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Adolescent Attachment: Implications for
Adolescent Interpersonal Behavior

Jennifer Lynn Ducharme

A Thesis

in

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of

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Abstract

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Jennifer Lynn Ducharme

Attachment security to mother as a contributing factor to the affective quality of, and interpersonal behavior involved in, adolescents' parent and peer relationships was investigated, as was concordance in attachment security to mother and to friends. One hundred and five adolescents (75 girls and 30 boys) in grades 9 and 10 participated. Attachment security was assessed categorically using The Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). Subjects completed a daily diary for one week in which they described two interactions per day, either positive or negative, one with parents and one with close friends, and a measure of emotional expressiveness (EES; Kring et al., 1994). The diary entries were coded to assess the hypothesized interpersonal manifestations (self-disclosure, emotional expressiveness, conflict, and positive versus negative valence) of attachment. Findings revealed little association between attachment to mother and to friend; most subjects were securely attached to friends. As hypothesized, securely attached subjects described more affectively positive and less affectively negative interactions with parents in their diaries than did insecurely attached subjects. Further, secure subjects used more negotiation, while insecure subjects used more disengagement, as conflict resolution strategies with parents. Attachment groups did not

significantly differ in self-disclosure, or emotional expressiveness and amount of conflict in their diary entries. However, securely attached girls were higher in emotional expressiveness (EES) than were insecurely attached girls. Significant gender differences, consistent with past research, were also documented. These findings suggest attachment security continues to hold implications for adolescents' interpersonal behaviors and the affective quality of their relationships.

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Table of Contents

List of Tables	p. viii
List of Appendices	p. x
Introduction	p. 1
Attachment Theory	p. 2
Adolescent-Parent Attachment	p. 4
Interpersonal Manifestations of Attachment	p. 6
Self-Disclosure	p. 8
Emotional Expressiveness	p. 12
Positive and Negative Valence	p. 13
Conflict	p. 15
Adolescent-Peer Attachment	p. 16
Hypotheses	p. 21
Method	p. 24
Subjects	p. 24
Measures	p. 24
Procedure	p. 28
Diary Coding	p. 29
Results	p. 33
Attachment Style	p. 33
Diary Reliability	p. 40
Self-Disclosure to Diary/Emotional Expressiveness	p. 46

Table of Contents (Continued)

Self-Disclosure to Other	p. 48
Positive and Negative Valence	p. 53
Conflict	p. 56
Interpersonal Style	p. 59
Exploratory Analyses	p. 60
Discussion	p. 62
Attachment Style	p. 62
Self-Disclosure to Diary/Emotional Expressiveness	p. 64
Self-Disclosure to Other	p. 68
Positive and Negative Valence	p. 70
Conflict	p. 75
Interpersonal Style	p. 77
Limitations	p. 78
Conclusions	p. 80
References	p. 81
Appendices	p. 92

List of Tables

Table 1

Number and Percentage of subjects in each Category for Mother,
Father, and Friend Attachment p. 34

Table 2

Sample Means and Standard Deviations for Continuous Attachment
measures for Mother, Father and Friend Attachment p. 35

Table 3

MANOVA Summary for the Continuous Attachment
Classifications p. 37

Table 4

Sample Means and Standard Deviations for Continuous Attachment
Classifications by Sex and Attachment Category p. 38

Table 5

Interrater Reliability for Diary Variables p. 41

Table 6

Intercorrelations between Depth and Breadth ratings for Self-Disclosure
to diary, Emotional Expressiveness, Sensitivity and Knowing p. 43

Table 7

Intercorrelations between Parent and Peer entries for Self-Disclosure
to diary, Emotional Expressiveness, Sensitivity and Knowing p. 44

List of Tables (Continued)

Table 8

Percentage of Parent and Peer Diary entries focused on each Content Category	p. 47
---	-------

Table 9

Sample Means and Standard Deviations for Emotional Expressivity scale for Secure and Insecure Adolescents	p. 49
--	-------

Table 10

Intercorrelations among Self-Disclosure to other Breadth and Depth in Parent and Peer entries	p. 51
--	-------

Table 11

Sample Means and Standard Deviations for MANOVA on Self-Disclosure to other	p. 52
--	-------

Table 12

MANOVA Summary for Positive and Negative Valence	p. 54
--	-------

Table 13

Intercorrelations among Conflict Breadth and Depth ratings in Parent and Peer entries	p. 58
--	-------

List of Appendices

Appendix A

Recruitment letter p. 92

Appendix B

RQ Categorical form (Attachment to Mother) p. 95

Appendix C

RQ Categorical form (Attachment to Father) p. 97

Appendix D

RQ Categorical form (Attachment to Friend) p. 99

Appendix E

RQ Continuous form (Attachment to Mother) p. 101

Appendix F

RQ Continuous form (Attachment to Father) p. 103

Appendix G

RQ Continuous form (Attachment to Friend) p. 105

Appendix H

Emotional Expressivity scale (EES) p. 107

Appendix I

Diary Time Record p. 109

Appendix J

Parent-Focused Diary Entry p. 111

List of Appendices (continued)

Appendix K

Peer-Focused Diary Entry p. 113

Appendix L

Diary Coding Manual p. 115

Appendix M

Consent Form p. 130

Appendix N

Complete List of Questionnaires p. 132

Appendix O

Instructions given to Subjects p. 134

Appendix P

Supplementary Consent Form p. 139

Appendix Q

Diary Coding Sheet p. 141

Adolescent Attachment: Implications for adolescent interpersonal behavior

Attachment theory has increasingly been advocated as an important approach to understanding close relationships. Studying individual differences in attachment style may serve as a means of understanding variations in the quality and interpersonal nature of close relationships (Simpson, 1990). Indeed, empirical evidence has demonstrated that both children and adults differ on a variety of relationship indices, including friendship quality, social competence, and levels of satisfaction and communication (Bell, Avery, Jenkins, Feld, & Schoenrock, 1985; Feeney, Noller, & Callan, 1994; Kerns, 1996). In addition, given the association of high quality parental relationships and friendships to adolescents' psychological and social well-being (Greenberg, Siegel, & Leitch, 1983; Savin-Williams & Berndt, 1990), identifying factors that may contribute to such high quality relationships in adolescence is important. As such, the overall purpose of the present study was to investigate attachment security to mother as a contributing factor to the affective quality of, and interpersonal behavior involved in, adolescents' parent and peer relationships.

The value of applying attachment theory to the study of relationships lies in the fact that it encompasses emotional, cognitive, and behavioral components (Goldberg, 1991), all of which are factors that impact relationship experiences (Collins & Read, 1994). The emotional component is seen in the emotional bond that the individual feels with the attachment figure; the cognitive component is reflected in the cognitive scheme or working model the individual forms concerning the self and the attachment figure; and

the behavioral component is found in the behaviors the individual engages in, which reflect and maintain the attachment relationship (Goldberg, 1991). Therefore, the present study investigated the implications of style of attachment to mother (i.e., the combined emotional and cognitive components) for adolescents' interpersonal behaviors (i.e., the behavioral component).

Attachment Theory

Attachment theory is "a way of conceptualizing the propensity of human beings to make strong affectional bonds to particular others" (Bowlby, 1977, p. 201). Bowlby proposed that the attachment system evolved as a mechanism to maintain proximity between infants and caregivers under threatening conditions. Ainsworth extended this idea, and views the attachment system as a mechanism to provide felt security for the child (Bartholomew & Horowitz, 1991). According to Bowlby's conceptualization, early attachment relationships form a prototype for relationships with others outside the family; through a mechanism he called "working models", children internalize their early experiences with caretakers (Bartholomew & Horowitz, 1991).

Bowlby (1973) suggests that expectations about whether the caregiver is responsive and the self is worthy of love (working models) are generalized to new relationships, and are therefore believed to be the main source of continuity between early attachment experiences and later feelings and behaviors. Working models organize cognitions, affects, and behaviors, and have been documented to relate to interpersonal processes in adulthood (Mikulincer & Nachshon, 1991), as they are assumed to "directly contribute to relationship experiences by shaping cognitive, emotional, and behavioral

response patterns" (Collins & Read, 1994, p. 69). It is through the beliefs and expectations that the child develops through interactions with his/her primary caregiver (working models) that early relationship patterns are carried forward to later close relationships (Sroufe & Fleeson, 1986; c.f. Collins & Read, 1990; Kobak & Sceery, 1988). That is, internal cognitive models of the self and of typical interactions with significant others, constructed during social development, are believed to organize or guide subsequent social behavior (Simpson, 1990). Thus, for example, persons whose early attachment relationships provided emotional security and satisfaction will come to expect positive interactions with others and value intimate relationships (Goldberg, 1991).

The existence of continuity between characteristics of early relationships and later relationships is well documented in the literature (e.g., Cassidy, Parke, Butkovsky, & Braungart, 1992). A person who has a close and warm relationship with their early caregivers (parents) is believed to develop the capacity and desire for close and warm relationships with others. In addition, the avoidance of closeness or intimacy in later relationships has also been postulated to have roots in early attachment experiences (in this case, parental rejection) (Bartholomew, 1990). Therefore, attachment experiences may serve as a framework for understanding individual differences in social functioning in adolescence and adulthood (Collins, 1996).

Attachment theory was postulated to be a general theory of personality development; however, the majority of past research in this area has focused on infants and young children (Kobak & Sceery, 1988). Investigators have only recently examined

the relationship between adults' working models of attachment and their social and emotional adaptation (Bartholomew & Horowitz, 1991). Attachment research in adulthood, however, has largely focused on love relationships in dating or married couples (e.g., Collins & Read, 1990; Hazan & Shaver, 1987). In comparison to attachment research with both young children and adults, the effects of attachment in adolescence has been the focus of less research (Kobak & Sceery, 1988; Resnick, 1989). In addition, far more attention has been paid to adolescent-parent attachment than to adolescent-peer attachment. Thus the present research aims to add to the attachment literature by focusing on adolescents and by examining both attachment to parents and attachment to peers.

Adolescent-Parent Attachment

Early psychoanalytic models of adolescents' family relationships focused primarily on the process of detachment believed to characterize adolescent-parent relationships (e.g., Freud, 1958; cited in Steinberg, 1990). According to this view, conflict and detachment were characteristics of normal adolescent development, and adolescents' developing autonomy was conceptualized as autonomy from parents at the cost of harmony and attachment (Steinberg, 1990). An implication of this theory was that much research focused primarily on how adolescents grew apart from their parents, instead of how closeness is maintained or even strengthened during the teenage years (Steinberg, 1990). Empirical evidence generally does not support the occurrence of detachment from parents during adolescence; harmony and closeness appear to be more normative in adolescent-parent relationships. In direct contrast with the psychoanalytic

model, recent research has focused on the development of autonomy in adolescence that occurs without the severing of emotional bonds with parents (Steinberg, 1990). It is now believed that growth of separateness and detachment from parents during adolescence was overestimated, and continuing connectedness to family and parents was thereby underestimated (Feldman & Gehringer, 1988).

Increasingly, researchers studying parent-adolescent attachment have contributed evidence indicating adolescents' relationships with parents are not characterized by detachment or "severed emotional ties" as was once believed (e.g., Paterson, Field, & Pryor, 1994). Instead, parental relationships remain important to adolescents, and are often valued as sources of intimacy. Further, in studies on adolescents' relationships with parents, most adolescents report they feel close to and get along well with their parents (Field, Lang, Yando, & Bendell, 1995; Pipp, Shaver, Jennings, Lamborn, & Fischer, 1985). It is well documented that friends play an increasingly important role in the lives of adolescents; they are valued sources of intimacy, loyalty and companionship (e.g., Buhrmester & Furman, 1986). It is perhaps less well known, however, that during the adolescent years "parents continue to provide a stable base from which to explore unfamiliar settings" (Laursen, 1996, p. 186). That is, parents also continue to provide intimacy and companionship to adolescents, in a complementary manner to provisions made by peers (Laursen, 1996). Thus, attachment to parents likely holds continuing implications for adolescents. Because of the many changes that are faced during the adolescent years, attachment issues may be viewed as especially salient in the transition from childhood to adolescence (Batgos & Leadbeater, 1994). Positive relationships with

parents may provide adolescents with the comfort and security necessary to negotiate the interpersonal tasks of adolescence, including initiating and maintaining healthy peer relationships (Batgos & Leadbeater, 1994). The implications of attachment to parents for adolescents' extrafamilial relationships, however, have not been extensively studied to date (Batgos & Leadbeater, 1994).

Interpersonal Manifestations of Attachment

Secure attachment relationships in childhood have been documented to predict adjustment and functioning in many areas; including cognitive development, emotional development, and interpersonal/social development (Rice, 1990). Early research on the correlates of secure attachment in infancy demonstrated a relationship between quality of early attachment and later peer competence assessed in toddlerhood (e.g., Waters, Wippman, & Sroufe, 1979). Further, children with secure attachment styles are more cooperative and popular and demonstrate more positive affect and social competence with their friends than children with insecure attachment styles (Kerns, Klepac & Cole, 1996; Waters et al., 1979). While early attachment experiences have been documented to be important precursors of social competence and the quality of close relationships in young children, less is known about the correlates of parent-child attachment beyond the childhood period (Bell et al., 1985).

Attachment bonds have recently been implicated in adolescent development and adjustment; that is, secure attachment relations with parents predict adaptive social and emotional functioning in many situations for the adolescent (Rice, 1990). Correlates of attachment relationships have been identified, such as peer competence and affect

regulation (Kobak & Sceery, 1988). Much research on adolescent attachment has focused on the influence of attachment relationships on adolescents' psychological well-being (e.g., their self-concept and self-esteem) (e.g., Armsden & Greenberg, 1987; Greenberg et al., 1983; Nada Raja, McGee & Stanton, 1992). It has been suggested that underlying the connection between adolescent attachment and adjustment is the ability of secure adolescents to interact in their relations with others with confidence and functional social skills (Chu & Powers, 1995). For example, a study of the relationship between adolescents' reports of closeness to parents and their perceived social competence found that adolescents who reported greater closeness to family reported greater self-esteem, social competence, and expressiveness (Bell et al., 1985). These results support the view that secure parent-child relationships promote social competence not only in early childhood, but in the adolescent years as well (Bell et al., 1985). In a review of adolescent attachment, Rice (1990) highlights that positive correlations have consistently been found "in studies of the concurrent association between quality parent-adolescent attachment relations and indices of intra- and interpersonal adaptation" (p. 518). This is consistent with Bowlby's (1982) postulation that having confidence in the accessibility and responsiveness of a trusted other (i.e., a secure attachment) may lead humans at any age to exhibit greater social and emotional adjustment.

Buhrmester (1996) uses the term "interpersonal competence" to refer to traits or qualities needed in close interpersonal relationships. Formative influences of past relationships with friends and with family members will shape individuals' interpersonal competence (Buhrmester, 1996). Since attachment involves a behavioral component

(Goldberg, 1991), attachment style may be viewed as one such formative influence that will impact individuals' interpersonal behaviors, particularly those that maintain and reflect the attachment relationship. The influence of attachment style on individuals' relationships with others is well established (e.g., Feeney & Noller, 1990; Hazan & Shaver, 1987; Simpson, 1990). Broadly, attachment style is said to impact individuals' relationships "because it reflects general views about the rewards and dangers of interpersonal relationships" (Feeney & Noller, 1990, p. 286). Collins and Read (1990) proposed that individual differences in comfort with closeness, ability to depend on others, and anxiety about being abandoned or unloved, underlie attachment styles. They further argue that these dimensions concern beliefs and expectations that are likely to have important implications for behaviors in a variety of relationship situations (Collins & Read, 1990).

Specifically, attachment styles reflect different cognitive-affective schemas, which are said to mediate affect and direct behavior in relationships (Pistole, 1993). Given this, the present study investigated the relation between adolescent attachment to mother and four areas of interpersonal behavior (self-disclosure, sensitivity/awareness of others' feelings, emotional expressiveness, and conflict) and the affective quality (valence) of interpersonal interactions, all of which are believed to be influenced by attachment relationships.

Self-Disclosure

Self-disclosure has been defined as "a process by which persons let themselves be known to others" (Mikulincer & Nachshon, 1991, p. 322), and refers to any information

about oneself that a person communicates to another person (Cozby, 1973). Individuals' self-disclosing tendencies can vary according to the amount (i.e., quantity or breadth), intimacy level (i.e., quality or depth), and content of information they self-disclose to others (Collins & Miller, 1994; Mikulincer & Nachshon, 1991).

In their review of the self-disclosure literature, Goodstein and Reinecker (1974) highlighted several variables documented to influence self-disclosure. One such variable is the influence of the target. Depending on the target of the self-disclosure, people differ on how much they disclose. For example, persons disclose more to those they are intimate with, and those they have disclosed to previously. As Goodstein and Reinecker (1974) note, "we disclose to those who have demonstrated that they will not punish our self-disclosure and to those who have no such capacity for punishing such behavior, namely, total strangers" (p. 52). The diary method employed in the present study was expected to elicit self-disclosures from adolescents, as it was assumed that the diaries would be viewed as analogous to strangers. That is, adolescents would feel free to disclose their personal thoughts and feelings to the diary without fear of punishment. Gender is another characteristic that influences self-disclosure, as females have been documented to disclose more often and about more personal issues and feelings than males, both to friends and to parents (Goodstein & Reinecker, 1974; Reisman, 1990).

Appropriate self-disclosure is a basic skill for developing and maintaining close relationships, and has been argued to be important for psychological well-being (Collins & Miller, 1994; Paul & White, 1990). Individual differences in attachment style have been proposed as one characteristic that influences patterns of self-disclosure and

consequently shape or limit interpersonal relationships (Rotenberg, 1995).

That attachment and self-disclosure tendencies would be related makes intuitive sense. Secure working models, reflecting the individual's confidence in self and others may result in increased willingness and motivation to engage in conversation (Feeney & Noller, 1996). According to Feeney et al. (1994), central themes that underlie attachment have implications for communication. Attitudes toward intimacy are, for example, both a facet of adult attachment in addition to being predictive of self-disclosure (Feeney et al., 1994). Since persons with secure attachment styles are comfortable with closeness and are able to depend on others, they should be prone to engage in intimacy-promoting behaviors (e.g., self-disclosure) (Collins & Read, 1990). Individuals with different attachment styles may differ in self-disclosure as a result of the differing goals they wish to obtain in their social interactions (Mikulincer & Nachshon, 1991). For example, since avoidantly attached individuals have a need for distance in their relationships, self-disclosure would be counterproductive to this goal (Pistole, 1993).

Reviews of past research of childhood attachment styles indicate that children who are securely attached to parents are more emotionally open and better able to communicate in a coherent and sensitive way than are insecurely attached children (Rothbard & Shaver, 1994). Only a paucity of past research has addressed the relation between attachment style and self-disclosure in adolescence, however. For example, Mikulincer and Nachshon (1991) found that in their sample of undergraduate students, subjects who were classified as securely attached showed a "responsive self-disclosure style" (high self-disclosure and high responsiveness to partners' self-disclosure). Similarly

employing a college student sample, Pistole (1993) found that compared to subjects who were avoidantly attached, securely attached subjects reported higher levels of trust in partner, self-disclosure, and comfort with self-disclosure. The present study endeavored to generalize the relationship between attachment status and self-disclosure via self-report questionnaires found in an undergraduate college sample to a younger adolescent sample using a diary method.

Although not direct investigations of the influence of attachment status on self-disclosure, other studies have evaluated the relation between such variables as parental warmth or family cohesion and self-disclosure. Snoek and Rothblum (1979) for example, found that college students who reported warm and autonomous relations with parents had greater self-disclosure. In fact, high parental affection was found not only to relate to high self-disclosure to parents, but to high self disclosure to friends and strangers as well. This finding suggests that "willingness to disclose personal thoughts and feelings is an attitude developed at home and generalized to relationships with others" (Snoek & Rothblum, 1979, p. 337). Therefore, the affective and communicative quality of the family context appear to be influential factors in adolescent self-disclosure (Papini, Farmer, Clark, Micka, & Barnett, 1990). Stemming from the findings of past research, subjects who are securely attached to their parents would be expected to demonstrate higher general self-disclosure in their diary entries as well as higher self-disclosure directed to specific targets (parents or peers).

An important finding by Mikulincer and Nachshon (1991) was that, in addition to differences in their own self-disclosure, subjects with secure attachments were also more

responsive to others' self-disclosure. The authors concluded that responsiveness is one relationship quality that is typical of secure persons, as it corresponds with their interactional goal of creating an atmosphere of closeness and intimacy with others (Mikulincer & Nachshon, 1991). Therefore, the present study also investigated the influence of attachment style on individuals sensitivity to and awareness of others' emotions and feelings.

Emotional Expressiveness

Familial factors have been found to influence individuals' style of expression and skill in communication (Halberstadt, 1986). For example, children and adolescents who describe their families as high in emotional expressiveness have been found themselves to be more emotionally expressive (Cassidy et al., 1992; Halberstadt, 1986). Attachment style may be seen as another influence on emotional expressiveness that has roots in the familial relationship. According to Collins and Read (1994) "emotions are a central feature of attachment theory, and individual differences in attachment style are associated with variations in emotional regulation and emotional expression" (p. 74). In a secure attachment environment, the child comes to learn that open communication and expression of emotion can serve to get his/her needs met (Feeney & Noller, 1996). Following this reasoning, a securely attached child would be expected to be more emotionally expressive than an insecure child.

Collins and Read (1990) found that attachment status was related to expressiveness; in their sample of college students, those who were more comfortable with closeness and able to depend on others (secure style) were more expressive. The

authors highlighted that expressiveness may be seen as a relationship quality that facilitates communication and intimacy. Their results are therefore consistent with research that has found intimacy to be one of the prototypic features that differ across attachment styles (Collins, 1996). Bell et al. (1985) studied the influence of family closeness on adolescents' social competence with peers. They found that adolescents who reported greater closeness to their families also reported greater expressiveness with peers. It is therefore expected that secure attachments to parents will predict emotional expressiveness in adolescents' diary entries.

Positive and Negative Valence

Some authors view attachment theory as a theory of affect regulation (e.g., Kobak & Sceery, 1988). In children, the affective correlates of secure attachment include more positive affect and positively toned peer interactions (Feeney & Noller, 1996). Insecurely attached children have been found to use less optimal strategies of affect regulation and may express extreme negative emotion with both attachment figures and peers (Kobak & Sceery, 1988). Given the recent life-span approach to attachment, affective correlates of adolescents' attachment relationships would be expected to parallel those documented in children.

In addition to differences in affect regulation, differences in the experience of various emotions have also been found among attachment groups. For example, Simpson (1990) found that subjects with secure styles experienced more positive and less negative emotions in their dating relationships; in contrast, subjects with anxious and avoidant styles experienced more negative and less positive emotions. This is in accordance with

attachment theory, which postulates that individuals develop relationships that differ in their emotional tone as a function of their differing attachment styles (Simpson, 1990).

Individuals' perceptions of the affective quality of their relationships may also differ as a function of their attachment style; they may be predisposed to interpret events in ways consistent with their working models of attachment (Collins, 1996). In a recent study, subjects were presented with hypothetical relationship events and were asked to explain the event and how they would feel and behave if they were in the situation (Collins, 1996). Results showed that in response to the same situations, avoidant and preoccupied subjects offered negative explanations (suggestive of their negative beliefs concerning their partner and relationship), while secure subjects offered positive explanations (Collins, 1996).

Contradictory findings have emerged from past research concerning the quality of affect in adolescents' relationships with their parents. Some authors document increased negative feelings toward parents during adolescence (e.g., Papini & Sebbi, 1987); in contrast, other studies have revealed that adolescents' feelings toward parents remain stable and positive during the teenage years (e.g., Greenberg et al., 1983). Adolescents' security of attachment to their parents may be a factor in determining the affective quality of their interactions with parents. That is, securely attached adolescents would be expected to perceive and report more positive valence in their interactions with parents; whereas insecurely attached adolescents would be expected to perceive and report more negative valence in their interactions with parents.

Conflict

According to Laursen (1993a), of all adolescent relationships, their closest ones (i.e., with parents and close friends) generally display the most frequent but least disruptive conflicts. Past research has documented that parent-adolescent conflict increases during early adolescence and remains high in middle adolescence (Paikoff & Brooks-Gunn, 1991) and that frequency of conflict during adolescence is higher in parental than peer relationships (Laursen, 1996). An aim of the present research is to compare the frequency, intensity, and resolution of conflict in adolescents' relationships with parents and peers as a function of their attachment status (e.g., insecurely attached adolescents are predicted to have more conflict, more intense conflict, and less positive conflict resolution in their relationships than securely attached adolescents).

According to Collins (1996) insecurely attached individuals are prone to negative interpretations of relationship events and their dating partner's behavior; such interpretations "are likely to result in conflict and to contribute to relationship distress" (p. 813). Extending this logic to the present study, insecurely attached adolescents may also construe their parents' or friends' behaviors in a negative fashion and therefore experience more conflict in these relationships. Positive negotiation of conflict may be more likely to occur in families in which teenagers and parents are securely attached, although to date, this hypothesis has received scant attention (Steinberg, 1990). If, as hypothesized, subjects who have secure attachments to parents are more self-disclosing than subjects who are insecurely attached, it would follow that the open communication styles of securely attached subjects would be conducive to less frequent conflict and more

appropriate conflict resolution with their parents. Further, if the interpersonal manifestations of parental attachment extend across other relationships, it would be expected that subjects with secure attachments to parents would also report fewer conflicts and more appropriate conflict resolution with their peers.

Adolescent-Peer Attachment

In addition to the growing interest in extending the study of attachment beyond early childhood (Armsden & Greenberg, 1987), researchers have also recently extended the study of attachment to include peer relationships in addition to parental relationships. As a life-span approach to attachment research has increasingly been recognized, the traditional definition of attachment (as an affectional bond between infant and caregiver) has been extended both beyond the mother-child dyad, and beyond infancy and early childhood (Rice, 1990). Increasingly, attachment bonds are believed to occur at all ages, to not only be restricted to the mother, but to also occur with other people as well (Ainsworth, 1989; Rice, 1990). According to Weiss (1982), attachment behavior in adolescence is often directed toward nonparental (noncaretaking) figures, and therefore "certain peer relationships, especially beginning in adolescence, can be considered as a type of attachment relationship" (Armsden & Greenberg, 1987, p. 430). Emotionally significant peers may serve as important (although often transient) attachment figures for adolescents as peers provide emotional support, encouragement, and security for adolescents (Lopez & Gover, 1993; Paul & White, 1990).

There is, however, some controversy as to whether or not peer relationships in adolescence or adulthood are in fact attachment relationships. Some authors argue that of

the many types of adult close relationships, only a few of these may be characterized as attachment relationships; that is, those that provide the potential for security (Berman & Sperling, 1994). The adult relationships that are typically conceptualized by attachment qualities include adults' relations with their parents and their children; recently adult love relationships have also been postulated to be a form of attachment relationship (Berman & Sperling, 1994). Although some researchers have also conceptualized peer relationships as attachment based (e.g., Greenberg et al., 1983), others have suggested that the connection between attachment and adult interpersonal functioning in peer relationships is less immediately evident than other areas of adult attachment (Berman & Sperling, 1994). Most peer relationships would be considered affiliative bonds, not attachment bonds; however, some peer relationships (such as best friendships), characterized by their comfort and closeness, may be considered attachment relationships. Still, many other friendships do not meet two important criteria necessary to be considered an attachment relationship: they are not unique and irreplaceable (as Ainsworth's (1989) definition for affectional bonds requires), and they do not create high levels of distress when disrupted (Ainsworth's (1985) criterion for a close relationship) (Berman & Sperling, 1994).

Others have argued, however, that attachment in infants typically appears in their relationships with caregivers, whereas attachment in adults often appear in relationships with peers who are felt to be of unique importance (Weiss, 1982). During adolescence, the peer group takes on increased importance, and attachment is for the first time directed toward nonparental figures (Weiss, 1982). Weiss (1982) further argues that parents lose

their positions as attachment figures and that adolescents become attached instead to a new figure, usually a same or opposite sex peer. Since adolescents desire the peer's company, feel comfortable and relaxed in the peer's presence, and feel distress if their peer relationships end, all which are viewed as indicators of attachment, the peer relationship is believed to be an attachment relationship (Weiss, 1982).

Despite the controversy surrounding the concept of peer attachment, given the increased saliency of the peer group in adolescence, it may be important to consider the possible influence of peer attachment on adolescents' interpersonal behavior in, and the affective quality of, their relationships. As Collins & Read (1994) argue, "it is unreasonable to assume that adult models of attachment reflect only the quality of parent-child relationships" (p. 56). That is, throughout the lifespan, working models of attachment likely become increasingly complex as intra- and extrafamilial relationships provide continuous opportunities to learn about the self and the nature of close relationships (Collins & Read, 1994).

Past research on the relationship between attachment to parents and attachment to peers and whether the interpersonal competencies shaped by parental attachment generalize to other relationships have resulted in equivocal findings. According to one view, attachment to parents and attachment to peers is inversely related. This is suggestive of the adolescent shift away from parents toward peers that is reflective of adolescents' striving for autonomy (Nada Raja et al., 1992). As previously highlighted, however, little empirical evidence supports the occurrence of such a shift, and this view has been considerably revised.

A second view holds that attachment to parents and attachment to peers are unrelated, as family and peers constitute two independent social worlds (Nada Raja et al., 1992). The results of an early study by Greenberg et al. (1983) provided support for this view, as they reported little association between 12 to 19 year old adolescents' parent and peer affectional attachment.

This view is similar to those postulated by both Sullivan and Piaget, emphasizing "the discontinuities in functioning across family and peer relationships and the unique incremental contributions that relationships with parents and peers make to the growth of competence" (Buhrmester, 1996, p. 176). The view that attachment to parents and attachment to peers are unrelated is in opposition to attachment theory's contention that individuals hold general working models that generalize across (at least attachment) relationships. Instead of these general working models, Furman and Wehner (1993) propose that "individuals have distinct views for each type of relationship" (p. 3). That is, an individual would hold distinct views of parent-child relationships, friendships, and romantic relationships. Therefore, "views generalize across specific instances of a particular type of relationship but only moderately across all types of relationships" (Furman & Wehner, 1993, p. 3).

A study by Wehner (1992) offers support for the contention that specific styles for specific relationship types exist. Wehner (1992) found that adolescent females' relationship styles (secure, dismissing, preoccupied) were not consistent, that is, did not generalize, across their relationships with mothers, fathers, friends, and romantic partners. Although general relationship style was moderately correlated across relationships,

adolescents' working models of relationships appeared to be primarily relationship specific (Wehner, 1992).

Extending this conceptualization to the present study, it would be expected that a secure attachment to parents may not necessarily generalize to attachment to peers and that parental attachment status would predict social competence in interactions with parents, while peer attachment would predict social competence with peers.

A third view is that attachment to parents is positively correlated with attachment to peers. Bowlby postulated that the security of one's attachment to mother will have implications for the quality of one's future attachment relationships (Park, 1993). Support for this postulation would be demonstrated by a strong relation between subjects' attachment to parents and their attachment to peers. That is, the security of attachment would be expected to generalize across relationships. Results with a sample of 15-year-olds provide support for this view (Nada Raja et al., 1992); most adolescents showed relatively high levels of attachment to both parents and peers. The authors interpreted the finding of strong attachment to parents as evidence that adolescents place continued importance on their parents, and that "attachment to peers does not occur at the expense of attachment to parents" (Nada Raja et al., 1992, p. 482; cf. Paterson et al., 1994). Attachment theory suggests people are predisposed toward particular styles of dealing with friends based on their representations of familial relationships (Bartholomew & Horowitz, 1991). Bartholomew and Horowitz's (1991) finding of a moderate but positive correlation between attachment styles with peers and family attachment ratings provide support for this suggestion. Similarly, Armsden and Greenberg (1987) found substantial

correspondence between parent and peer affectional attachment in a sample of 17 to 20 year olds.

Past experiences with parents, friends, and other social network members are believed to shape adolescents' interpersonal competencies (Buhrmester, 1996). According to Buhrmester (1996) attachment theory "emphasises the primacy of early parent-child relationships and the continuity of functioning across different types of relationships" (p. 176). People who are securely attached to their primary caregivers are believed to develop working models (or beliefs) about relationships; for example, that others can be trusted and will be accepting of and responsive to them (Park, 1993). These beliefs then carry over to new relationships, thereby shaping and influencing them. Thus, social competencies stem from the parent-child attachment and hold important implications for competencies in other relationships. From the attachment perspective, then, it would be expected that such continuity would be reflected in parental attachment style (secure versus insecure) predicting social competence (positive affect and resolution of conflict) in adolescents' interactions with parents (i.e., diary entries pertaining to parents) and would generalize to attachment style and social competencies in their peer interactions (i.e., diary entries pertaining to peers).

Hypotheses

Attachment style and working models of self and other are expected to play a role in shaping how people behave in their interactions and in the affective quality of their relationships (Collins & Read, 1994). Further, in young children, attachment style has been found to influence such correlates as social competence and positive affect (e.g.,

Kerns et al., 1996). According to the lifespan approach to attachment, parental attachment would be expected to continue to exert an influence on adolescents' affect, attitudes, beliefs, and behaviors in close relationships. In the present study, the behaviors of interest were general self-disclosure, emotional expressiveness and awareness of others' feelings; as well as self-disclosure and conflict behavior involving specific targets (parents or peers). Also of interest was the positive and negative affective tone (valence) of adolescents' interactions with their parents and peers. In addition, given the increased salience of peer relationships in adolescence (Paterson, Pryor, & Field, 1995) and the equivocal findings concerning the relation between maternal and peer attachment; the association between these two attachment relationships, and the implications of peer attachment style for affective tone and conflict in adolescents' interactions, were also investigated. Based on the research previously reviewed, the following hypotheses were predicted:

- 1) Subjects with secure attachments to mother will show greater depth and breadth of self-disclosure in their diary entries than subjects who are insecurely attached.
- 2) Subjects with secure attachments to mother will show greater emotional expressiveness depth and breadth in their diary entries than subjects who are insecurely attached.
- 3) Subjects with secure attachments to mother will show more self-disclosure directed toward a specific target (their parents) than subjects who are insecurely attached; this trend may also generalize to self-disclosure directed toward peers.
- 4) Subjects with secure attachments to mother will show more positive valence and

less negative valence in their diary reports of interactions with parents than subjects who are insecurely attached; this trend may also generalize to the valence in adolescents' reports of peer interactions. Exploratory analyses will be conducted to determine the influence of peer attachment on the valence in adolescents' reported interactions.

- 5) Subjects with secure attachments to mother will report less frequent conflict, less intense conflict, and more positive conflict resolution (i.e., negotiation/compromise) with their parents than insecurely attached subjects; this trend may also generalize to adolescents' reported peer interactions. Exploratory analyses will be conducted to determine the influence of peer attachment on the conflict in adolescents' reported interactions.
- 6) Adolescents' attachment to mother and attachment to friends will be moderately positively correlated.
- 7) Subjects with secure attachments to both mother and friends will show the healthiest interpersonal style (high self-disclosure, high emotional expressiveness, high positive valence, positive conflict resolution). Subjects with insecure attachments to both mother and friends will show the most interpersonal difficulties (low self-disclosure, low emotional expressiveness, high negative valence, negative conflict resolution).

Method

Subjects

A sample of 105 adolescents (75 girls and 30 boys) from three suburban Montreal high schools, participating in a larger project investigating the nature and quality of family and peer relationships, served as subjects. They were recruited from a population of 225 adolescents (144 girls and 81 boys) who had participated in a larger study two years earlier, a 47% response rate. Approximately half of the subjects were in grade nine ($n=51$) and the remaining subjects ($n=54$) were in grade ten. The majority were white and came from middle-class families (Hollingshead (1975) four factor index $M = 41.06$). Subjects were recruited by letter sent to them at their homes (see Appendix A) and were paid \$10.00 for their participation in this portion of the larger project.

Measures

The Relationship Questionnaire (RQ). Adolescents' attachment style was determined by an adaptation of The Relationship Questionnaire (RQ; Bartholomew and Horowitz, 1991). Bartholomew's (1990) four group model of attachment was developed based on Bowlby's theoretical assumption that attachment styles reflect working models of the self and of the attachment figure (Feeney & Noller, 1996). Individuals' self models can be dichotomized into positive (self being worthy of love and affection) or negative (self seen as unworthy), as can models of the attachment figure (where the other is seen as available and caring in the positive model, and as rejecting or uncaring in the negative model).

Security of attachment to mother, to father, and to friends was assessed in two

ways (categorical and continuous measures) for each subject. First, subjects self-categorized themselves as either secure, dismissing, preoccupied, or fearful by endorsing one of four paragraphs, adapted to refer to themselves in relation to a) their mother b) their father and c) their friends as most descriptive of themselves (examples can be seen in Appendices B, C, and D, respectively). Each of these paragraphs consists of a relationship description that is reflective of the different combinations of individuals' working models of the self and other. Specifically, the secure paragraph reflects positive-self/positive-other working models, the dismissing paragraph reflects positive-self/negative-other working models, the preoccupied paragraph reflects negative-self/positive-other working models, and the fearful paragraph reflects negative-self/negative-other working models. Subjects are simply required to indicate the paragraph that is most descriptive of their relationship with a given other.

Second, subjects rated the degree to which each of the four categories (secure, dismissing, preoccupied, or fearful) in their parental and peer relationships applied to the self in relation to each of mother, father, and friends (examples can be seen in Appendices E, F, and G, respectively). Each paragraph is rated on a 7-point scale, where 1 indicates "not at all" and 7 indicates "very much". This measure yielded four continuous attachment style scores for each subject.

Some authors have proposed that attachment styles are not mutually exclusive, and therefore continuous attachment measures may be more sensitive to individual differences in attachment style than categorical typologies (e.g., Feeney et al., 1994). However, past research found that correlational analyses (using the continuous ratings)

and between-group comparisons with the categorical measure yield very similar results and conclusions (Bartholomew & Horowitz, 1991). Further, both categorical and continuous ratings of attachment have been found to yield consistent descriptions of individual differences in attachment (Feeney & Noller, 1996). The RQ has good psychometric properties; for example, attachment ratings have been validated with self-report measures of self-concept and interpersonal functioning (Bartholomew & Horowitz, 1991).

Emotional Expressivity Scale (EES). As shown in Appendix H, the EES, developed by Kring, Smith, and Neale (1994) served as one measure of subjects' emotional expressiveness. The EES is a 17 item self-report measure, designed to assess "the extent to which people outwardly display their emotions" (Kring et al., 1994, p. 934). Subjects rate the extent to which each item applies to them on a 5-point Likert scale, where 1 indicates "never true" and 5 indicates "always true". The EES is a psychometrically sound instrument; Kring et al. (1994) report high internal consistency (average $\alpha = .91$) and test-retest reliability (four-week test-retest $r = .90$) as well as evidence for convergent and discriminant validity as indicated by self-report measures of affect intensity, family expressiveness, and self-esteem.

The Diary. Several authors have suggested that a deeper understanding of the multidimensional nature of attachment might be gained through the use of more innovative qualitative methodologies (Kobak & Sceery, 1988; Paterson et al., 1994). In pursuit of this goal, a diary method was employed in the present study. The diary technique has been recognized as an important improvement over the use of general

questionnaires (Winstead & Derlega, 1986), yet despite its advantages, only a minority of past research has employed this method. For example, in their study of self-disclosure, Burhenne and Mirels (1970) used an essay format in order to elicit a free-response sample of self-disclosing behavior and to allow for nuances in expression. The advantages of the diary method include, for example, allowing the researcher access to behaviors and settings that would otherwise be unavailable for observation (Norris, 1987). The use of diaries is most conducive to studies of relationship quality or characteristics (Norris, 1987). Further, diary keeping is especially prevalent in adolescence, particularly among adolescent girls (Burt, 1994).

In the present study, adolescents were asked to complete a diary of parent and peer interactions for one week. The diary (Doyle & Markiewicz, 1995) spanned a one week (seven day) period, yielding a total of 14 diary entries for each subject (i.e., 7 days X 2 targets (parent, peer). For each of the seven days, subjects recorded the place (e.g., home, school) and amount of time that they spent interacting with parents and interacting with peers in the morning, afternoon, and evening (see Appendix I). Subjects also described one parent and one peer positive or negative interaction per day in detail; including what happened, how they felt, and how the other(s) felt during and after the interaction (see Appendices J and K). The diary entries formed the basis of adolescents' reported interactions with parents and peers, and were used to assess the hypothesized interpersonal manifestations of attachment: adolescents' self-disclosure, emotional expressiveness, and sensitivity/awareness of others' attitudes and feelings; and the affective quality (positive and negative valence) and amount of conflict in their parent

and peer interactions. A coding manual was developed to rate the recorded interactions on each of these dimensions, as well as the general content area of each diary entry (see Appendix L). The coding system employed will be further described in the Procedure.

Procedure

After obtaining permission from the high schools and written consent from each subject (see Appendix M), we invited subjects in small, grade homogeneous groups at school to complete a series of questionnaires. The set of questionnaires included the mother and father attachment measures and the EES, as well as others not relevant to this project (see Appendix N for the complete list of measures administered). After completing the questionnaires, subjects were given the diary and instructions concerning how to complete it (see Appendix O). Subjects were phoned during the course of the week to remind them to complete the diaries and to answer any questions. A self-addressed, stamped envelope was enclosed with each diary; subjects were instructed to return the diaries by mail when they were completed.

Subsequently, some subjects participated in a second portion of the larger project, videotaped discussions of each subject with a friend. During this testing session, approximately one month later, subjects signed a supplementary consent form (see Appendix P), and completed a second series of questionnaires, including the friend attachment measures. Seventy-five of the subjects who completed the diary and first set of questionnaires also participated in this portion of the study, yielding friend attachment data for 71% of the present study's sample.

Diary Coding

The diaries were coded using a coding system designed for the present study. As outlined in the coding manual, the contents of each diary entry (i.e., a page represents interactions with one target (parent or peer) on one day) were first divided into thought units (i.e., a sentence or sentence fragment, typically containing a subject-verb-object combination, that could stand alone as a meaningful idea by itself). Thought units served as the unit of analysis to determine the quantifiable amount of self-disclosure to diary, self-disclosure to other, emotional expressiveness, sensitivity and awareness of other, and conflict in the diary entries. In addition to coding the number of thought units for each of these behaviors (breadth ratings), the extent or intensity (depth ratings) of each variable in each diary entry, and the intensity of positive and negative valence in the entries was also recorded (see Appendix Q for an example of the coding sheet employed). For coding purposes, each of the following categories were coded separately for each of the seven days and for parent and peer diary entries.

Self-Disclosure. Thought units indicating self-disclosure to the diary and self-disclosure to other (to parents or to peers) were identified. Self-disclosure included any information referring to the self. Both self-disclosure breadth (quantity) and depth (quality) were noted. The breadth (quantity) of self-disclosure (either to diary or to other) was the number of self-disclosing thought units in the diary entry. The depth (quality) of self-disclosure (i.e., the intimacy level of the information revealed) was rated on a 7-point scale ranging from absent (0), through low (1,2) or moderate (3,4) to high (5,6). Personal and private information was considered a higher level (greater depth) of self-disclosure

than was factual information, which was considered a lower level (lower depth) of disclosure. For example, "I went to school" was coded as low self-disclosure (i.e., general factual information about the self); "My boyfriend broke-up with me" was coded as high self-disclosure (i.e., thoughts, feelings, or events of a personal/private nature that reveal the writer's vulnerabilities).

Emotional Expressiveness. Emotional expressiveness was defined as labelling, describing, explaining, revealing, justifying, or amplifying emotions or feelings of the self in the diary. Both quantitative and qualitative aspects of emotional expressiveness were noted. The quantity of emotional expressiveness was the number of emotionally expressive thought units in the diary entry. The quality (i.e., the intensity and explicitness of the feelings and emotions revealed) was rated on a 7-point scale ranging from absent (0) to high (6). Little or general global reference to emotions and feelings (e.g., "I felt good") was considered low emotional expressiveness; detailed descriptions of intense and personal feelings and emotions (e.g., "I felt left out and excluded") was considered high emotional expressiveness.

Sensitivity and Knowing. Sensitivity and knowing was defined as an awareness of others' feelings and the degree to which others' feelings are mentioned, acknowledged and understood. Sensitivity and knowing breadth was the number of thought units in the diary entry devoted to defining, explaining, or describing others' feelings; sensitivity and knowing depth (the quality of knowledge of others' feelings) was rated on a 7-point scale, ranging from absent (0) to high (6).

Positive and Negative Valence. Given the possibility that both positive and

negative emotions and/or self-disclosures could be expressed simultaneously in the same diary entry, positivity and negativity were recorded as separate dimensions. The positive and negative valence of the entry (based on a modified version of Collins and Gould's (1994) coding scheme for valence) were each rated on a 7-point scale ranging from absent (0) to high (6).

Conflict. Conflict (quantity, intensity, and resolution) with parent(s) and conflict with peer(s) was noted. The quantity (breadth) of conflict was the number of thought units in an entry devoted to describing expression of conflict. The severity (depth) of the conflict was rated on a 7-point scale ranging from absent (0) to high (6) (e.g., "a disagreement" was coded as low conflict intensity, "a fight" was coded as high conflict intensity). Resolution of conflict was coded as one of three categories: Power Assertion, Negotiation/Compromise, or Disengagement (Laursen, 1993b).

Content Category. Ten mutually exclusive content categories were used to code the main issue, theme, or idea expressed in the diary entry (adapted from Smetana, Yau, Restrepo, & Braeges, 1991). The content of each diary entry was coded with the following categories: chores, education, social activity at home, social activity outside home, interpersonal relationships, finances, health and hygiene, regulating activities, regulating interpersonal relationships, and other.

One hundred percent of the diaries were coded by a primary coder; in order to establish interrater reliability, 20% of the diaries were additionally coded by two independent coders. Each of these coders coded approximately 10% of the diaries, and their ratings were compared to those of the primary coder. After calculating interrater

reliability, disagreements were discussed and resolved by consensus.

Results

Attachment

Subjects' attachment styles with each target were determined via the categorical and continuous measures of the RQ (Bartholomew & Horowitz, 1991). As noted earlier, mother and father attachment data were provided by 104 subjects (one subject missed the questionnaire phase) and peer attachment data were based on 75 subjects. The percent and number of subjects who classified themselves into each of the four categories for mother, father, and friend attachment are shown in Table 1. Sample means and standard deviations for the four continuous measures of mother, father, and friend attachment are shown in Table 2.

On the continuous attachment measure, corresponding mother and father ratings were significantly correlated with one another: for the secure ratings, $r = .37$, $p < .001$; for the dismissing ratings, $r = .27$, $p < .01$; for the preoccupied ratings, $r = .21$, $p < .05$; and for the fearful ratings, $r = .19$, $p < .05$. However, with one exception, the corresponding mother and friend attachment ratings were not significantly correlated: for the secure ratings, $r = .12$, ns; for the preoccupied ratings, $r = .04$, ns; and for the fearful ratings, $r = -.05$, ns. The only statistically significant association between corresponding mother and friend continuous attachment ratings emerged on subjects' dismissing attachment ratings, $r = .23$, $p < .05$. Thus, contrary to the prediction of a moderate but positive correlation between mother and peer attachment, there appeared to be little association between the two.

As attachment security to mother was of primary interest in the present study, all

Table 1

Number and Percentage of Subjects in each Category for Mother, Father, and Friend Attachment

<u>Target</u>	<u>N</u>	<u>n</u>	<u>%</u>
Mother	104		
secure		68	65.4
dismissing		25	24.0
preoccupied		3	2.9
fearful		8	7.7
Father	103		
secure		37	35.9
dismissing		41	39.8
preoccupied		9	8.7
fearful		16	15.5
Friend	74		
secure		59	79.7
dismissing		6	8.1
preoccupied		4	5.4
fearful		5	6.8

Table 2

Sample Means and Standard Deviations for Continuous Attachment Measures for
Mother, Father, and Friend Attachment

Target	<u>N</u>	<u>M</u>	<u>SD</u>
Mother	104		
secure		5.27	1.67
dismissing		3.56	1.94
preoccupied		2.26	1.50
fearful		1.89	1.37
Father	104		
secure		3.95	1.86
dismissing		4.13	1.93
preoccupied		2.49	1.60
fearful		2.76	1.91
Friend	75		
secure		5.56	1.33
dismissing		3.10	1.50
preoccupied		2.61	1.60
fearful		2.16	1.59

references to attachment classification refer to attachment to mother unless otherwise specified. Due to the small number of subjects who self-categorized themselves as insecure in their attachment styles to mother (in particular because of the low ns in the preoccupied and fearful groups), all analyses with categorical attachment measures compared the secure group with the three insecure groups combined.

Consistent with the continuous measures, a chi-square analysis, comparing categorical attachment security to mother (secure vs. dismissing, preoccupied and fearful) with attachment security to father revealed a significant relationship between subjects' categorical attachment classification with mother and with father, $\chi^2 (1, n=102) = 4.14, p < .05$. There was, however, no significant relationship between subjects' categorical attachment classification with mother and with friends ($\chi^2 (1, n=74) = .195, ns$).

A 2 X 2 between-subjects multivariate analysis of variance (MANOVA) was conducted to assess the concurrent validity of the continuous and categorical RQ measures and to investigate sex differences in attachment. The independent variables were sex and attachment classification (secure vs. insecure). Continuous ratings of the four attachment styles (secure, dismissing, preoccupied, fearful) served as the dependent variables. The source table and table of means and standard deviations for this analysis are presented in Tables 3 and 4, respectively. According to the Wilks' criterion, the combined continuous attachment ratings did not differ significantly by sex. There was, however, a significant main effect of categorical attachment classification, multivariate $F (4,97) = 45.38, p < .0001$, qualified by a significant sex by attachment classification interaction, $F (4,97) = 3.48, p < .01$. Univariate F-tests revealed significant interactions for

Table 3

Multivariate Analysis of Variance Summary for the Continuous Attachment Classifications

Source of Variance	Wilks' Lambda	Hypoth <u>df</u>	error <u>df</u>	Multivariate <u>F</u>
Sex	0.93502	4.00	97.00	1.68535
Attachment	0.34827	4.00	97.00	45.38016**
Sex by Attachment	0.87447	4.00	97.00	3.48099*

** $p < .0001$; * $p < .01$

Table 4

Sample Means and Standard Deviations for Multivariate Analysis of Variance of the Continuous Attachment Classification by Sex and Attachment Category

Attachment	<u>n</u>	Secure	Dismissing	Preoccupied	Fearful
Secure					
Females	53				
<u>M</u>		6.26	2.50	2.07	1.32
<u>SD</u>		0.78	1.43	1.38	0.72
Males	15				
<u>M</u>		6.06	2.93	2.40	1.73
<u>SD</u>		0.70	0.96	1.59	0.79
Insecure					
Females	22				
<u>M</u>		3.18	5.40	2.31	3.27
<u>SD</u>		1.25	1.46	1.61	1.90
Males	14				
<u>M</u>		4.00	5.35	2.78	2.07
<u>SD</u>		1.66	1.69	1.67	1.26

secure ratings, $F(1,100) = 4.69$, $p < .05$, and fearful ratings, $F(1,100) = 9.61$, $p < .01$. To further investigate the sex by security interaction effect, separate MANOVAs, for each of the two attachment classifications (secure, insecure), were performed on the secure and fearful continuous ratings of attachment. The independent variable in both analyses was sex. For subjects categorized as insecure ($n=36$), there was a nonsignificant trend for a sex main effect, $F(2,33) = 2.77$, $p = .07$. Examination of the univariate F-tests indicated that insecure girls ($M=3.27$) rated themselves as significantly higher on fearful attachment than did insecure boys ($M=2.07$), $F(1,34) = 4.31$, $p < .05$. For subjects categorized as secure ($n=68$), there was no difference between boys and girls on either secure or fearful continuous attachment ratings.

Univariate F-tests, examined to further investigate the impact of the main effect of attachment classification, revealed that three of the continuous attachment ratings were significantly affected by attachment classification: secure ratings, $F(1,100) = 120.70$, $p < .0001$; dismissing ratings, $F(1,100) = 69.06$, $p < .0001$; and fearful ratings, $F(1,100) = 19.36$, $p < .0001$. Compared to insecure subjects ($M=3.59$), subjects who self-categorized themselves as securely attached were significantly higher on the secure continuous rating ($M=6.16$). Subjects categorized as secure were significantly lower on the dismissing ($M=2.71$) and fearful ($M=1.52$) ratings than insecure subjects ($M_s=5.37$ and 2.67 , respectively). Although not statistically significant, subjects who self-categorized themselves as secure were also lower on the preoccupied continuous ratings ($M=2.23$) than were subjects who self-categorized themselves as insecure ($M=2.54$) $F(1,100) = .861$, ns.

The present study was interested in the influence of global group differences in attachment style on subjects' interpersonal behavior. Therefore, the categorical measure of attachment was selected for analysis. Further, the use of the categorical measure allowed for data analysis to be performed with MANOVA procedures, thereby reducing the risk of inflated alpha. Finally, the previously described findings demonstrate that the categorical measure of attachment is a concurrently valid means of investigating differences in attachment classification, and provide further justification for the use of the categorical attachment measure in the present study's subsequent analyses.

The Diary

Reliability. Interrater reliability (agreements / agreements + disagreements) for total number of thought units in subjects' parent and peer diary entries was high, 92.3% and 93.6%, respectively. Cohen's Kappa coefficients were calculated, separately for parent and peer entries, on all remaining categorical measures: on conflict resolution and content; and on the identification of thought units as reflecting self disclosure to other, emotional expressiveness, sensitivity and knowing, and conflict. Cohen's weighted Kappa coefficients were calculated, separately for parent and peer entries, on positive valence, negative valence, and on the depth ratings for self disclosure to other, self-disclosure to diary, emotional expressiveness, sensitivity and knowing, and conflict. Kappas ranged from .61 (conflict resolution-parent) to .93 (emotional expressiveness-parent) (see Table 5 for Kappa coefficients for each category). Since it takes chance agreement into consideration, the kappa coefficient is a stringent measure of agreement between raters. Because it is a conservative estimate of the percentage of agreement between two raters,

Table 5

Interrater Reliability for Diary Variables

Variable	Kappa	
	Parent Entries	Peer Entries
SDD-depth	.68	.71
SDO-depth	.66	.73
SDO-breadth	.87	.92
EE-depth	.71	.66
EE-breadth	.93	.93
SK-depth	.70	.73
SK-breadth	.89	.89
Positive V.	.86	.82
Negative V.	.92	.89
CON-depth	.68	.65
CON-breadth	.76	.82
CON-resolution	.61	.69
Content category	.80	.81

Note: SDD = self-disclosure to diary, SDO = self-disclosure to other, EE = emotional expressiveness, SK = sensitivity and knowing, CON = conflict.

kappas between .40 and .60 are fair, .60 to .75 are good, and kappas above .75 are considered extremely good (Fleiss, 1981; Streiner, 1995). Therefore, the interrater reliability coefficients of the diary variables were considered more than adequate for further analyses.

Data screening and reduction. Prior to analysis, all dependent variables were screened for accuracy of data entry and preliminary statistical procedures were employed to determine characteristics of the data and to test multivariate assumptions. All univariate outliers were brought within three standard deviations of the group means. Dependent variables that showed significant non-normality were subjected to transformations appropriate to their skewness (i.e., square root transformations or reflected and square root transformations).

Data were reduced by summing and averaging the dependent measures across the seven days, separately for parent and peer entries. Pearson product-moment correlations revealed that the depth and breadth ratings of self-disclosure to diary, emotional expressiveness, and sensitivity and knowing were highly correlated both within and across parent and peer diary entries (intercorrelations are presented in Tables 6 and 7). A principle components factor analysis revealed these variables all loaded on one factor which explained 70.1% total variance. Therefore, depth and breadth of self-disclosure to diary, emotional expressiveness, and sensitivity and knowing were standardized and averaged across parent and peer entries to create one composite variable, "responsive emotional self-disclosure" (ZSDEESK). Following this, there remained 15 dependent variables from the diary entries available for analysis: ZSDEESK, 2 measures of self-

Table 6

Intercorrelations between Depth and Breadth ratings for Self-Disclosure to diary (SDD), Emotional Expressiveness (EE), and Sensitivity and Knowing (SK)

Target of entries		r
Parent	SDD	.71*
	EE	.75*
	SK	.78*
Peer	SDD	.71*
	EE	.63*
	SK	.84*

*p < .0001

Table 7

Intercorrelations between Parent and Peer Entries for Self-Disclosure to diary (SDD),
Emotional Expressiveness (EE), and Sensitivity and Knowing (SK)

Rating	r
Breadth	
SDD	.86*
EE	.70*
SK	.78*
Depth	
SDD	.79*
EE	.70*
SK	.73*

*p <.0001

disclosure to other breadth (to parent, to peer), 2 measures of self-disclosure to other depth (to parent, to peer), 2 measures of positive valence (parent interactions, peer interactions), 2 measures of negative valence (parent interactions, peer interactions), 2 measures of conflict breadth (with parent, with peer), 2 measures of conflict depth (with parent, with peer), and 2 measures of conflict resolution (with parent, with peer).

Descriptive data. For each day they completed a diary entry, subjects recorded the amount of time they spent interacting with their parents and with their friends in the morning, afternoon, and evening. Results indicated that subjects spent significantly more time interacting with their friends ($M=54$ minutes in the morning, $M=90$ minutes in the afternoon, $M=72$ minutes in the evening) than with their parents ($M=23$ minutes in the morning, $M=38$ minutes in the afternoon, $M=62$ minutes in the evening), multivariate $F(3,69) = 23.47, p < .0001$. Subjects were also asked to indicate the location in which these interactions took place. The majority of adolescents' interactions with their parents occurred at home (M interactions at home = 12). In contrast, the majority of adolescents' interactions with their friends took place at school (M interactions at home = 7). Adolescents also commonly interacted with their friends on the telephone ($M=2$ interactions) and in public places (e.g., the mall) ($M=2$ interactions).

The parent focused diary entries were examined to determine the main target of the interaction; 47% of the entries focused on mother alone (M number of interactions = 3.00), 16% on father alone (M number of interactions = 1.02), 36% on both parents (M number of interactions = 2.31), and less than 1% on other (e.g., stepfather). Finally, the general content category (main theme or idea) was coded for each diary entry. As shown

in Table 8, results revealed that adolescents' parent-focused entries most often described social activities at home, followed by regulating activities, while their peer-focused entries most often described social activities outside home or interpersonal relationships.

Self-disclosure to Diary/Emotional Expressiveness. A 2 X 2 between subjects ANOVA was conducted to test Hypotheses 1 and 2, which predicted that subjects who were securely attached to their mothers would show greater depth and breadth of self-disclosure and emotional expressiveness in their diary entries than subjects who were insecurely attached. The independent variables were sex and attachment classification (secure vs. insecure). The dependent variable was the "responsive emotional self-disclosure" (ZSDEESK) composite variable that combined depth and breadth ratings of self-disclosure to diary, emotional expressiveness and sensitivity and knowing collapsed across parent and peer diary entries. Results showed that responsive emotional self-disclosure was not significantly affected by attachment classification, nor by the interaction between sex and attachment classification. There was, however, a significant main effect for sex, $F(1,99) = 9.75, p < .01$, with girls ($M=0.186$) scoring higher on responsive emotional self-disclosure than boys ($M=-0.381$).

A second 2 X 2 ANOVA was conducted in order to evaluate whether the secure and insecure groups differed on emotional expressiveness as measured by the Emotional Expressivity Scale (EES, Kring et al., 1994). Sex was also an independent variable. The EES was moderately correlated with the breadth rating of emotional expressiveness in the diaries (collapsed across parent and peer entries), $r = .24, p < .01$; but was not significantly associated with the depth rating in the diaries, $r = .06, ns$. Results indicated that the secure

Table 8

Percentage of Parent and Peer Diary Entries focused on each Content Category

Category	Percent of Entries	
	Parent	Peer
Chores	3.3	0
Education	6.4	11.4
Social Activities at home	39.6	6.5
Social Activities outside home	14.8	44.0
Interpersonal Relationships	9.8	21.7
Finances	3.3	0
Health and Hygiene	3.6	1.8
Regulating Activities	16.0	7.5
Regulating Interpersonal Relationships	2.1	6.0
Other	0.5	0

and insecure groups differed significantly on the EES; subjects who were securely attached to their mothers were higher in emotional expressiveness than were subjects who were insecurely attached ($F(1,100) = 10.92, p < .001$). Boys and girls also differed significantly in their emotional expressiveness, with girls scoring higher on the EES than boys ($F(1,100) = 3.87, p < .05$). Further, there was a significant sex by attachment classification interaction effect, $F(1,100) = 4.57, p < .05$ (see Table 9 for means and standard deviations). In order to isolate the interaction effect, Tukey post-hoc procedures were employed. While secure ($M=2.97$) and insecure ($M=2.79$) **boys** did not significantly differ in their emotional expressiveness ($F(1,27) = 1.20, ns$), securely attached **girls** ($M=3.61$) were significantly more expressive than were insecurely attached girls ($M=2.76$), $F(1,73) = 19.14, p < .00001$. Thus, Hypothesis 1 was not supported by these findings, as subjects with different attachment classifications did not significantly differ on diary measures of self-disclosure. Hypothesis 2 was partially supported, as girls who were classified as securely attached reported being more emotionally expressive on the EES than girls classified as insecurely attached. However, subjects with different attachment classifications did not significantly differ on diary measures of emotional expressiveness.

Self-disclosure to other. Hypothesis 3 predicted that subjects who were securely attached to their mothers would show greater depth and breadth of self-disclosure directed toward their parents, possibly generalizing to greater self-disclosure to friends, than would subjects who were insecurely attached. Self-disclosure breadth to parent and self-disclosure breadth to peer were significantly skewed and were therefore subjected to

Table 9

Sample Means and Standard Deviations for Emotional Expressivity scale (EES) for
Secure and Insecure Adolescents

Gender	<u>n</u>	<u>M</u>	<u>SD</u>
Females			
Secure	53	3.61	0.69
Insecure	22	2.76	0.90
Males			
Secure	15	2.97	0.38
Insecure	14	2.79	0.50

a square root transformation. For clarity, however, raw means are presented. Self-disclosure depth and breadth to parent were moderately correlated ($r = .30, p < .01$), as were self-disclosure depth and breadth to peer ($r = .34, p < .01$) (see Table 10).

A 2 X 2 X 2 between-within subjects MANOVA was conducted to examine group differences in breadth and depth of self-disclosure directed to other among secure and insecure subjects. Between- subjects independent variables were sex and attachment classification (secure vs. insecure). The within-subjects repeated measure was target (parent vs. peer). Means and standard deviations are presented in Table 11. (Since lack of detail in the diary entries often prevented coders from assigning a depth rating (i.e., intimacy level) for self-disclosure, data on self-disclosure depth was available for only 66 subjects. Therefore, total n in this analysis was 66.)

According to the Wilks' criterion, there was a significant effect for sex, multivariate $F(2,61) = 3.39, p < .05$. Univariate F-tests revealed that females demonstrated higher self-disclosure depth than did males, $F(1,62) = 4.82, p < .05$, and that there was a nonsignificant trend for females to demonstrate higher self-disclosure breadth than males ($F(1,62) = 3.78, p = .056$). A nonsignificant trend for attachment classification emerged on the combined dependent measure, $F(2,61) = 2.58, p = .08$, although it was not in the predicted direction. Univariate F-tests revealed insecurely attached subjects tended to demonstrate higher self-disclosure depth than securely attached subjects ($F(1,62) = 3.76, p = .057$). Further, although the multivariate target main effect, $F(2,61) = 2.18, p = .12$, did not reach statistical significance, there was a trend for higher self-disclosure depth directed to friends than to parents (Univariate $F(1,62) = 3.35, p = .07$). No two-way

Table 10

Intercorrelations among Self-Disclosure to other (SDO) Breadth and Depth ratings in Parent and Peer entries

Variable	SDO breadth parent	SDO breadth peer	SDO depth parent	SDO depth peer
SDO breadth parent	-	.58** (105)	.30* (80)	.05 (75)
SDO breadth peer		-	.07 (80)	.34* (75)
SDO depth parent			-	-.01 (66)
SDO depth peer				-

* $p < .01$, ** $p < .0001$

Table 11

Sample Means and Standard Deviations for Multivariate Analysis of Variance on Self-Disclosure to other (SDO)

Attachment	<u>n</u>	SDO depth parent	SDO depth peer	SDO breadth parent	SDO breadth peer
Secure					
Females	33				
<u>M</u>		2.26	2.92	1.35	1.58
<u>SD</u>		0.59	0.77	0.70	0.78
Males	8				
<u>M</u>		2.17	2.13	0.98	0.82
<u>SD</u>		0.42	0.38	0.44	0.40
Insecure					
Females	17				
<u>M</u>		2.55	2.92	1.55	1.55
<u>SD</u>		0.53	0.86	0.91	0.82
Males	8				
<u>M</u>		2.50	2.60	1.48	1.27
<u>SD</u>		0.64	0.87	0.52	0.50

or three-way interactions were statistically significant. Therefore, Hypothesis 3 was not supported. Contrary to the prediction, subjects classified as insecurely attached showed a trend toward higher self-disclosure depth directed to parents and peers than did subjects classified as securely attached.

Positive and Negative Valence. Hypothesis 4 predicted that subjects who were securely attached to their mothers would show more positive valence and less negative valence in their interactions with parents, possibly generalizing to the valence in subjects' peer interactions, than subjects who were insecurely attached. The mean negative valence in both parent and peer entries was significantly skewed and was therefore transformed; however, raw means are presented for clarity. Pearson product-moment correlations showed the positive valence in subjects' parent and peer interactions was moderately correlated ($r = .52, p < .0001$), as was the negative valence in parent and peer interactions ($r = .54, p < .0001$). Further, positive and negative valence in interactions were moderately negatively correlated ($r_s = -.24, p < .01, -.37, p < .0001$, for parent and peer entries, respectively).

A 2 X 2 X 2 between-within subjects MANOVA was conducted to examine group differences in positive and negative valence. The between subjects independent variables were sex and attachment classification (secure vs. insecure). The within subjects factor was target of diary entry (parent vs. peer). The source table is presented in Table 12. Using the Wilks' criterion, there was a significant interaction between attachment classification and target, multivariate $F(2,98) = 5.85, p < .01$. Closer examination of the univariate F ratios revealed a nonsignificant trend for positive valence, $F(1,99) = 3.50$,

Table 12

Multivariate Analysis of Variance Summary for Positive and Negative Valence

Source of Variance	Wilks' Lambda	Hypoth <u>df</u>	error <u>df</u>	Multivariate <u>F</u>
Sex	0.93742	2.00	98.00	3.27135*
Attachment	0.95305	2.00	98.00	2.41371
Target	0.86723	2.00	98.00	7.50157***
Sex by Attachment	0.99362	2.00	98.00	0.31451
Sex by Target	0.98563	2.00	98.00	0.71440
Attachment by Target	0.89322	2.00	98.00	5.85769**
Sex by Attachment by Target	0.98939	2.00	98.00	0.52530

* $p < .05$, ** $p < .01$, *** $p < .001$

$p = .06$; while the univariate F for negative valence was significant, $F(1,99) = 11.64$, $p < .001$. In addition, there was a nonsignificant trend for attachment classification to influence valence, multivariate $F(2,98) = 2.41$, $p = .09$, reflecting a nonsignificant univariate trend for secure subjects ($M = 1.88$) to be more affectively positive than insecure subjects ($M = 1.61$), $F(1,99) = 3.45$, $p = .06$. According to the Wilks' criterion, valence was significantly affected by target, multivariate $F(2,98) = 7.50$, $p < .001$. The univariate F ratios revealed subjects' interactions with peers ($M = 1.94$) were significantly higher in positive valence than were their interactions with parents ($M = 1.64$), $F(1,99) = 15.14$, $p < .0001$. Finally, there was a significant effect for sex, multivariate $F(2,98) = 3.27$, $p < .05$. Univariate F -tests revealed that females ($M = 1.87$) demonstrated significantly more positive valence in their diary entries than did males ($M = 1.57$), $F(1,99) = 3.92$, $p < .05$.

The attachment classification by target interaction effect for positive valence was further investigated by conducting two 2 X 2 ANOVAs, separately for each target, with attachment classification and sex as independent variables. The first ANOVA, performed with positive valence in parent interactions as the dependent variable, showed that subjects with secure attachments demonstrated significantly more positive valence ($M = 1.76$) in their parent interactions than did subjects with insecure attachments ($M = 1.34$), $F(1,99) = 7.46$, $p < .01$. Results of the second ANOVA revealed that secure ($M = 1.91$) and insecure ($M = 1.80$) subjects did not significantly differ in the positive valence of their interactions with peers $F(1,99) = .41$, ns.

Two 2 X 2 ANOVAS, separately for each target, were then performed in order to

isolate the attachment classification by target interaction on negative valence. The independent variables were attachment classification and sex. Results of the first ANOVA, with negative valence in parent interactions as the dependent variable, revealed that insecurely attached subjects demonstrated significantly more negative valence ($M=1.56$) in their interactions with parents than did securely attached subjects ($M=1.04$), $F(1,99) = 11.78, p < .001$. Secure and insecurely attached subjects did not significantly differ in the negative valence in their reported peer interactions ($F(1,99) = .02, ns$). Therefore, Hypothesis 4 was supported: subjects who were classified as securely attached demonstrated significantly more positive valence and significantly less negative valence in their reported interactions with parents. However, this finding did not generalize to adolescents' reported peer interactions.

As an exploratory analysis, a 2 X 2 X 2 between-within subjects MANOVA was conducted to evaluate whether group differences in attachment classification to **friends** affected the positive and negative valence in subjects' diary entries. The between-subjects independent variables were sex and attachment classification to friend (secure vs. insecure). The within-subjects factor was target of diary entry (parent vs. peer). The results of this analysis indicated that attachment security to friend did not significantly affect the positive or negative valence in subjects' parent nor peer diary entries.

Conflict. Hypothesis 5 predicted that subjects who were securely attached would report less frequent conflict, less intense conflict, and more positive conflict resolution (i.e., negotiation/compromise) in their interactions with parents than would insecurely attached subjects; and investigated whether this trend would generalize to interactions

with peers. The intercorrelations between conflict depth and breadth in parent and peer interactions are presented in Table 13. It should be noted that lack of detail in the diary entries often prevented coders from assigning a depth rating (i.e., intensity level) to conflictual interactions. In fact, cell sizes were too small to analyze conflict depth in parent and peer interactions as dependent variables ($n=14$ in entire analysis).

Similarly, given that conflict resolution was infrequently coded in the diaries, resolution variables were not analyzed via MANOVA procedures, as doing so would result in cell sizes that were too small to be meaningfully interpreted. The influence of attachment classification on conflict resolution was assessed via chi-square analyses. Separate chi-square analyses for parent and peer were performed on the categories of conflict resolution (power assertion, negotiation/compromise, and disengagement). Secure and insecurely attached subjects differed significantly in their use of the conflict resolution strategies: secure subjects were significantly more likely to use negotiation/compromise with parents ($\chi^2 (1, n=104) = 4.20, p < .05$) than were insecure subjects, and insecure subjects were significantly more likely to use disengagement with parents ($\chi^2 (1, n=104) = 6.15, p < .01$) than were secure subjects.

Given that conflict depth and conflict resolution occurred so infrequently, only conflict breadth was available for further analysis. Conflict breadth to parent and to peer were significantly skewed and therefore transformed with square root transformations; raw means are presented for clarity. A 2 X 2 X 2 between-within subjects ANOVA was performed on the conflict breadth in the diary entries. The between-subjects independent variables were sex and attachment classification (secure vs. dismissing, preoccupied, and

Table 13

Intercorrelations among Conflict Breadth and Depth ratings in Parent and Peer entries

Variable	conflict breadth parent	conflict breadth peer	conflict depth parent	conflict depth peer
conflict breadth parent	-	.39** (105)	.49** (46)	.38 (18)
conflict breadth peer		-	-.04 (46)	.26 (18)
conflict depth parent			-	.69* (14)
conflict depth peer				-

* $p < .01$, ** $p < .0001$

fearful). The within-subjects independent variable was target of conflict (parent vs. peer). Results indicated that conflict breadth was significantly affected by sex, $F(1,100) = 4.39$, $p < .05$, with girls reporting more conflict in their diary entries ($M = 0.52$) than boys ($M = 0.33$). Conflict breadth was also significantly affected by target, $F(1,100) = 25.98$, $p < .0001$, with subjects reporting more conflict with parents ($M = .624$) than with peers ($M = .314$). No two-way or three-way interaction effects were statistically significant. Therefore, Hypothesis 5 was only partially supported. As hypothesized, subjects who were classified as securely attached reported more positive conflict resolution than subjects classified as insecurely attached; however, contrary to the prediction, conflict breadth was not significantly affected by attachment classification.

As an exploratory analysis, a 2 X 2 X 2 between-within subjects ANOVA was conducted to evaluate whether group differences in attachment classification to **friends** affected the conflict breadth in subjects' diary entries. The between-subjects independent variables were sex and attachment classification to friend (secure vs. insecure). The within-subjects factor was target of diary entry (parent vs. peer). The results of this analysis indicated that attachment security to friend did not significantly affect the conflict breadth in subjects' parent or peer diary entries.

Interpersonal style. Hypothesis 7 predicted that subjects with secure attachments to both parents and peers would show the healthiest interpersonal style (high self-disclosure, high emotional expressiveness, high positive valence, positive conflict resolution), and that subjects with insecure attachments to both parents and peers would show the most interpersonal difficulties (low self-disclosure, low emotional

expressiveness, high negative valence, negative conflict resolution). The insecure attachment to friend category was not sufficiently represented ($n=15$) to employ attachment to friend as a between subjects variable in addition to other between subjects variables (i.e., attachment to mother) in the same MANOVA. Therefore, to test hypothesis 7, the independent variables were attachment classification (secure mom-secure friend vs. insecure mom-insecure friend, insecure mom-secure friend, and secure mom-insecure friend) and sex. A 2 X 2 between-subjects MANOVA was conducted on the following dependent variables: self-disclosure to diary (collapsed across depth and breadth and parent and peer entries), emotional expressiveness (collapsed across depth and breadth and parent and peer entries), positive valence (collapsed across parent and peer entries), negative valence (collapsed across parent and peer entries), and conflict breadth (collapsed across parent and peer entries). Results of this analysis revealed the combined dependent measure was not significantly affected by sex, attachment classification, nor the sex by attachment classification interaction.

Exploratory Analyses

Attachment to father. As previously reported, 16% of subjects' parent diary entries involved father as the primary target of the reported interactions, while 36% of the parent entries were focused on both father and mother. This finding indicates that the conflict and valence reported in these entries involved interactions with subjects' fathers. Therefore, a question of interest that emerged was whether attachment to father affected the valence and conflict in subjects' parent diary entries. Two analyses were performed in order to investigate this possible relationship, as well as to investigate whether attachment

to father was associated with the valence and conflict in subjects' reported peer interactions. Since the results for sex and target effects are synonymous with analyses conducted for attachment to mother, they are not mentioned here.

A 2 X 2 X 2 between-within subjects MANOVA was conducted to examine group differences in positive and negative valence. The between subjects independent variables were sex and attachment to father classification (secure vs. insecure). The within subjects factor was target of diary entry (parent vs. peer). Using the Wilks' criterion, attachment classification significantly influenced valence, multivariate $F(2,97) = 4.27$ $p < .01$, with a significant univariate effect for secure subjects ($M=1.94$) to be more affectively positive than insecure subjects ($M=1.68$), $F(1,98) = 3.95$ $p < .05$, and a significant univariate effect for insecure subjects ($M=1.38$) to be more affectively negative than secure subjects ($M=1.04$), $F(1,98) = 6.06$, $p < .01$. The combined dependent variable was not significantly affected by any two way interactions, nor by the three-way interaction. Thus, unlike the findings concerning the influence of attachment to mother on positive and negative valence, the target by attachment (to father) interaction was not statistically significant.

A 2 X 2 X 2 between-within subjects ANOVA was performed on the conflict breadth in the diary entries. The between-subjects independent variables were sex and attachment to father classification (secure vs. insecure). The within-subjects independent variable was target of conflict (parent vs. peer). Results indicated that attachment security to father did not significantly affect the conflict in subjects' diary entries.

Discussion

The purpose of this study was to investigate the implications of adolescents' attachment security on interpersonal behaviors that were believed to be of importance in social competence and social interaction in adolescence. A diary method was employed; the daily entries consisted of parent and peer interactions, from which the interpersonal behaviors of interest (i.e., self-disclosure, emotional expressiveness, sensitivity and knowing and conflict) as well as the overall affective tone of the interactions, were measured. A self-report measure of emotional expressiveness (EES) was also administered as a validity check on the construct validity of the diary measure of the same behavior.

Although the predominant focus of Bowlby's theory of attachment is on infant-caregiver bonds, Bowlby and other adult attachment researchers have pointed out that the attachment system in fact plays a vital role throughout the life cycle (Feeney & Noller, 1996). In support of this postulation, results of the present study revealed that the maternal attachment relationship continues to have implications for some facets of adolescent interpersonal behavior. Overall, the results suggest that individual differences in attachment style were reflected in differences in adolescents' self-reported emotional expressiveness, in the affective tone of their interactions with parents, and in their conflict resolution strategies (with the latter two assessed via the diary).

Attachment Style

Frequencies of subjects' self-categorization into the four attachment classifications to mother were similar to those reported in previous studies (e.g., Feeney & Noller, 1990;

Hazan & Shaver, 1987). However, the categorical attachment measure to friend showed limited variability in subjects' self-reported attachment classifications. The large majority of adolescents (approximately 80%) rated their friendships as secure attachment relationships. The limited individual variability obtained on the categorical measure may indicate that the RQ is not a valid measure of adolescents' attachment to friends. The results obtained may also be reflective of a self-report bias (i.e., adolescents may have considered only their positive friendships when responding to the questionnaire), or even be somewhat anomalous and specific to the adolescents sampled. However, aside from measurement issues, this finding may be a function of the fact that friendships are voluntary relationships that can be terminated if not satisfactory (Kerns & Stevens, 1996). It is possible that, unlike parental relationships, the flexible nature of friendships may be such that adolescents choose to discontinue their involvement in peer relationships when they do not feel secure in them.

The association between attachment security to mother and to father, and conversely, the lack of association between attachment security to mother and to friend found in the present study is consistent with the suggestion that working models of attachment form a hierarchical structure (Collins & Read, 1994). According to these authors, at the top of the hierarchy is a generalized model of self and others in relation to attachment; at the intermediate level, models for classes of relationships (e.g., family members, peers); at the lowest level, models for specific relationships (e.g., mother, father, close friend). Thus, compared to individuals' working models of attachment for mother and friend, their models for mother and father are more closely related because

they fall under the same class of relationship in the intermediate level of the hierarchy. In addition, empirical evidence supports the view that individuals can have separate and independent working models of attachment (Collins & Read, 1994); that is, different models may be developed from and for different relationships (Feeney & Noller, 1996). For example, Wehner (1992) found that adolescents had different styles of relationships with their mothers, fathers, and friends. Consistent with the present study's findings, Bartholomew and Horowitz (1991) found some overlap but considerable independence between subjects' peer and parent attachment styles.

Self-disclosure to Diary/Emotional Expressiveness

The high correlations among the diary variables of self-disclosure to diary, emotional expressiveness, and sensitivity and knowing, along with their high loadings on the same factor, indicated that each of these variables were essentially measures of the same construct. These variables in combination theoretically appear to reflect both a) subjects' own emotional self-disclosure and b) their responsiveness to the emotional self-disclosure of others. Conceptualizations of self-disclosure and emotional expressiveness have been merged to form one construct in past research. Emotional self-disclosure has been defined as "any intentional and voluntary verbal utterance which conveys information about the emotional state of the individual" (Papini et al., 1990, p.960). This definition may be seen as a combination of the definitions employed to measure self-disclosure to diary and emotional expressiveness in the present study. Further, self-disclosure and responsiveness to others' self-disclosure may be viewed as two aspects of the same construct, "responsive self-disclosure" (Mikulincer & Nachshon, 1991).

Broadly, responsive self-disclosure is similar to the addition of sensitivity and knowing to the definition of self-disclosure to diary in the present study. Thus, the high correspondence and subsequent merging of these variables into a composite variable, "responsive emotional self-disclosure", appears to be not only empirically, but theoretically justified as well.

Contrary to the hypothesis, attachment groups did not differ in responsive emotional self-disclosure as measured by the diary. The lack of support for this prediction is inconsistent with past research that has found a relationship between attachment style and patterns of self-disclosure. Previous findings have typically demonstrated that subjects with secure attachment styles are more open and report higher self-disclose and comfort with self-disclosure compared to individuals with insecure attachment styles (Collins & Read, 1990; Pistole, 1993). However, individual differences in attachment style have not always been found to relate to differences in self-disclosure; for example, Feeney and Noller (1991) found no difference in openness (spontaneous reference to expression of thoughts and feelings) among subjects in different attachment categories. Some authors argue (e.g., Weiss, 1982) that while the cognitive-affective component of attachment remains stable during adolescence, as the individual matures, it is less frequently expressed in behavioral terms (Paterson et al., 1994). It is therefore possible that although secure adolescents feel closer to parents than do insecure adolescents, they do not demonstrate this through their emotional self-disclosing behavior.

Still, it is possible that attachment group differences in emotional self-disclosure were present but confounded in the present study because the small cell sizes of the

preoccupied, fearful and dismissing categories necessitated collapsing these groups into an insecure attachment category. Previous research has shown, in fact, that insecure attachment groups differ from one another in patterns of self-disclosure. Consistent with their need for distance in interpersonal relationships, avoidant subjects are low self-disclosers; in contrast, anxious/ambivalent subjects, perhaps as a function of their intense need for closeness, have often been found to be inappropriately high self-disclosers (Mikulincer & Nachshon, 1991; Pistole, 1993). Combining these groups in the present study might have resulted in a level of self-disclosure that was essentially equivalent to that demonstrated by secure subjects. Methodological differences between the present study and past studies is another possible explanation for the discrepancy between this study's nonfinding and previous findings of self-disclosure differences among attachment groups. Specifically, previous studies have typically employed self-report questionnaires to assess self-disclosure, whereas the current study employed a diary method in which independent raters subjectively assessed subjects' emotional self-disclosure.

While attachment groups did not differ in their emotional expressiveness as measured by the diary, they did differ in expressiveness in the anticipated direction on the EES. The EES showed a moderate positive correlation with the breadth (quantity) measure of diary emotional expressiveness, but was not associated with the depth measure in the diary. The correlations provide some validity evidence for the measurement of the expressivity variable in the diary. However, they also indicate that the diary measure and the EES are, at least to some extent, measuring different aspects of individual emotional expressiveness. This may explain why the attachment effect did not

emerge on both measures of emotional expressiveness.

The finding that securely attached subjects were more emotionally expressive than insecurely attached subjects (on the EES) is consistent with the well-documented association between variations in emotional expression/regulation and individual differences in attachment style (Collins, 1996; Collins & Read, 1994). For example, Collins and Read (1990) found that expressiveness was one behavioral correlate among subjects who showed comfort with closeness and the ability to depend on others (i.e., those with a secure attachment style). Further, Bell et. al. (1985) found that adolescents who reported greater closeness to their family were also higher in expressiveness. In general, persons' attachment beliefs and expectations hold implications for their relational behaviors (Collins & Read, 1990). Specifically, individuals with secure working models of self and others have positive self-evaluations (i.e., self-esteem) and greater confidence in the responsiveness of others, which likely leads to increased openness about expressing their feelings and emotions in relationships.

The gender difference found in the present study, with girls demonstrating higher "responsive emotional self-disclosure" than boys, is not surprising and is consistent with past research on self-disclosure (e.g., Papini et al., 1990) and emotional expressiveness (e.g., Blier & Blier-Wilson, 1989). Further, a recent meta-analysis of sex differences in self-disclosure found most studies document that females disclose more than males (Dindia & Allen, 1992). Gender differences in these interpersonal behaviors are often attributed to sex-role stereotypes; in that while females are likely socialized to express emotion, revealing personal feelings is inconsistent with the masculine sex-role (Collins

& Miller, 1994; Papini et al., 1990). A recent study on adolescent diary-keeping found results that were consistent with gender differences in verbal expressivity: compared to males, females were also more likely to write about emotions and feelings in their diaries (Burt, 1994).

Consistent with previous research and the gender difference that emerged in the diary, girls described themselves as more emotionally expressive on the EES than did boys. The interaction between sex and attachment security, however, indicated that while securely attached girls were found to be higher in emotional expressiveness than insecurely attached girls, boys did not differ in their expressivity as a function of their attachment classification. Perhaps boys are so highly socialized to inhibit the expression of emotion that the sex-role stereotype circumvents the influence of attachment security.

Self-disclosure to other

Although not statistically significant, contrary to the prediction, insecurely attached subjects showed a tendency to demonstrate higher self-disclosure depth directed to other than did securely attached subjects. This finding is in opposition with previous research that suggests positive feelings toward parents and perceptions of parents as nurturant are associated with high self-disclosure in adolescence (e.g., Papini et al, 1990). For example, Snoek and Rothblum (1979) found that high parental affection was associated with high self-disclosure among adolescents, not only directed toward parents, but to friends and strangers as well. It is possible that the insecurely attached subjects in the present study showed a trend for higher self-disclosure depth to other as a function of the preoccupied and/ or fearful subjects (corresponds to anxious/ambivalent) in the

insecure group. Previous research has found preoccupied subjects engage in inappropriately high self-disclosure (Bartholomew & Horowitz, 1991) reflective of their need to merge with others, thereby reducing their fear of being unloved (Mikulincer & Nachshon, 1991). Alternatively, it is possible that the insecurely attached subjects used the diaries as an outlet for what they wished to disclose to their parents and friends, rather than objectively reporting what they in fact did disclose to others. This is, of course, merely speculative; to a certain extent the diary methodology suffers from the same self-report limitations as questionnaire methods (i.e., conclusions are based on subjects' perceptions of what they disclosed or would like to disclose).

In addition to being higher in general emotional self-disclosure in the diary entries, results also showed that girls demonstrated higher self-disclosure directed to a target (parent or peer) than did boys. This result confirms previous research findings that compared to boys, girls self-disclose more to both parents and friends (e.g., Papini et al., 1990). Dindia and Allen (1992) investigated "relationship to target" as a possible moderator variable of sex differences in self-disclosure. Consistent with the present study's findings, they found that although females also disclosed more than males to strangers, sex differences in self-disclosure were strongest in ongoing relationships, with females reporting significantly higher self-disclosure to parents and friends than males. The significant univariate effect demonstrating that girls were higher in self-disclosure depth than boys is also consistent with past research. It has been suggested that while males and females show similar self-disclosure concerning non-intimate topics, males disclose less than women concerning personal or intimate issues (Morgan, 1976).

The present study found a nonsignificant trend for adolescents to show higher self-disclosure directed toward their friends than their parents. Some authors have reported that self-disclosure to friends increases during adolescence, such that adolescents demonstrate higher disclosure to friends than parents (e.g., Papini et al., 1990). This finding is often proposed as evidence for the view that a transition occurs during adolescence in which parents are replaced by peers as sources of intimacy (Buhrmester & Furman, 1987). Although age-related changes in self-disclosure could not be assessed in this study, the current findings seem closer to those indicating that increased disclosure to peers is not paralleled by an equally dramatic decrease in self-disclosure to parents (Buhrmester & Prager, 1995). The similarity in levels of self-disclosure directed to both parents and peers seems consistent with the view that while intimacy with peers increases in adolescence, intimacy with parents nonetheless remains constant (e.g., Hunter & Youniss, 1982).

Positive and Negative Valence

The present study's findings revealed a significant interaction effect between subjects' attachment security and the target (parent vs. peer) of their reported interaction in the diary. Specifically, as predicted, the results showed that securely attached subjects reported more affectively positive interactions with their parents than did insecurely attached subjects. Further, insecurely attached subjects reported more affectively negative interactions with their parents than did securely attached subjects. Since both positive and negative affective components are central to the attachment construct according to both Bowlby's and Ainsworth's conceptualizations (Waters et al., 1979), it is not surprising

that individual differences in attachment security influenced both positive and negative valence in the diary entries. The difference between the secure and insecure groups in the valence of their reported peer interactions was not statistically significant (although the positive valence in subjects' reported interactions with peers showed the same pattern as those with parents). These findings imply that maternal attachment security in adolescence has a more salient effect on interactions with parents than with peers.

Exploratory analyses revealed, however, a main effect of attachment security to father on both positive and negative valence in subjects' diary entries. That is, unlike the influence of attachment security to mother on valence, which was qualified by a target by attachment interaction, attachment security to father influenced the affective tone in reported interactions with both parent and peer targets. While these findings were consistent with the pattern shown by maternal attachment classification (i.e., secure, more positive valence; insecure, more negative valence), they imply that attachment security to father may have more pervasive effects on adolescents' interpersonal interactions. This finding is consistent with past research with young children, which has shown father-child attachment relates to children's peer relationships more consistently than mother-child attachment (e.g., Kerns & Barth, 1995). It is also supportive of the suggestion that it is important to investigate adolescents' attachments to specific attachment figures (Kerns & Stevens, 1996).

Working models of attachment are assumed to directly contribute to individuals' relationship experiences by shaping their cognitive, emotional, and behavioral response patterns (Collins & Read, 1994). Further, in empirical studies, "attachment groups have

been found to differ in perceptions, expectations and functioning in close relationships" (Mikulincer, 1995, p. 1203). It seems likely that individual differences in attachment classification, leading to differences in all three of these areas, impacted the valence findings in the present study. For example, according to Baldwin, Keelan, Fehr, Enns, and Koh-Rangarajoo, (1996), "attachment-related cognitive structures should lead people to be attentive to certain forms of interaction, to recall certain forms of interaction particularly well, and so on" (p. 95). This postulation may explain the present study's finding, in that subjects with secure attachment styles (i.e., positive models of self and other) may have been more attentive to and therefore reported more affectively positive interactions with parents. Similarly, subjects with insecure attachment styles (i.e., negative models of self and/or other) may have been more attuned to and more likely to recall affectively negative interactions with parents. It would further appear that subjects with secure attachments to father would also be more attuned to affectively positive interactions with peers (in addition to parents); while those with insecure attachments to father would be more attentive to negative interactions with peers (in addition to parents). This explanation seems especially likely given that "individuals are more likely to notice information that can be easily assimilated into their existing knowledge about self and others" (Collins & Read, 1994, p. 71).

Adolescents' reported interactions may have differed in affective tone as a function of the expectations and/or perceptions of relational events that vary according to secure and insecure working models. With or without such influences, however, it is also possible that the interactions adolescents experienced were objectively different in

affective quality. Attachment theory postulates that individuals with different attachment styles develop relationships that systematically differ in their emotional tone (Simpson, 1990). The present study's results seem to support this, and are consistent with Simpson's (1990) findings that subjects who were higher in secure attachment reported experiencing more positive and less negative emotion in their relationships; while subjects who were higher in avoidant or anxious attachment reported experiencing less positive and more negative emotions in their relationships.

Given that peer relationships become increasingly salient in adolescence, adolescents' interpersonal behaviors may be affected by not only parent relationships, but by peer relationships as well (Paterson et al., 1995). Further, some authors (e.g., Hazan & Zeifman, 1994) argue that between childhood and adolescence, some components of attachment shift from parents to peers. Exploratory analyses were therefore conducted to investigate the influence of peer attachment classification on the positive and negative valence in adolescents' interactions with parents and peers. Results revealed, however, that subjects with secure and insecure attachments to friends did not differ on these indices. The limited variability in subjects self-categorization of attachment to friend may have influenced this result. Or, perhaps the friends that adolescents reported interacting with in their diary entries and the friends they had in mind when completing the attachment questionnaire were not the same individuals. This nonsignificant finding may, however, be seen as consistent with past research demonstrating that quality of attachment to parents is a stronger predictor of adolescent adjustment than is peer attachment (e.g., Armsden & Greenberg, 1987). And, as Ainsworth (1989) suggests,

despite the developmental changes in the nature of attachment during adolescence, parents remain influential agents in adolescent well-being.

Results of the present study also revealed a significant multivariate sex effect on the overall valence of the interactions reported in adolescents' diary entries; significantly contributing to this effect was that the tone of girls' entries were more affectively positive than boys' entries. It is likely that the tendency for girls to be high in emotional expressiveness contributed to this finding. That is, overall, girls described or revealed more intense feelings and emotions in a clear and detailed manner in the diaries than did boys. When such feelings or emotions were positive, the resulting valence score would have therefore been higher for girls. Results of a recent study may provide further explanation for the gender difference in the affective quality of the diary entries. Burt (1994) investigated adolescents' motivation for keeping diaries. Results showed that females most often kept diaries as an avenue for expressing their thoughts, feelings, and emotions, but males most often kept a diary as an aid to recall past and future events. Although diary-keeping in the present study was experimentally imposed, it is possible the adolescents sampled also had different motivations for what they wrote in their diaries. If the present study's sample is similar to subjects in Burt's (1994) study, it is not surprising that the affective quality of the diary entries were found to differ according to gender.

The present study also found that adolescents' reported interactions with peers were significantly more positive in affective tone than were their interactions with parents. This finding is consistent with Steinberg's (1990) suggestion that diminished

levels of positive interaction (e.g., fewer shared activities, less frequently expressed affection) between teenagers and parents may occur during the early adolescent period. Adolescents' social interaction with close peers has been said to substantially differ from that with others (Laursen, 1993a), and the higher level of positive affect adolescents report with peers than with parents is one example of this difference (Larson & Richards, 1991).

Conflict

Some support was found for the prediction that group differences in attachment classification influence the use of conflict resolution strategies in adolescents' relationships. These findings, however, should be interpreted cautiously, due to the limited number of conflict resolution occurrences that were found in the diaries. Results showed that subjects with secure attachments utilized the "negotiation/compromise" resolution strategy in their conflicts with parents more often than did subjects who were insecurely attached. Conversely, compared to subjects who were securely attached, insecurely attached subjects more often utilized "disengagement" as a resolution strategy in their conflicts with parents. These results, consistent with previous research, extend findings demonstrating that attachment groups differ in their methods of dealing with conflict in dating relationships; specifically, securely attached individuals use more constructive strategies to deal with conflict (Feeney & Noller, 1996).

Open communication and the ability to express differences in personal opinions are needed in negotiation/compromising strategies. It is likely that among secure subjects, a supportive family context facilitates these traits (Papini et al., 1990), thereby increasing

the likelihood that such conflict resolution strategies are employed. The more frequent use of disengagement as a means of dealing with conflict among insecure subjects appears consistent with dismissing individuals' interactional goal of maintaining distance or withdrawing from others (Mikulincer & Nachshon, 1991). In sum, these findings are consistent with the suggestion that attachment theory serves as a means of understanding individual differences in dealing with conflict (Feeney & Noller, 1996).

Contrary to the hypothesis, secure and insecure attachment groups did not differ in the frequency of conflict they reported in their interactions with parents or with peers. Exploratory analyses further revealed that group differences in attachment security to father did not result in differences in reported conflict. According to Steinberg (1990), the disagreements and other forms of minor conflict which typify the parent-child relationship in adolescence typically "do not diminish the emotional attachment between adolescents and their parents" (p.269). Perhaps the reverse is true as well. That is, it is possible that the emotional attachment also does not diminish the natural or typical conflict occurrences that occur between adolescents and their parents. Since disagreements are an inevitable aspect of interaction in social relationships (Laursen, 1993a), perhaps attachment security influences the quality of negotiation surrounding, but not the quantity of, such minor conflicts (Steinberg, 1990). Exploratory analyses also revealed that group differences in peer attachment security did not affect reported conflict frequency in the diaries, perhaps for the same reasons peer attachment classification did not produce significant group differences in valence.

Subjects reported more conflictual interactions with their parents than their peers

in the diaries. This is consistent with past research which has found that adolescents report more conflict occurrences and disagreements with parents compared to friends (e.g., Furman & Buhrmester, 1992; Lempers and Clark-Lempers, 1992). Differences in conflict frequency with parents and peers may be attributable to adolescents' recognition that their peer relationships (which are open-field relationships) are more vulnerable to dangers posed by conflict than are their relationships with their parents (which are closed-field relationships) (Laursen, 1993a). This realization may lead adolescents to minimize conflict frequency with peers but fail to do so with parents, thereby resulting in more frequent conflict and disagreements with their parents (Laursen, 1993a). Finally, results indicating that girls reported more conflict in their diaries than boys are consistent with previous findings concerning the amount of conflict in adolescent relationships (e.g., Laursen, 1993a).

Interpersonal Style

The hypothesis that subjects with secure attachments to both mother and friends would show the healthiest interpersonal style, while those subjects with insecure attachments to both mother and friends would show the most interpersonal difficulties, could not be tested as planned due to small cell sizes. The analysis that was conducted, however, comparing subjects securely attached to both mother and friends to all combinations of subjects with insecure attachments (to mother and/or to friends), did not appear to support this hypothesis. Group differences in maternal attachment security on the dependent measures used to test this hypothesis were assessed in previous analyses, and, with the exception of positive and negative valence, were not significant. Given

these results, and given that the quality of attachment to parents has been found to be more strongly associated with adolescent psychological well-being than quality of attachment to peers (Greenberg et al., 1983; Nada Raja et al., 1992), this nonsignificant result is perhaps not surprising. However, this analysis was undertaken as it was expected that parent and peer attachment might have additive and/or cumulative effects on adolescents' interpersonal behavior. The lack of support for this hypothesis implies that this may not be the case. It should, however, also be noted that the small number of subjects who self-categorized themselves as insecurely attached to friends may have prevented an adequate test of this hypothesis.

Limitations

Given the correlational nature of the present study, causal generalizations must be made tentatively, if at all. Although studies of infant and child development are supportive of the belief that healthy adjustment causally flows from secure attachment, the converse may also be true, in that "well-adjusted adolescents feel better about their relationships with their parents and therefore report more secure attachments" (Kobak & Sceery, 1988, p. 535). In terms of the present study, high emotional expressivity, and the experience of more affectively positive interactions with parents, may have contributed to adolescents' reports of secure attachment relationships.

A second limitation is that the present study employed a sample consisting of primarily white, middle class adolescents in grades 9 and 10. Therefore, these results may not generalize to other population samples. Subjects of different age groups and backgrounds should be studied to test the generalizability of these findings.

Finally, two possible methodological limitations should be considered. First, the present study employed a categorical measure to assess the influence of group differences in attachment security on the variables of interest. Some authors have proposed, however, that attachment styles are not mutually exclusive, and therefore continuous attachment measures may be most sensitive to individual differences (Feeney et al., 1994). The concurrent validity of the categorical measure with the continuous measure was demonstrated in the present study. Still, it is possible that had attachment been analyzed with the continuous measure, more differences on the interpersonal behaviors of interest would have emerged.

It has been suggested that using alternative methods to study the correlates of attachment will enhance the existing knowledge in the area (Kerns & Stevens, 1996). However, the use of newly-developed methods for measuring such correlates requires extensive research on their psychometric properties before firm conclusions can be drawn. The interpersonal correlates of attachment investigated were assessed with a coding system designed for the present study. Preliminary psychometric data was obtained to support its use; interrater reliability was established via Kappa coefficients and was high, and convergent validity was demonstrated via a moderate correlation with a self-report measure of emotional expressiveness. However, further research should be conducted (e.g., validation with other self-report measures of relationship indices or behaviors, replication on retest or with other samples) in order to obtain additional evidence concerning the diary's reliability and validity as a measure of attachment correlates.

Conclusions

A robust finding in the attachment literature is that the nature and quality of individuals' close relationships differ as a function of their attachment styles (Collins & Read, 1994). The present study's results provide further evidence in support of these findings. Subjects with secure attachment styles reported higher emotional expressivity; they were also more affectively positive and more frequently used positive conflict resolution strategies in their interactions with parents. Individual differences in each of these areas are likely to translate into qualitative differences in close relationships.

Ainsworth (1989) postulated that developmental changes in the nature of adolescents' attachment relationships may occur during the teenage years. While this may be true, Bowlby suggests that at any age, confidence in the accessibility and responsiveness of a trusted other leads to greater social and emotional adjustment (Paterson et al., 1995). Although the influence of maternal attachment security on the interpersonal behaviors assessed in the diary was somewhat limited in the present study, the findings nonetheless suggest that attachment security continues to hold implications for adolescents.

References

- Ainsworth, M. D. S. (1989). Attachments beyond infancy. American Psychologist, 44, 709-716.
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. Journal of Youth and Adolescence, 16, 427-454.
- Baldwin, M. W., Keelan, J. P. R., Fehr, B., Enns, V., & Koh-Rangarajoo, E. (1996). Social-cognitive conceptualization of attachment working models: availability and accessibility effects. Journal of Personality and Social Psychology, 71, 94-109.
- Batgos, J. & Leadbeater, B. J. (1994). Parental attachment, peer relations, and dysphoria in adolescence. In M. B. Sperling & W. H. Berman (Eds.), Attachment in adults: Clinical and developmental perspectives (pp. 155-178). New York: The Guilford Press.
- 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.
- Bell, N. J., Avery, A. W., Jenkins, D., Feld., J., & Schoenrock, C. J. (1985). Family relationships and social competence during late adolescence. Journal of Youth and Adolescence, 14, 109-119.
- Berman, W. H., & Sperling, M. B. (1994). The structure and function of adult

attachment. In M. B. Sperling & W. H. Berman (Eds.), Attachment in adults: Clinical and developmental perspectives (pp. 3-28). New York: The Guilford Press.

Blier, M. J., & Blier-Wilson, L. A. (1989). Gender differences in self-rated emotional expressiveness. Sex Roles, 21, 287-295.

Bowlby, J. (1973). Attachment and loss: Vol 2. Separation. New York: Basic Books.

Bowlby, J. (1977). The making and breaking of affectional bonds. British Journal of Psychiatry, 130, 201-210.

Bowlby, J. (1982). Attachment and loss: Vol 1. Attachment (2nd ed.). New York: Basic Books.

Buhrmester, D. (1996). Need fulfillment, interpersonal competence, and the developmental contexts of early adolescent friendship. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), The company they keep: Friendship in childhood and adolescence (pp. 158-185). New York: Cambridge University Press.

Buhrmester, D., & Furman, W. (1986). The changing functions of friends in childhood: A neo-sullivanian perspective. In V. J. Derlega & B. A. Winstead (Eds.), Friendship and social interaction (pp. 41-62). New York: Springer.

Buhrmester, D., & Furman, W. (1987). The development of companionship and intimacy. Child Development, 58, 1101-1113.

Buhrmester, D., & Prager, K. (1995). Patterns and functions of self-disclosure during childhood and adolescence. In K. J. Rotenberg (Ed.), Disclosure processes in

children and adolescents (pp. 10-56). New York: Cambridge University Press.

Burhenne, D., & Mirels, H. L. (1970). Self-disclosure in self-descriptive essays. Journal of Consulting and Clinical Psychology, 35, 409-413.

Burt, C. D. B. (1994). An analysis of a self-initiated coping behavior: Diary-keeping. Child Study Journal, 24, 171-189.

Cassidy, J., Parke, R. D., Butkovsky, L., & Braungart, J. M. (1992). Family-peer connections: The roles of emotional expressiveness within the family and children's understanding of emotions. Child Development, 63, 603-618.

Chu, L., & Powers, P. A. (1995). Synchrony in adolescence. Adolescence, 30, 453-461.

Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. Journal of Personality and Social Psychology, 71, 810-832.

Collins, C. L., & Gould, O. N. (1994). Getting to know you: How own age and other's age relate to self-disclosure. International Journal of Aging and Human Development, 39, 55-66.

Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. Psychological Bulletin, 116, 457-475.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. Journal of Personality and Social Psychology, 58, 644-663.

Collins, N. L., & Read, S., J. (1994). Cognitive representations of attachment: The

structure and function of working models. In K. Bartholomew & D. Perlman (Eds.), Advances in personal relationships (Vol. 5, pp. 53-90). London: Jessica Kingsley.

Cozby, P. C. (1973). Self-disclosure: A literature review. Psychological Bulletin, 79, 73-91.

Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. Psychological Bulletin, 112, 106-124.

Doyle, A. B., & Markiewicz, D. (1995). Family social relationships: Influences on children's peer relations. SSHRCC grant application.

Feeney, J. A. & Noller, P. (1990). Attachment style as a predictor of adult romantic relationships. Journal of Personality and Social Psychology, 58, 281-291.

Feeney, J., & Noller, P. (1991). Attachment styles and verbal descriptions of romantic partners. Journal of Social and Personal Relationships, 8, 187-215.

Feeney, J., & Noller, P. (1996). Adult Attachment. London: Sage Publications.

Feeney, J. A., Noller, P., & Callan, V. J. (1994). Attachment style, communication and satisfaction in the early years of marriage. In K. Bartholomew & D. Perlman (Eds.), Advances in Personal Relationships (Vol. 5, pp. 269-308). London: Jessica Kingsley.

Feldman, S. S. & Gehring, T. M. (1988). Changing perceptions of family cohesion and power across adolescence. Child Development, 59, 1034-1045.

Field, T., Lang, C., Yando, R., & Bendell, D. (1995). Adolescents' intimacy with parents and friends. Adolescence, 30, 133-140.

Fleiss, J. L. (1981). Statistical methods for rates and proportions. New York: Wiley.

Furman, W., & Buhrmester, D. (1992). Age and sex differences in perceptions of networks of personal relationships. Child Development, 63, 103-115.

Furman, W., & Wehner, E. A. (1993, March). Adolescent romantic relationships: A developmental perspective. Paper presented at the meeting of the Society for Research in Child Development, New Orleans, LA.

Goldberg, S. (1991). Recent developments in attachment theory and research. Canadian Journal of Psychiatry, 36, 393-400.

Goodstein, L. D., & Reinecker, V. M. (1974). Factors affecting self-disclosure: A review of the literature. In B. A. Maher (Ed.), Progress in Experimental Personality Research: Vol. 4. New York: Academic Press.

Greenberg, M. T., Siegel, J. M., & Leitch, C. J. (1983). The nature and importance of attachment to parents and peers during adolescence. Journal of Youth and Adolescence, 12, 373-386.

Halberstadt, A. G. (1986). Family socialization of emotional expression and nonverbal communication styles and skills. Journal of Personality and Social Psychology, 51, 827-836

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

Hazan, C., & Zeifman, D. (1994). Sex and the psychological tether. In K. Bartholomew & D. Perlman (Eds.), Advances in personal relationships (Vol. 5, pp. 151-178). London: Jessica Kingsley.

Hunter, F., & Youniss, J. (1982). Changes in functions of three relations during

adolescence. Developmental Psychology, 18, 806-811.

Kerns, K. A. (1996). Individual differences in friendship quality and their links to child-mother attachment. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), The company they keep: Friendship in childhood and adolescence. (pp. 137-157). New York: Cambridge University Press.

Kerns, K. A., & Barth, J. M. (1995). Attachment and play: Convergence across components of parent-child relationships and their relations to peer relations. Journal of Personal and Social Relationships, 60, 861-869.

Kerns, K. A., Klepac, L., & Cole, A. K. (1996). Peer relations and preadolescents' perceptions of security in the child-mother relationship. Developmental Psychology, 32, 457-466.

Kerns, K. A., & Stevens, A. C. (1996). Parent-child attachment in late adolescence: Links to social relations and personality. Journal of Youth and Adolescence, 25, 323-342.

Kring, A. M., Smith, D., & Neale, J. M. (1994). Individual differences in dispositional expressiveness: Development and validation of the emotional expressivity scale. Journal of Personality and Social Psychology, 66, 934-949.

Kobak, R. R. & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. Child Development, 59, 135-146.

Larson, R., & Richards, M. H. (1991). Daily companionship in late childhood and early adolescence: Changing developmental contexts. Child Development, 62, 284-300.

Laursen, B. (1993a). The perceived impact of conflict on adolescent relationships. Merrill-Palmer Quarterly, 39, 535-550.

Laursen, B. (1993b). Conflict management among close peers. New Directions for Child Development, 60, 39-54.

Laursen, B. (1996). Closeness and conflict in adolescent peer relationships: Interdependence with friends and romantic partners. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), The company they keep: Friendship in childhood and adolescence (pp. 186-210). New York: Cambridge University Press.

Lempers, J. D. & Clark-Lempers, D. S. (1992). Young, middle, and late adolescents' comparisons of the functional importance of five significant relationships. Journal of Youth and Adolescence, 21, 53-96.

Lopez, F. G., & Gover, M. R. (1993). Self-report measures of parent-adolescent attachment and separation-individuation: A selective review. Journal of Counseling and Development, 71, 560-569.

Mikulincer, M. (1995). Attachment style and mental representation of self. Journal of Personality and Social Psychology, 69, 1203-1215.

Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. Journal of Personality and Social Psychology, 61, 321-331.

Morgan, B. S. (1976). Intimacy of disclosure topics and sex-differences in self-disclosure. Sex Roles, 2, 161-166.

Nada Raja, S., McGee, R., & Stanton, W. R. (1992). Perceived attachments to parents and peers and psychological well-being in adolescence. Journal of Youth and

Adolescence, 21, 471-484.

Norris, J. E. (1987, March). Using diaries in Gerontological research. Qualitative Methods Workshop, University of Guelph.

Paikoff, R. L., & Brooks-Gunn, J. (1991). Do parent-child relationships change during puberty? Psychological Bulletin, 110, 47-66.

Papini, D. R., Farmer, F. F., Clark, S. M., Micka, J. C. & Barnett, J. K. (1990). Early adolescent age and gender differences in patterns of self-disclosure to parents and friends. Adolescence, 25, 959-976.

Papini, D. R., & Sebbi, R. A. (1987). Adolescent pubertal status and affective family relationships: A multivariate assessment. Journal of Youth and Adolescence, 16, 1-15.

Park, K. A. (1993, March). A longitudinal examination of links between mother-child attachment and children's friendships in early childhood. Paper presented at the meeting of the Society for Research in Child Development, New Orleans, LA.

Paterson, J. E., Field, J., & Pryor, J. (1994). Adolescents' perceptions of their attachment relationships with their mothers, fathers and friends. Journal of Youth and Adolescence, 23, 579-600.

Paterson, J., Pryor, J., & Field, J. (1995). Adolescent attachment to parents and friends in relation to aspects of self-esteem. Journal of Youth and Adolescence, 24, 365-376.

Paul, E. L., & White, K. M. (1990). The development of intimate relationships in late adolescence. Adolescence, 25, 375-400.

- Pipp, S., Shaver, P., Jennings, S., Lamborn, S., & Fischer, K. W. (1985). Adolescents' theories about the development of their relationships with parents. Journal of Personality and Social Psychology, 48, 991-1001.
- Pistole, M. C. (1993). Attachment relationships: Self-disclosure and trust. Journal of Mental Health Counselling, 15, 94-106.
- Reisman, J. M. (1990). Intimacy in same-sex friendships. Sex Roles, 23, 65-82.
- Resnick, G. (1989, April). Individual differences in adolescent attachment and its relationship to family cohesion and adaptability. Paper presented at the biennial meeting of the Society for Research on Child Development, Kansas City.
- Rice, K. G. (1990). Attachment in adolescence: A narrative and meta-analytic review. Journal of Youth and Adolescence, 19, 511-538.
- Rotenberg, K. J. (1995). Disclosure processes: An introduction. In K. J. Rotenberg (Ed.), Disclosure processes in children and adolescents (pp. 1-9). New York: Cambridge University Press.
- Rothbard, J. C., & Shaver, P. R. (1994). Continuity of attachment throughout the life span. In M. B. Sperling & W. H. Berman (Eds.), Attachment in adults: Clinical and developmental perspectives (pp. 31-71). New York: The Guilford Press.
- Savin-Williams, R. C., & Berndt, T. J. (1990). Friendship and peer relations. In S. S. Feldman & G. R. Elliot (Eds.), At the threshold: The developing adolescent (pp. 277-307). Cambridge: Harvard University Press.
- Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. Journal of Personality and Social Psychology, 59, 971-980.

Smetana, J. G., Yau, J., Restrepo, A., & Braeges, J. L. (1991). Adolescent-parent conflict in married and divorced families. Developmental Psychology, 27, 1000-1010.

Snoek, D., & Rothblum, E. (1979). Self-disclosure among adolescents in relation to parental affection and control patterns. Adolescence, 14, 333-340.

Sroufe, L. A., & Fleeson, J. (1986). Attachment and the construction of relationships. In W. W. Hartup & Z. Rubin (Eds.), Relationships and Development (pp. 51-71). Hillsdale, NJ: Erlbaum.

Steinberg, L. (1990). Autonomy, conflict, and harmony in the family relationship. In S. S. Feldman & G. R. Elliot (Eds.), At the threshold: The developing adolescent (pp. 255-276). Cambridge: Harvard University Press.

Streiner, D. L. (1995). Learning how to differ: Agreement and reliability statistics in psychiatry. Canadian Journal of Psychiatry, 40, 60-66.

Waters, E., Wippman, J., & Sroufe, L. A. (1979). Attachment, positive affect, and competence in the peer group: Two studies in construct validation. Child Development, 50, 821-829.

Wehner, E. A. (1992, March). Characteristics of adolescent romantic relationships and links with parent-adolescent relationships and friendships. Paper presented at the meeting of the Society for Research in Adolescence, Washington, DC.

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.

Winstead, B. A., & Derlega, V. J. (1986). Friendship and social interaction: An

introduction. In V. J. Derlega & B. A. Winstead (Eds.), Friendship and social interaction (pp. 1-7). New York: Springer.

Appendix A
Recruitment Letter



December 1994

Dear Student:

Thank you again for participating in our 1992-94 study of children's friendships which was carried out with the help of you, your parents and other families from five schools in the Sault St. Louis and Baldwin-Cartier School Boards. We have enclosed a summary of the findings of the study, which we hope you find interesting. We have also mailed a copy to your parents. This report includes only some of the findings, but we wanted to send it as promised without further delay.

One finding is that what determines a student's popularity is somewhat different from what determines who will have a best friend and how many friends one will have. The way students feel about their friendships is somewhat similar to the way they feel about the support they receive from and communication they have with their parents. That is, students who report good relationships with friends also report feeling supported by and having good communication with their parents.

These findings are important, but how friends actually behave together is even more important than what they say on questionnaires. We are writing to you and to some of the other students who participated in the 1992-94 study to ask if you will participate with one of your friends in a second study which will help answer that question. Participation will be at your school either during or after school as you prefer and will involve 1/2 hour of completing questionnaires about friendship and communication and a 20-minute discussion with your friend about things such as what you enjoy doing, other kids, parents, and things you dislike. There will also be some brief questions for you to answer at home about when you spend time with other kids and an example of a good and a bad time.

Of course all information will be completely private (only the research team will see it). We're interested in knowing from you what sorts of things help kids have good friendships. We really want you to participate because this would help us complete the puzzle of what is really important for good friendships. In return for your help, we'll give you \$20. As before, we will also be pleased to send you a report of the group results of the study once completed. And of course, you are free to discontinue at any time, although we think you'll enjoy the study.

Please complete the enclosed consent form whether or not you wish to participate. If you're willing to participate, we'll phone you in the next few weeks to ask you for the names of some friends we might invite also. As usual, we want to hear from you whether

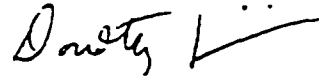
your answer is "yes" or "no". Everyone returning the form will have a chance to win a Cineplex Odeon movie pass. Thank you again for your support in this research.

If you have any questions about the study, please call us. We look forward to hearing from you by January 3, 1995.

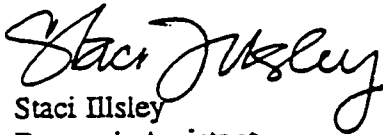
Sincerely,



Anna-Beth Doyle, Ph.D.
Professor of Psychology
(848-7538)



Dorothy Markiewicz, Ph.D.
Associate Professor of Applied
Social Science and of Psychology
(848-3889)



Staci Illsley
Research Assistant
(848-7560)



Linda Spaleny
Research Assistant
(848-7560)

Appendix B

RQ Categorical form (Attachment to Mother)

RELATIONSHIP WITH MOTHER

Think about your relationship with your mother. Which of the following paragraphs best describes this relationship?

Check the **one** which is **most** like your relationship with your mother.

- _____ It is easy for me to become emotionally close to my mother. I am comfortable depending on my mother and having my mother depend on me. I don't worry about being alone or having my mother not accept me.
- _____ I am comfortable not having a close emotional relationship with my mother. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on my mother or have my mother depend on me.
- _____ I want to be completely emotionally intimate with my mother, but I often find that my mother is reluctant to get as close as I would like. I am uncomfortable not having a close relationship with my mother, but I sometimes worry that she doesn't value me as much as I value her.
- _____ I am uncomfortable getting close to my mother. I want to be emotionally close to my mother, but I find it difficult to trust her, or to depend on her. I worry that I will be hurt if I allow myself to become too close to my mother.

Appendix C

RQ Categorical form (Attachment to Father)

If you don't have a dad or stepdad, just leave this blank and go to the next questionnaire

RELATIONSHIP WITH FATHER

Think about your relationship with your father. Which of the following paragraphs best describes this relationship?

Check the **one** which is **most** like your relationship with your father.

- _____ It is easy for me to become emotionally close to my father. I am comfortable depending on my father and having my father depend on me. I don't worry about being alone or having my father not accept me.
- _____ I am comfortable not having a close emotional relationship with my father. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on my father or have my father depend on me.
- _____ I want to be completely emotionally intimate with my father, but I often find that my father is reluctant to get as close as I would like. I am uncomfortable not having a close relationship with my father, but I sometimes worry that he doesn't value me as much as I value him.
- _____ I am uncomfortable getting close to my father. I want to be emotionally close to my father, but I find it difficult to trust him completely, or to depend on him. I worry that I will be hurt if I allow myself to become too close to my father.

Appendix D

RQ Categorical form (Attachment to Friend)

RELATIONSHIP WITH FRIENDS

Think about your relationships with your friends in general, not just with this friend. Which of the following paragraphs best describes these relationships?

Check the **one** which is **most** like your relationships with friends.

- _____ It is easy for me to become emotionally close to my friends. I am comfortable depending on my friends and having my friends depend on me. I don't worry about being alone or having my friends not accept me.
- _____ I am comfortable not having close emotional relationships with my friends. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on my friends or have my friends depend on me.
- _____ I want to be completely emotionally intimate with my friends, but I often find that my friends are reluctant to get as close as I would like. I am uncomfortable not having close relationships with my friends, but I sometimes worry that they don't value me as much as I value them.
- _____ I am uncomfortable getting close to my friends. I want to be emotionally close to my friends, but I find it difficult to trust them completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to my friends.

Appendix E

RQ Continuous form (Attachment to Mother)

Now read each paragraph again (see below). To what extent do **each** of these describe your relationship with your mother?

Circle the number that is true for you.

It is easy for me to become emotionally close to my mother. I am comfortable depending on my mother and having my mother depend on me. I don't worry about being alone or having my mother not accept me.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I am comfortable not having a close emotional relationship with my mother. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on my mother or have my mother depend on me.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I want to be completely emotionally intimate with my mother, but I often find that my mother is reluctant to get as close as I would like. I am uncomfortable not having a close relationship with my mother, but I sometimes worry that she doesn't value me as much as I value her.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I am uncomfortable getting close to my mother. I want to be emotionally close to my mother, but I find it difficult to trust her, or to depend on her. I worry that I will be hurt if I allow myself to become too close to my mother.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

09/02/95

Appendix F

RQ Continuous form (Attachment to Father)

Now read each paragraph again (see below). To what extent do **each** of these describe your relationship with your father?

Circle the number that is true for you.

It is easy for me to become emotionally close to my father. I am comfortable depending on my father and having my father depend on me. I don't worry about being alone or having my father not accept me.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I am comfortable not having a close emotional relationship with my father. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on my father or have my father depend on me.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I want to be completely emotionally intimate with my father, but I often find that my father is reluctant to get as close as I would like. I am uncomfortable not having a close relationship with my father, but I sometimes worry that he doesn't value me as much as I value him.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I am uncomfortable getting close to my father. I want to be emotionally close to my father, but I find it difficult to trust him completely, or to depend on him. I worry that I will be hurt if I allow myself to become too close to my father.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

09/02/95

Appendix G

RQ Continuous form (Attachment to Friend)

Now read each paragraph again (see below). To what extent do **each** of these describe your relationships with friends?

Circle the number that is true for you.

It is easy for me to become emotionally close to my friends. I am comfortable depending on my friends and having my friends depend on me. I don't worry about being alone or having my friends not accept me.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I am comfortable not having close emotional relationships with my friends. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on my friends or have my friends depend on me.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I want to be completely emotionally intimate with my friends, but I often find that my friends are reluctant to get as close as I would like. I am uncomfortable not having close relationships with my friends, but I sometimes worry that they don't value me as much as I value them.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

I am uncomfortable getting close to my friends. I want to be emotionally close to my friends, but I find it difficult to trust them completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to my friends.

Not at all

Very Much

1.....2.....3.....4.....5.....6.....7

26/04/95

Appendix H

Emotional Expressivity scale (EES)

Expressiveness

This questionnaire is about your own **personal emotional expressiveness at home**. Circle a number from 1 (never true) to 5 (always true) indicating to what extent each item applies to you.

	Never True	Always True
1. I think of myself as emotionally expressive.	1.....2.....3.....4.....5	
2. People think of me as an unemotional person.	1.....2.....3.....4.....5	
3. I keep my feelings to myself.	1.....2.....3.....4.....5	
4. I am often considered indifferent by others.	1.....2.....3.....4.....5	
5. People can read my emotions.	1.....2.....3.....4.....5	
6. I display my emotions to other people.	1.....2.....3.....4.....5	
7. I don't like other people to see how I am feeling.	1.....2.....3.....4.....5	
8. I am able to cry in front of other people.	1.....2.....3.....4.....5	
9. Even if I am feeling very emotional, I don't let others see my feelings.	1.....2.....3.....4.....5	
10. Other people aren't easily able to observe what I'm feeling.	1.....2.....3.....4.....5	
11. I am not very emotionally expressive.	1.....2.....3.....4.....5	
12. Even when I'm experiencing strong feelings, I don't express them outwardly.	1.....2.....3.....4.....5	
13. I can't hide the way I'm feeling.	1.....2.....3.....4.....5	
14. Other people believe me to be very emotional.	1.....2.....3.....4.....5	
15. I don't express my emotions to other people.	1.....2.....3.....4.....5	
16. The way I feel is different from how others think I feel.	1.....2.....3.....4.....5	
17. I hold my feelings in.	1.....2.....3.....4.....5	

09/02/95

Appendix I
Diary Time Record

Time Record Day 1

Day (circle one)

Su M T W Th F Sa

Date _____

Time Spent with Parents and Close Friends

Tell us when you spent time doing something with your parent(s) and/or your close friend(s). (By doing something we mean, for example, talking with, working with, watching tv with). Mark approximately how long you spent, for example, 10 minutes. Also write where (for example, in your home, in the car, at a store, at the movies, at school). Remember, mark only when you were interacting, not just when you were in the same room.

	Parent(s)		Close Friend(s)	
	How long (total time)	Where	How long (total time)	Where
Morning (6 am - 12 noon)	_____	_____ _____ _____ _____	_____	_____ _____ _____ _____
		* * * * *		
Afternoon (12 noon - 6 pm)	_____	_____ _____ _____ _____	_____	_____ _____ _____ _____
		* * * * *		
Evening (6 pm - bedtime)	_____	_____ _____ _____ _____	_____	_____ _____ _____ _____
		* * * * *		

Appendix J
Parent-Focused Diary Entry

Description Day 1

Parent(s)

Describe something that happened between you and your **parent(s)** today that made you feel either **good** or **bad**. (For example, you talked to your parent(s) about your plans to go out and disagreed about what time you'd be home OR You watched T.V. with your parents and joked about it) Tell **what happened** from start to finish, and how you and your parent(s) felt during and at the end.

What happened?

How did you feel during and at the end?

How did your parents feel?

Appendix K

Peer-Focused Diary Entry

Day 1 (Continued)

Close Friend(s)

Describe something that happened between you and (a) **close friend(s)** today that made you feel **either good or bad**. (For example, you might have talked about weekend plans.) Tell **what happened** from start to finish and how you and your friend(s) felt during and at the end.

What happened? _____

How did you feel during and at the end? _____

How did your friend(s) feel? _____

Thanks! Good night. Don't forget to complete the daily records tomorrow too.

Appendix L
Diary Coding Manual

DIARY CODING MANUAL (Final Version)

April, 1997

1) COMPANIONSHIP

- quantitative measurement, achieved by adding up time indicated.
- refers to total amount of time per day spent interacting with a) peers and b) parents.
- code total time spent interacting with each of parent(s) and peer(s): in a) Morning (6 am-12 noon), b) Afternoon (12 noon- 6 pm), and c) Evening (6 pm-bedtime).
- code where interactions during each time period took place:
e.g.: home (h), school (s), on telephone (t), public place (p), other's home (oh), car (c), outside (os), or other (oth).
- code as 99 if the location where interaction occurred is not specified: e.g. "2 hours afterschool".
- code whether the parent entry focused primarily on: a) interaction with mother, b) interaction with father or c) interaction with both.

2) TOTAL NUMBER OF THOUGHT UNITS IN DIARY ENTRY

- determine the total number of thought units for the entire entry (i.e., the whole diary page).
- similar and/or repetitive thought units should each be coded and counted as separate thought units.
- a thought unit will typically contain a SUBJECT-VERB-OBJECT combination; however, a pronoun subject may be implicit, and can be filled in by the coder in order to constitute a separate thought unit.
- by definition, an intransitive verb does not need an object.
- a phrase is counted as a thought unit only if it can stand alone as a meaningful idea by itself.

FOR EXAMPLE:

"I was on the phone with my friend and I had left a bunch of dirty dishes in the sink" would be coded as 2 thought units:

[I was on the phone with my friend] AND [I had left a bunch of dirty dishes in the sink] (N.B. "I was on the phone with my friend" is counted as only one thought unit since "with my friend" could not stand alone as a sentence by itself.)

- verbs are clues to separate thought units; alternate phrasing of a clause may indicate if the clause should be considered a separate thought unit (i.e., if the clause has a common alternate phrasing that would stand alone as a meaningful idea).
- if the thought unit is based upon a transitive verb, the thought unit must also contain an object (a word indicating who or what receives the action named by the verb).
- multiple objects with explicit repetitions of verbs count as separate thought units.
- multiple objects without repetition of verb is counted as a single thought unit

EXAMPLES: The following are coded as one thought unit only because there is only one verb:

- “We talked about the same old things; sports, girls and music”
- “We talked about the movie”
- “My friend was sad and upset”

EXAMPLES: The following are coded as two thought units because there are two verbs:

- “We talked / about going to the movies with my girlfriend”
- “We fought / about playing hockey”
- “I got into a discussion with Mom and Dad / about being allowed to go to the party”

NOTE: verb modifiers (when, why, if, because, that) often indicate the beginning of a second thought unit.

NOTE: sentence fragments are NOT coded as separate Thought units; EXCEPT when they immediately follow the diary's questions. (EX: HOW DID YOUR FRIENDS FEEL? “Good”)

Sentence fragments CAN increase the depth of SK or EE statements.

3) SELF-DISCLOSURE

- refers to any information about oneself that a person communicates to another person.
- includes both descriptive information (eg: one's political affiliation) and evaluative information (eg: how one feels about starting university).
- any communication can vary in the degree of self-disclosure present.
- self-disclosure includes "any information exchange that refers to the self, including personal states, dispositions, events in the past and plans for the future" (Derlega, 1984, p.2)
- self disclosure may be objectively defined as any message that begins with the word "I" (for example, "I think...", "I feel...", "I like...") or any other message about the self (Derlega, 1984); that is, it includes sharing opinions, attitudes, beliefs, etc.

The degree of self-disclosure is evaluated on the dimensions of **DEPTH (quality)** and **BREADTH (quantity)**.

DEPTH refers to the intimacy level of information exchanged.

BREADTH refers to the amount of information exchanged.

(Collins & Miller, 1994).

a) disclosure breadth

- code the total number of self-disclosing thought units in the diary entry:
 - i) **self-disclosure TO DIARY:** the number of self-disclosure thought units to diary is equal to the total number of thought units in the diary entry.
 - ii) **self-disclosure TO OTHER:** the number of self-disclosure thought units directed to other (e.g., parent or peer) in the diary entry.

b) **disclosure depth**

- code the quality of self-disclosure; where personal and private information is considered a higher level of disclosure than is factual information, which is considered a lower level of disclosure.
 - i) **self-disclosure TO DIARY:** the depth of self-disclosure to diary is a global rating of the quality of the emotional and factual disclosure in the diary, and is based on the entire diary entry.
 - ii) **self-disclosure TO OTHER:** the depth of self-disclosure to other is a rating of the quality of the emotional and factual disclosure directed to other (e.g., parent or peer).

EXAMPLES of SELF-DISCLOSURE to OTHER:

- Thought units that are clearly identifiable as emotional or factual disclosures to parent or peer are coded as self-disclosure to other.

Low Self-Disclosure:

"we talked about the floats at the parade"

"we talked / about a TV show that's on tonight"

"Me and my friend talked / about how we were going to plan for the 30 hour famine / and how we were going to sleep at school / and we made all these plans"

"Today me and my mom talked / about a trip to California we're taking soon / we talked about who we'd see / where we'd go / and things like that"

Moderate Self-Disclosure:

"I said to him that I didn't get a good mark"

"I spoke to a few close friends today / and we discussed school, studies, sports, and even girls"

"Today I talked to my friend / about my chances of getting the job"

High Self-Disclosure:

"I talked with my parents / about them getting a divorce"

"I told my mom that me and my boyfriend broke-up"

NOTE: taken in context, thought units such as "we joked..." "we decided...", "we planned...", "I suggested..." would also be coded as self-disclosure to other.

NOTE: Verbal arguments and apologies **ARE coded as SD to other.**

"We fought" in isolation would **not** be coded as SD to other; Fighting is coded as SD to other only if a verbal exchange is reported.

In cases where the self-disclosures stem primarily **FROM** parent or peer, and it is not clear that the writer self-disclosed, code as self disclosure to other, but of LOW depth..

FOR EXAMPLE:

"my friend and I talked about how badly her boyfriend treats her"

However, "She told me about..." WOULD NOT be coded as SD to other.

In cases where the self-disclosure is hypothetical and not actual, DO NOT code as self-disclosure to other.

EXAMPLE:

"I felt good / that I can talk to her" or "I really enjoy talking to her"

The quality (depth) of self-disclosure is rated on a seven-point scale ranging from absent, to low, to moderate, to high.

Within each category (except absent) are two potential degrees of intensity:

Absent = 0 (to diary only)

Low = 1, 2

Moderate = 3, 4

High = 5, 6

Note: a rating of "9" is given in such cases where the intimacy level of the self-disclosure cannot be determined.

EXAMPLES:

"Today my Mom and I talked"

"It was fun / talking to my friend"

"It felt good / to communicate with my parents"

would be coded as self-disclosure thought units (self-disclosure to other), and would be given a depth ratings of 9.

NOTE: if any detail within the diary entry concerning the depth of self-disclosure is provided, the depth rating should be estimated (conservatively) by the coder.

Code the quality of Self-disclosure to diary and to other (where some indication of how intimate of the disclosed information to other is present) by rating the depth as follows:

ABSENT SELF-DISCLOSURE

- refers to the absence of any self-disclosure (i.e., the absence of any descriptive or evaluative information about the self).

EXAMPLES:

"It was an okay day"

"Nothing happened"

LOW SELF-DISCLOSURE

- refers to general information about the self.
- refers to factual disclosure in the diary entry.
- reports factual information and/or superficial revelations about the self (Kerns, 1995).
- describes topics such as hobbies, food preferences, sports (Morgan, 1976), or general descriptions of environment or activities (Rotenberg & Sliz, 1988).

- disclosures do not reveal anything about the speakers' inner nature or feelings (Collins & Gould, 1994).

EXAMPLES:

"My mom and I went and saw a movie"

"I went to school"

"We didn't have much to talk about today"

"Nothing happened today; we had supper and watched TV together, that's all"

MODERATE SELF-DISCLOSURE

- refers to personal or private information about the self.
- refers to a mix of factual and emotional disclosure in the diary entry.
- describes positive or negative personal traits (Rotenberg & Sliz, 1988). (e.g., things that hurt my feelings, things that I dislike about myself/worry me, things that make me feel proud of myself (Biran, 1983)).
- disclosures reveal something about inner nature or feelings (Collins & Gould, 1994).

EXAMPLES:

"My friends and I hardly talked today, it seemed like my best friend was ignoring me"

"My mom got mad at me because I failed my biology test"

HIGH SELF-DISCLOSURE

- describes thoughts, feelings and events of a personal/private nature, describes information that could compromise the individual if it were widely known, or reveals the writers' vulnerabilities (Kerns, 1995).
- refers to emotional disclosure in the diary entry.
- describes topics such as love, loneliness, or inferiority feelings (Morgan, 1976), sex, drug/alcohol use, divorce, own or others' secrets.

4) EMOTIONAL EXPRESSIVENESS

- refers to labelling, describing, explaining, revealing, justifying, or amplifying emotions or feelings of the self.
- refers to perceptions of how or why the writer thinks or feels
- refers to degree to which writers' feelings are mentioned, defined, acknowledged or understood.

NOTE: even if the writer does not explicitly label the emotion they are feeling, the thought unit may still be coded as emotional expressiveness. The coder should ask the question "is the writer feeling a specific emotion that underlies the thought unit?" (That is, it cannot simply be positive or negative in tone) FOR EXAMPLE: "I had fun" or "I enjoyed myself" would both be coded as EE; (the underlying emotion of happiness is inferred). However, both these examples would receive a low depth rating.

NOTE: hoping, wishing, liking, disliking, or wanting ARE NOT coded as EE, unless a specific emotion can be inferred.

NOTE: justifications of writers' emotions (either preceding or following the emotion)

must be explicitly connected by "because" or "since" statements in order to be coded as EE.

EXAMPLES:

"I felt happy {**description**} / that she could come and talk to me {**explanation**} / but I also felt sad {**description**} / because I couldn't do anything to help her {**justification**}" would constitute 4 EE thought units.

"I am very excited. / I have never been to the sugar shack with my friends" Here, the first thought unit would be coded as EE; but the second thought unit would not as it is not explicitly connected as a justification.

NOTE: qualifiers of feeling, justification, time and place are coded as EE.

FOR EXAMPLE: "She was getting on my nerves / because in science class she never listens" would be coded as 2 EE thought units.

- Code both quantitative and qualitative aspects of emotional expressiveness:

- a) **expressiveness breadth**

- code the total number of emotional expressiveness thought units in the diary entry:
emotional expressiveness TO DIARY: the number of emotional expressiveness thought units to diary is equal to the total number of EE thought units in the diary entry. This includes emotional expressiveness to diary and emotional expressiveness thought units directed to other (e.g., parent or peer) in the diary entry.

EXAMPLES of EE to OTHER:

"We joked around together"

"We laughed so much"

"I yelled at her"

"I cried in front of my friend"

NOTE: Thought units such as "I told her I was upset" should be DOUBLE CODED as both emotional expressiveness TO DIARY and as self-disclosure TO OTHER.

- b) **intensity of emotional expressiveness**

- revealing explicit, detailed feelings or emotions (eg: feeling loved, hurt, accepted, shunned) are considered higher levels of expressiveness than are general, global references to feelings (feeling ok).

NOTE: qualifiers such as "very" or "really" would increase the depth rating.

FOR EXAMPLE: "I felt happy" = 2; "I felt very happy" = 3

emotional expressiveness TO DIARY: the depth of emotional expressiveness to diary is a global rating of the quality of all emotion expressed in the diary, and is based on all EE thought units in the diary entry (i.e., EE to diary and EE to other).

The intensity of emotional expressiveness is rated on a seven-point scale ranging from absent to low, to moderate, to high. Within each category (except absent) are two potential degrees of intensity:

Absent = 0

Low = 1, 2

Moderate = 3, 4

High = 5, 6

Code the quality of Emotional expressiveness to diary and to other by rating the depth as follows:

ABSENT EMOTIONAL EXPRESSIVENESS

- refers to an absence of any emotion or feeling (of self) labelled, described, explained or revealed.

EXAMPLE:

"I didn't feel anything"

LOW EMOTIONAL EXPRESSIVENESS

- very little or very general, global reference to inner emotions and feelings.
- very little or superficial explanations of reasons underlying own emotions.

EXAMPLES:

"I felt good" (1) "I don't care" (1)

"I felt OK" (1) "I felt fine, normal" (1)

"I felt good / because we had fun" (2)

"I felt happy" (2)

"I felt surprised / that watching TV with Mom could be fun"(2)

NOTE: Code as LOW EE if writer makes a general or vague reference to emotions/feelings AND a general or vague explanation of underlying reasons for emotions.

EXAMPLE:

"I felt good / about the character I like"

NOTE: code as LOW EE if writer defines feelings through references to own or others' actions.

EXAMPLE:

"I felt like I shouldn't have said anything"

"I felt like she cared about me"

"I felt like I was doing the right thing"

NOTE: code as LOW EE if writer describes feeling of physical states (in the "feelings" section of the diary only). (E.g., "I felt tired and / I felt sick")

MODERATE EMOTIONAL EXPRESSIVENESS

- refers to moderate reference to emotions and feelings; more than a global or general

indication of emotions, but not highly detailed nor elaborated on.

EXAMPLES:

"I felt happy / that we actually had a decent, normal conversation / I also felt excited about Washington" (3)

"I felt sorry for him / because he's my friend and / I hope everything goes OK for him" (3)

"I felt confused but not surprised. / I feel sorry for my friend / because her so-called best friend is treating her badly" (4)

NOTE: Code as MODERATE EE if writer makes a general or vague reference to emotions/feelings BUT includes a more detailed explanation of underlying reasons for emotions.

EXAMPLE:

"I felt good / because my friend feels she can confide in me" (3)

HIGH EMOTIONAL EXPRESSIVENESS

- describes intense and personal feelings and emotions in depth and in detail.
- expressed emotions are strong and unambiguous.
- offers detailed or very perceptive explanations of reasons underlying own emotions.

EXAMPLES:

"I felt left out and excluded" (5)

"I felt loved and accepted by my friends" (5)

"I had a great time / because my Mom and I got to spend time together and / I felt very close to her" (5)

"I was still depressed / but I felt better. / I was consoled by the fact that my friends were there for me" (5)

"I felt sick to my stomach. / I hate it when they fight. / It makes me really worried. / I hope they get divorced" (6)

5) SENSITIVITY AND KNOWING OF FEELINGS

- refers to an awareness regarding others' feelings when unique from the writers' own feelings (e.g., "my friends felt..." or "she and I felt..." would be coded as sensitivity and knowing; "we all felt ..." or "everyone felt..." if including the writer's feelings would NOT be considered sensitivity and knowing of other; this would be coded as EE).
- refers to perceptions of how or why other thinks or feels
- refers to degree to which others' feelings are mentioned, defined, acknowledged, and understood.
- refers to explanation of why others' feel as they do, i.e., a recognition of the reasons that cause the emotions.

NOTE: "we agreed" or "we disagreed" would be coded as SK

a) **sensitivity and knowing breadth**

- code the total number of thought units in the diary entry that are devoted to defining, explaining, describing or questioning others' (implicit or explicit) feelings, emotions, opinions or attitudes.

NOTE: qualifying statements ARE coded as sensitivity and knowing. For example, "She felt good / even though we didn't talk much" would be coded as two SK thought units.

NOTE: others' actions or behaviors ARE NOT coded as sensitivity and knowing.

EXAMPLES:

"My mom was at work"

b) **depth of sensitivity and knowing**

- code the quality of knowledge of others' feelings, emotions, opinions or attitudes; i.e., the extent to which others' feelings are understood, the awareness of or reasoning behind others' feelings that emerge in the diary entry.

The quality of sensitivity and knowing is rated on a seven-point scale ranging from absent to low, to moderate, to high. Within each category (except absent) are two potential degrees of intensity:

Absent = 0

Low = 1, 2

Moderate = 3, 4

High = 5, 6

Code the quality of Sensitivity and Knowing of other by rating the depth as follows:

ABSENT SENSITIVITY AND KNOWING

- refers to the absence of any awareness, mention, acknowledgement, understanding, or explanation of others' feelings/emotions.

EXAMPLE:

"I don't know how they felt"

"I'm not sure how they felt"

"I wish I knew how my friends felt"

LOW SENSITIVITY AND KNOWING

- refers to very little or very general reference to others' feelings/emotions.
- refers to minor acknowledgement, or little explanation of reasons behind others' feelings, but lacking in depth or understanding.

EXAMPLES:

"My dad laughed" (1) or "My dad yelled" (1)

"They felt the same way I did" (1)

"My friends felt good" (1)

"My friends felt happy, too" (2)

NOTE: If others' feelings, attitudes, or opinions are directly quoted, code as LOW SK.

EXAMPLE: "She said she was angry"

"My mom told me to call when I got there" (this is an opinion/attitude, but since it is a direct quote, it would receive a low depth rating)

NOTE: If writer refers to how others feel physically, code as low SK.

EXAMPLE: "She felt exhausted"

MODERATE SENSITIVITY AND KNOWING

- refers to reference to others' feelings/emotions; less global than low SK, but not as specific as high SK.
- refers to moderate acknowledgement, explanation and understanding of others' feelings/emotions (i.e. more than low/minor, but not as much as high/detailed).

EXAMPLES:

"She probably feels like me, / but not as mad" (3)

"He didn't even notice me" (3)

"I think she felt good / that I confided in her. / She turned out to be very understanding"(4)

HIGH SENSITIVITY AND KNOWING

- refers to specific and detailed reference to others' feelings/emotions.
- refers to an in-depth explanation of reasons behind others' feelings/emotions.
- refers to an in-depth understanding of others' feelings/emotions.

EXAMPLES:

"I think my Dad felt sad / because I'm not as friendly to him as I was / when I was a little kid" (5)

"My dad was agitated. / He was in a really bad mood, / but I think my mom kept her cool. / She was just a little bit upset / and annoyed at the whole situation" (6)

6) VALENCE OF DIARY ENTRY

- there may be both positive and negative emotions and/or self-disclosures expressed simultaneously in the diary entry.
- positivity and negativity are recorded as separate dimensions, ranging from 0-6, with 0 representing the absence of the quality, and 6 representing the quality in the extreme.

The valence of the entry is rated on a seven-point scale ranging from absent to low, to moderate, to high. Within each category (except absent) are two potential degrees of intensity:

Absent = 0

Low = 1, 2

Moderate = 3, 4

High = 5, 6

- cue words for positivity : affectionate, warm, soft, tender, caring, loving, cheerful,

- excited, happy, satisfied, relieved, empathic.
- cue words for negativity: cold, tense, impatient, sarcastic, angry, hurt, depressed, worried, ashamed, anxious.

A. POSITIVITY

0. NONE: the content of the entry (emotions expressed, self-disclosure) is neutral or solely negative in nature (e.g., "I felt normal").

1, 2. LOW POSITIVITY: the content of the entry (emotions expressed, self-disclosure) reveals information or feelings that are mildly positive in nature (e.g., "I felt ok, good", "I had fun playing basketball with my friends").

3, 4. MODERATE POSITIVITY: the content of the entry (emotions expressed, self-disclosure) reveals information or feelings that are not intensely positive, but are more than only mildly positive (e.g., "I was in a play today and I did really well", "My Mom and I went shopping together and had a really good time").

5, 6. HIGH POSITIVITY: the content of the entry (emotions expressed, self-disclosure) is extremely positive in nature (e.g., the entry reveals information about extreme happiness, love, enjoyment).

B. NEGATIVITY

0. NONE: the content of the entry (emotions expressed, self-disclosure) is neutral or solely positive in nature.

1, 2. LOW NEGATIVITY: the content of the entry (emotions expressed, self-disclosure) reveals information or feelings that are mildly negative in nature (e.g., "I felt kind of bad", "My Dad and I disagreed on what TV show to watch").

3, 4. MODERATE NEGATIVITY: the content of the entry (emotions expressed, self-disclosure) reveals information or feelings that are not intensely negative, but are more than only mildly negative (e.g., "I felt annoyed and frustrated", "My Dad and I yelled at each other").

5, 6. HIGH NEGATIVITY: the content of the entry (emotions expressed, self-disclosure) reveals information or feelings that are extremely negative in nature. Emotions are highly detailed and elaborated on (e.g., the entry reveals information about suffering physical or emotional pain, feeling unloved, uncared for, alone, angry). The diary entry reveals intense conflicts or disappointments.

8) CONFLICT

- refers to the global level of CONFRONTATION or FRICTION between (at least) 2 parties present in the diary entries.
- code as conflict when subject is directly or indirectly involved in conflict (e.g., if writer describes a conflict between parents or peers that they witnessed or were otherwise indirectly involved in, code as conflict).
- refers to overt conflict behaviors (i.e. not feeling), overt expression of conflict.

EXAMPLE:

"He acted angry" or "He got mad" **would be coded** as conflict;

"I felt angry" **would not be coded** as conflict (this would be coded as emotional expressiveness).

CONFLICT: may include arguments, disagreements, fights, critical comments toward other, insults, sarcasm, blame, or condescension, conflictual or aggressive actions (e.g., leaving)

- code quantity, intensity, and resolution of conflict.

a) quantity of conflict:

- code the total number of thought units devoted to describing overt conflict, including qualifiers (as to content or degree, not to time and place).
- thought units that describe the immediate precipitating event or behavior that leads up to the first conflictual exchange, the conflictual/negative exchange, and the negative conflict resolution (power assertion or disengagement) are summed to determine the quantity of conflict present in the entry.

b) intensity of conflict:

- code the severity of the conflict (e.g., "a disagreement" would be low conflict intensity, "a fight" would be high conflict intensity).

The conflict of the entry is rated on a seven-point scale ranging from absent to low, to moderate, to high. Within each category (except absent) are two potential degrees of intensity:

Absent = 0

Low = 1, 2

Moderate = 3, 4

High = 5, 6

NOTE: if conflict intensity is unclear due to lack of information, code conservatively.

EXAMPLES:

"my parents and I disagreed about phone time" (low conflict)

"my Dad yelled at me to do the dishes" (moderate conflict)

"today we had a huge fight" (high conflict)

c) resolution of conflict:

- a) **POWER ASSERTION:** a process where one party persists in assertions until the other submits or capitulates.
- b) **NEGOTIATION/COMPROMISE:** a process in which consensus or middle ground between two opposing positions is reached (may include making up).
- c) **DISENGAGEMENT:** behaviors that terminate a dispute without achieving a solution; including standoff (dropping the conflict or changing the subject) and withdrawal (refusing to continue).

(source: Laursen, 1993)

NOTE: code as "9" if the resolution of the conflict cannot be determined.

NOTE: if more than one resolution technique is described in the entry, code the FINAL method of resolution. (e.g., the writer describes a conflict that results in disengagement (leaving the house) followed by negotiation (returning and discussing the problem); resolution would be coded as b) NEGOTIATION/COMPROMISE.

9) CONTENT OF DIARY ENTRY:

- code the general content of the diary entry (e.g., the main issue, theme, idea or goal of activity that is expressed in the entry).
- if more than one content area is described in the entry, up to TWO content categories may be coded if necessary; however, in most cases one content category will be sufficient to describe the entry.
- each content category may be described in the diary as a positive experience/event or a negative experience/event; the same category is employed for both.

EXAMPLE: 3-SOCIAL ACTIVITY AT HOME would be used to code both the presence and absence of any activity at home; such that both "I was at home all day but nothing really happened" and "I watched TV with my Dad today" would receive a code of 3. (The same applies to 4-SOCIAL ACTIVITY OUTSIDE THE HOME)

-the positive or negative nature of the entry will be revealed through coding the positive and negative valence.

-code as 99 if no content area can be determined, e.g., if the entire diary entry consists of "It was an OK day" or "Nothing happened".

Use the following categories to code the content of the diary entry:

1) **CHORES:** maintaining family duties or responsibilities (e.g., doing the dishes, shovelling snow).

- 2) **EDUCATION**: studying for exams, work on a school-related project (alone or with others), educational or vocational goals (e.g., attending university), field trips (where focus is not social activity), arguments about doing homework.
- 3) **SOCIAL ACTIVITY - AT HOME**: mealtime with family, watching TV, conversations.
- 4) **SOCIAL ACTIVITY - OUTSIDE HOME**: family outing, school dance, going to a party, shopping, conversations, playing sports (if focus is not on health), drives (if focus).
- 5) **INTERPERSONAL RELATIONSHIPS**: conversations (in person or on the phone) concerned with relationship topics; feelings about others, concern for others' well-being.
- 6) **FINANCES**: spending money, earning money, budgeting money, working at a part-time job, allowances.
- 7) **HEALTH AND HYGIENE**: diets, hygiene, health, appearance (clothing or make-up), physical safety, visits to doctor/dentist/optometrist.
- 8) **REGULATING ACTIVITIES**: curfews, using phone or TV, engaging in afterschool activities, permission to go to parties, may include planning activities.
- 9) **REGULATING INTERPERSONAL RELATIONSHIPS**: choice of friends, decisions regarding when to see friends, concerns about participating in social activities, morals or behaviors appropriate in relationships.
- 10) **OTHER**

NOTE:

If a conversation is the main focus of the diary entry, code as 3) SOCIAL ACTIVITY AT HOME, or 4) SOCIAL ACTIVITY OUTSIDE HOME. However, if the content of the conversation is evident, code that category. E.g., if a conversation at home focused on homework, code as 2) EDUCATION.

Similarly, code the content of an argument if content is evident; if it isn't code as 5- INTERPERSONAL RELATIONSHIPS.

NOTE:

when computing interrater reliability for content:

- if both coders code two content categories (regardless of their order), e.g., coder 1 codes 5,2 and coder 2 codes 2,5 this constitutes 100% agreement.
- if both coders code two categories, if the first or primary codes are the same, this constitutes 100% agreement.
- if both coders code two categories, e.g., coder 1 codes 8,5 and coder 2 codes 7,8 this constitutes 50% agreement.
- if only one coder codes two content categories, but there is agreement on the first category, e.g., coder 1 codes 5, 2 and coder 2 codes 5 this constitutes 100% agreement.
- if only one coder codes two content categories, and there is agreement only with the second category, e.g., coder 1 codes 5, 2 and coder 2 codes 2 this constitutes 50% agreement.

Appendix M
Consent Form

December 1994

Consent Form To Participate in Research

Participation number _____

Check where applicable

_____ I agree to participate in the friendship study being conducted by Drs. A.B. Doyle and D. Markiewicz of the Centre for Research in Human Development at Concordia University

_____ I / my parent wish(es) to be called to discuss the project.

.....
Student's Name (please print)

.....
Phone number

OR

_____ I do not agree to participate or to be called

IF YOU AGREE TO PARTICIPATE, please complete the following:

I have been informed that the purpose of the research is to study students' interaction with friends in relation to their perceptions of friendships and family factors. Participation will be at the students' school and will involve 1/2 hour of completing questionnaires about friendships and family relationships, a 20-minute videotaped discussion with a friend of things the student enjoys doing, other kids, parents and things the student dislikes; and some brief open-ended questions to be answered at home on the students' own about when they spend time with other kids and parents and an example of a good and bad time. I understand that all information will be confidential to the research team and identified only by number. I understand that I/my child may withdraw my/his/her consent and may discontinue participation at any time.

I HAVE READ THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND AGREE TO PARTICIPATE IN THIS STUDY

Student's Name..... Student's Signature
(please print)

Home Room Teacher's Name:.....

School:.....Grade:..... Class:.....

Parent(s) Name(s).....
(please print) Date

.....
Parent's Signature

.....
Street Address

.....
Phone Number

.....
City & Postal Code

.....
Student's birthdate

Please return this form in the postage-prepaid envelope by January 3, 1995

Appendix N
Complete List of Questionnaires

List of Questionnaires

First set of questionnaires:

- RQ attachment measures (categorical and continuous) for mother
- RQ attachment measures (categorical and continuous) for father
- Perceptions of Mother's Relationships Scale
- Family Disagreements Questionnaire
- Emotional Expressivity Scale (EES)

Second set of questionnaires:

- list of best same-sex friends
- RQ attachment measures (categorical and continuous) for friends
- Perceptions of Friend's Feelings and Behaviors Scale
- Perceptions of Own Feelings and Behaviors Scale
- Friendship Activity Questionnaire

Appendix O
Instructions given to Subjects

Verbatim Instructions for
Friendship Project Questionnaires

Lasalle Catholic High School

GRADES 7, 8, 9 & 10

"Hi. We're with the Friendship Project at Concordia University. My name is _____, and this is my assistant _____.

Today, you're going to do similar questionnaires as you did two years ago. They are more family oriented but still on friendships and relationships. But before we get started, I'd like to repeat the 3 important things that we told you last time about how we work together.

First, this is not a test, there are **no right or wrong answers**. We want to know about your feelings and opinions on friendships and relationships. Second, since we are asking for your opinions, we will keep things **confidential**. This means, for our part, that we won't show your answers to anyone - not in the school or at home. For your part, to keep things confidential remember not to look at what the others are writing and not to let the others see what you are writing. This means **no talking** while you are working, not asking others what they wrote and not telling others what you wrote. Also, to keep things confidential, if you have any questions later, just raise your hand and one of us will come over to help you. We will be coming around while you work just to check that you haven't left anything out.

Okay those are the important things: this is not a test, this is confidential,

and no talking while I'm explaining and also while you're answering the questionnaires.

OK, so let's get started. I thought it would be a good idea if you told me your names and I would give you the questionnaire. So why don't we start with you. You can fill out the front page but don't look at the questions until I tell you to turn the sheets over. *[each package has an id number and a sticky with the matching name and a number; as students say their name I remove the sticky and place it on a blank sheet of paper; place the questionnaire on their desk]*

Before you start, although the instructions are pretty straight forward I'd like to tell you a few things about these questionnaires. *[hold up the questionnaire and show them the first part]*. In one part, we want to know about your relationship with your mom. Here we want you to choose the **ONE** paragraph that **best** describes the relationship **you** have with your mom and put a check mark next to it. Then you go on reading the instructions carefully and answering the questions.

Later you get to another part where we want to know how **you** see your mom's relationships. But you may not be sure about some of them like about your mom's relationship with her best friend. Well in that case, we'd like you to give us your best guess. OK.

Now you can begin starting with page one and please raise your hand if you have any questions.

[wait until students are starting to finish] I see that some of you are almost finished so just wait until everyone is done so I can tell you about the diary.

[when kids turn the questionnaire over go to their desk, take it to your desk and assistant will look through it to see that they answered all the questions properly and will check off

their name on the list].

Thank you all for answering these questions for us and if you have any questions or concerns that you would like to discuss with us you can stick around for a bit after I explain the diary or you can come and talk to us later in the day or you can call us at the University 848-7560 *[assistant writes it on the board]*.

Diary:

Now I will tell you about the diary that you will take home with you for a week after your March break. It will look something like this. *[Show diary]*. We want you to tell us when you spent time with your parents and close friends and an example of things you do with them. By time spent, we mean interacting (something like talking to a friend about an assignment that you have to do or going shopping with your parent). *[Show first page]* On the first page for each day we want to know **when** this happened (i.e. what time of the day - morning, afternoon or evening), for **how long** (e.g. 20 minutes) and **where** it happened (e.g. on the bus, at the shopping mall, in the park).

On the next page we'd like you to give us one example of something that happened between you and your parent and something that happened between you and your friend that was either good or bad. Then we want you to tell us how you felt about it and how your parent and your close friend felt about it.

Let me give you an example of something that happened with my parent. This was something good. Last week my mom and I went shopping because I wanted to buy new clothes. I liked one big sweater but I thought it was too expensive. My mom said that it

was good quality and worth the money so I ended up buying it. So I would write that down in the diary and then I would write how I felt. I felt good because I love the sweater and I had a fun time with my mom. I felt grateful to her for helping me buy the sweater.

And how did my mom feel? Well, I think that she felt good because she laughed a lot and she told me that it was fun shopping with me.

Now, I will give you an example of a bad time with a close friend. Just yesterday, my best friend Kathleen, phoned me and wanted to go see a movie but I have 2 exams this week. I really felt I had to study. She kept begging me to go with her and then told me that I was not a good friend any more because I don't want to spend time with her. I wrote that under what happened then under how I felt I wrote: I felt upset about the conflict and hurt after she told me I wasn't a good friend. And how did she feel? Well, I think that she felt angry that I wasn't going with her but I think she also felt bad about the conflict.

So, something like this you will do for seven days, filling it out at a convenient time every day, like before you go to bed. You will get the diary at school after you come back from the break. We will call you a few days after you get the diary to make sure that you don't have any problems or questions. When you finish the 7th day you will mail us the completed diary in the prepaid envelope that will be attached to the diary. Does anyone have any questions about that?

So once again, thank you for your help and call us if you have any questions at 848-7560.

Appendix P
Supplementary Consent Form



May 1995

Consent Form To Participate in Research
(Supplementary)

Please complete the following:

I have been informed that the purpose of the research is to study students' interaction with friends in relation to their perceptions of friendships and family factors. Participation involves questionnaires about self, friends and family relationships, and a discussion with a friend. This session will involve 15 minutes of completing questionnaires about friendship, and how my friend and I behave and feel, and a 25-minute discussion with my friend about other kids, a weekend activity, and things that make us mad, which will be videotaped. I understand that all information will be confidential to the research team and identified only by number. I understand that I may withdraw my consent and may discontinue participation at any time.

**I HAVE READ THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY
CONSENT AND AGREE TO PARTICIPATE IN THIS STUDY**

Student's Name..... Student's Signature.....
(please print)

School:.....

Date

Appendix Q
Diary Coding Sheet

Subject #: _____
School: _____
Grade: _____

Day _____ W-DAY W-END
Consecutive: YES NO

MOM - DAD - BOTH

PEER

Total time: _____/_____/_____

_____/_____/_____

Place: _____/_____/_____

_____/_____/_____

Total Number
Thought Units: _____

SD

to other

to diary

to other

to diary

T.U.

XXX

XXX

Depth

EE

to diary

to diary

T.U.

Depth

SK

of other

of other

T.U.

Depth

Positive V.

Negative V.

CONFLICT:

T.U.

Intensity

Resolution

CONTENT:
