college sample consisted primarily of students in the spring semester of their first year. Future studies may find continued developmental differences in older college students or young adults who have not attended four year colleges. As an open ended nomination procedure, the IPI is ideally suited for continuing to describe developmental processes and individual differences in the attachment hierarchies of more demographically diverse samples.

Conclusion

The current findings shed new light on how adolescents maintain, organize, and gradually transform relationships with multiple attachment figures. This aspect of attachment theory has remained relatively unexplored due to the lack of methods for assessing adolescent and adult attachment bonds. Measures such as the IPI will make it possible to better understand the dynamic processes through which adolescents and adults form, maintain, relinquish, or grieve the loss of attachment bonds. Longitudinal designs that can track these changes within individuals across major life transitions involving the formation or loss of an attachment bond should be a primary focus of future investigations.

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Appendix

The Important People Interview

Construct	Context
Attachment Bond	To whom do you feel closest? Imagine that you must fly across the country by yourself and stay by yourself for two weeks. Who would you miss the most?

Construct	Context
Support seeking behavior	Imagine you are walking by yourself. While crossing the street, you are suddenly hit by a car. The next thing you know, you are waking up in a hospital emergency room. Who do you call first?
	Imagine you are having a bad day. A lot of things have built up and are bothering you. To whom would you go to first to make you feel better?
	Imagine you are going to make a presentation in front of your class. You start to get really nervous and worry that you will mess up. Who would make you feel most confident that you could do a good job?
Affiliation	You heard that someone you know is having a party and you are not invited. You feel left out and hurt. Who would you talk to first to make you feel better?
	Who would you most choose to be with if you wanted to have fun and have a good time?
	Who most likes to do the things that you enjoy?
	Which person do you most enjoy being with when you have free time?

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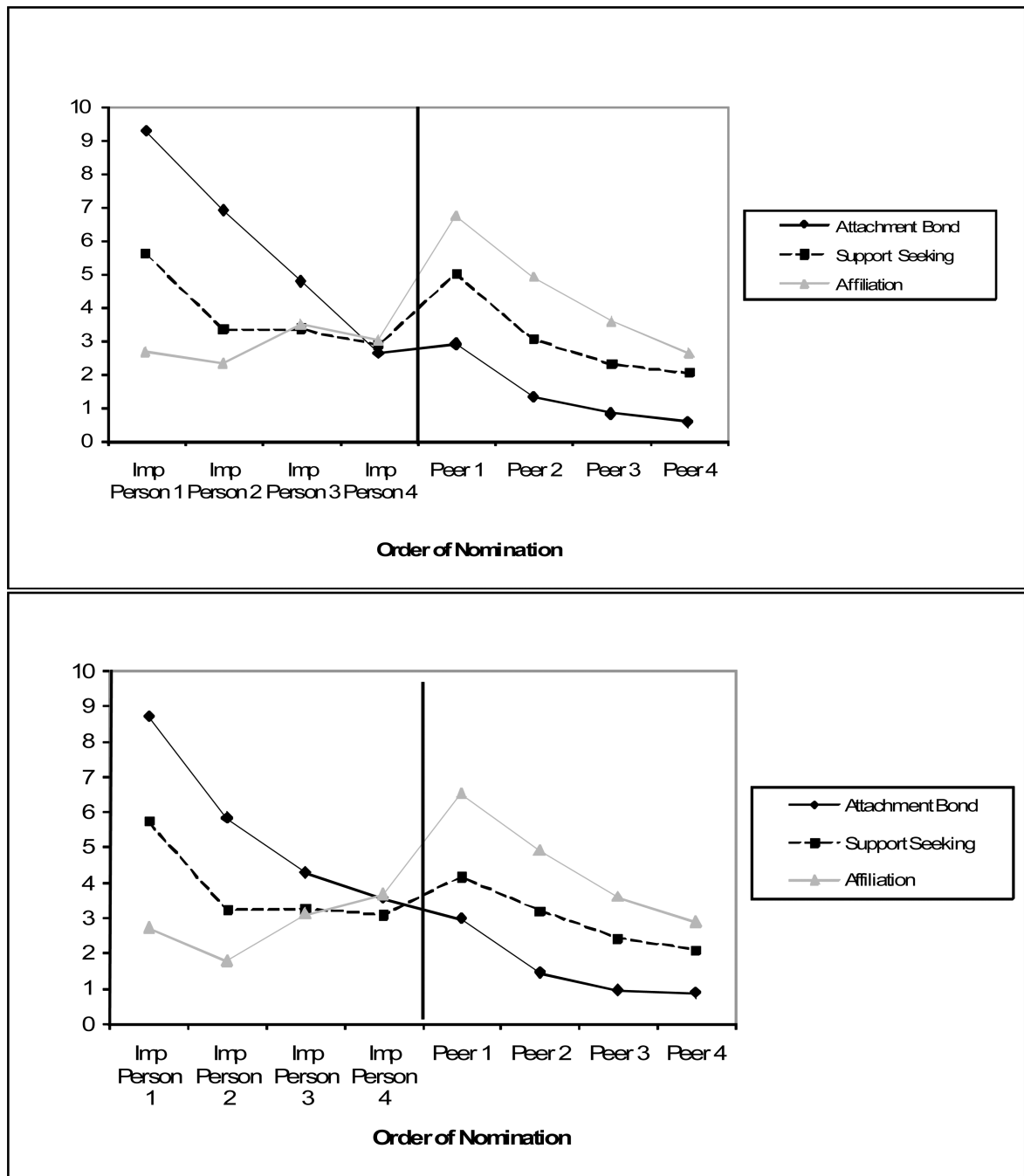


Figure 1. Attachment bond, support-seeking behavior, and affiliation scores across four important people and four peers in high school (top) and college (bottom).

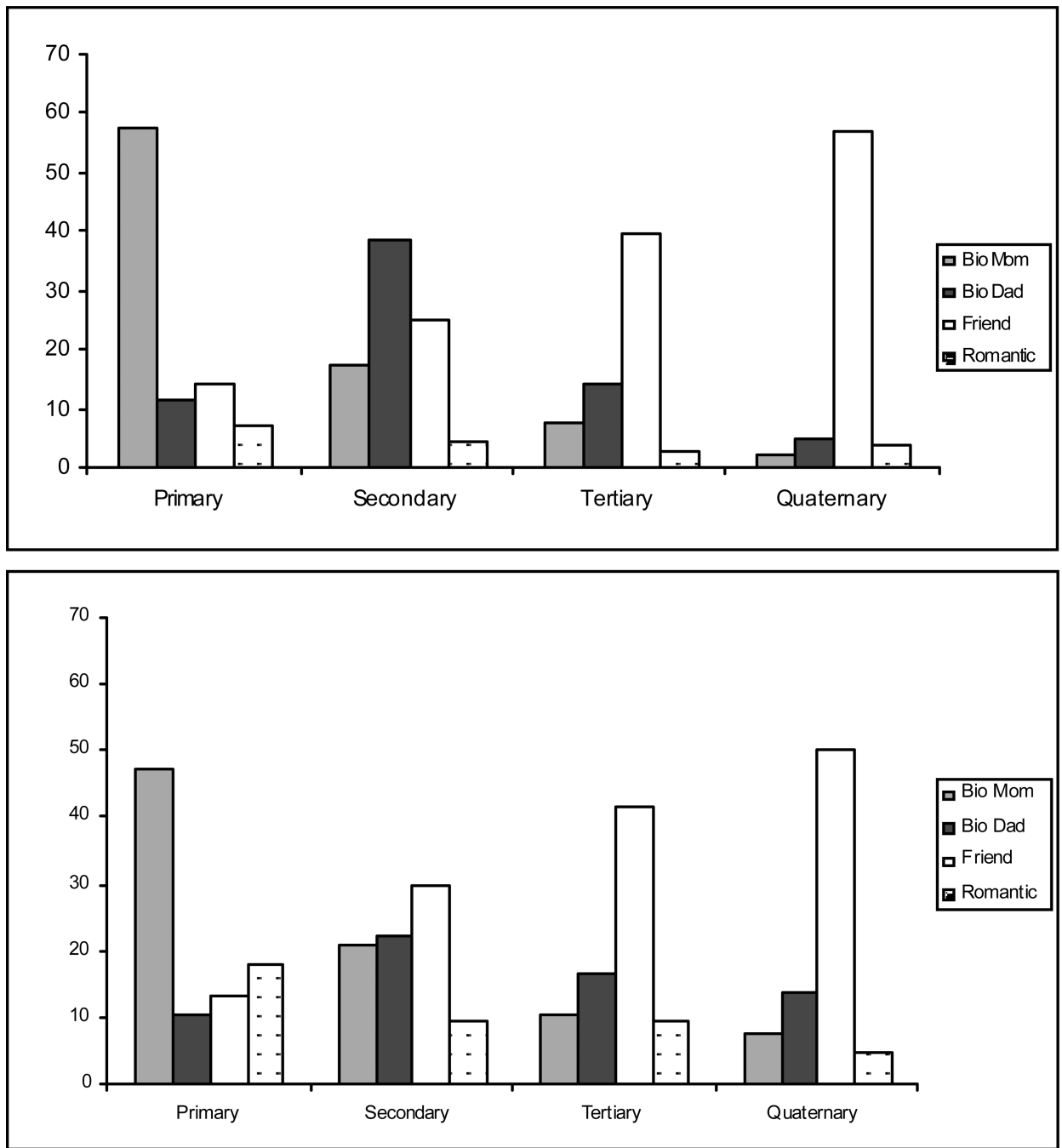


Figure 2. Percentages of biological mother, biological father, friends, and romantic partners at each hierarchy placement in high school (top) and college (bottom).

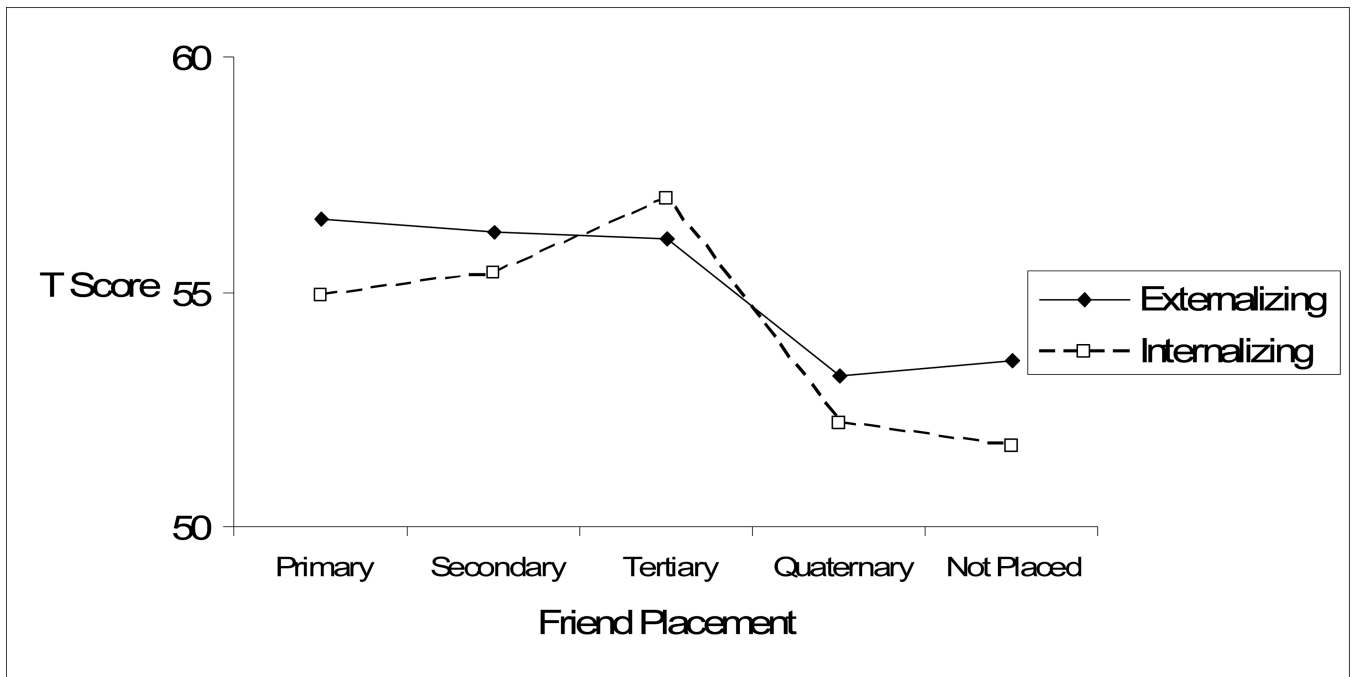


Figure 3.
Internalizing and externalizing behaviors across friend hierarchy placement.

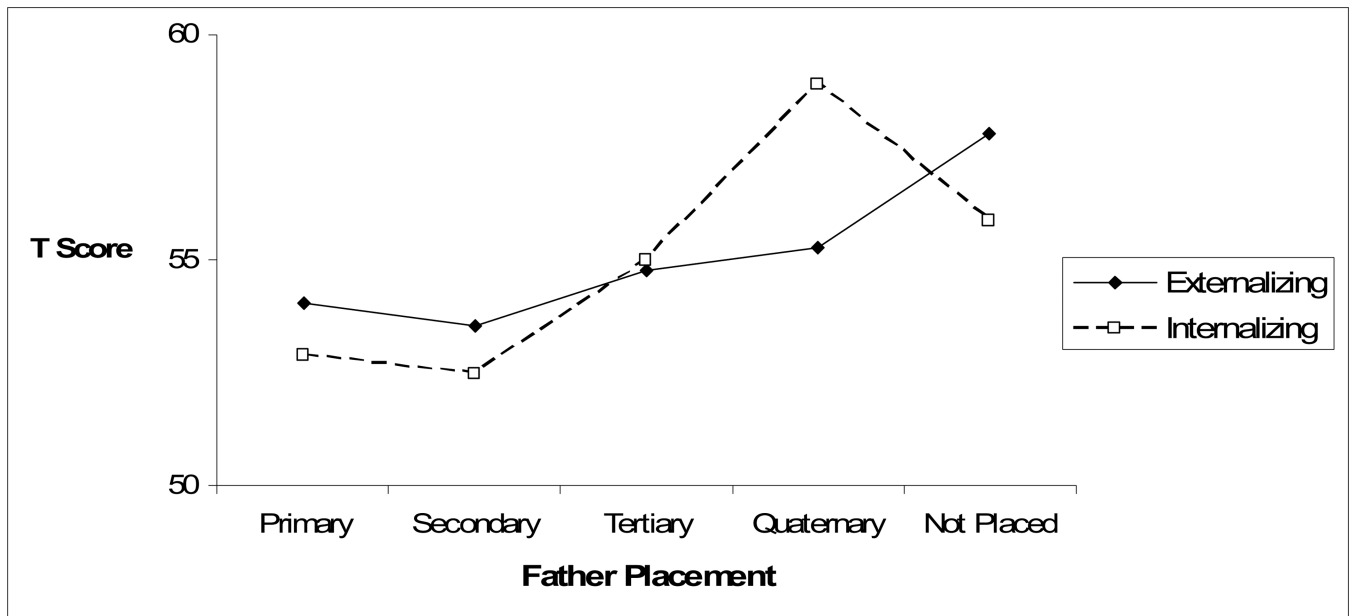


Figure 4.
Internalizing and externalizing behaviors across father hierarchy placement.

Table 1
Means, Standard Deviations, and Bivariate Correlations Among Family, Peer, and Adjustment Variables

	1.	2.	3.	4.	6.	7.	HS M	HS SD	College M	College SD
1. Mother Acceptance	--						25.43	4.35	25.50	5.24
2. Mother Contact	.05	--					6.81	.96	3.97	2.65
3. Father Acceptance	.38***	-.03	--				22.80	5.92	23.27	6.12
4. Father Contact	-.00	.81	-.03	--			6.42	1.53	3.13	2.47
5. Length Romantic	-.03	-.18	.01	-.13	--		4.60	1.37	4.88	1.41
6. Internalizing	-.24***	-.10	-.29***	-.16***	.09	--	53.28	10.14	56.44	10.31
7. Externalizing	-.25***	-.16***	-.21***	-.19***	.11	.54***	52.74	9.40	58.16	7.79

Note.

* $p < .05$;

** $p < .01$;

*** $p < .001$.

Table 2

Component Loadings From Pattern Matrix of Eight Nominees in High School (and College) Across Nine Situations

Context (#)	Attachment Bond	Support-seeking behavior	Affiliation
Closest to (1)	.695 (.715)	.153 (.052)	.188 (.281)
Miss the most (2)	.935 (.888)	-.066 (-.091)	-.014 (.131)
Accident (7)	.925 (.804)	-.034 (.074)	-.140 (-.358)
Bad day (4)	.120 (.177)	.702 (.589)	.115 (.186)
Class presentation (6)	-.057 (.098)	.978 (.843)	-.206 (-.256)
Party (9)	-.051 (-.193)	.700 (.805)	.207 (.232)
Choose for fun (3)	-.105 (-.110)	.003 (.002)	.905 (.883)
Things you enjoy (5)	.008 (-.002)	-.083 (-.027)	.899 (.828)
Enjoy being with (8)	.052 (.177)	.012 (.015)	.867 (.801)

Table 3
 Partial Correlations Among Attachment Figures Placement and Relationship Components, Controlling for Developmental Period

	Mother Accept	Father Accept	Mother Contact	Father Contact	Romantic Length	Int	Ext
Mother Placement	.30***	.07	.18**	.03	.10	-.05	-.08
Father Placement	.16**	.42***	-.01	.13*	.00	-.18***	-.20***
Friend Placement	-.18***	-.21***	.03	.00	-.31**	.18***	.17**
Romantic Placement	-.02	-.05	-.07	-.11	.40***	.01	.05

Note.

* $p < .05$;

** $p < .01$;

*** $p < .001$.